

**STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL PROTECTION**

**In Re: SEMINOLE ELECTRIC)
COOPERATIVE SEMINOLE GENERATING)
STATION UNIT 3 POWER PLANT SITING)
APPLICATION NO. PA 78-10A2.)**
_____)

**OGC CASE NO. 06-0780
DOAH CASE NO. 06-0929EPP**

FINAL ORDER APPROVING CERTIFICATION

This matter is before me as Secretary of the Department of Environmental Protection ("DEP" or "Department") for the purpose of entering a Final Order under Sections 403.508(6) and 403.509(1)(a), Florida Statutes.

BACKGROUND

On February 23, 2007, the Administrative Law Judge ("ALJ") assigned by the Division of Administrative Hearings ("DOAH"), issued an order closing file that granted the parties' request to cancel the certification hearing in accordance with Section 403.508(6), Florida Statutes. The order was issued pursuant to a Joint Stipulation Between Parties filed on February 22, 2007, that no disputed issues of material fact or law exist in this proceeding. The Joint Stipulation stated that the parties did not object to cancellation of the site certification hearing and did not object to entry of a Final Order by the Department. Therefore, under Section 403.509(1)(a), Florida Statutes, the DEP is required to prepare and enter a Final Order. On March 5, 2007, the DEP and the Applicant Seminole Electric Cooperative, Inc. ("Seminole" or "Applicant"), submitted their Joint Proposed Final Order. The matter came before me for final agency action.

On April 6, 2007, I entered an order remanding the case back to the ALJ, who declined the remand on July 10, 2007. On August 17, 2007, I entered a final order that denied Seminole's application for site certification. Seminole appealed that final order and on June 13, 2008, the Fifth District Court of Appeal issued its opinion reversing the final order and remanding the matter to me with instructions "to issue a final order granting certification, consistent with the parties' stipulations and with the agreed recommended final order." Therefore, in accordance with the mandate issued on August 4, 2008, this matter is again before me for entry of a final order in accordance with the Court's mandate.

PARTIES

Pursuant to Section 403.508(4), Florida Statutes, the parties are the Applicant Seminole, the Department, the Florida Department of Community Affairs ("DCA"), the Florida Department of Transportation ("DOT"), the Sierra Club and the St. Johns River Water Management District ("SJRWMD"). No other person or agency filed a notice of intent to be a party or a motion to intervene under Section 403.508, Florida Statutes.

STATEMENT OF THE ISSUE

The issue to be decided in this proceeding is whether, DEP acting in lieu of the Siting Board, should approve certification in accordance with the Florida Electrical Power Plant Siting Act, Sections 403.501, et seq., Florida Statutes, authorizing Seminole to construct and operate a new electrical generating unit at Seminole's existing Seminole Generating Station site (consisting of existing Units 1 and 2) in an unincorporated area of Putnam County.

PRELIMINARY STATEMENT

On March 9, 2006, Seminole filed a Site Certification Application ("SCA") to construct and operate a new electrical power plant unit ("Unit 3") at the existing Seminole Generating Station ("SGS") site in Putnam County, Florida. The existing site, which presently includes Units 1 and 2 and directly associated facilities, is located approximately five miles north of the city of Palatka.

The Department determined that Seminole's SCA was complete on March 24, 2006. DEP then issued a Notice of Insufficiency on May 15, 2006. Seminole filed its Response to the Department's Notice of Insufficiency on May 30, 2006, and then submitted a Response to Sufficiency Request for Information on June 30, 2006. On July 26, 2006, the Department determined that Seminole's SCA was sufficient.

Pursuant to Section 403.507, Florida Statutes, several reviewing agencies submitted agency reports and proposed Conditions of Certification on Seminole's Unit 3 SCA. On November 9, 2006, the Department issued its Staff Analysis Report ("SAR"), incorporating the reports and recommendations of the reviewing agencies. In the SAR, the Department recommended certification of the proposed Seminole Generating Station Unit 3, subject to a comprehensive set of Conditions of Certification.

On June 1, 2006, a land use hearing was held for the purposes of determining whether Seminole's Unit 3 project was consistent and in compliance with local land use plans and zoning ordinances of Putnam County. On August 31, 2006, the assigned ALJ entered a Recommended Order, which concluded that the Unit 3 project and site were consistent and in compliance with Putnam County's land use plans and zoning ordinances. On December 5, 2006, the Siting Board unanimously approved a Final Order adopting the

land use Recommended Order, and finding that the Unit 3 project was consistent and in compliance with applicable land use plans and zoning ordinances. The Siting Board's Final Order on Land Use was signed by the Governor and issued on December 8, 2006.

Public notice of the filing of the Site Certification Application was published by the Applicant in the Palatka Daily News on April 7, 2006, and by the Department on April 7, 2006, in the Florida Administrative Weekly ("FAW"). Pursuant to Section 403.5115(1)(e), Florida Statutes, notice of the certification hearing originally scheduled to begin on January 9, 2007, was published in the Palatka Daily News on November 25, 2006, and by the Department in the FAW on November 22, 2006. By Order of the ALJ dated January 8, 2007, the certification hearing was rescheduled to March 15, 2007. That notice was published in the Palatka Daily News on January 18, 2007.

On February 22, 2007, the Applicant, DEP, DCA, DOT, the Sierra Club, and the SJRWMD filed a Joint Stipulation Between Parties addressing certification issues. In the Joint Stipulation, all parties agreed that Seminole's Unit 3 project should be certified subject to the Conditions of Certification included in the SAR.

Pursuant to Section 403.508(6)(a), Florida Statutes, a certification hearing may be cancelled, relinquishing jurisdiction to the Department, if the parties to the proceeding stipulate that there are no disputed issues of fact or law to be raised at the certification hearing. The Joint Stipulation Between Parties of February 22, 2007, stipulated that there are no disputed issues of fact or law to be raised at the certification hearing and requested that the ALJ relinquish jurisdiction. Sufficient time remained to publish public notices of the cancellation of the hearing at least three days prior to the scheduled hearing date, as required under Section 403.508(6)(a), Florida Statutes.

The ALJ timely issued an order closing file on February 23, 2007, granting the parties' request to cancel the certification hearing. DEP published notice of cancellation of the certification hearing in the FAW on March 9, 2007. The Applicant published a similar notice on March 10, 2007, in the Palatka Daily News.

No party to this proceeding is recommending denial of certification for the Unit 3 project or changes to the Conditions of Certification presented in the Department's SAR. The agency parties agree that Seminole's SCA, as supplemented by Seminole's Sufficiency Responses filed on June 30, 2006, in conjunction with the agreed-upon Conditions of Certification, provide reasonable assurances that construction and operation of the proposed Unit 3 project will comply with all applicable agency standards. In a Settlement Agreement entered on January 7, 2007, the Sierra Club agreed not to contest certification of Unit 3 under the Power Plant Siting Act in accordance with the Conditions of Certification in the SAR, and also agreed to the process resulting in the cancellation of the certification hearing and the Department issuing this Final Order pursuant to Sections 403.508(6)(a) and 403.509(1)(a), Florida Statutes.

FINDINGS OF FACT

Background

1. Seminole is a non-profit generation and transmission electric cooperative. Seminole generates and transmits electric power for ten member cooperatives that provide electricity in 46 of Florida's 67 counties. Seminole was created in 1948 under the federal Rural Electrification Act of 1936 to serve Florida's electric cooperatives. Seminole and the network of Florida electric cooperatives currently serve approximately 1.6 million individuals and businesses in two-thirds of the counties throughout Florida.

2. Seminole Generating Station Units 1 and 2, in Putnam County, originally were approved under the Florida Electric Power Plant Siting Act by the Governor and Cabinet, sitting as the Siting Board, in 1979. Both of these coal-fired units were in commercial operation by the end of 1984. Seminole has undertaken several environmental improvements since the original certification in 1979. For example, in 2000 at Seminole's request, the SGS Conditions of Certification were modified. The modification authorized Seminole to install an oxidation system that converts the output from the Flue Gas Desulfurization ("FGD") air pollution control systems on Units 1 and 2 to gypsum that is reused for wallboard manufacturing. This eliminated the disposal of hundreds of thousands of tons per year of solid waste. Additional recent improvements to Units 1 and 2 are described below in paragraph 8.

3. The SGS site primarily is comprised of two parcels. Parcel 1 of the SGS site is an approximately 1,917-acre tract of land. SGS Parcel 2 is approximately 4.5 acres in area, and it includes approximately 212 feet of frontage on the St. Johns River, which serves as the northernmost boundary of a sovereign submerged land lease from the State of Florida to Seminole. SGS Parcel 2 is located south of County Road 209, and is the site of a pump house that serves the Seminole Generating Station. An existing 100-foot wide privately granted easement connects SGS Parcel 1 and SGS Parcel 2. Underground pipelines that provide plant makeup water and discharge plant wastewater, and also electrical conduits to provide electric power to the pump house, are located within the easement. SGS Unit 3's proposed location is within the southeastern portion of SGS Parcel 1.

4. Existing SGS Units 1 and 2 are 650 megawatt ("MW") coal-fired electrical generating units. These units burn bituminous coal or a blend of coal and petroleum coke up to a maximum of 30 percent petroleum coke. Currently, one train per day provides coal and petroleum coke for Units 1 and 2. Onsite coal and petroleum coke storage is provided for up to 45 to 60 days of fuel inventory. Coal and petroleum coke are unloaded from rail cars and transported to Units 1 and 2 on a covered conveyor system. The existing units are equipped with electrostatic precipitators ("ESP's") that remove fly ash from the flue gas. Also, an FGD system contains "wet scrubbers" that remove sulfur dioxide ("SO₂") from the flue gas of Units 1 and 2. The FGD system produces gypsum that is used in the production of wallboard at a wallboard production facility located at a site directly adjacent to Units 1 and 2. Two natural draft cooling towers provide offstream cooling for the existing units. Water for the existing units is supplied from the St. Johns River and the Floridan Aquifer. Existing wastewaters from operation of Units 1 and 2 are treated at the plant's wastewater treatment facility and then combined with cooling tower blowdown, treated sanitary wastewater, and other wastewaters for discharge to the St. Johns River.

5. The main entrance to the SGS site is located on U.S. Highway 17. Employees also use a secondary entrance on County Road 209 West. U.S. Highway 17 is a four-lane divided State highway under the jurisdiction of the DOT.

6. The land surrounding the existing SGS site is predominantly undeveloped. Adjoining land is used for agricultural purposes or forestry. The previously mentioned wallboard manufacturing plant is located immediately adjacent to the SGS site on the northwest boundary. Relatively low density residential housing occurs along the St. Johns .

River south of the SGS site. The existing rail line enters the SGS site on its western boundary parallel to U.S. Highway 17.

7. The pattern of undeveloped land in the vicinity of the SGS site has been projected to remain the same for the near future as evidenced by the County's future land use map. These maps depict the area as primarily agricultural except along the St. Johns River where scattered residential use is found.

8. In 2006 Seminole applied for and received from the Department a modification to its existing Conditions of Certification and a corresponding air construction permit authorizing several air pollution control upgrades and efficiency improvements to Units 1 and 2, including the following:

- Installation of low-nitrogen oxide ("NOx") burners and modified overfire air systems on Units 1 and 2, to meet an annual average NOx emission limitation of 0.46 lb/mmBtu, as applicable in 2008 pursuant to Title IV of the federal Clean Air Act and corresponding state regulations.
- Installation of a urea-based selective catalytic reduction ("SCR") control system on Units 1 and 2, designed to be capable of achieving substantial nitrogen oxides (NOx) reductions (to 0.07 lb/mmBtu).
- Upgrades to the FGD systems for Units 1 and 2 to achieve up to 95% post-combustion SO₂ removal efficiency.
- Substantial reductions in mercury emissions from Units 1 and 2 due to the combined effect of the new SCRs and FGD upgrades.
- An alkali injection air pollution control system for Units 1 and 2 to control for potential SO₃ formation by the new SCR systems.

- A carbon burnout (CBO) system to produce a final fly ash product that will have substantially lower carbon and ammonia levels, and therefore suitable for beneficial reuse, while also recovering energy to improve the heat rate of Units 1 and 2.

9. The proposed SGS Unit 3 consists of a 750 MW advanced supercritical pulverized coal unit utilizing state-of-the-art emission controls. The term “supercritical” refers to higher steam operating pressures than conventional boiler designs, achieving greater efficiency. By maximizing the MW output per unit of fuel consumed, the air pollutant emissions per MW output are minimized. Unit 3 will utilize modern burner technology to minimize generation of NO_x, CO and VOC in the boiler. Also, an SCR system will be used to remove approximately 90% of the NO_x generated by Unit 3. An ESP will collect and remove fine particles. A wet FGD system will remove approximately 98% of the sulfur dioxide while producing commercial grade gypsum for use in manufacturing wallboard. A wet ESP will also be used for control of sulfuric acid mist and trace elements. The combined effect of the air emission control technology proposed for Unit 3 is expected to remove approximately 90% of the mercury that would otherwise be emitted by Unit 3.

10. The Seminole Unit 3 project will be located in Putnam County, which is designated as an attainment area for all air pollutants. This designation indicates that Putnam County is in compliance with the federal and state ambient air quality standards.

11. The Department’s Division of Air Resource Management (DARM) conducted a separate Prevention of Significant Deterioration (PSD) review for the Unit 3 Project. In the PSD review DARM determined that the Unit 3 project will comply with all appropriate state and federal air pollution regulations.

12. The PSD regulations require the application of Best Available Control Technology (BACT) to control air emissions from sources such as Unit 3. The BACT requirements are intended to insure that the air pollution control systems incorporated in the design of a proposed facility reflect the latest in control technologies used in a particular industry. A decision on BACT is based on balancing environmental benefits with energy, economic and other impacts.

13. A preliminary BACT determination was made by DARM for the Unit 3 project for carbon monoxide (CO), particulate matter (PM/PM10), fluorides (HF) and volatile organic compounds (VOCs), which were determined to be the only pollutants that will increase in amounts requiring such review.

14. Seminole obtained approval for upgrades to the air pollution control systems for Units 1 and 2 as discussed in paragraph 8 above. These upgrades to Units 1 and 2 allow Seminole to add Unit 3 to SGS while reducing emissions of NO_x, SO₂, Sulfuric Acid Mist, and mercury from Units 1, 2 and 3 combined.

15. Air pollution control equipment will be installed on Unit 3 and associated systems to minimize air emissions as discussed in Paragraph 9 above. Due to the pollution control upgrades on Units 1 and 2, the facility-wide air emissions after Unit 3 comes on line will actually be less than current levels for several air pollutants. The new Unit 3 cooling tower will use drift eliminators to minimize PM emissions. PM emissions from material handling will be minimized through the use of best management practices, such as covered conveying systems, baghouses at transfer points and water sprays for dust suppression.

16. DARM reviewed Seminole's PSD air permit application and made a preliminary determination that the Unit 3 Project will comply with all applicable state and

federal air pollution regulations. DARM determined that the maximum ground-level concentrations due to PM₁₀, NO_x and CO emissions as a result of the Unit 3 project are less than the significant impact levels. DARM determined that maximum ground-level concentrations of SO₂ predicted to occur as a result of the Unit 3 project will be below the associated AAQS which are designed to protect public health and welfare. Seminole conducted an air quality related values (AQRV) analysis for the nearest Class I air quality areas. This analysis indicated that no adverse impacts on these areas are projected. A regional haze analysis was also performed using a long range transport model to evaluate impacts on the PSD Class I areas. This analysis showed no significant impacts on visibility in the Class I areas. Final agency action on Seminole's separate PSD air permit application pursuant to Section 403.087, Florida Statutes, and Rule 62-212, Florida Administrative Code, will be taken by the Department pursuant to Section 403.509(3), Florida Statutes. The conditions of that permit will be incorporated into the Conditions of Certification.

17. The design of Unit 3 will maximize the co-use of existing site facilities to the greatest extent possible. The existing plant systems that will also be used for Unit 3 include the coal unloading and storage facilities, the coal pile runoff pond system, the process wastewater treatment system, surface water intake and discharge structures, the plant switchyard, entrance road, the existing groundwater well system, the limestone storage system, the solid waste disposal area, and the associated transmission lines. No new offsite transmission lines are required for Unit 3. Also, existing warehouse, administrative, and maintenance buildings will support Unit 3. The SGS Unit 3 power block will contain fuel bunkers, a boiler, steam turbine generator, step-down transformers, pollution control equipment, water treatment equipment, ash handling equipment, and related facilities. The

existing fuel storage and handling area will be expanded from approximately 60 acres to approximately 84 acres to support the new SGS Unit 3 facility.

18. Coal and petroleum coke will continue to be delivered by rail from the existing CSX railroad line. Unit 3 will increase fuel deliveries to approximately 1.6 trains per day. A new 200,000 gallon fuel oil storage tank will be provided to supply fuel for the new Unit 3. Fuel oil will be used for startup, flame stabilization, emergency reserve capacity and limited supplemental load. The existing fuel oil unloading system will be used to fill the new fuel oil tank.

19. A new mechanical draft cooling tower will be used to dissipate heat from the Unit 3 closed-cycle condenser cooling and auxiliary cooling systems. Unit 3 will use the St. Johns River and the Floridan Aquifer as water supply sources for plant operations. Surface water will be withdrawn from the St. Johns River using the existing river water intake structure system with minor upgrades. This intake water will provide makeup water to the Unit 3 heat dissipation system to replace water lost to evaporation, drift and blowdown. River water will also be used for plant service water, including pump bearing cooling water, equipment maintenance, cleaning and flushing, and area and floor washing.

20. The existing onsite domestic wastewater treatment system at the SGS site is adequate to support the Unit 3 addition. To insure continued reliability, the existing system will be replaced with a like-kind replacement. The existing onsite potable water system will be expanded to supply an additional 50 employees.

21. Unit 3 process wastewaters such as low volume wastes, coal runoff, bottom ash collection systems, equipment cleaning, demineralization regeneration, pre-treatment backwash, and FGD wash water will be collected and treated in the plant's wastewater

treatment facility. Significantly, these treated waste streams will not be discharged to surface water, as is currently done for Units 1 and 2. Instead, with the build-out of Unit 3, the treated wastewater from all three units will be routed to a new “zero liquid discharge” (ZLD) system. The ZLD system will remove dissolved solids from the Units 1, 2, and 3 wastewater, and condensate from the ZLD system will be reused as makeup for the steam cycle for all three units. The waste concentrate from the ZLD system will be evaporated in a spray dryer, and the residue will be disposed of in the onsite landfill or off site in permitted landfills. With the addition of the ZLD system, the only proposed wastewater discharge to the St. Johns River will be cooling tower blowdown from Units 1, 2 and 3. The ZLD system will eliminate the existing discharges of several water pollutants to the St. Johns River, including nitrogen.

22. Because the combined maximum intake design capacity of Units 1, 2, and 3 will be less than 50 million gallons per day (“MGD”), SGS is not subject to the U.S. Environmental Protection Agency’s (“EPA’s”) Section 316(b) intake regulations. The through-screen velocity of the SGS intake will not exceed 0.5 feet per second, thereby minimizing any potential for adverse impacts to aquatic life.

23. The Department’s SAR acknowledged that the ZLD system will result in reductions in mass pollutant loadings to the St. Johns River and stated that based on initial analysis, the requested mixing zones for cooling tower blowdown discharges will meet applicable requirements. Final action on these surface water discharge issues will be addressed in the Department’s final agency action in response to Seminole’s pending application for a revision to the Seminole Generating Station National Pollutant Discharge Elimination System (NPDES) permit. This is a separate permit issued by the Department

under Section 403.0885, Florida Statutes, and Chapter 62-620, Florida Administrative Code. The conditions of that permit revision, when issued, will be included in the Conditions of Certification for the Seminole Generating Station.

24. The SGS Unit 3 project will implement recycling, reuse, and various conservation practices in order to minimize water use requirements. Cooling water will be recycled in the cooling towers before being discharged as blowdown to the river. The FGD system will recycle water multiple times based on the amount of chlorides in the water. Stormwater from the active landfill areas will be collected and used as makeup to the FGD system. Boiler blowdown and air pre-heater wash will also be reused in the FGD system rather than being disposed of in percolation ponds.

25. Seminole demonstrated that the combined surface water withdrawal from Units 1, 2, and 3 is insignificant relative to the flow rates in the St. Johns River. The proposed withdrawal rate from all three units represents only 0.6 percent of the actual flow of the St. Johns River, as measured at the closest gauging station located at Buffalo Bluff near Satsuma. The SJRMWD concluded that impacts on the river are expected to be insignificant, and much less than the natural variations associated with tidal influences. For similar reasons, the SJRWMD concluded that there would be no adverse impacts on wetlands adjacent to the river.

26. At the SGS site, potable and process water is supplied to the existing units from two onsite production wells that withdraw groundwater from the Floridan Aquifer. Current annual average daily withdrawal is authorized at 0.55 MGD. During the original licensing of Units 1 and 2, the impacts of this withdrawal were determined to be minor and to not cause an adverse impact to offsite users. With the addition of Unit 3, SGS will

continue to utilize water from the Floridan Aquifer. However, Unit 3 will not require additional groundwater greater than the existing consumptive use limitations in the current SGS conditions of certification. Therefore, no new impacts to offsite users are anticipated beyond that already authorized for the site.

27. Site drainage for Unit 3 will be handled by an onsite stormwater management system. The stormwater management system will be designed and operated to meet all applicable local, regional, state and federal requirements.

28. Coal combustion products from Unit 3 will be reused to the maximum extent feasible. Bottom ash will continue to be sold to concrete and concrete block manufacturers. Fly ash will be sold for reuse to the maximum extent feasible. Gypsum will be sold to the adjacent wallboard manufacturing facility. The new ZLD system will produce a dry solid reject which will be disposed in the onsite landfill or in an offsite permitted landfill. Any coal combustion products not reused and miscellaneous plant waste will be managed onsite within the existing landfill area or disposed offsite in a permitted landfill. All new onsite landfill areas that receive solid waste from Unit 3 will have a double liner and leachate collection and removal system installed to serve the Unit 3 waste. Any hazardous waste generated, such as spent solvents, cleaning materials and other wastes, will be collected and managed in a permitted hazardous waste storage facility in accordance with applicable regulations. No impacts are anticipated from hazardous waste generated from the operation of Unit 3.

29. Construction of the Unit 3 Project will affect a total of 228 acres within Parcel 1 of the SGS site. During construction, heavily travelled areas will be stabilized with limerock and other more lightly travelled areas will be seeded with grass to prevent erosion. The

primary access to U.S. Highway 17 at the plant entrance will be modified from two lanes to four lanes at the beginning of the construction process to minimize traffic impacts onsite and on U.S. Highway 17. No explosives for blasting will be used during construction of Unit 3. Foundations required to support heavy loads, such as the boiler and air pollution control equipment are expected to use mat foundations although pilings may be used to support these facilities.

30. Temporary dewatering activities may be required during construction of Unit 3. This will be accomplished using standard construction dewatering techniques in which well points will be installed around the areas to be excavated, or excavations will be directly dewatered by pumping. Discharges from dewatering will be routed to the onsite stormwater detention ponds. Lowering the water table through dewatering allows for safe and efficient excavation, construction and back filling of foundations and other below grade facilities. Dewatering is expected to last a total of 16 months. Limited impacts to groundwater will occur and no offsite impacts to groundwater are anticipated from construction dewatering.

31. Solid waste generated during construction will be disposed of in accordance with applicable rules and regulations. Construction and demolition wastes, such as scrap wood and metal, will be transferred to a storage area on the site where it will be separated for salvage and recycling. Typical municipal solid waste will be collected in appropriate waste collection containers for disposal in an offsite approved location. All hazardous waste generated during construction will be properly stored, transported and disposed of in accordance with applicable regulations and the site hazardous waste management plan. Used oil from construction vehicles and equipment will be collected by contractors in appropriate containers and transported offsite.

32. During construction, portable toilets and/or permitted holding tanks will be provided for the construction labor force. A licensed contractor will remove all sanitary sewage from these facilities for disposal at an approved offsite treatment facility. Potable water for consumption during construction will be provided using bottled potable water.

33. The entire area within which construction at SGS Unit 3 will occur is located above the 100-year flood plain. Project construction will not adversely impact site flood elevations on adjacent areas and will not cause flooding on offsite property.

34. Construction activities will alter onsite runoff in several parts of the project area. However, no adverse effects are anticipated from this alteration. Surface water runoff from active construction areas will be directed to properly sized and designed stormwater swales and ponds that meet applicable agency standards. Due to the existing nature of the SGS site and the proposed stormwater controls, adverse impacts to surrounding surface waters will not occur during site preparation and construction.

35. Construction of the Unit 3 Project will require a temporary impact to 0.04 acres of the river bank and river bottom for the construction of a new 325 foot-long, 36-inch diameter intake pipe. This new pipe will be adjacent to the existing intake pipeline, extending from the existing river water pump house into the St. Johns River within the existing submerged land easement issued by the Board of Trustees of the Internal Improvement Trust Fund. At the shoreline, to minimize turbidity, sheet piling will be installed around the excavation trench for the pipeline in an area of approximately 10 feet by 30 feet. The trench will be backfilled and the shoreline restored after construction. No adverse impacts to the St. Johns River are anticipated as a result of the new intake pipe.

36. The power block and related facilities have been located to avoid wetland habitats on the SGS site, with the exception of a 0.46-acre isolated shrub marsh wetland of low ecological value adjacent to the existing coal yard. Also, installation of a new pipeline and electrical duct bank between the pump house and Unit 3, within the existing pipeline easement, will temporarily impact a total of 0.47 acres of wetlands. The construction in these areas will comply with applicable state and local regulations. No significant adverse impacts to aquatic systems are anticipated as a result of this construction. Disturbed wetland areas will be returned to their prior condition after construction of the pipeline and duct bank.

37. Construction of the SGS Unit 3 power block and pollution control systems will be located on cleared grassland and is not projected to result in any adverse ecological impacts. No changes to wildlife populations on adjacent properties are expected including listed species. Noise and lighting impacts are minimal and are not anticipated to deter the continued use of undeveloped forest areas within the vicinity by listed species of wildlife.

38. The areas to be impacted by the Unit 3 Project do not support any threatened or endangered flora. No federally listed animal species occur in the areas to be impacted by Unit 3. The state-listed gopher tortoise does occur within upland pine flatwoods proposed for construction activities. The Florida Fish and Wildlife Conservation Commission (FWCC) lists the gopher tortoise as a species of special concern. Impacts to the gopher tortoise will be avoided or minimized through burrow avoidance, tortoise relocation or mitigation. Mitigation can include purchase of suitable gopher tortoise habitat offsite, in consultation with the FWCC. The presence or absence of other protected

species, including the Eastern Indigo snake, will be verified during pre-clearing surveys of the area and standard protection measures.

39. The Unit 3 Project's construction is expected to have a small demographic impact on the community surrounding the site. The Unit 3 construction work force is expected to average approximately 600 employees over the four year construction period. It is anticipated that onsite construction activities will begin no later than the third quarter of 2008. Construction is expected to be completed no later than the third quarter of 2012. Peak construction is expected to occur in mid-2010 with approximately 1500 workers on site. The majority of the construction workers are expected to commute to the site from within a commuting distance of up to sixty miles. Contractors will be responsible for hiring the construction work force. Construction of the Unit 3 Project is expected to have direct economic benefits, including employment opportunities. Direct benefits of plant construction will also result from the purchase of materials and equipment from local suppliers, and from equipment purchased or leased within the state. A significant portion of these purchases will be made in Putnam County and nearby counties. It is expected that a majority of the construction wages paid during construction will be spent within Putnam County and the surrounding areas. These wages will create additional demands for goods and services. As this money is spent, it will create a multiplier effect within the area, thereby generating economic activity, including additional jobs and earnings.

40. Operation of the new Unit 3 is expected to have significant socio-economic benefits to Putnam County and the surrounding area. Operation of the new Unit 3 is expected to add 50 new employees to supplement the existing work force of approximately 280 employees. In addition, property tax revenues from the Seminole facility, including the

Unit 3 Project, paid to Putnam County and other governmental entities is estimated to be over \$130 million for the first ten years of the life of the plant following construction. Because the Seminole plant is largely self-sufficient, it will not require many public utilities or services that residential and commercial development typically requires. The sum total of operating and capital revenues and costs from the project to local government agencies is projected to be a substantial net surplus to Putnam County. In addition to the local government fiscal benefits, sales and other tax benefits will accrue to the state of Florida. In addition to the direct benefit of the increased employment payroll, these direct earnings from plant operations will also generate indirect earnings benefits in the local economy due to an increase in the demand for goods and services.

41. Construction traffic will affect area roadways on a temporary basis during the construction period. The worst-case impact for construction traffic will occur during maximum employment in the year 2010. A traffic impact analysis was conducted to determine impacts during the period of the peak construction work force. This included calculations of the future turning movements at intersections in the traffic study area. The intersection of U.S. Highway 17 and the plant entrance road requires signalization and widening to two approach lanes to maintain acceptable levels of traffic service during construction of Unit 3. In addition, the site entrance drive will be widened to provide two exit lanes, one for right turns and the other for left turns onto U.S. Highway 17. Projected traffic impacts during operation of Unit 3 were also evaluated based on an increase of 50 employees. Total future traffic beginning in 2013, the first full year of Unit 3 operation, was evaluated. The evaluation identified the need for a signal at the U.S. Highway 17 and Project entrance to insure acceptable levels of service with projected total traffic. The

improvements proposed for Unit 3 construction will maintain an acceptable level of traffic during plant construction and operation.

42. A noise impact evaluation for the construction period was conducted to predict maximum noise levels produced by a combination of likely construction-related noise sources. The predicted noise levels for construction are not expected to adversely impact sensitive receptors in the vicinity of the site. The actual or measured noise levels are expected to be lower than those predicted because of the conservative nature of the analysis. When steam blows to clean piping are conducted, which result in elevated noise levels for short durations, notification will be made to areas expected to experience elevated noise levels.

43. A noise impact assessment was also conducted for noise generated during operation of the Unit 3 project. Noise impact modeling was performed using an environmental noise propagation computer program, to predict maximum noise levels produced during operation with background noise levels. While there are no applicable federal or state noise standards, the Unit 3 Project will comply with the sound level limits contained in the Putnam County noise ordinance.

44. Net beneficial environmental impacts at SGS associated with Unit 3, in combination with the Units 1 and 2 upgrades described above, are summarized as follows:

Air Quality - - Reductions in facility-wide SO₂, NO_x, SAM, and mercury air emissions, and compliance with applicable air quality requirements. The proposed urea-based (as opposed to ammonia) SCR system will enhance community safety.

Water Quality - - Elimination of several process water discharge streams will result in reductions in mass loading of nutrients and several additional pollutants to the St. Johns

River. Mixing zones for cooling tower blowdown discharges are required only on account of the concentration of river intake constituents. Several proposed mixing zones will be smaller than current mixing zones. Current discharges of wastewater from Units 1 and 2 via groundwater percolation ponds will be eliminated.

Water Conservation - - The combined Units 1-3 surface water intake, as proposed, will meet consumptive use criteria, and will be lower than the applicability threshold of EPA's Phase II surface water intake rules. Enhanced on-site water reuse will result in no need to increase current groundwater consumptive use levels.

Coal Combustion Product Reuse - - Reuse of FGD product, fly ash, and bottom ash will minimize solid waste disposal.

Land Use - - Seminole's proposed use of the existing SGS site and infrastructure is environmentally beneficial.

45. On August 7, 2006, the Florida Public Service Commission (PSC) issued its affirmative determination of need for the SGS Unit 3 Project. The PSC addressed the criteria in Section 403.519, Florida Statutes. The PSC determined that there is a need for the proposed Unit 3 taking into account the need for electric system reliability and integrity. The PSC found that without the addition of 750 MW from the Unit 3 Project, Seminole will not meet its 15 percent reserve margin criterion in the year 2012 and Seminole's members and customers will be faced with an unacceptably high risk of service interruptions. The PSC found that Seminole has chosen a proven generating technology and that Seminole has experience with the construction and operation of pulverized coal units. The estimated costs for Unit 3 appeared reasonable to the PSC. Therefore, the PSC found that Seminole's Unit 3 Project will contribute to the provision of adequate electricity at a

reasonable cost. The PSC also found that Seminole's Unit 3 Project is the most cost-effective alternative available to Seminole. The PSC found that there are no conservation measures reasonably available to Seminole that might mitigate the need for the proposed power plant.

Agency Positions

46. On November 9, 2006, DEP issued its Staff Analysis Report on the Seminole Generating Station Unit 3 Project. The DEP recommended that "if the Seminole Electric Cooperative, Inc., as the applicant, agrees to abide by the conditions of certification, attached and incorporated herein, the Department would recommend certification of the Seminole Generating Station Unit 3."

47. The Florida PSC issued its order determining the need for the Project. That determination of need served as the PSC's report to the DEP for the certification of the Project.

48. The FWCC submitted a letter on September 1, 2006, indicating that the Commission "does not object to certification of the Project under the condition that if protected species...are impacted..., then the FWC shall be contacted prior to taking any action related to those species."

49. The SJRWMD submitted its agency report on October 11, 2006. The SJRWMD recommended approval of the Site Certification Application for SGS Unit 3 with a number of conditions of certification. That report concluded that the Unit 3 Project met the SJRWMD's permitting requirements.

50. On October 30, 2006, the Florida DOT submitted a revised report recommending approval, subject to that agency's recommended conditions.

51. The Florida Department of State, Division of Historical Resources submitted a letter on September 29, 2006, indicating that the Division had reviewed additional archaeological and historical survey of the site and concluded that no additional historic cultural resources existed on the site of the Unit 3 Project.

CONCLUSIONS OF LAW

1. Under Subsection 403.508(6), Florida Statutes, the ALJ granted the request to cancel the certification hearing and relinquished jurisdiction to the Department. Therefore, the Department has jurisdiction to enter this Final Order. See Section 403.509(1), Fla. Stat.

2. In accordance with Part II, of Chapter 403, Florida Statutes, and Chapter 62-17, Florida Administrative Code, proper notice was given to all persons, entities and parties entitled to such notice. All necessary and required governmental agencies, as well as members of the public, either participated in or had the opportunity to participate in the certification hearing. Reports and studies were issued by the Department, the FWCC, the SJRWMD, the DOT, and the Department of State's Division of Historical Resources.

3. The Florida PSC issued its affirmative determination that a need exists for the Unit 3 electrical generating facility and the electricity it will produce. See Section 403.519, Fla. Stat.

4. Seminole Electric Cooperative has met its burden of proof to demonstrate that the SGS Unit 3 Project meets the criteria for certification under the PPSA. Seminole has provided reasonable assurances that the safeguards for construction and operation of the Unit 3 Project are technically sufficient to protect the public welfare of the citizens of Florida, and are otherwise reasonable and available methods to achieve that protection of the public.

5. The Unit 3 Project will result in minimal adverse effects on human health, the environment, the ecology of the land and its wildlife, and the ecology of state waters and their aquatic life. In addition, the Unit 3 Project will not conflict with the State Comprehensive Plan or the local comprehensive plan for Putnam County, Florida. If operated and maintained in accordance with this Final Order and the Department's proposed Conditions of Certification, the Unit 3 Project will comply with the applicable nonprocedural requirements of all agencies. Furthermore, certification of the Unit 3 project will fully balance the increasing demand for electrical power plant location and operation in this State with the broad interests of the public that are protected by the PPSA.

CONCLUSION

Having reviewed the matters of record and being otherwise duly advised, the Department concludes that, if constructed and operated in accordance with the evidence presented in the record and the Conditions of Certification, the Project will serve and protect the broad interest of the public and should be approved.

It is therefore ORDERED that:

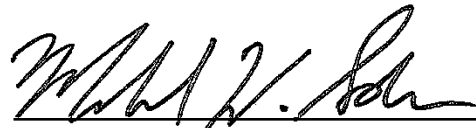
A. Site certification of Seminole Electric Cooperative, Inc.'s Seminole Generating Station Unit 3 Project, as described in the Site Certification Application and the record as a whole, is hereby APPROVED.

B. The Project is subject to the Conditions of Certification, dated November 9,

2006, contained in the DEP's SAR, Appendix I, which are attached as Exhibit A and incorporated by reference herein.

DONE AND ORDERED this 18th day of August, 2008, in Tallahassee, Florida.

STATE OF FLORIDA DEPARTMENT
OF ENVIRONMENTAL PROTECTION



MICHAEL W. SOLE
Secretary

Marjory Stoneman Douglas Building
3900 Commonwealth Boulevard
Tallahassee, Florida 32399-3000

FILED ON THIS DATE PURSUANT TO § 120.52,
FLORIDA STATUTES, WITH THE DESIGNATED
DEPARTMENT CLERK, RECEIPT OF WHICH IS
HEREBY ACKNOWLEDGED.


CLERK

8/18/08
DATE

CERTIFICATE OF SERVICE

I HEREBY CERTIFY that a copy of the foregoing Final Order has been sent by United States Postal Service to:

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this 19th day of August, 2008.

STATE OF FLORIDA DEPARTMENT
OF ENVIRONMENTAL PROTECTION



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*Seminole Unit 3
Staff Analysis Report
Florida Department of Environmental Protection*

Appendix I: Draft Conditions of Certification

EXHIBIT A

State of Florida Department of Environmental Regulation Protection
Seminole Electric Cooperative, Inc.
Seminole Units 1, 2 & 3
PA 78-10A2

CONDITIONS OF CERTIFICATION

Modified XX/XX/XX

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I. Air

A. Units 1 and 2

The construction and operation of Units No. 1 and 2 at the Seminole steam electric power plant site shall be in accordance with all applicable requirements and limits provisions of Chapters 62-210, 62-212, 62-213, 62-296, and 62-297, Florida Administrative, In addition to the foregoing, the permittee shall comply with Air permit No. 1070025-004-AC, and Title V permit 1070025-003-AV each as attached in Appendix A and the following conditions of certification. Any final issuance, modifications, or amendments to such PSD permit and/or Title V, are incorporated by reference herein, and are binding and enforceable Conditions of this Certification. The Licensee is subject to and shall comply with the terms, conditions, requirements, limitations, and restrictions set forth in Appendix A, as it may be revised by any final issuance, modification, or amendment to such PSD permit and/or Title V Permit. A violation of the terms conditions, requirements, limitations, and restrictions in Appendix A is a violation of these Conditions of Certification.

B. Unit 3

The conditions, requirements, limitations, and restrictions set forth in draft Permit PSD-FL-375, [Attached as Appendix A] and any final issuance, modifications, or amendments to such PSD permit, are incorporated by reference herein, and are binding and enforceable Conditions of this Certification. The Licensee is subject to and shall comply with the conditions, requirements, limitations, and restrictions set forth in Appendix A and any final issuance modification or amendment thereto. A violation of the conditions, requirements, limitations, and restrictions in Appendix A is a violation of these Conditions of Certification. The Licensee is also obligated to comply with any air operation permit issued pursuant to Chapter 62-213, F.A.C.

BC. Liquid Discharges

There shall be no discharge of liquids containing nitrogen compounds from the upgraded air pollution control systems to the Seminole Generating Station cooling water outfall to the St. Johns River until a revised NPDES permit is issued by the Department that reflects discharge limits for nitrogen compounds in accordance with the DEP's Total Maximum Daily Load limits for the St. Johns River.

II. Water Discharges

A. Units 1 and 2

Any discharges into waters of the State during construction and operation of Units No. 1 & 2 shall be in accordance with all applicable provisions of Chapters 62-302 and 62-

520, Florida Administrative Code, and 40 C.F.R 423 *Effluent Guidelines and Standards for Steam Electric Power Generating Point Source Category* except as provided herein. Also the permitteelicensee shall comply with the following conditions of certification:

1A. Plant Effluents and Receiving Body of Water

For discharges made from the power plant the following conditions shall apply.

a4. Receiving Body of Water (RBW)

The receiving body of water has been determined by the Department to be those waters of the St. Johns River and any other water affected which are considered to be waters of the State within the definition of Chapter 403, Florida Statutes.

b2. Point of Discharge (POD)

The point of discharge will be determined by the Department to be where the effluent physically enters the waters of the State.

c3. Chemical Wastes and Boiler Blowdown

All discharges of low volume wastes (demineralizer regeneration, floor drainage, lab drains and similar wastes), shall comply with Chapter 62-302. If violations of Chapter 62-302 occur, corrective action shall be taken. These wastewaters shall be discharged to an adequately sized and constructed treatment facility. Preoperational cleaning wastes shall be treated to comply with 40 CFR Part 423 and Chapter 62-302, F.A.C., prior to discharge. Boiler blowdown, boiler fireside wash, air preheater wash, and stack wash shall be disposed of in an adequately sized percolation pond; provided, however, that boiler blowdown from either unit may also be recycled to the Unit 1 and 2 cooling towers.

d4. Coal Pile and Limestone Pile

Coal pile runoff and Limestone Pile runoff from less than 10-year 24-hour rainfall shall be treated as required to limit the suspended solids to 50 mg/l and to prevent increases in turbidity to less than 29 NTU above background in waters of the State beyond a distance of 150 meters from the POD.

B. Unit 3

1. A percolation pond closure plan must be submitted 90 days prior to eliminating the wastewater discharge to the three percolation ponds.

C5. Industrial Wastewater Permit

1a: In addition to the Conditions of Certification set forth in this subsection, Water Discharges, the operation of Units 1, and 2 and 3 at the Seminole steam electric power plant site also shall be in accordance with the separate Industrial Wastewater Facility Permit No. FL0036498-Major, issued to Seminole by the Department on January 7, 2000, and all revisions approved by the Department. The provisions of Industrial Wastewater Facility Permit No. FL0036498-Major, which is attached as Appendix "BA", is hereby incorporated as part of these Conditions of Certification for the SECI Seminole Power Plant. Seminole shall comply with the substantive conditions and limitations set forth in that Permit as part of the Conditions of Certification, and as those conditions may be modified revised in the future by the Department. The substantive requirements of Industrial Wastewater Facility Permit No. FL0036498-Major are hereby incorporated as Conditions of this Certification, are fully enforceable as Conditions of Certification for this facility, and are subject to the provisions of §403.516, F.S., and Chapter 62-17.211, F.A.C.

2b Any renewed or modified revised Industrial Wastewater Facility Permit for the plant shall be made a part of this certification in accordance with the Department's rules for modifications of certification in accordance with the Department's rules for modifications of certification in Chapter 62-17.211(4), Florida Administrative Code. If that Permit is subsequently renewed or modified in the future, Seminole shall comply with the more stringent of the substantive conditions and limitations contained in these Conditions of Certification or in the separate Industrial Wastewater Facility Permit until the certification is modified to reflect any renewed or modified Industrial wastewater Facility Permit.

III. Groundwater

A. General

The use of groundwater from two wells for plant service water for Units 1, 2 and 3 shall be minimized to the greatest extent practicable, but in no case shall exceed 3.9 mgd on a maximum daily basis or 0.55 mgd on an average annual basis. If, in the future, the demand for groundwater use is expected to increase above this amount, Seminole shall submit necessary and appropriate information to the department and to the St. Johns River Water Management District (SJRWMD) to demonstrate that the increased water use complies with the applicable substantive consumptive use permitting criteria. The Department, in consultation with the SJRWMD, may authorize such increase in writing. Seminole shall then operate the plant in compliance with that approval and these conditions of certification.

[Chapter 40C-2, F.A.C.; Paragraphs 10.2(a)(b)(c)(d)(h)(i)(j)(k)(l)(r); 10.3(a)(b)(c)(g), A.H.]

B. Well Criteria

The submission of well logs and test results and location, design and construction of wells to provide plant service water must shall be in accordance with

applicable rules of the Department of Environmental Protection and the St. Johns River Water Management District (SJRWMD). Total water use per month must shall be reported quarterly to SJRWMD commencing with the start of construction.

C. Water Use Restriction

Groundwater is restricted to uses other than main steam condensing. Any change in the use of said water will require a modification of this condition.

D. Emergency Shortages

In the event an emergency water shortage should be declared pursuant to Section 373.175 or 373.246, F.S., by St. Johns River Water Management District for an area including the location of these withdrawal points, the Department, pursuant to Section 403.516, F.S., may alter, modify, or declare to be inactive, all or parts of Condition III. A.- F. An authorized Water Management District Representative, at any reasonable time, may enter the property to inspect the facilities (please see Condition XVIII.A).

E. Monitoring and Reporting

Seminole shall implement the following groundwater monitoring program:

1. Static groundwater levels must shall be monitored prior to purging the wells for sample collection. All measurements must shall be referenced to NGVD at a precision of ± 0.01 foot. The results must shall be logged for each monitoring point approved by the DEP and the St. Johns River Management District, in accordance with the schedule shown in Tables 1 and 2 at the wells shown in Figures 2 3 and 4. Chemical analyses must shall be made on samples from all monitored wells identified in this condition. The location, frequency and selected chemical analyses shall be as given in Condition III.E.4.

2. The chemical analyses must shall be in accord with the latest edition of *Standard Methods for the Analysis of Water and Wastewater*.

3. Seminole must shall operate flow meters in compliance with SJRWMD specifications on all production wells.

4. After consultation with the DEP and SJRWMD, Seminole must shall install a monitoring well system as generally shown in Figures 2 3 and 4 to monitor groundwater quality in the top 40 feet of surficial aquifer. One well must shall be installed to a depth greater than 40 feet but less than 100 to monitor vertical dispersion or groundwater contaminants. Monitoring well locations and designs must shall be submitted to the Department and SJRWMD for review. Approval or disapproval of the locations and design will be issued within 60 days. The water samples collected from each of the monitor wells must shall be collected immediately after removal by pumping of a

quantity of water equal to three well volumes and stabilization of field parameters (i.e. conductivity, temperature, and pH), or five well volumes (if field parameters not monitored) in accordance with the Department's most current Standard Operating Procedures Manual for Field Sampling, and the Quality Assurance Rule 62-160, Florida Administrative Code. The water quality analyses must shall be performed monthly during the year prior to commercial operation and two years after operation and quarterly or annually thereafter in accordance with the schedule shown in Tables 1 and 2. Monthly sampling prior to operation of Unit 3 is not required. The Coal Pile and Percolation Pond well Results shall must be submitted to the Department's Northeast District Ground Water Section and the SJRWMD, and the FGD well results must be submitted to the Department's Northeast District Solid Waste Section and SJRWMD as specified in Condition III.E.9. Monitoring Testing for the wells and following constituents listed in Tables 1 and 2 below is required.

Table 1. Groundwater Monitoring Frequency – Units 1 and 2						
	FGD Disposal Area Wells MW-3, MW-5, MW-7C, MW-18, MW-19, MW-20, MW-202, MW-203, MW-204, MW-205, MW-206, MW-207, and MW-208		Coal Pile Area Wells MWI-8R, MWC-9, MWI-10, MWI-12, MWC-13A		Perc Pond Area Wells MWI-14A, MWI-14CR, MWC-16R2, MWC-17C	
	Monthly	Quarterly	Monthly	Yearly	Monthly	Quarterly
Arsenic	X	X		X	X	X
Barium		X		X		X
Beryllium		X		X		X
Cadmium		X		X		X
Chloride	X	X		X	X	X
Chromium		X		X		X
Copper		X		X		X
Gross Alpha		X		X		X
Iron	X	X	X	X	X	X
Lead		X		X		X
Mercury	X	X		X	X	X
Nickel		X		X		X
Nitrite+Nitrate				X		X
pH	X	X		X	X	X
Selenium	X	X		X	X	X
Silver		X		X		X
Specific Conductance	X	X	X	X	X	X
Sulfate	X	X		X	X	X
TOC				X		X
TOH				X		X
Turbidity				X		X
Vanadium				X		X

Table 1. Groundwater Monitoring Frequency – Units 1 and 2

	FGD Disposal Area Wells MW-3, MW-5, MW-7C, MW-18, MW-19, MW-20, MW-202, MW-203, MW-204, MW-205, MW-206, MW-207, and MW-208		Coal Pile Area Wells MWI-8R, MWC-9, MWI-10, MWI-12, MWC-13A		Perc Pond Area Wells MWI-14A, MWI-14CR, MWC-16R2, MWC-17C	
	Monthly	Quarterly	Monthly	Yearly	Monthly	Quarterly
Zinc	X	X		X	X	X

MW = SOLID WASTE AREA WELL, MWI = INTERMEDIATE WELL, MWC = COMPLIANCE WELL

Table 2. Groundwater Monitoring Frequency – Unit 3

	*TBD		Coal Pile Area Wells MWI-8R, MWC-9, MWI-10, MWI-12, MWC-13A**		Perc Pond Area Wells MWI-14A, MWI-14CR, MWC-16R2, MWC-17C**	
	Monthly	Quarterly	Monthly	Yearly	Monthly	Quarterly
Arsenic				X	X	X
Barium				X		X
Beryllium				X		X
Cadmium				X		X
Chloride				X	X	X
Chromium				X		X
Copper				X		X
Gross Alpha				X		X
Iron			X	X	X	X
Lead				X		X
Mercury				X	X	X
Nickel				X		X
Nitrite+Nitrate				X		X
pH				X	X	X
Selenium				X	X	X
Silver				X		X
Specific Conductance			X	X	X	X
Sulfate				X	X	X
TOC				X		X
TOH				X		X
Turbidity				X		X
Vanadium				X		X
Zinc				X	X	X

*TBD = TO BE DETERMINED - AN UPDATED GROUND WATER MONITORING PLAN MUST BE SUBMITTED AND APPROVED PRIOR TO THE OPERATION OF UNIT 3

**MWI = INTERMEDIATE WELL, MWC = COMPLIANCE WELL

Conductance	Nickel
pH	Selenium
Chloride	Chromium
Iron	Arsenic
Cadmium	Beryllium
Zinc	Mercury
Copper	Lead
Sulfate	Gross Alpha
Silver	Barium

5. The licensee must give at least 72-hours notice to the Department's Northeast District Office, prior to the installation of any new monitoring wells.

56. A scaled drawing must shall be submitted which depicts the location of monitor wells in relation to property lines, facility structures, roads, etc. The drawing must shall include the identity of each monitor well, along with the latitude, longitude and top of casing elevation. The drawing must shall be revised within 45 days of any new monitor well construction.

67. New monitor wells constructed after January 1, 1995, must shall be installed by a Florida licensed water well contractor. Well design, installation, and development must shall be in accordance with A.S.T.M. standard D-5092 "Standard Practice for Design and Installation of Monitoring Wells in Aquifers", or other prior approved Department procedures with screened intervals limited to ten feet unless otherwise approved by the Department. All monitor wells are to be permanently labeled as to identity and top-of-casing elevation.

78. Within 30 days of any new monitor well installation, a Monitor Well Completion Report, DEP Form 62-522.900(3) (Appendix C) must shall be completed and submitted.

89. In the event that a monitor well is damaged, a written report describing both the damage and proposed corrective measures must shall be submitted to the DEP within 7 days. Approval must shall be obtained from the Department prior to repair or replacement of any monitor well.

910. Quarterly Ground water sampling and analytical reporting must be in accordance with the following schedule:

Sample Periods	Report Due
1st Quarter (January - March)	April 28th
2nd Quarter (April - June)	July 28th
3rd Quarter (July - September)	October 28th

4th Quarter (October - December)	January 28th
Annual (January - December)	January 28th

11. Coal Pile and Percolation Pond well analytical results must be reported on DEP Form 62-620.910(10), or a facsimile thereof. FGD well analytical results must be reported on DEP Form 62-522.900(2), or a facsimile thereof. A copy of the laboratory analysis report is to accompany the completed monitoring report form.

4412. Commencing with the first quarter of 1995, Seminole is authorized to discontinue monitoring of compliance wells 2 and 15. However, SECI must shall monitor data collected at intermediate wells 7C and 14A to determine if a trend or trends exist indicating that maximum contaminant levels in 62-550, F.A.C., for the parameters listed in Condition III.E.4. may be exceeded at the boundary of the zone of discharge. DEP may require resumption of quarterly monitoring at either well 2 or 15, as appropriate, upon determining that such maximum contaminant level trends are occurring for specific parameters in wells 7C or 14A.

4213. An analysis must shall be conducted once every 5 years on each of the separate effluent(s) which are discharged to ground water via the percolation ponds. The analysis must shall be run on a 24-hour flow-proportioned representative grab samples for the priority pollutants (excluding pesticides).

4314. After the second year of monitoring and periodically thereafter, the Department will, and the applicant must, shall review the results of the monitoring program and determine the necessity for modifying or continuing the program.

Table I. Groundwater Monitoring Frequency						
	FGD Area Wells 3, 5, 7C, 18, 19, 20		Coal Pile Area Wells 6, 8, 9, 10, 12, 13A		Perc Pond Area Wells 14A, 14C, 16, 17B	
	Monthly	Quarterly	Monthly	Yearly	Monthly	Quarterly
Conductance	X	X	X	X	X	X
pH	X	X		X	X	X
Chloride	X	X		X	X	X
Sulfate	X	X		X	X	X
Cadmium		X		X		X
Zinc	X	X		X	X	X
Iron	X	X	X	X	X	X
Copper		X		X		X
Silver		X		X		X
Nickel		X		X		X
Selenium	X	X		X	X	X
Chromium		X		X		X
Beryllium		X		X		X
Mercury	X	X		X	X	X
Lead		X		X		X
Barium		X		X		X
Arsenic	X	X		X	X	X
Gross Alpha		X		X		X

F. Leachate

1. Zone of Discharge

Leachate from the FGD/sludge landfill, coal storage pile, bottom ash sump, percolation and FGD emergency pond must shall not contaminate waters of the State (including both surface and groundwaters) in excess of the limitations of Chapter 62-520, F.A.C., beyond the boundary of the site.

2. Corrective Action

When the groundwater monitoring system show a violation of the groundwater water quality standards of Chapter 62-520, the appropriate ponds, FGD landfill, or coal pile must shall be sealed, relocated or closed, or the operation of the affected facility must shall be altered in such a manner as to assure the Department that no violation of the groundwater standards will occur beyond the boundary of the site.

G. Disposal Area

1. Prior to the onsite disposal of any waste, from Unit 3 the facility must provide for Department review, in conjunction with any requested additional information, and obtain Department approval of a revised groundwater monitoring plan to address potential discharges from the landfill. The groundwater monitoring plan must be of sufficient detail to show how the landfill will be monitored and to provide technical justification for the monitoring locations, parameters and frequency. The facility must conduct initial sampling prior to the acceptance of waste in accordance with the approved groundwater monitoring program.

2. The groundwater monitoring plan must comply with the portions of 62-522 and 62-701, including, 62-522.600(3), 62-522.600(6), 62-701.410(1), 62-701.510(2), 62-701.510(6), 62-701.510(7), 62-701.510(9).

IV. Control Measures During Construction

A. Stormwater Runoff

During construction and plant operation, necessary measures must shall be used to settle, filter, treat or absorb silt containing or pollutant laden stormwater runoff to limit the suspended solids to 50 mg/l or less at the POD during rainfall periods less than the 10-year, 24-hour rainfall, and to prevent an increase in turbidity of more

than 29 nephelometric 50-Jackson Turbidity Units above background in waters of the state beyond 150 meters from the POD.

Control measures must shall consist at the minimum, of filters, sediment traps, barriers, berms or vegetative planting. Exposed or disturbed soil must shall be protected as soon as possible to minimize silt and sediment laden runoff. The pH must shall be kept within the range of 6.0 to 8.5 at the POD.

B. Sanitary Wastes

Disposal of sanitary wastes from construction toilet facilities must shall be in accordance with applicable regulations of the Department and appropriate local health agency. The sewage treatment plant must shall be operated in accordance with Chapters 62-302, 62-601, and 17-602, F.A.C. Plans and specifications for the sewage treatment plant shall be submitted to the Department's St. Johns River Subdistrict Manager District Office for review and approval prior to installation.

C. Environmental Control Program

An environmental control program must shall be established under the supervision of a qualified person to assure that all construction activities conform to good environmental practices and the applicable conditions of certification.

The permittee/licensee must shall notify the Department if unexpected harmful effects or evidence of irreversible environmental damage are detected during construction, must shall immediately report to the Department and must shall within two weeks provide an analysis of the problem and a plan to eliminate or significantly reduce the harmful effects or damage, and to prevent reoccurrence.

V. Solid Wastes

A. Units 1 and 2 Landfill

Solid Wastes resulting from construction or operation must shall be disposed of in accordance with the applicable regulations of Chapter 62-701, F.A.C. The permittee licensee must shall submit a program for approval outlining the methods to be used in handling and disposal of solid wastes indicating at least methods for erosion control, covering, vegetation, and quality control.

Open burning in connection with land clearing must shall be in accordance with Chapter 62-256, F.A.C. No additional permits shall be required, but the Division of Forestry must shall be notified prior to burning. Open burning must shall not occur if the Division of Forestry has issued a ban on burning due to fire hazard conditions.

B. Unit 3 Landfill

1. General Requirements

At least 90 days prior to the initial start up of Unit 3, SECI shall submit sufficiently detailed information that shows how a new landfill for Units 1, 2 and 3 will be constructed, operated, monitored, and closed (including how a new or expanded landfill will be constructed while continuing to operate the existing landfill) in compliance with the following provisions of Chapter 62-701, F.A.C.:

62-701.220(4);

62-701.300;

62-701.320(6), (7)(b & d through i) and (15)

62-701.330(3)(c through i);

62-701.340(1) and (4)

62-701.400(1), (2), (3)(a & c through f), (4), (6), (7), (9) through (11);

62-701.410;

62-701.430;

62-701.500(1) through (5) and (7) through (13);

62-701.510;

62-701.520(3) and (4);

62-701.530, and;

62-701.630.

Nothing herein shall preclude SECI from applying for approval of alternate procedures and requirements in accordance with Rule 62-701.310, F.A.C.

2. Construction Requirements

At least 90 days prior to the initial start-up of Unit 3, SECI shall submit detailed design and construction drawings showing how the landfill and all appurtenances will be built. Construction of the proposed landfill must not begin until the Solid Waste Section of the Department's Northeast District reviews and approves, in writing, these design and construction submittals. The design of the landfill shall include at least a double or composite liner system, with a leachate collection and removal system, that complies with the requirements of Rule 62-701.400, F.A.C., for a Class I landfill.

3. Operation Requirements

At least 90 days prior to the initial start up of Unit 3, SECI shall submit a detailed operation plan showing how the facility will be operated in compliance with the above-noted requirements of Chapter 62-701, F.A.C. If the operation plan indicates that no putrescible wastes will be accepted at the landfill, some of these requirements may not be applicable. Operations at the landfill must not commence until the Solid Waste Section of the Department's Northeast District reviews and approves, in writing, the operation plan.

No solid waste from Unit 3 may be disposed on site prior to the proposed new landfill areas having been constructed in accordance with this certification and the

Department having accepted, in writing, a certification of construction completion signed and sealed by a Professional Engineer licensed in Florida indicating that the landfill has been constructed in substantial conformance with the requirements of this certification.

4. Landfill Closure Requirements

At the time of closure, the Facility must meet the Class I landfill requirements (except for submitting and receiving a permit and/or a permit application) contained in the following Rules:

62-701.600(1)(b), (2)(a), and (3) through (7);
62-701.610(2) through (4), (7) and (8), and;
62-701.620(1), (5) through (7), (9) and (10), and;

5. Miscellaneous Provisions

a. Information Format

Although a permit and/or a permit application are not required, information for the construction, operation and closure of the proposed landfill must be submitted in the format required for a permit.

b. Leachate Recirculation

Leachate must not be recirculated.

c. Annual Notice of Compliance

By January 15 of each year and within 60 days of the promulgation of new Solid Waste Rules, the Facility must provide written certification to the Solid Waste Section of the Department's Northeast District that it is either in compliance with all Solid Waste Rules and certification conditions or must list the Rules and/or conditions that it is not in compliance with and the actions that have been or will be taken to bring it back into compliance. The certification must also indicate which new Solid Waste Rules apply to the Facility and what is being done to come into compliance with them.

d. Document Storage

A copy of the Department approved engineering drawings, plans, reports, operation and contingency plans, all revisions and supporting information, as well as a copy of this certification must be kept onsite at the Facility office at all times for reference and inspections.

e. Other Regulatory Requirements

If any other regulatory agency should require revisions or modification to any portion of the site certified project directly or indirectly related to the proposed landfill, the Solid Waste Section of the Department's Northeast District office is to be notified of the revisions so that a determination can be made as to whether modification of the

certification conditions is required.

f. Notification in Case of Emergency

The Licensee must immediately notify the Department by telephone whenever a serious problem occurs at the facility, including a fire or other emergency that poses an unanticipated threat to the public health or the environment. During regular business hours, notification must be made to the Solid Waste Section of the Department's Northeast District at (904) 807-3300. If an emergency occurs outside regular business hours, the Licensee must telephone the 24-hour emergency phone number (800) 320-0519. This number is for emergencies only. Within seven (7) days of any emergency, the Facility must submit to the Solid Waste Section of the Department's Northeast District, a written report explaining the extent of the problem, the cause and what actions have been or will be taken to correct the problem and prevent its recurrence.

g. Provisions for Potable Water Sources

The Facility must provide a temporary source of potable water within seven (7) days and a permanent safe drinking water supply within 180 days of discovery of contamination to replace any potable water well that is shown by chemical and hydrogeologic analysis to be contaminated by the facility. This water must meet all drinking water standards set forth in F.A.C. Chapter 62-550 and must be provided at the Facility's expense.

h. Liner Trench Maintenance and Waste Limits

The facility must post and maintain markers to note the edge of the liner and anchor trench for the proposed landfill and the limits of waste. The facility must place the markers at a minimum frequency of every 100 feet and must provide them during construction of the proposed landfill. The facility must maintain the anchor trenches and slopes to prevent erosion, rutting, or other conditions that may cause damage to the liner. In maintaining the area, the facility must conduct maintenance and grading activities in a manner that will not impact the liner's integrity.

i. Inspections

The Licensee is responsible for the operation and maintenance of the leachate collection and removal system and must, each day the facility receives waste, perform inspections of the leak detection and collection systems for the proposed landfill. Any discrepancies observed during the inspection must be repaired as soon as possible, but not to exceed within seven days of detection. These inspections must be documented and kept on file at the Facility's onsite office.

j. Quantitative Records of Leachate

Quantitative records of leachate collected, in gallons per day, at the proposed landfill's collection and detection systems, and leachate sent off-site for treatment and/or disposal, must be compiled monthly. This information must be maintained at the landfill office and shall be made available to the Department at the Department's request, including during a routine inspection. This information must indicate the daily volume of leachate flow and must be sent to the Solid Waste Section of the Department's Northeast District by January 15 of each year, at the request of the department, and as otherwise indicated in other certification conditions.

k. Leachate System Cleaning and Inspection

The facility's leachate collection systems must be water pressure cleaned, or inspected by video recording at a minimum frequency of once every five years, beginning on the date of construction certification. Results of the respective leachate collection system inspections and/or cleanings must be provided to the Solid Waste Section of the Department's Northeast District within 30 days, and at the Department's request. The facility must in an appropriate manner clean out the leachate collection system if and when obvious signs of obstruction(s) are exhibited, and must notify the Solid Waste Section of the Department's Northeast District, in writing, of the event within 14 days of discovery and must provide the results at the Department's request.

l. Backup Pumps and Power

The facility must provide and maintain a generator onsite to be utilized in the event of a power failure at the proposed landfill to prevent leachate from backing up in the system. The facility shall also have backup pumps available at the facility that will be able to be placed in service in lieu of a pump that is taken out of service for repair and/or maintenance.

m. Ash Storage and Transport

Prior to transport to the landfill, ash must be stored in an enclosed building on an impervious surface. Final disposal of the ash must be into the proposed landfill or other method approved by the Solid Waste Section of the Department's Northeast District. Any leachate generated from within the building must be collected and disposed of by a method approved by the Solid Waste Section of the Department's Northeast District.

n. Prohibition of Hazardous Wastes

Unless approved by the Department with subsequent modification of conditions, this facility must not accept materials defined by applicable Federal, State or local statutes, rules, regulations or ordinances as "Hazardous Wastes."

o. Ash Sampling

A representative composite ash sample must be gathered within 30 days after commencement of disposal in the proposed landfill and prepared for analysis by total digestion using EPA Method 3050 Acid Digestion of Sediments, Sludges and Soils, "Test Methods of Evaluating Solid Waste Physical/Chemical Methods," EPA Publication SW-848 (3rd edition as amended by Update 1/12/87). Ash samples must be collected and analyzed by the methods listed in the Quality Assurance/Quality Control plan as required under F.A.C. 62-702 and as approved by the Solid Waste Section of the Department's Northeast District.

p. Submittal of Ash Sampling Results

Results of the ash analysis must be submitted to the Solid Waste Section of the Department's Northeast District within 30 days of receipt. Results will be used by the Solid Waste Section of the Department's Northeast District to establish a baseline of levels of metals concentrations in the ash as compared to other facilities in the state. Results of these analyses may also be used for correlation with groundwater monitoring information or ash leachate as discussed in F.A.C. 62-702 and in any subsequent modification of conditions.

VI. Operation Safeguards

The overall design, layout, and operation of the facilities must shall be such as to minimize hazards to humans and the environment. Security control measures must shall be utilized to prevent exposure of the public to hazardous conditions. The Federal Occupational Safety and Health Standards must 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 must will also be complied with.

VII. Screening

The ~~permitee~~licensee must shall provide screening of the site through the use of aesthetically acceptable structures, vegetated earthen walls and/or existing or planted vegetation.

VIII. Potable Water Supply System

The potable water supply system must shall be designed and operated in conformance with Chapters 62-550, 62-551, and 62-560, F.A.C. Information as required in Chapters 62-550, 62-551, 62-555, and 62-560, F.A.C., must shall be submitted to the Department prior to construction and operation. The operation of the potable water supply system must shall be certified in accordance with Chapters 62-602 and 62-699, F.A.C.

IX. Transformer and Electric Switching Gear

The foundations for transformers, capacitors, and switching gear necessary for Seminole Units 1, 2 and 2.3 to connect with the existing transmission/distribution system must shall be constructed of an impervious material and must shall be constructed in such a manner to allow complete collection and recovery of any spills or leakage of oily, toxic, or hazardous substances.

X. Toxic, Deleterious, or Hazardous Materials

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

XI. Construction and Emergency Maintenance Activities in Waters of the State

A. No construction on sovereignty submerged lands may shall commence without obtaining lease or title from the Trustees of the Internal Improvement Trust Fund.

B. Construction and maintenance of intake and discharge structures should be done in a manner to minimize turbidity. Turbidity screens should be used to prevent turbidity in excess of 29 NTU above background beyond 150 meters from the dredging, pile driving or construction site.

C. Dredging of the intake channel and discharge pipe trench should be performed by hydraulic dredge (small "mudcat" type is suitable); clamshell or other excavating equipment is satisfactory behind cofferdams or other turbidity control devices.

D. All spoil shall be piped hydraulically or trucked to an upland disposal site of sufficient capacity to retain all material. The discharge pipe trench should be refilled with clean sand sized material.

E. Effective stabilization of submerged bottom sediments at the discharge pipe exits should be achieved and maintained during the period of operation by the placement of riprap or other suitable material.

XII. FGD/Sludge Landfill and Coal Pile

SECI is authorized, pursuant to Section 62-701.320(1), F.A.C., to utilize flyash from the Seminole Power Plant and from other coal fired electric generating facilities in the on-site FGD sludge stabilization process.

Adequate geophysical testing of landfill increments 1 and 2 and any subsequent increments must shall be conducted in accordance with Chapter 62-701, F.A.C.

The existing and proposed FGD sludge landfill areas must shall be monitored and studied pursuant to a detailed groundwater testing and monitoring program as defined in Condition III.E.

The results of the program will be used by the Department in determining whether Seminole has affirmatively demonstrated that Florida Water Quality Standards (62-520, F.A.C.) will not be violated beyond the site boundary.

If the Department determines that Seminole has failed to affirmatively demonstrate that Florida Water Quality Standards (Chapter 62-520, F.A.C.) will not be violated, Seminole must shall present to the Department, within 90 days of such determination, a plan of correction, (which may include, if appropriate, an impermeable liner) for review and approval by the Department, and for timely implementation by Seminole.

SECI is granted the authority to dispose of FGD wastes by implementation of microencapsulation and/or macroencapsulation methods as described below:

A. Microencapsulation or fixation of unoxidized FGD waste must shall be accomplished by following good engineering practices and applicable environmental standards. The fixated material must shall achieve an ultimate permeability of no greater than 7×10^{-7} cm/sec.

B. Macroencapsulation of physically stabilized unoxidized FGD waste must shall be accomplished by following good engineering practices and applicable environmental standards. The macroencapsulation cells must shall be constructed on an initial bed of fixated material measuring a minimum of 8.0 feet thick and having an ultimate permeability of 7×10^{-7} cm/sec. An open cell design configuration with a gradually sloped bottom must shall be constructed to allow the stabilized FGD material to drain and minimize the potential of developing a hydraulic head. The cell walls and cap must shall be constructed of fixated material having an ultimate permeability no greater than 7×10^{-7} cm/sec. The cells must shall be filled with physically stabilized FGD material to the full vertical extent and must shall be capped with 5.0 feet of fixated material as the cells develop.

C. A quality control program must ensure shall insure that the permeability of the fixated FGD material does not exceed prescribed levels. Perimeter berms and/or swales constructed of fixated FGD material may be used to capture and route all runoff from the landfill area to the closed FGD scrubber/wastewater recycling system.

SECI is authorized to continue FGD/Sludge disposal activities in the areas designated as Landfill Increment 1 and Landfill Increment 2 as shown in attached Figure 3, provided:

AD. SECI must shall provide three sets of the final landfill construction drawings and retention pond design calculations to the Florida Department of Environmental Protection, Siting Coordination Office, for review prior to construction of landfill Increments 1 & 2 shown in attached Figure 4.

BE. Prior to finalizing the construction plans for Landfill Increments 1 & 2, SECI must shall apply for and receive a binding jurisdictional determination from the Department, which delineates the boundaries of any wetlands adjacent to landfill increments. SECI must shall notify the Siting Coordination Office of the submittal of the application for the binding determination and when the determination is granted.

CE. If the binding jurisdictional determination required above shows that the proposed construction will occur in wetlands, SECI must shall provide the Siting Coordination Office with complete postcertification information regarding the wetland impacts, including a joint application form and detailed drawings of the proposed work. The Department will, within shall have 30 days, to review the information for sufficiency and request additional information as needed. If the Department determines that it is necessary, SECI must shall provide mitigation to offset the wetland impacts of the

project. Once the information is sufficient, the Department ~~will~~ shall have 90 days to issue a determination of compliance of the project within 90 days.

~~DG.~~ With regard to the existing FGD/Sludge landfill and Increments 1 & 2, Seminole may construct the landfill and appurtenant facilities and may dispose of solid waste within 200 feet of any natural or artificial body of water, including wetlands within the jurisdiction of the Department, pursuant to Rule 62-701.300(2)(g).

XIII. Transmission Lines

Directly associated transmission lines must ~~shall~~ be constructed and maintained in a manner to minimize environmental impacts in accordance with Chapter 403, F.S.

A. Construction

1. Filling and construction in waters of the State must ~~shall~~ be minimized to the extent practicable. No such activities may ~~shall~~ take place without obtaining lease or title from the Trustees of the Internal Improvement Trust Fund.

2. Placement of fill in wetland areas must ~~shall~~ be minimized by spanning such areas with the maximum transmission lines span practicable.

3. Construction and access roads should avoid wetlands and be located in surrounding uplands. Any fill required in wetlands for construction but not required for maintenance purposes must ~~shall~~ be removed and the ground restored to its original contours after transmission line placement.

4. Keyhole fills from upland areas are preferable to a single road and should be oriented as nearly parallel to surface water flow lines as possible.

5. Sufficient culverts must ~~shall~~ be placed through fill causeways to maintain sheet flow. The number and locations of such culverts will be determined in the field by consultation with DEP field inspectors.

6. Maintenance roads must ~~shall~~ be planted with native species to prevent erosion and subsequent water quality degradation.

7. Construction activities should proceed as much as possible during the dry season.

8. Turbidity control measures, where needed, must ~~shall~~ be employed to prevent violation of water quality standards.

9. Good environmental practices as described in *Environmental Criteria for Electric Transmission Systems* as published by the U.S. Department of Interior and the U.S. Department of Agriculture should be followed.

10. Any archaeological sites discovered during construction of the transmission lines ~~must~~ shall be disturbed as little as possible and such discovery ~~must~~ shall be communicated to the Department of State, Division of Archives, History and Records Management.

B. Maintenance

1. Vegetative removal for maintenance should be carried out in the following manner:

Vegetative clearing operations to be carried out within the corridor should follow the general standards for clearing rights-of-way for overhead transmission lines and follow good environmental practices as described in *Environmental Criteria for Electric Transmission Systems*, as published by the U.S. Department of the Interior and the U.S. Department of Agriculture, thus preserving immature tree species along the peripheries of the right-of-way. These standards define the zone that shall be cleared of all tree growth as the area between structures 10 ft. to either side of the outside conductor. The remainder of the right-of-way from the cleared area to the right-of-way limit shall be screened. This translates to mean that only trees in excess of 10 ft. in height would be removed from the outer zone except where location of the access roads necessitates complete clearing.

2. Approved Chemicals or herbicides may be used for vegetation control along the transmission line without prior approval of the Department.

XIV. Change in Discharge

All discharges or emission authorized herein 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 the 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 a new or supplemental application pursuant to Chapter 403, Florida Statutes.

XV. Noncompliance Notification

If, for any reason, the ~~permittee~~licensee does not comply with or will be unable to comply with any limitation specified in this certification, the ~~permittee~~licensee shall notify the Director of District Management for the Northeast District of the Department by telephone during the working day during which ~~permittee~~licensee becomes aware of said noncompliance and shall confirm this situation in writing within seventy-two (72) hours of first becoming aware of such conditions, 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 take to reduce, eliminate and prevent recurrence of the noncomplying event.

XVI. Facilities Operation

The permitteelicensee shall at all times maintain in good working order and operate as efficiently as possible all treatment or control facilities or systems installed or used by the permitteelicensee to achieve compliance with the terms and conditions of this certification. Such systems are not to be bypassed without prior department approval, except, during periods of when light oil is used for ignition, the FGD system may be bypassed.

XVII. Adverse Impact

The permitteelicensee 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.

XVIII. Right of Entry

The permitteelicensee shall allow the Secretary of the Florida Department of Environmental Protection and/or authorized representatives, upon the presentation of credentials:

A. To enter upon the permitteelicensee '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 pollutants, and

D. To assess any damage to the environment or violation of ambient standards.

XIX. Revocation or Suspension

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

XX. Civil and Criminal Liability

This certification does not relieve the permitteelicensee 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 the permitteelicensee from any responsibilities or penalties established pursuant to any other applicable State Statutes or regulations.

XXI. 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 applicant must will obtain title, lease or right of use from ~~from~~ the State of Florida to any sovereign submerged lands occupied by the plant, transmission line structures, or appurtenant facilities.

XXII. 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.

XXIII. Definitions

The meaning of the terms used herein shall be governed by the definitions contained in Chapters 403, 378, 373, 372, and 253, Florida Statutes (F.S.), and any regulation adopted pursuant thereto and the applicable statutes and regulations of any agency with jurisdiction over the Facility. 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.

XXIV. Review of Site Certification

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 System Permit issued pursuant to the Federal Water Pollution Control Act Amendments of 1972, for the plant units, the Department will ~~shall~~ review all monitoring data that has been submitted to it during the preceding five-year period for the purposes of determining the extent of the ~~permittee~~licensee'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 ~~permittee~~licensee. Such review will be repeated at least every five years thereafter.

XXV. 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 monitoring, testing and evaluation programs, sampling, groundwater, mixing zones, zones of discharge or variances to water quality standards, or location of transmission line corridors within areas already approved at the land use hearing.~~

~~B. This certification shall be automatically modified to conform to any subsequent amendments, modifications, or renewals made by DEP under a federally delegated or approved program to any separately issued Prevention of Significant Deterioration (PSD) permit, Title V Air Permit, or National Pollutant Discharge Elimination System (NPDES) permit for the certified facility. SECI shall send each party to the original certification proceedings (at the party's last known address as shown in the record of such proceeding notice of requests submitted by SECI for modifications or renewals of the above-listed permits if the request involves a relief mechanism (e.g., mixing zone, variance, etc.) from state standards, a relaxation of conditions included in the permit due to state permitting requirements, or the inclusion of less restrictive air emission limitations in the air permits. DEP shall notify all parties to the certification proceeding of any intent to modify conditions under this section prior to taking final agency action.~~

~~C. All other modifications shall be made in accordance with Section 403.516, Florida Statutes.~~

XXVI. Rail Car Maintenance Facility

The rail car maintenance and surface coating facility must ~~shall~~ be designed, constructed and operated in conformance with Chapters 62-296, 62-25, and 62-302, F.A.C., and the following limitations:

A. Visible Emissions - must ~~shall~~ not exceed 20% opacity.

B. VOC Emissions - must ~~shall~~ not exceed 38.75 lbs/hr or 11.84 T/year.

C. Particulate Emissions - Unconfined particulate emissions from abrasive blasting must ~~shall~~ be controlled as required by Section 62-296.310(3)(c), F.A.C., using the following precautions:

1. The cover and the partial enclosure of the shelter will act as a windbreak to minimize the amount of residual particulate that becomes airborne.

2. Containment screens must ~~shall~~ be installed on the northern and southern ends of the shelter.

D. Stormwater Runoff - must ~~shall~~ be collected in existing runoff ditches and routed to percolation/evaporation areas on site.

E. Wastewater - There must ~~shall~~ be no discharge of wastewater from the maintenance facility site.

F. Sanitary Waste - Must ~~Shall~~ be disposed of in accordance with the applicable substantive requirements of Chapter 10D-6, F.A.C.

G. Water - The associated drinking water system must ~~shall~~ comply with the substantive requirements of Chapters 10D-4, 62-550, and 62-555, F.A.C. Consumptive use of groundwater shall be governed by the nonprocedural provisions of 40C-2.381, F.A.C., and Section 18.0.1, part III, "Applicants Handbook Consumptive Uses of Water."

H. Spent Blast Media - Spent blast media associated with the railcar maintenance facility must ~~shall~~ be containerized during storage and subsequently disposed of in the onsite FGD/sludge landfill.

XXVII. Gypsum and Flyash Reuse Facilities

A. Seminole may modify its Flue Gas Desulfurization (FGD) system by introducing an oxidation system to convert sulfite and by installing a chloride bleed system to produce synthetic gypsum for reuse, as long as the emission limitations of condition I.A. are not exceeded. Flyash may be processed for reuse or sale as well.

B. If any wallboard manufacturing facility or other operation that reuses gypsum is to be located within the property currently comprising Seminole's certified site, Seminole must ~~shall~~ file a revised site map and legal description excluding from the certified site that area conveyed to the manufacturer or related operation. The revised site map must ~~shall~~ also include a depiction of any easements that Seminole conveys to any manufacturer or other operation for that portion of the site which is not conveyed to the manufacturer. Any parcels conveyed for gypsum reuse must ~~shall~~ be located within that area generally identified for that purpose in Seminole's April 8, 1999

request. The revised site map shall become effective upon written acknowledgment of receipt by the Department. The owner or operator of any wallboard plant or related facility shall be responsible for applying for, obtaining and complying with all appropriate permits and for complying with all regulations applicable to its separate activities, including the wallboard plant, and any conveyor used to deliver gypsum from the Seminole plant to the wallboard or other gypsum reuse facility. Those separate facilities and their operations shall not be subject to this Certification and its conditions unless otherwise expressly stated in this Certification.

C. If construction of new facilities occurs within jurisdictional wetlands within Seminole's revised site, Seminole ~~must shall~~ submit information to the Department in accordance with the wetland-related provisions of Condition XII above. If the Department determines that it is necessary based upon review of the information submitted, Seminole ~~must shall~~ provide mitigation to offset the wetland impacts of those facilities. After the information is submitted, the Department ~~will shall have 90 days to~~ issue a determination of compliance of the project with these conditions and applicable regulations within 90 days.

D. Off-specification gypsum, ash by products, FGD system wastes, and other miscellaneous wastes may continue to be disposed in encapsulation cells at the onsite landfill after conversion of the FGD system is completed, in accordance with Condition XII above. However, by no later than three months before the date on which Seminole expects to commence the production of calcium sulfate (gypsum), Seminole ~~must shall~~ submit to the Department a report assessing the required landfill capacity needed for prospective on-site disposal of solid wastes, the manner and location for such disposal, and existing and proposed procedures and actions associated with modifying or terminating usage of existing or future landfill areas. Seminole ~~must shall~~ commence implementation of all action items set forth in that report upon written approval by the Department.

E. Seminole has applied to the Department to modify the Plant's separate NPDES permit for approval of the purge stream treatment system associated with the gypsum conversion project in accordance with Section 403.0885, Florida Statutes and Chapter 62-620, F.A.C. All additional effluent limitations, monitoring requirements and other substantive conditions which will be required in the Chapter 62-620, F.A.C., permit shall become new Conditions of Certification pursuant to Condition XXV. The Department will issue any orders needed to revise these conditions to conform to the new or revised conditions of the NPDES permit.

F. If a wallboard manufacturing plant or other gypsum reuse facility is constructed adjacent to the Seminole plant, water may be withdrawn from Seminole's onsite water wells for those activities as authorized by a consumptive use permit issued by the St. Johns River Water Management District to the wallboard plant or other gypsum reuse facility. However, this water shall not be used for electric power production purposes.

XXVIII. Stormwater

A. At least ninety days prior to the commencement of construction of any new facility, the Licensee shall provide all information necessary for a complete Environmental Resource Permit application including the engineering drawings and supporting documentation necessary to demonstrate that the stormwater runoff from the proposed project will be treated and attenuated in accordance with Rules 40C-4, 40C-41 and 40C-42, F.A.C. The drawings and documentation shall be signed, sealed and dated by a professional engineer registered in the State of Florida.

B. Prior to the commencement of construction, the Department will shall conduct a review of the submitted information and request the correction of any errors and omissions and any additional information necessary to complete the application. This shall be done in accordance with timeframes established in Chapter 120.60, F.S. and Rule 62-4.055, F.A.C.

C. The Department will notify the licensee in writing that the application is complete upon review of all requested information and the correction of any errors or omissions. Construction shall not begin until the Department has provided such written notification.

D. Turbidity and sediments must be controlled to prevent violations of water quality pursuant to Rule 62-302.500, 62-302.530(70) and 62-4.242 Florida Administrative Code (FAC). Best Management Practices, as specified in the Florida Stormwater, Erosion and Sedimentation Control Inspectors Manual, shall be installed and maintained at all locations where the possibility of transferring suspended solids into wetlands and/or surface waters due to the permitted activity. If site-specific conditions require additional measures, then the Applicant shall implement them as necessary to prevent adverse impacts to wetlands and/or surface waters.

E. The existing ambient water quality within Outstanding Florida Waters shall not be lowered as a result of the proposed activity, except as authorized by the FDEP under 62-4.242(2) FAC.

F. At least 90 days prior to start of construction on Unit 3 copies of the Notice of Intent (NOI) to Use Generic Permit (CGP) for Stormwater Discharge from Large and Small Construction Activities (DEP Form 62-621.300(4)9b) shall be submitted to DEP and a copy shall also be submitted to the Putnam County EPD and copied to the Putnam County EPD NPDES Administrator.

XXIX. St. Johns River Water Management District

A. St. Johns River Water Management District (SJRWMD) and DEP authorized staff, upon proper identification, will have permission to enter, inspect and observe permitted and related facilities in order to determine compliance with the approved plans, specifications and conditions of this certification.

B. Licensee must mitigate any adverse impact caused by the withdrawals permitted herein on legal uses of water existing at the time of application. The DEP has the right to curtail the permitted withdrawal rate or water allocations if the withdrawals of water cause an adverse impact on legal uses of water which existed at the time of application. Adverse impacts are exemplified by but not limited to:

1. Reduction of water levels in an adjacent surface water body resulting in a significant impairment of the use of water in that water body.
2. Saline water intrusion or introduction of pollutants into the water supply of an adjacent water use resulting in a significant reduction of water quality; and
3. Change in water quality resulting in either impairment or loss of use of a well or water body.

Chapter 40C-2, F.A.C.; Paragraphs 10.2(c)(e)(f)(g)(m)(o)(p)(r); 10.3(b)(d)(h)(i). A.H.

C. Licensee must mitigate any adverse impact caused by the withdrawals permitted herein on adjacent land uses that existed at the time of permit application. The DEP has the right to curtail the permitted withdrawal rates of water allocations if the withdrawals cause an adverse impact on adjacent land uses that existed at the time of application. Adverse impacts are exemplified by but not limited to:

1. Significant reduction in water levels in an adjacent surface water body;
2. Land collapse or subsidence caused by a reduction in water levels; and
3. Damage to crops and other types of vegetation.

Chapter 40C-2, F.A.C., Paragraphs 10.2(c)(e)(f)(g)(m)(o)(p)(r); 10.3(b)(d)(h)(i). A.H.

D. A SJRWMD-issued identification tag must be prominently displayed at each withdrawal site by permanently affixing such tag to the pump, headgate, valve, or other withdrawal facility as provided by Section 40C-2.401, F.A.C. Licensee must notify SJRWMD in the event that a replacement tag is needed.

Chapter 40C-2, F.A.C.; Paragraphs 10.2(b)(e)(f)(g)(h)(m)(o)(p)(r); 10.3(b)(d)(h)(i). A.H.

E. All submittals made to demonstrate compliance with the consumptive use conditions of this certification must have the certification number plainly labeled on the submittal.

Chapter 40C-2, F.A.C.; Paragraphs 10.2(a)(b)(c)(e)(f)(g)(h)(i)(j)(m)(o)(p); 10.3(a)-(h)(i). A.H.

F. The total annual allocation of surface water from the St. Johns River for the entire facility must not exceed: 15,783 MGY in 2012 and beyond.

Chapter 40C-2, F.A.C.; Paragraphs 10.2(a)(b)(c)(d)(h)(i)(j)(k)(l)(r); 10.3(a)(b)(c)(g). A.H.

G. Flow from the surface water pumps (River Pump 1, River Pump 2, River Pump 3, River Pump 4, and River Pump 5) as listed on the application must be monitored using an in-line totalizing flow meter installed in the common pipe carrying the total pumped flow prior to use. The totalizing flow meter must maintain 95% accuracy, be verifiable, and be installed according to manufacturer specifications. Documentation of proper installation of flow meter (e.g. photograph) shall be submitted

to the SJRWMD within 30 days of meter placement. A site visit by SJRWMD staff can also fulfill this documentation requirement.

Chapter 40C-2, F.A.C.; Paragraphs 10.2(a)(r); 10.3(a)(b), A.H.

H. Total withdrawal from River Pump nos. 1 through 5, as listed on the application, must be recorded continuously, totaled monthly, and reported to DEP and SJRWMD at least every six months using SJRWMD Form No. EN-50. The reporting dates each year will be as follows:

<u>Reporting Period</u>	<u>Report Due Date</u>
-------------------------	------------------------

<u>January - June</u>	<u>July 31</u>
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<u>July - December</u>	<u>January 31</u>
------------------------	-------------------

Chapter 40C-2, F.A.C.; Paragraphs 10.2(a)(r); 10.3(a)(b), A.H.

I. The Licensee must maintain the meters. In case of failure or breakdown of any meter, DEP and 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.

Chapter 40C-2, F.A.C.; Paragraphs 10.2(a)(r); 10.3(a)(b), A.H.

J. The Licensee must have the flow meters calibrated once every 3 years within 30 days of the anniversary date of permit issuance, 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 DEP and SJRWMD within 10 days of the inspection/calibration.

Chapter 40C-2, F.A.C.; Paragraphs 10.2(a)(r); 10.3(a)(b), A.H.

K. The licensee must prepare and submit a detailed Dewatering Plan for review and approval by the SJRWMD staff in accordance with the requirements of Section 10.3 of the SJRWMD Applicant's Handbook: Consumptive Uses of Water, prior to any dewatering activities at the site. This plan shall include at a minimum:

- a map showing the locations of dewatering activities with associated projected drawdowns. If projected drawdowns initially appear to cause adverse environmental impacts or interference to existing legal uses, mitigation measures must be proposed and included in the Dewatering Plan;
- a map delineating the portions of the property where dewatering activities will take place and the extent of the proposed excavations, both vertically and laterally. This map must include the locations and dimensions of any proposed ponds to receive dewatering discharges;
- procedures to ensure that dewatering will not cause or contribute to flood damage including the proposed rate and duration of water pumped for dewatering;
- a map providing the proposed locations and capacities (gpm) of proposed dewatering pump(s); and
- detailed description of turbidity treatment and erosion control measures at the discharge point(s).

Chapter 40C-2, F.A.C.; Paragraphs 10.3 (d)(i), A.H.

L. Beginning July 30, 2017, or by July 30th of the fifth year after commercial operation of Unit 3 begins, whichever occurs first, the Licensee must submit to the District, a compliance report for the entire facility and subsequent compliance reports every 5 years thereafter. The report must, at a minimum, include all the information required by the SJRWMD's "Individual and Standard General Consumptive Use Permit Application Number 40C-2.1082- 1 " in existence at the time the SJRWMD agency report for Unit 3 was approved by the Governing Board. Additionally, the report must contain sufficient information to maintain reasonable assurances that the licensee's use of water will continue, for the remaining duration of the permit, to meet the conditions for permit issuance set forth in the SJRWMD rules as such rules existed at the time the SJRWMD agency report for Unit 3 was approved by the SJRWMD Governing Board. The compliance report must include:

1. Information documenting that allocations from all sources in the permit will continue to be needed for the remainder of the permit duration;
2. Documentation verifying that the sources are capable of supplying the needs authorized by this permit without causing harm to water and water-related resources;
3. Documentation verifying that use of water is efficient and that the licensee is implementing all feasible water conservation measures.

Chapter 40C-2, F.A.C.; Paragraphs 10.3(a)-(k), A.H.

XXX. Florida Fish And Wildlife Conservation Commission

The requirements of Article IV, Section 9 of the Florida Constitution and the rules thereto, as well as any statutes relating to protected species are applicable. The FWC must be contacted prior to taking any action related to those species.

XXXI. Florida Department of Transportation

A. Request for Restricted Areas

No requests for restricted areas are necessary.

B. Post Certification Review Items

1. Traffic Study:

Prior to submitting any transportation and transportation related plans for approval, the applicant shall must revise and supplement the previously conducted traffic study (Appendix 10.7 of the SCA) to include at minimum the following:

- a) Existing Conditions Analysis:
 - Site location, boundaries, geometry, area of influence;
 - Transportation Network (number of lanes, facility type, speed, area type);
 - Planned and programmed improvements;
 - Traffic data—Annual Average Daily Travel, traffic volumes, level of service and turning movements;
 - Right of way (Geometry);

- Sidewalks, pedestrian/bike lanes;

b) Background Traffic:

- Department of Transportation Annual Average Daily Travel —daily, PM Peak, AM Peak;

- Growth rates based on historic trends; or
- Model analysis based on socio-economic data; or
- 72-hour machine traffic counts at the plant entrances.

c) Trip generation:

- ITE Trip generation 7th edition for all land uses by project phase; or
- Information supplied from logs maintained by the applicant or its contractor at plant entry locations and projections developed by the applicant.

d) Trip Distribution:

- Manual and/or model (distribution map);

e) Trip Assignment:

- Distribute and assign trips to roadways by development phase (Map);
- Calculate turning radii and movement volumes at each driveway;

f) Future Conditions/ Future Analysis:

- Level of Service analysis;
- Florida Intrastate Highway System issues and discussion;

g) Site Access, Geometry, traffic circulation and parking:

- Access Management standards—spacing standards;
- Median openings spacing and design;
- Connection throat lengths/depth etc;
- Right Turn/Left Turn lanes;

2. Access Management to the State Highway System:

Any access to the State Highway System is subject to the requirements of Rule Chapters 14-96, State Highway System Connection Permits, Administrative Process, and 14-97, State Highway System Access Management Classification System and Standards, Florida Administrative Code.

3. Overweight or Overdimensional Loads:

Operation of overweight or overdimensional loads by the applicant on State transportation facilities during construction and operation of the utility facility will be subject to safety and permitting requirements as defined in Chapter 316, Florida Statutes, and Rule Chapter 14-26, Safety Regulations and Permit Fees for Overweight and Overdimensional Vehicles, Florida Administrative Code.

4. Use of State of Florida Right of Way or Transportation Facilities:

All usage and modification of State of Florida right of way or transportation facilities will be subject to Florida Department of Transportation's Roadway and Traffic Design Standards, Florida Department of Transportation Specifications for Road and Bridge Construction and pertinent sections of the Florida Department of Transportation's Project Development and Environmental Manual. Although there is no major widening of the facility segment planned in the foreseeable future, due to the status of this roadway as an emerging Strategic Intermodal System's (SIS) facility, the placement of the access road should take into consideration the possible widening of this facility. If future widening should be required, the cost of relocating or reconstructing the access road will be borne by the applicant unless the terms and conditions of Section 337.403, Florida Statutes, are met.

5. Standards:

The Manual on Uniform Traffic Control Devices, Florida Department of Transportation's Roadway and Traffic Design Standards; Florida Department of Transportation's Standard Specifications for Road and Bridge Construction; the Department's Utility Accommodation Manual and pertinent sections of the Florida Department of Transportation's Project Development and Environmental Manual will be adhered to in all circumstances involving the State Highway System and other transportation facilities.

6. Drainage:

Any drainage onto State of Florida right of way and transportation facilities will be subject to the requirements of Rule Chapter 14-86, Drainage Connections, Florida Administrative Code, including the attainment of any permit required thereby. Any required treatment and storage of surface waters for the intersection improvements or other work on the State Transportation System by the applicant will occur in either a) the State right of way if sufficient capacity exists; b) on land donated by the applicant to the Department for such purposes; or c) by permanent provision, i.e. a recorded drainage easement, for such purposes in treatment facilities owned by the applicant. Treatment can occur within existing State right of way only if such right of way necessary for treatment is not planned to be used by the Department for improvements or expansion of the State Transportation System.

7. Use of Air Space:

Any structures proposed in the application which exceed 200 feet in height will be subject to an aeronautical study by the Federal Aviation Authority under the provisions of 14 CFR Part 77. If the aeronautical study finds an adverse effect on the safe and efficient use of navigable airspace, the project will require the issuance of a variance by state or local government.

8. Signalization:

Prior to any signalizations, a warrant study must be provided to the Florida

Department of Transportation. The warrant study must meet the requirements of the Manual on Uniform Traffic Control Devices, incorporated in Rule 14-15.010, Florida Administrative Code and Section 316.0745, Florida Statutes.

C. Best Management Practices

Traffic control during plant construction and maintenance will be subject to the standards contained in the Manual on Uniform Traffic Control Devices; Rule Chapter 14-94, Statewide Minimum Level of Service Standards, Florida Administrative Code; Florida Department of Transportation's Roadway and Traffic Design Standards; Florida Department of Transportation's Standard Specifications for Road and Bridge Construction; and the Department's Utility Accommodation Manual, whichever is more stringent.

It is recommended that the applicant encourage transportation demand management techniques by doing the following:

- Placing a bulletin board on site for car pooling advertisements.
- Requiring that heavy construction vehicles remain onsite for the duration of construction to the extent practicable.

If the applicant uses contractors for the delivery of any overweight or overdimensional loads to the site during construction, the applicant should ensure that its contractors adhere to the necessary standards and receive the necessary permits required under Chapter 316, Florida Statutes, and Rule Chapter 14-26, Safety Regulations and Permit Fees for Overweight and Overdimensional Vehicles, Florida Administrative Code.

XXXI. Compliance

A. The Licensee shall comply with all rules adopted by the Department subsequent to the issuance of this certification, which prescribe new or stricter criteria to the extent that the rules are applicable to electric power plants. Except where express variances have been granted, subsequently adopted rules that prescribe new or stricter criteria, which are applicable to electrical power plants, shall operate as a modification pursuant to Section 403.511(5)(a), F.S.

B. Pursuant to Section 403.511(5)(b), F.S., upon written notification to the Department's Siting Coordination Office, the Licensee may choose to operate in compliance with any rule subsequently adopted by the Department which prescribes criteria more lenient than the criteria required by the terms and conditions in this certification, so long as this operation causes no violation of standards or these Conditions of Certification.

XXXII. Dispute Resolution

If a dispute situation arises between the Licensee and an Agency exercising its regulatory jurisdiction, the Department will act as mediator to resolve it. If, after mediation, a mutual agreement cannot be reached between the parties, then the matter will be immediately referred to the Division of Administrative Hearings (DOAH) for disposition in accordance with the provisions of Chapter 120, F.S.

XXXIII. Post-certification Submittals

A. Post-certification Submittals shall be handled pursuant to Rule 62-17.191, F.A.C.

B. Interagency Meetings: Within sixty (60) days of the filing of a complete post-certification submittal, DEP may conduct an interagency meeting with other agencies that received copies of the submittal. The purpose of such an interagency meeting shall be for the agencies with regulatory jurisdiction over the matters addressed in the post-certification submittal to discuss whether reasonable assurance of compliance with the conditions of certification has been provided. Failure of any agency to attend an interagency meeting shall not be grounds for DEP to withhold a determination of compliance with these Conditions of Certification nor to delay the time frames for review established by these Conditions of Certification.

History Notes

Certification Issued (Units 1 & 2) 09/18/79; signed by Governor Graham
Modified 10/12/88; signed by Secretary Twachtman
Modified 03/26/91; signed by Secretary Browner
Modified 10/44/92; signed by Secretary Browner
Modified 11/25/92; signed by Secretary Browner
Modified 03/02/95; signed by Secretary Wetherell
Modified 05/12/97; signed by Secretary Wetherell
Modified 02/01/00; signed by Deputy Secretary Green
Modified 04/03/00; signed by Deputy Secretary Green
Modified 07/05/05; signed by Siting Administrator Owen
Modified 09/06/06; signed by Siting Administrator Owen
Certification Issued (Unit 3) XX/XX/XX, signed by Governor _____

Figure 1 Location of Ambient Air Quality Monitoring Stations

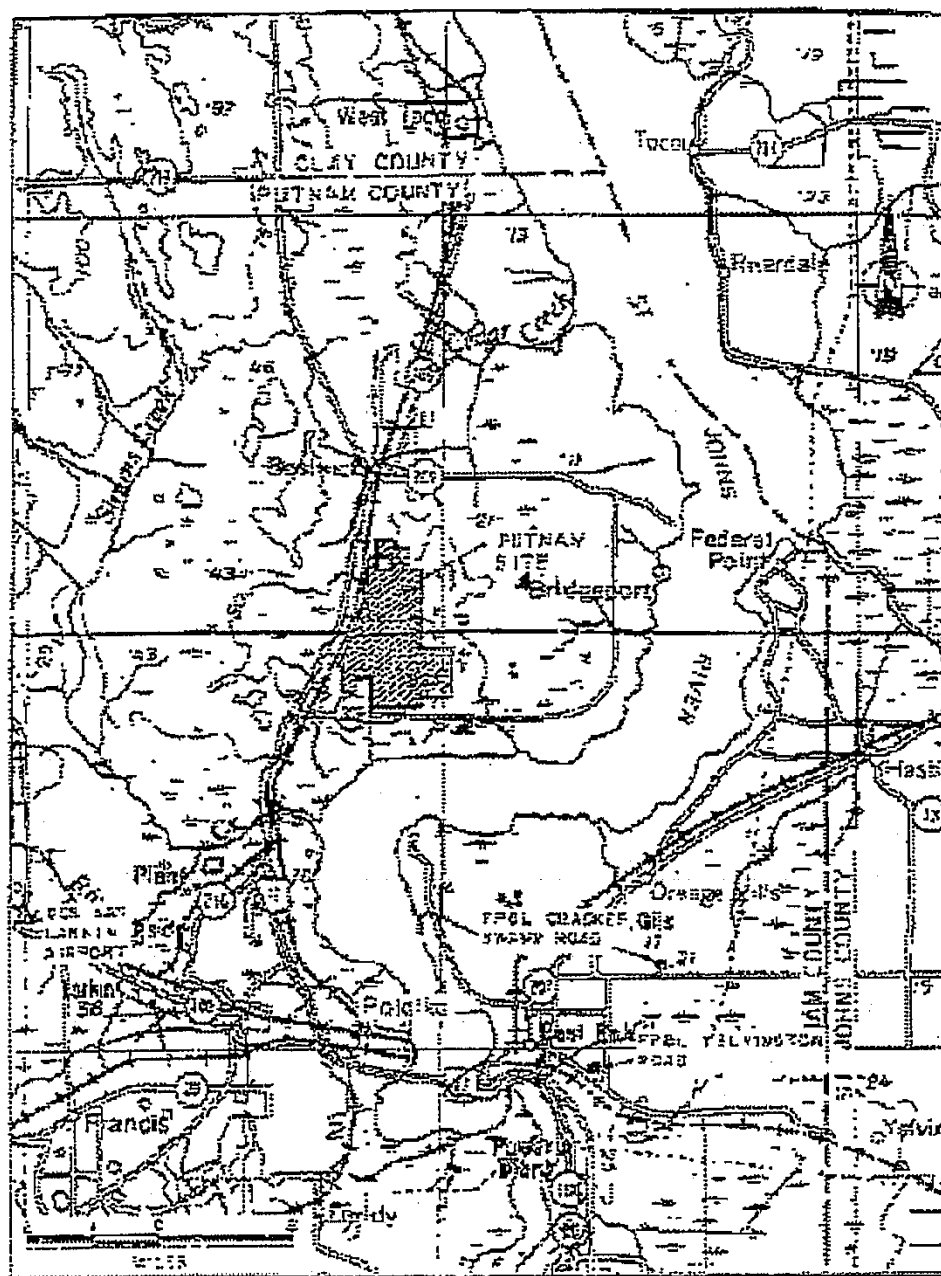
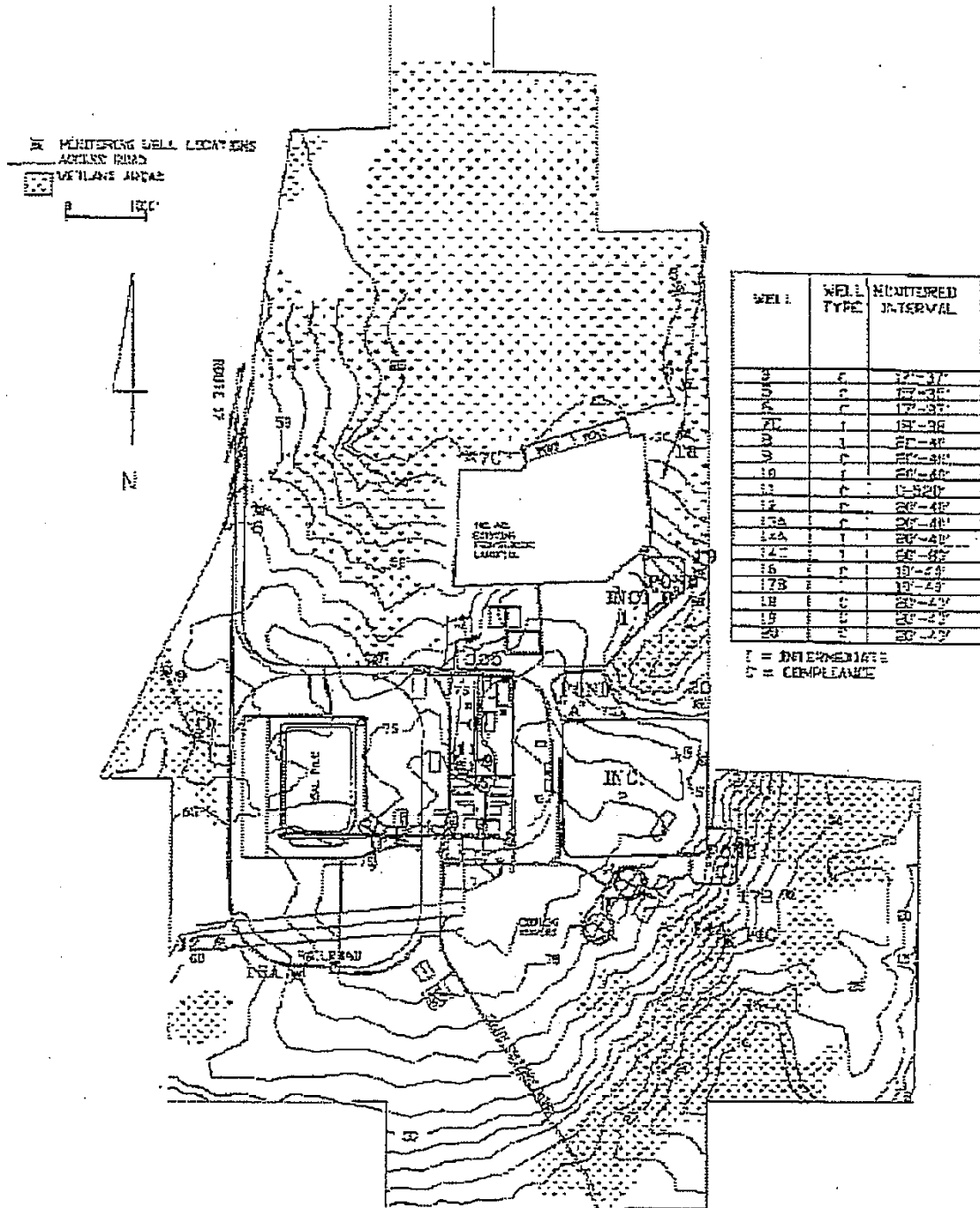


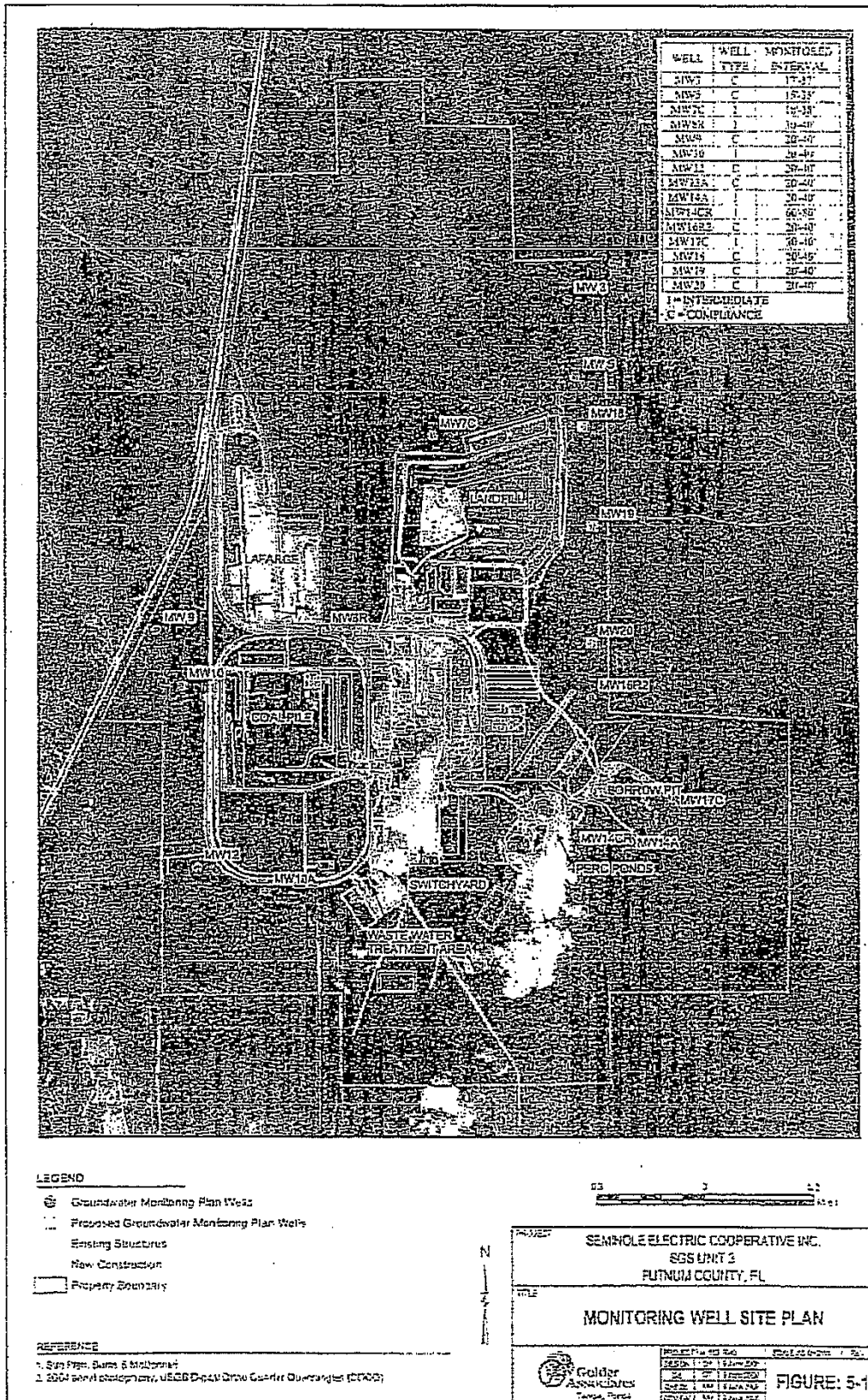
Figure 1. Location of Ambient Air Quality Monitoring Stations.

Figure 2 Groundwater Monitoring Plan – Units 1 and 2



[illegible]

Figure 4 Monitor Well Location Map – Unit 3



APPENDIX A – Air Permits

AIR PERMITS

1. Air Permit No. 1070025-004-AC (Units 1 and 2)
2. Title V Air Operation Permit No. 1070025-003-AV (Units 1 and 2)
3. Draft PSD Permit FL-375 (Unit 3)

Air Permit No. 1070025-004-AC (Units 1 and 2)

STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL PROTECTION

GOLDER ASSOCIATES INC.

NOTICE OF FINAL PERMIT

JUN 23 2006

In the Matter of an
Application for Permit by:

Seminole Electric Cooperative, Inc.
16313 North Dale Mabry Highway
Tampa, FL 33618

Authorized Representative:

James R. Frauen, Project Director

GAINESVILLE

Air Permit No. 1070025-004-AC
Seminole Generating Station
Units 1-2 Pollution Controls Upgrade

Enclosed is Final Air Permit No. 1070025-004-AC, which authorizes the construction and/or upgrade of pollution control equipment for Units 1 and 2 at the existing Seminole Generating Station. The existing power plant is located at 890 North U.S. Highway 17, north of Palatka, in Putnam County, Florida. As noted in the attached Final Determination, only minor changes and clarifications were made. This permit is issued pursuant to Chapter 403, Florida Statutes.

Any party to this order has the right to seek judicial review of it under Section 120.68 of the Florida Statutes by filing a notice of appeal under Rule 9.110 of the Florida Rules of Appellate Procedure with the clerk of the Department of Environmental Protection in the Office of General Counsel (Mail Station #35, 3900 Commonwealth Boulevard, Tallahassee, Florida, 32399-3000) and by filing a copy of the notice of appeal accompanied by the applicable filing fees with the appropriate District Court of Appeal. The notice must be filed within thirty (30) days after this order is filed with the clerk of the Department.

Executed in Tallahassee, Florida.



Trina Vielhauer, Chief
Bureau of Air Regulation

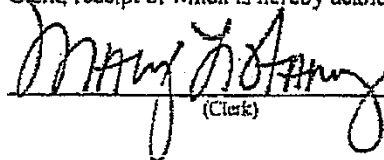
CERTIFICATE OF SERVICE

The undersigned duly designated deputy agency clerk hereby certifies that this Notice of Final Permit (including the Final permit) was sent by certified mail (*) and copies were mailed by U.S. Mail before the close of business on 6/21/06 to the persons listed:

Mr. James R. Frauen, SECI *
Mr. Michael P. Opalinski, SECI
Mr. Mike Roddy, SECI
Mr. Scott Osbourn, Golder Associates Inc.
Mr. Ken Kosky, Golder Associates Inc.
Mr. Chris Kirts, NED
Mr. Gregg Worley, EPA Region 4
Mr. John Bunyak, NPS

Clerk Stamp

FILING AND ACKNOWLEDGMENT FILED, on this date, pursuant to §120.52, Florida Statutes, with the designated Department Clerk, receipt of which is hereby acknowledged.


(Clerk)

6/21/06
(Date)

FINAL DETERMINATION

Seminole Electric Cooperative, Inc.
Seminole Generating Station
DEP File No. 1070025-004-AC

The Department distributed a public notice package on May 5, 2006 to allow the applicant, Seminole Electric Cooperative, Inc. (SECI) to install pollution control equipment on Seminole Generating Station (SGS) Units 1 and 2 located at 890 US Highway 17, North of Palatka, Putnam County. The Public Notice of Intent to Issue concerning the Draft Permit was published in the Palatka Daily News on May 13, 2006.

COMMENTS/CHANGES

No comments were received by the Department from the public. No comments were received from EPA. Comments were received from the applicant by letter dated May 19, 2006. The applicants comments are summarized below and the Department's responses are included following each comment.

Minor edits: Cover page (Authorized representative Title), page 2 (Project Description), page 5 (Specific Condition 2 – added the word “may” prior to the variety of FGD improvements being contemplated, and Specific Condition 3 – struck reference to approved drawings and plans, since there were none), page 6 (Specific Condition 6 – added a sentence specifying gross MW rating, and “Emissions Standards” note – specified that interim limits become effective once changes are completed), page 7 (Specific Conditions 10 – allowed EPA Method 8A, Specific Conditions 11 and 16 – changed Rule Cites), and page 9 (Specific Condition 1 – changed language from “no additional emissions occur” to “emissions are minimized”).

RESPONSE: These changes are acceptable, with the exception of the suggested “Emissions Standards” note, which is accepted in part (see the remainder of this Determination).

Page 4, Condition 7: Provide an option to submit the Title V application when the renewal is due (July, 2009), since this is reasonably close to the expected air construction completion date.

RESPONSE: Per Rule, the Department is unable to accommodate this change.

Page 6, Condition 8: Change NO_x emission limits from 30-day rolling to 12-month rolling averages.

RESPONSE: The Department agrees. The NO_x limit has been established in the permit for 2 reasons – for PSD netting and CAIR emission allotments. In both cases, the regulatory requirement is annual; hence a 12-month rolling average is appropriate.

Page 6, Condition 9: Change CO emission limit from a 0.20 lb/MMBtu 12-month rolling average to a 13,448 TPY 12-month rolling limit. Add an initial compliance test to demonstrate the vendor's burner guarantee of 0.20 lb/MMBtu.

RESPONSE: The Department agrees in part. The CO limit of 0.20 lb/MMBtu was placed in the permit to demonstrate that the vendor's burner guarantee could be met. However, the regulatory requirement is that there can be no increase in CO emissions above the baseline of 13,448 TPY (PSD netting). The Department notes that by meeting the 0.20 lb/MMBtu emission rate specified in the draft permit which was publicly noticed, the effective PSD annual emission rate is 12,565 TPY. Absent the applicant agreeing to an additional public notice to accommodate an “apparent” increase in CO emissions of 883 TPY, a 12-month rolling total (federally enforceable) of 12,565 will be allowed.

Page 7, Condition 12: Change the Hg limit from 0.36 TPY (combined for Units 1 and 2) to 0.59 TPY (combined for Units 1, 2 and 3). The applicant notes that the basis for Hg limits on Units 1 and 2 is the upcoming CAMR, as well as PSD netting. For the purposes of PSD netting, the regulatory requirement

FINAL DETERMINATION

Seminole Electric Cooperative, Inc.
Seminole Generating Station
DEP File No. 1070025-004-AC

is established from the baseline emissions of 0.65 TPY, hence a facility limit of 0.59 TPY *still* represents a reduction in mercury emissions.

RESPONSE: The Department agrees. The proposed facility limit (Units 1, 2, and 3) of 0.59 TPY ensures that both the PSD netting and the CAMR requirements can be met.

NOTE: *The Department acknowledges that the Draft Permit included the following typographical error: the mercury emissions standard should have been "0.36 TPY" and not "0.036 TPY". This standard represented the total emissions from Units 1 and 2.*

Page 9, Condition 5: The condition should be revised to provide for the (more restrictive) Subpart Db NO_x emission limit of 0.20 lb/MMBtu on a 30-day rolling average, for the steam generating unit configured to accept the operating CBOTM Unit emissions.

RESPONSE: The Department agrees and will also add item "d." to Page 6, Condition 8, reflecting the same issue.

Emissions Standards Note (Page 6) and Condition 17 (Page 8): These two sections of the permit establish the effective date of the emissions standards and notification requirements to the initial coal fires in SGS Unit 3. The applicant requested that these provisions be tied to "initial commercial startup" rather than the "initial coal fires".

RESPONSE: The Department does not accept the requested changes, which could allow the project to exceed the PSD significant emissions rates.

Changes to Technical Evaluation and Preliminary Determination: Several changes proposed by applicant.

RESPONSE: Since there exists no requirement for the subject document to be re-issued (i.e. there is no BACT Determination), the Department makes no response to SECI's suggested changes.

ADDITIONAL CHANGES

For the purposes of providing the applicable Citation, the Department adds the word [Design] after Conditions 2 through 6 (Pages 5 and 6).

For the purposes of clarification, the Department changes the word "total" to "emissions rate" in Conditions 7.c, 8.c and 10.c (Pages 6 and 7).

For the purpose of clarification, the Department eliminates the words "(except NO_x)" in Condition 5, Page 9.

CONCLUSION

The final action of the Department is to issue the permit with the minor changes described above.



Jeb Bush
Governor

Department of Environmental Protection

Twin Towers Office Building
2600 Blair Stone Road
Tallahassee, Florida 32399-2400

Colleen M. Castille
Secretary

PERMITTEE

Seminole Electric Cooperative, Inc.
16313 North Dale Mabry Highway
Tampa, FL 33618

Authorized Representative:

James R. Frauen, Project Director

Air Permit No. 1070025-004-AC Seminole Generating Station Units 1-2 Pollution Controls Upgrade Facility ID No. 1070025 SIC No. 4911 Permit Expires: December 31, 2009
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PROJECT AND LOCATION

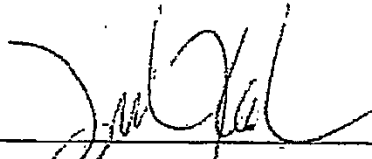
This permit authorizes the construction and/or upgrade of pollution control equipment for Units 1 and 2 at the existing Seminole Generating Station, which is located at 890 North U.S. Highway 17, north of Palatka, in Putnam County, Florida. The map coordinates are: Zone 17; 438.80 km East; and 3289.20 km North.

STATEMENT OF BASIS

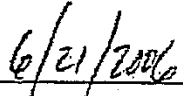
This air pollution construction permit is issued under the provisions of Chapter 403, F.S., and Chapters 62-4, 62-204, 62-210, 62-212, 62-296, and 62-297, F.A.C. The permittee is authorized to install the proposed equipment in accordance with the conditions of this permit and as described in the application, approved drawings, plans, and other documents on file with the Department. This air construction permit supplements all other valid air construction and operation permits.

CONTENTS

- Section 1. General Information
- Section 2. Administrative Requirements
- Section 3. Emissions Units Specific Conditions
- Section 4. Appendices



Joseph Kalin, P.E., Acting Director
Division of Air Resource Management



(Date)

"More Protection, Less Process"

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SECTION 1. GENERAL INFORMATION

FACILITY AND PROJECT DESCRIPTION

The existing Seminole Generating Station (SGS) consists of two 714.6 megawatt, electric, coal fired steam electric generators; a coal handling and storage system; a limestone unloading, handling and storage system; and a flue gas desulphurization (FGD) sludge stabilization system.

This project includes the replacement of the low NO_x burners; the addition of SCRs, an alkali injection system and carbon burnout (CBO); and improvements to the existing FGD system and steam turbines. The following units are affected by this air construction permit:

EMISSION UNIT NO.	SYSTEM	EMISSION UNIT DESCRIPTION
001	Steam Generation	SGS (Existing) Unit 1 upgraded to 735.9 MW
002	Steam Generation	SGS (Existing) Unit 2 upgraded to 735.9 MW
009	Materials Handling	Carbon Burn-Out (CBO TM) Feed Fly Ash Silo (New)
010	Materials Handling	CBO TM Product Fly Ash Storage Dome (New)
011	Materials Handling	CBO TM Product Fly Ash Loadout Storage Silo (New)
012	Materials Handling	CBO TM Product Fly Ash Fugitives (New)
013	Hot Water Generation	CBO TM Process Fluidized Bed Combustor (New) NSPS Subpart Db

REGULATORY CLASSIFICATION

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

Title IV: The existing facility operates units subject to the acid rain provisions of the Clean Air Act.

Title V: The existing facility is a Title V major source of air pollution in accordance with Chapter 213, F.A.C.

PSD: The existing facility is a PSD-major facility in accordance with Rule 62-212.400, F.A.C., although this project does not trigger a PSD Review.

SECTION 2. ADMINISTRATIVE REQUIREMENTS

1. Permitting Authority: All documents related to applications for permits to construct, modify, or operate emissions units at this facility shall be submitted to the Bureau of Air Regulation of the Florida Department of Environmental Protection (DEP) at 2600 Blair Stone Road (MS #5505), Tallahassee, Florida 32399-2400. Copies of all permit applications shall also be sent to the Compliance Authority.
2. Compliance Authority: All documents related to compliance activities such as reports, tests, and notifications shall be submitted to the Department's Northeast District Office at 7825 Baymeadows Way, Suite B200, Jacksonville, Florida 32256-7577.
3. Appendices: The following Appendices are attached as part of this permit: Appendix GC (General Conditions).
4. Applicable Regulations, Forms and Application Procedures: Unless otherwise indicated in this permit, the construction and operation of the subject emissions units shall be in accordance with the capacities and specifications stated in the application. The facility is subject to all applicable provisions of Chapter 403, F.S. and Chapters 62-4, 62-204, 62-210, 62-212, 62-213, 62-296, and 62-297, F.A.C. The permittee shall use the applicable forms listed in Rule 62-210.900, F.A.C. and follow the application procedures in Chapter 62-4, F.A.C. Issuance of this permit does not relieve the permittee from compliance with any applicable federal, state, or local permitting or regulations. [Rules 62-4, 62-204.800, 62-210.300 and 62-210.900, F.A.C.]
5. New or Additional Conditions: For good cause shown and after notice and an administrative hearing, if requested, the Department may require the permittee to conform to new or additional conditions. The Department shall allow the permittee a reasonable time to conform to the new or additional conditions, and on application of the permittee, the Department may grant additional time. [Rule 62-4.080, F.A.C.]
6. Construction Approval: No emissions unit or facility subject to this permit shall be constructed or modified without obtaining an air construction permit from the Department. Rule 62-210.200(76), F.A.C. defines *construction* as, "Construction –
 - (a) The act of performing on-site fabrication, erection, installation or modification of an emissions unit or facility of a permanent nature, including installation of foundations or building supports; laying of underground pipe work or electrical conduit; and fabrication or installation of permanent storage structures, component parts of an emissions unit or facility, associated support equipment, or utility connections. Land clearing and other site preparation activities are not a part of the construction activities.
 - (b) For the purposes of Rules 62-212.300, 62-212.400, 62-212.500, and 62-212.720, F.A.C., construction means any physical change or change in the method of operation (including fabrication, erection, installation, or modification of an emissions unit) that would result in a change in emissions.
 - (c) For the purposes of the provisions of 40 CFR Parts 60 and 61, adopted by reference in Rule 62-204.800, F.A.C., construction means fabrication, erection, or installation of an affected facility.
 - (d) For the purposes of the provisions of 40 CFR Part 63, adopted by reference in Rule 62-204.800, F.A.C., construction means the on-site fabrication, erection, or installation of an affected source. Construction does not include the removal of all equipment comprising an affected source from an existing location and reinstallation of such equipment at a new location. The owner or operator of an existing affected source that is relocated may elect not to reinstall minor ancillary equipment including piping, ductwork, and valves. However, removal and reinstallation of an affected source will be construed as reconstruction if it satisfies the criteria for reconstruction as defined in this section. The costs of replacing minor ancillary equipment must be considered in determining whether the existing affected source is reconstructed." Such permits shall be obtained prior to beginning construction or modification. [Rules 62-210.300(1) and 62-212.300(1)(a), F.A.C.]

SECTION 2. ADMINISTRATIVE REQUIREMENTS

7. Title V Permit: This permit authorizes construction of the permitted emissions units and initial operation to determine compliance with Department rules. A Title V operation permit is required for regular operation of the permitted emissions units. The permittee shall apply for a Title V operation permit at least 90 days prior to expiration of this permit, but no later than 180 days after completion of work and commencing operation. To apply for a Title V operation permit, the applicant shall submit the appropriate application form, compliance test results, and such additional information as the Department may by law require. [Rules 62-4.030, 62-4.050, 62-4.220, and Chapter 62-213, F.A.C.]

SECTION 3. EMISSIONS UNIT SPECIFIC CONDITIONS

A. EU 001 and 002 – Boilers No. 1 and 2

This section of the permit addresses the following existing emissions units:

Emissions Unit Nos. 001 and 002

Steam Electric Generator Nos. 1 and 2 are existing, coal fired utility, dry bottom wall-fired boilers, each having a maximum generator rating of 714.6 megawatts, electric. The maximum heat input to each emissions unit is 7,172 million Btu per hour. Steam Electric Generator Nos. 1 and 2 are each equipped with an electrostatic precipitator (ESP) to control particulate matter, a wet limestone flue gas desulphurization (FGD) unit to control sulfur dioxide, and low NO_x burners and low excess-air firing to control nitrogen oxides.

{Permitting note(s): IMPORTANT REGULATORY CLASSIFICATIONS - The emissions units are regulated under Acid Rain, Phase II and Phase I; NSPS - 40 CFR 60, Subpart Da, Standards of Performance for Electric Utility Steam Generating Units for Which Construction is Commenced After September 18, 1978, adopted and incorporated by reference in Rule 62-204.800(7), F.A.C.; Rule 212.400(5), F.A.C., Prevention of Significant Deterioration (PSD); and Rule 62-212.400(6), F.A.C., Best Available Control Technology (BACT) Determination, dated August 9, 1979. Steam Electric Generator No. 2 began commercial operation in 1984 and Steam Electric Generator No. 1 began commercial operation in 1985.}

PREVIOUS APPLICABLE REQUIREMENTS

1. Other Permits: The conditions of this permit supplement all previously issued air construction and operation permits for this emissions unit. Unless otherwise specified, these conditions are in addition to all other applicable permit conditions and regulations. [Rule 62-4.070, F.A.C.]

EQUIPMENT AND CONSTRUCTION

2. Flue Gas Desulphurization System (FGD) Upgrade: In order to reduce the emissions of sulfur dioxide, the permittee shall make upgrades to the existing Units 1 and 2 scrubbers so as to improve the SO₂ removal efficiency from approximately 87 to 95%. The improvements may include the following types of work: scrubber module modifications, upgrades to the modules mist eliminator wash system, expansion of the oxidation air system, modifications to the existing sparger rings in the absorber recycle tanks, upgrades to the Effluent Processing Facility (EPF) System and a new gypsum conveyor system. The upgrades will allow SGS to meet the 0.67 lb/MMBtu SO₂ emission limits specified in this permit. [Design]
3. Selective Catalytic Reduction (SCR) Systems: The permittee shall construct, tune, operate, and maintain a new SCR system for Units 1 and 2, to reduce emissions of nitrogen oxides (NO_x) as described in the application. The SCR system shall be designed to achieve a NO_x emission rate of no more than 0.07 lb/MMBtu. An SCR reagent system shall be installed, consisting of a new urea to ammonia processing system and associated bulk storage systems. The SCR system shall be designed for a maximum ammonia slip rate of 5 ppmvd @ 15% O₂. [Design]
4. Low NO_x Burner Replacement: The permittee shall replace, tune, operate and maintain low NO_x burners on Units 1 and 2. Additionally, the existing burner inlet systems will be modified to ensure even air flow, and the Overfire Air System (OFA) will be modified to utilize at least six ports per wall compared with the existing system design of four ports per wall. These replacements are designed to achieve the Acid Rain Program NO_x annual average emission limit of 0.46 lb/MMBtu, which will be effective in 2008. [Design]
5. Alkali Injection System: The permittee shall construct and operate a new alkali injection system on Units 1 and 2 to mitigate the potential impacts of SO₃ formation resulting from the operation of the SCR control systems. The design criteria shall ensure that sulfuric acid mist emissions do not increase above the sulfuric acid mist emissions baseline. [Design]
6. Turbine Upgrade: Each existing steam turbine for Units 1 and 2 shall be upgraded for increased unit

SECTION 3. EMISSIONS UNIT SPECIFIC CONDITIONS

A. EU 001 and 002 – Boilers No. 1 and 2

efficiency, and in order to recover portions of the lost electrical output from powering the above additions. Such efficiency improvements may include blade and/or rotor redesigns and replacements. The nominal gross MW rating per unit will increase from 714.6 to 735.9 MW although each boiler maximum heat input will remain at 7,172 MMBtu/hr. [Design]

PERFORMANCE REQUIREMENTS

This permit does not alter any specifications or limitations included in previous permits that define permitted capacities such as heat input rates, fuel consumption, or hours of operation. It does not authorize any additional fuels or such other methods of operation.

EMISSIONS STANDARDS

A concurrent application is being processed for a new SGS Unit 3. Where affected, the below emission standards are shown for this project (Pollution Control Upgrades) as "interim" limits which become effective once all upgrades are complete. As of the first monitoring period following the establishment of initial coal fires in SGS Unit 3, the latter "permanent" emission limits will become effective.

7. Sulfur Dioxide (SO₂):

- a. The interim Sulfur Dioxide emissions from Units 1 and 2 shall not exceed 0.67 lb/MMBtu (combined for Units 1 and 2), based upon a 24 hour block average via CEMS.
- b. The permanent limits shall be 0.38 lb/MMBtu (combined for Units 1 and 2), based upon a 24 hour block average via CEMS.
- c. The combined emission rate shall be computed by adding the total lbs emitted for both Units 1 and 2, divided by the total MMBtu heat input for both Units 1 and 2 for each 24-hour block period.
[PSD Avoidance]

8. Nitrogen Oxides (NO_x):

- a. The interim Nitrogen Oxide emissions from Units 1 and 2 shall not exceed 0.46 lb/MMBtu, based upon a 12-month rolling average. Compliance shall be determined by data collected from the certified continuous emissions monitor (CEM).
- b. The permanent limits shall be 0.33 lb/MMBtu (combined for Units 1 and 2), based upon a 12-month rolling average via CEMS.
- c. The combined emission rate shall be computed by adding the total lbs emitted for both Units 1 and 2, divided by the total MMBtu heat input for both Units 1 and 2 for each 12-month rolling period.
- d. When operating the CBO fluidized bed combustor, the affected Steam Electric Generating Unit shall not exceed 0.20 lb/MMBtu NO_x emissions based on a 30-day rolling average via CEMS.
[40 CFR Parts 72 and 76; NSPS Subpart Db and PSD Avoidance]

9. Carbon Monoxide (CO)/Volatile Organic Compounds (VOC): The emission of Carbon Monoxide shall not exceed 12,565 TPY based upon a 12-month rolling total. The existing CO emission monitors which are installed in the stack shall be certified according to 40 CFR Part 60 and the data collected shall be combined and utilized to demonstrate compliance annually. Also, initial performance test data shall be submitted to demonstrate compliance with the burner CO guarantee of 0.20 lb/MMBtu. For VOC, an initial stack test (only) shall be required in order to demonstrate that the emissions do not exceed the established baseline emission rate of 0.06 lb/ton of coal. Testing shall be according to EPA Method 18, 25, 25A or 25B.
[PSD Avoidance]

SECTION 3. EMISSIONS UNIT SPECIFIC CONDITIONS

A. EU 001 and 002 – Boilers No. 1 and 2

10. Sulfuric Acid Mist (SAM):

- a. The interim Sulfuric Acid Mist emissions from Units 1 and 2 shall not exceed 0.096 lb/MMBtu, based upon an initial stack test (only) via EPA Method 8 or 8A.
- b. The permanent limits shall be 0.031 lb/MMBtu (combined for Units 1 and 2), based upon annual stack test via EPA Method 8 or 8A.
- c. The combined emission rate shall be computed measuring the lb/MMBtu emission rate on each unit, multiplying each unit's maximum emission rate by its annual heat input (MMBtu), adding the total lbs emitted for both Units 1 and 2, and dividing by the total MMBtu heat input for both Units 1 and 2.
[PSD Avoidance]

11. Particulate Matter (PM/PM₁₀): The emission limit for particulate matter shall not exceed 0.03 lb/MMBtu on each individual unit, as measured by an annual stack test via EPA Method 5B. [Current Title V Limit]

12. Mercury (Hg): The permanent emission limitation for mercury shall be 0.59 tons per year (combined for Units 1, 2 and any future emission units), based upon annual stack tests via EPA Method 101A or 108 or CEMS (when operational and certified). The combined total shall be computed by measuring the lb/MMBtu emission rate on each unit, multiplying each unit's emission rate by its annual heat input (MMBtu) and adding the total lbs emitted, divided by 2000. [Requested by Applicant]

EMISSIONS PERFORMANCE TESTING

13. Test Notification: The permittee shall notify the Compliance Authority in writing at least 15 days prior to any required tests. The notification shall include: the scheduled date, approximate start time, test team, contact name and phone number, description of unit to be tested, and the tests to be performed. [Rule 62-297.310(7)(a)9, F.A.C.]
14. Ammonia Slip, Performance Tests: Within 60 days after completing construction of each SCR system and bringing each unit on line, the permittee shall conduct tests to determine the ammonia slip rate in accordance with EPA Method CTM-027 or other methods approved by EPA. Subsequent tests shall be conducted during each federal fiscal year. If tests show ammonia slip emissions are greater than 5 ppmvd @ 15% O₂, the permittee shall take corrective actions such as repair, addition of catalyst, replacement of catalyst, etc. The corrective actions which are taken shall be submitted with the test data. [Rules 62-4.070(3) and 62-297.310(7), F.A.C.]

CONTINUOUS MONITORING REQUIREMENTS

15. NO_x and SO₂ CEMS: The permittee shall demonstrate compliance with the emissions standards specified in this permit with data collected from the existing NO_x, SO₂, CO₂, and stack gas flow rate continuous monitors installed pursuant to the Acid Rain requirements. [Rules 62-4.070(3) and 62-212.400, F.A.C.]
16. CO CEMS: To demonstrate compliance, the permittee shall certify, calibrate, operate and maintain a continuous emissions monitoring system (CEMS) to continuously monitor and record the emissions of carbon monoxide. The existing Thermo Electron Corp Model 48C monitors may be utilized for this purpose, provided that they are able to demonstrate compliance with 40 CFR 60 Appendix B, Performance Specification 4 and Appendix F, Quality Assurance Procedures. CEMS shall monitor and record data during all periods of Units 1 and 2 operation, including startup, shutdown, malfunction or emergency conditions, but not including continuous monitoring system breakdowns, repairs, calibration checks, or zero and span adjustments. For each calendar quarter, monitor availability shall be 95% or greater. If unable to achieve this level, the permittee shall submit a report identifying the problems in achieving 95% monitor availability and a plan of corrective actions. The permittee shall implement the reported corrective actions within the next calendar quarter. [Rules 62-4.070(3), F.A.C. and requested by applicant]

SECTION 3. EMISSIONS UNIT SPECIFIC CONDITIONS

A. EU 001 and 002 – Boilers No. 1 and 2

RECORDS AND REPORTS

17. Test Reports: The permittee shall prepare and submit reports for all required tests in accordance with the provisions of Rule 62-297.310(8), F.A.C. The report shall include copies of the continuous monitoring records. Additionally, an official notification shall be made to the Compliance Authority 72 hours prior to the establishment of initial coal fires in SGS Unit 3, for the purpose of complying with the limits herein.

SECTION 3. EMISSIONS UNIT SPECIFIC CONDITIONS

B. EUs 009 to 013 – Combined Conditions

This section of the permit addresses the following emissions units:

EMISSION UNIT NO.	SYSTEM	EMISSION UNIT DESCRIPTION
009	Materials Handling	Carbon Burn-Out (CBO™) Feed Fly Ash Silo
010	Materials Handling	CBO™ Product Fly Ash Storage Dome
011	Materials Handling	CBO™ Product Fly Ash Loadout Storage Silo
012	Materials Handling	CBO™ Product Fly Ash Fugitives
013	Hot Water Generation	CBO™ Process Fluidized Bed Combustor NSPS Subpart Db

DESIGN AND ESSENTIAL POTENTIAL TO EMIT (PTE) PARAMETERS

1. CBO™ Process Fluidized Bed Combustor: The maximum design heat input rate to the CBO™ Process Fluidized Bed Combustor (EU-013) shall be 114.7 MMBtu/hr. The emissions from the CBO™ Process Fluidized Bed Combustor shall be routed back to Units 1 and 2 flue gas ductwork, upstream of the ESP, SCR and FGD System, so as to ensure that emissions are minimized. [Design; Rules 62-210(PTE) and 62-4.070(3), F.A.C.]
2. Baghouse Controls: Particulate emissions from Emission Units Nos. 009, 010 and 011 shall be controlled by baghouses that are designed, operated, and maintained to achieve a particulate matter design specification of 0.01 grains/acf of exhaust. New and replacement bags shall meet these specifications based on vendor design information. No particulate matter emissions tests are required. The permittee shall not circumvent the air pollution control equipment or allow the emission of air pollutants without this equipment operating properly. [Design; Rules 62-4.070(3) and 62-210.650, F.A.C.]
3. Hours of Operation: Emission Unit Numbers 009, 010, 011, 012 and 013 associated with the Carbon Burnout Unit are each allowed to operate continuously (8760 hrs/yr). [Rule 62-210.200(PTE), F.A.C.]

EMISSION LIMITATIONS AND PERFORMANCE STANDARDS

4. Authorized Fuels: Only fly ash generated from EU-001 and 002 may be used as fuel for the CBO™ Process Fluidized Bed Combustor (EU-013), except for the purposes of start-up. Start-up fuel shall be distillate fuel oil, limited to 0.5% sulfur and 14,300 gallons per calendar year. Records of fuel oil consumed for EU-013, demonstrating compliance with this condition shall be kept on-site so as to be readily available for review. Additionally, SGS shall totalize fuel usage data for annual (AOR) reporting. [Design; Rule 62-4.070(3), F.A.C.]
5. NSPS Provisions: EU-013 shall comply with the requirements of 40 CFR 60, Subpart Db. As a result of the configuration identified in above Condition 1, demonstration of the Subpart limits shall be allowed via the existing SGS Units 1 and 2 CEMS and stack testing. SGS shall include this demonstration upon initial installation and annually thereafter. [Note: Due to the configuration, there will be no practical method to test the CBO™ Unit separately. However, the combined emissions from the steam generating unit with the CBO™ Unit (when operating) shall comply with the NSPS NO_x limit of 0.20 lb/MMBtu on a 30 day rolling average via CEMS. The CBO™ Unit exhaust shall only be routed to one unit at a time.]
6. Baghouse Exhausts: As determined by EPA Method 9 observations, visible emissions shall not exceed 5% opacity from each baghouse exhaust point for Emissions Unit Nos. 009, 010 and 011. [Design; Rules 62-4.070(3), 62-210.650, and 62-297.620(4) F.A.C.]

SECTION 3. EMISSIONS UNIT SPECIFIC CONDITIONS

B. EUs 009 to 013 – Combined Conditions

7. **Fugitive Dust Control:** The following requirements shall be met to minimize fugitive dust emissions from the storage and handling facilities, including haul roads and CBO-related operations:
- All conveyors and conveyor transfer points will be enclosed to the extent practical, so as to preclude PM emissions.
 - Water sprays or chemical wetting agents and stabilizers will be applied to storage piles, handling equipment, roadways, etc. as necessary to minimize opacity.
8. **Maximum Expected Emissions:** The following table identifies the maximum expected emissions, design specifications and fugitives associated with the CBO™ Process. This table is shown for convenience purposes and does not represent additional, allowable emission limitations beyond those listed within the permit. [Design]

Emissions Unit No.	Control Device	Exhaust Flow Rate (dscfm)	PM Emission Rate (gr/dscf)	PM Emission Rate (lb/hr)	PM Emission Rate (TPY)
009	Baghouse	3,000	0.01	0.3	1.1
010	Baghouse	6,000	0.01	0.5	2.3
011	Baghouse	6,000	0.01	0.5	2.3
012	Paved Roads; Watering	—	—	0.1	0.2
TOTALS				1.4	5.8

TEST METHODS AND PROCEDURES

9. **Test Notification:** At least 15 days prior to the date on which each formal compliance test is to begin, the permittee shall notify the Compliance Authority of: the date, time, and place of the test; and the contact person who will be responsible for coordinating and having the test conducted. [Rule 62-297.310(7)(a)9, F.A.C.]
10. **Compliance Tests:** Each baghouse exhaust point for EU-009, EU-010, and EU-011 shall be tested to demonstrate initial compliance with the specified opacity standard. The initial tests shall be conducted within 60 days after achieving permitted capacity, but not later than 180 days after initial operation of the unit. Thereafter, each baghouse exhaust point for EU-009, EU-010, and EU-011 shall be tested to demonstrate compliance with the specified opacity standard during each federal fiscal year (October 1st to September 30th) and within the 12-month period prior to renewing the operation permit. [Rule 62-297.310(7)(a)1 and 4, F.A.C.]
11. **Test Procedures:** All tests shall be conducted in accordance with EPA Method 9, which is described in 40 CFR 60, Appendix A, and adopted by reference in Rule 62-204.800, F.A.C. Tests shall also comply with the applicable requirements of Rule 62-297.310, F.A.C. Tests shall be conducted in accordance with all applicable requirements of Chapter 62-297, F.A.C. The minimum observation period for a visible emissions compliance test shall be thirty (30) minutes. The observation period shall include the period during which the highest opacity can reasonably be expected to occur. [Rules 62-204.800 and 62-297.310(4) and (5), F.A.C.; 40 CFR 60, Appendix A]
12. **Special Compliance Tests:** When the Compliance Authority, after investigation, has good reason (such as complaints, increased visible emissions or questionable maintenance of control equipment) to believe that any applicable emission standard contained in a Department rule or in a permit issued pursuant to those rules is being violated, it shall require the owner or operator of the emissions unit to conduct compliance tests which identify the nature and quantity of pollutant emissions from the emissions unit and to provide a report on the results of said tests to the Compliance Authority. [Rule 62-297.310(7)(b), F.A.C.]

APPENDIX GC
GENERAL PERMIT CONDITIONS [F.A.C. 62-4.160]

- G.1 The terms, conditions, requirements, limitations, and restrictions set forth in this permit are "Permit Conditions" and are binding and enforceable pursuant to Sections 403.161, 403.727, or 403.859 through 403.861, Florida Statutes. The permittee is placed on notice that the Department will review this permit periodically and may initiate enforcement action for any violation of these conditions.
- G.2 This permit is valid only for the specific processes and operations applied for and indicated in the approved drawings or exhibits. Any unauthorized deviation from the approved drawings or exhibits, specifications, or conditions of this permit may constitute grounds for revocation and enforcement action by the Department.
- G.3 As provided in Subsections 403.087(6) and 403.722(5), Florida Statutes, the issuance of this permit does not convey and vested rights or any exclusive privileges. Neither 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. This permit is not a waiver or approval of any other Department permit that may be required for other aspects of the total project which are not addressed in the permit.
- G.4 This permit conveys no title to land or water, does not constitute State recognition or acknowledgment of title, and does not constitute authority for the use of submerged lands unless herein provided and the necessary title or leasehold interests have been obtained from the State. Only the Trustees of the Internal Improvement Trust Fund may express State opinion as to title.
- G.5 This permit does not relieve the permittee from liability for harm or injury to human health or welfare, animal, or plant life, or property caused by the construction or operation of this permitted source, or from penalties therefore; nor does it allow the permittee to cause pollution in contravention of Florida Statutes and Department rules, unless specifically authorized by an order from the Department.
- G.6 The permittee shall properly operate and maintain the facility and systems of treatment and control (and related appurtenances) that are installed or used by the permittee to achieve compliance with the conditions of this permit, as required by Department rules. This provision includes the operation of backup or auxiliary facilities or similar systems when necessary to achieve compliance with the conditions of the permit and when required by Department rules.
- G.7 The permittee, by accepting this permit, specifically agrees to allow authorized Department personnel, upon presentation of credentials or other documents as may be required by law and at a reasonable time, access to the premises, where the permitted activity is located or conducted to:
- a) Have access to and copy and records that must be kept under the conditions of the permit;
 - b) Inspect the facility, equipment, practices, or operations regulated or required under this permit, and,
 - c) Sample or monitor any substances or parameters at any location reasonably necessary to assure compliance with this permit or Department rules.
- Reasonable time may depend on the nature of the concern being investigated.
- G.8 If, for any reason, the permittee does not comply with or will be unable to comply with any condition or limitation specified in this permit, the permittee shall immediately provide the Department with the following information:
- a) A description of and cause of non-compliance; and
 - b) The period of noncompliance, including dates and times; or, if not corrected, the anticipated time the non-compliance is expected to continue, and steps being taken to reduce, eliminate, and prevent recurrence of the non-compliance.

APPENDIX GC
GENERAL PERMIT CONDITIONS [F.A.C. 62-4.160]

- The permittee shall be responsible for any and all damages, which may result and may be subject to enforcement action by the Department for penalties or for revocation of this permit.
- G.9 In accepting this permit, the permittee understands and agrees that all records, notes, monitoring data and other information relating to the construction or operation of this permitted source which are submitted to the Department may be used by the Department as evidence in any enforcement case involving the permitted source arising under the Florida Statutes or Department rules, except where such use is prescribed by Sections 403.73 and 403.111, Florida Statutes. Such evidence shall only be used to the extent it is consistent with the Florida Rules of Civil Procedure and appropriate evidentiary rules.
- G.10 The permittee agrees to comply with changes in Department rules and Florida Statutes after a reasonable time for compliance, provided, however, the permittee does not waive any other rights granted by Florida Statutes or Department rules.
- G.11 This permit is transferable only upon Department approval in accordance with Florida Administrative Code Rules 62-4.120 and 62-730.300, F.A.C., as applicable. The permittee shall be liable for any non-compliance of the permitted activity until the transfer is approved by the Department.
- G.12 This permit or a copy thereof shall be kept at the work site of the permitted activity.
- G.13 This permit also constitutes:
- a) Determination of Best Available Control Technology ()
 - b) Determination of the applicability of Prevention of Significant Deterioration (X); and
 - c) Compliance with New Source Performance Standards (X).
- G.14 The permittee shall comply with the following:
- a) Upon request, the permittee shall furnish all records and plans required under Department rules. During enforcement actions, the retention period for all records will be extended automatically unless otherwise stipulated by the Department.
 - b) The permittee shall hold at the facility or other location designated by this permit records of all monitoring information (including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation) required by the permit, copies of all reports required by this permit, and records of all data used to complete the application or this permit. These materials shall be retained at least three years from the date of the sample, measurement, report, or application unless otherwise specified by Department rule.
 - c) Records of monitoring information shall include:
 - 1. The date, exact place, and time of sampling or measurements;
 - 2. The person responsible for performing the sampling or measurements;
 - 3. The dates analyses were performed;
 - 4. The person responsible for performing the analyses;
 - 5. The analytical techniques or methods used; and
 - 6. The results of such analyses.
- G.15 When requested by the Department, the permittee shall within a reasonable time furnish any information required by law, which is needed to determine compliance with the permit. If the permittee becomes aware that relevant facts were not submitted or were incorrect in the permit application or in any report to the Department, such facts or information shall be corrected promptly.

Title V Air Operation Permit No. 1070025-003-AV (Units 1 and 2)

Seminole Electric Cooperative, Inc.
Seminole Generating Station
Facility ID No.: 1070025
Putnam County

Title V Air Operation Permit REVISION

FINAL Permit Project No.: 1070025-003-AV

(1st Revision to Renewed Title V Permit No.: 1070025-002-AV)

Permitting Authority:

State of Florida
Department of Environmental Protection
Division of Air Resource Management
Bureau of Air Regulation
Permitting North Section
Mail Station #5505
2600 Blair Stone Road
Tallahassee, Florida 32399-2400
Telephone: 850/488-0114
Fax: 850/922-6979

Compliance Authority:

Department of Environmental Protection
Northeast District Office
7825 Baymeadows Way, Suite 200B
Jacksonville, Florida 32256-7590
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Title V Air Operation Permit REVISION

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Permittee:

Seminole Electric Cooperative, Inc.
16313 North Dale Mabry Highway
Tampa, Florida 33618
REVISION

FINAL Permit No.: 1070025-003-AV**Facility ID No.:** 1070025**SIC Nos.:** 49, 4911**Project:** Title V Air Operation Permit

The purpose of this permit is to revise Title V Air Operation Permit, No. **1070025-002-AV**, for the operation of the Seminole Generating Station, to reflect the authorized removal of the ambient monitoring station and to replace Appendix TV-4, Title V Conditions (version dated 02/12/02) with Appendix TV-5, Title V Conditions (version dated 03/28/05). This facility is located east of U.S. Highway 17, approximately seven miles north of Palatka, Putnam County.

This Title V air operation permit REVISION is issued under the provisions of Chapter 403, Florida Statutes (F.S.), and Florida Administrative Code (F.A.C.) Chapters 62-4, 62-210, 62-213, and 62-214. The above named permittee is hereby authorized to perform the work or operate the facility shown on the application and approved drawing(s), plans, and other documents, attached hereto or on file with the permitting authority, in accordance with the terms and conditions of this permit.

Referenced attachments made a part of this permit:

Appendix U-1, List of Unregulated Emissions Units and/or Activities

Appendix I-1, List of Insignificant Emissions Units and/or Activities

Appendix TV-5, Title V Conditions (version dated 03/28/05)

APPENDIX SS-1, STACK SAMPLING FACILITIES (version dated 10/07/96)

TABLE 297.310-1, CALIBRATION SCHEDULE (version dated 10/07/96)

FIGURE 1 - SUMMARY REPORT-GASEOUS AND OPACITY EXCESS EMISSION AND
MONITORING SYSTEM PERFORMANCE REPORT (40 CFR 60; July 1996)

Appendix 40 CFR 60 Subpart A - General Provisions (version dated 07/01/03)

Phase II Acid Rain Application/Compliance Plan received 06/08/04

Phase II NO_x Compliance Plan dated 06/29/04.

Attachment Seminole Electric Cooperative: Protocol for Startup and Shutdown

Appendix CAM

Seminole Electric Cooperative, Inc.: Support Systems Operation Manual Plant Practice Section

Effective Date: January 1, 2005**Renewal Application Due Date:** July 5, 2009**1st Revision Effective date:** December 19, 2005**Expiration Date:** December 31, 2009

Michael G. Cooke, Director
Division of Air Resource Management

MGC/jk/jh

Section I. Facility Information.

Subsection A. Facility Description.

This facility consists of two 714.6 megawatt, electric, coal fired steam electric generators; a coal handling and storage system; a limestone unloading, handling and storage system; a flue gas desulfurization (FGD) sludge stabilization system; and a rail car maintenance facility.

Also included in this permit are miscellaneous unregulated/insignificant emissions units and/or activities.

Based on the Title V Air Operation Permit Renewal application received July 2, 2004, this facility is a major source of hazardous air pollutants (HAPs).

Subsection B. Summary of Emissions Unit ID No(s). and Brief Description(s).

E.U.

<u>ID No.</u>	<u>Brief Description</u>
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-001	Steam Electric Generator No. 1
-002	Steam Electric Generator No. 2
-004	Coal Storage Yard
-005	Limestone and FGD Sludge Handling and Storage

Unregulated Emissions Units and/or Activities

-006	One or more emergency generators not subject to the Acid Rain Program
-007	One or more heating units and general purpose internal combustion engines not subject to the Acid Rain Program
-008	General plant fugitives including plant-wide abrasive blasting, painting, moveable abrasive blast material bin, soil borrow pit, and vehicular travel on unpaved roads.

Please reference the Permit No., Facility ID No., and appropriate Emissions Unit(s) ID No(s). on all correspondence, test report submittals, applications, etc.

Subsection C. Relevant Documents.

The documents listed below are not a part of this permit; however, they are specifically related to this permitting action.

These documents are provided to the permittee for information purposes only:

Table 1-1, Summary of Air Pollutant Standards and Terms

Table 2-1, Summary of Compliance Requirements

Appendix A-1, Abbreviations, Acronyms, Citations, and Identification Numbers

Appendix H-1, Permit History

Seminole Electric Cooperative, Inc.
Seminole Generating Station

FINAL Permit No.: 1070025-003-AV
Facility ID No.: 1070025

These documents are on file with the permitting authority:

Title V Permit REVISION Application received July 2, 2004.

Statement of Basis

Proposed Permit was posted for EPA Review on November 12, 2004.

Section II. Facility-wide Conditions.

The following conditions apply facility-wide:

1. APPENDIX TV-5, TITLE V CONDITIONS, is a part of this permit.

{Permitting note: APPENDIX TV-5, TITLE V CONDITIONS, is distributed to the permittee only. Other persons requesting copies of these conditions shall be provided a copy when requested or otherwise appropriate.}

2. Not federally enforceable. General Pollutant Emission Limiting Standards. Objectionable Odor Prohibited. The permittee shall not cause, suffer, allow, or permit the discharge of air pollutants which cause or contribute to an objectionable odor.
[Rule 62-296.320(2), F.A.C.]

3. General Particulate Emission Limiting Standards. General Visible Emissions Standard. Except for emissions units that are subject to a particulate matter or opacity limit set forth or established by rule and reflected by conditions in this permit, no person shall cause, let, permit, suffer or allow to be discharged into the atmosphere the emissions of air pollutants from any activity, the density of which is equal to or greater than that designated as Number 1 on the Ringelmann Chart (20 percent opacity). EPA Method 9 is the method of compliance pursuant to Chapter 62-297, F.A.C.
[Rules 62-296.320(4)(b)1. & 4., F.A.C.]

4. Prevention of Accidental Releases (Section 112(r) of CAA).

a. The permittee shall submit its Risk Management Plan (RMP) to the Chemical Emergency Preparedness and Prevention Office (CEPPO) RMP Reporting Center when, and if, such requirement becomes applicable. Any Risk Management Plans, original submittals, revisions or updates to submittals, should be sent to:

RMP Reporting Center
Post Office Box 1515
Lanham-Seabrook, Maryland 20703-1515
Telephone: 301/429-5018

and,

b. The permittee shall submit to the permitting authority Title V certification forms or a compliance schedule in accordance with Rule 62-213.440(2), F.A.C.
[40 CFR 68]

5. Unregulated Emissions Units and/or Activities. Appendix U-1, List of Unregulated Emissions Units and/or Activities, is a part of this permit.
[Rule 62-213.440(1), F.A.C.]

6. Insignificant Emissions Units and/or Activities. Appendix I-1, List of Insignificant Emissions Units and/or Activities, is a part of this permit.
[Rules 62-213.440(1), 62-213.430(6) and 62-4.040(1)(b), F.A.C.]

7. General Pollutant Emission Limiting Standards. Volatile Organic Compounds Emissions or Organic Solvents Emissions. The permittee shall allow no person to store, pump, handle, process, load, unload or use in any process or installation, volatile organic compounds or organic solvents without applying known and existing vapor emission control devices or systems deemed necessary and ordered by the Department.
[Rule 62-296.320(1)(a), F.A.C.]

8. Emissions of Unconfined Particulate Matter. Pursuant to Rules 62-296.320(4)(c)1., 3. & 4., F.A.C., reasonable precautions to prevent emissions of unconfined particulate matter at this facility include the following requirements (see Condition 57. of APPENDIX TV-5, TITLE V CONDITIONS):

The following requirements are "not federally enforceable":

- a. Chemical or water application to unpaved roads and unpaved yard areas;
- b. Paving and maintenance of roads, parking areas and plant grounds;
- c. Landscaping or planting of vegetation;
- d. Confining abrasive blasting where possible; and,
- e. Other techniques as necessary.

[Rule 62-296.320(4)(c)2., F.A.C.; and, proposed by the applicant in the renewal Title V permit application received July 2, 2004.]

9. When appropriate, any recording, monitoring, or reporting requirements that are time-specific shall be in accordance with the effective date of the permit, which defines day one.

[Rule 62-213.440, F.A.C.]

10. Statement of Compliance. The annual statement of compliance pursuant to Rule 62-213.440(3)(a)2., F.A.C., shall be submitted to the Department and EPA within 60 (sixty) days after the end of the calendar year using DEP Form No. 62-213.900(7), F.A.C.

[Rules 62-213.440(3) and 62-213.900, F.A.C.]

(1)

(2) *{Permitting Note: This condition implements the requirements of Rules 62-213.440(3)(a)2. & 3., F.A.C. (see Condition 51. of APPENDIX TV-5, TITLE V CONDITIONS.)}*

(3)

11. The permittee shall submit all compliance related notifications and reports required of this permit to the Department's Northeast District office:

Department of Environmental Protection, Northeast District Office

7825 Baymeadows Way, Suite 200B

Jacksonville, Florida 32256-7590

Telephone: 904/807-3300; Fax: 904/448-4319

12. Any reports, data, notifications, certifications, and requests required to be sent to the United States Environmental Protection Agency, Region 4, should be sent to:

United States Environmental Protection Agency, Region 4

Air, Pesticides & Toxics Management Division

Air and EPRCA Enforcement Branch

Air Enforcement Section

61 Forsyth Street

Atlanta, Georgia 30303

Telephone: 404/562-9155; Fax: 404/562-9163

13. Certification by Responsible Official (RO). In addition to the professional engineering certification required for applications by Rule 62-4.050(3), F.A.C., any application form, report, compliance statement, compliance plan and compliance schedule submitted pursuant to Chapter 62-213, F.A.C., shall contain a certification signed by a responsible official that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete. Any responsible official who fails to submit any required information or who has submitted incorrect information shall, upon becoming aware of such failure or incorrect submittal, promptly submit such supplementary information or correct

Seminole Electric Cooperative, Inc.
Seminole Generating Station

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information.
[Rule 62-213.420(4), F.A.C.]

Section III. Emissions Unit(s) and Conditions.

Subsection A. This section addresses the following emissions units.

E.U.

<u>ID No.</u>	<u>Brief Description</u>
-001	Steam Electric Generator No. 1
-002	Steam Electric Generator No. 2

Steam Electric Generator Nos. 1 and 2 are coal fired utility, dry bottom wall-fired boilers, each having a maximum generator rating of 714.6 megawatts, electric. The maximum heat input to each emissions unit is 7,172 million Btu per hour. Steam Electric Generator Nos. 1 and 2 are each equipped with an electrostatic precipitator (ESP) to control particulate matter, a wet limestone flue gas desulfurization (FGD) unit to control sulfur dioxide, and low NO_x burners and low excess-air firing to control nitrogen oxides.

{Permitting note(s): IMPORTANT REGULATORY CLASSIFICATIONS - The emissions units are regulated under Acid Rain, Phase II and Phase I; NSPS - 40 CFR 60, Subpart Da, Standards of Performance for Electric Utility Steam Generating Units for Which Construction is Commenced After September 18, 1978, adopted and incorporated by reference in Rule 62-204.800(7), F.A.C.; Rule 212.400(5), F.A.C., Prevention of Significant Deterioration (PSD); and Rule 62-212.400(6), F.A.C., Best Available Control Technology (BACT) Determination, dated August 9, 1979. Steam Electric Generator No. 2 began commercial operation in 1984 and Steam Electric Generator No. 1 began commercial operation in 1985. Units 1 and 2 are subject to CAM for monitoring controlled emissions of particulate matter. Units 1 and 2 are not subject to CAM for controlled emissions of SO₂ because CEMS are used for continuous compliance. Units 1 and 2 are not subject to CAM for NO_x because there are no add-on control devices.}

The following specific conditions apply to the emissions unit(s) listed above:

{Permitting note: In addition to the requirements listed below, these emissions units are also subject to the standards and requirements contained in the Acid Rain Part of this permit (see Section IV).}

Essential Potential to Emit (PTE) Parameters

A.1. Permitted Capacity. The maximum operation heat input rate is as follows:

<u>Emissions Unit No.</u>	<u>MMBtu/hr Heat Input</u>
-001	7,172
-002	7,172

[Rules 62-4.160(2) and 62-210.200(PTE), F.A.C.]

{Permitting note: The heat input limitations have been placed in each permit to identify the capacity of each unit for the purposes of confirming that emissions testing is conducted within 90 to 100 percent of the unit's rated capacity (or to limit future operation to 110 percent of the test load), to establish appropriate emission limits and to aid in determining future rule applicability. Regular record keeping is not required for heat input. Instead the owner or operator is expected to determine heat input whenever emission testing is required, to demonstrate at what percentage of the rated capacity that the unit was tested. Rule 62-297.310(5), F.A.C., included in the permit, requires measurement of the process variables for emission tests. Such heat input determination may be based on measurements of fuel consumption by various methods including but not limited to

fuel flow metering or tank drop measurements, using the heat value of the fuel determined by the fuel vendor or the owner or operator, to calculate average hourly heat input during the test.}

A.2. Emissions Unit Operating Rate Limitation After Testing. See specific condition **A.47**.
[Rule 62-297.310(2), F.A.C.]

A.3. Methods of Operation. Fuel(s). The only fuels allowed to be fired are coal, coal with a maximum of 30 percent petroleum coke (by weight), No. 2 fuel oil, and on-specification used oil. The maximum weight of petroleum coke burned shall not exceed 186,000 pounds per hour (averaged over 24 hours), see **Specific Condition A.66**. On-specification used oil containing any quantifiable levels of PCBs can only be fired when the emissions unit is at normal operating temperatures.
[Rule 62-213.410(1), F.A.C.; 40 CFR 271.20(e)(3); and PSD-FL-018(A)]

{Permitting note: The fuel restrictions specified in **Specific Condition A.3** apply to each emissions unit.}

A.4. Hours of Operation. These emissions units are allowed to operate continuously, i.e., 8,760 hours/year.
[Rule 62-210.200(PTE), F.A.C.]

Emission Limitations and Standards

{Permitting note: Table 1-1, Summary of Air Pollutant Standards and Terms, summarizes information for convenience purposes only. This table does not supersede any of the terms or conditions of this permit.}

{Permitting note: Unless otherwise specified, the averaging times for **Specific Conditions A.5** through **A.17** are based on the specified averaging time of the applicable test method.}

A.5. Particulate Matter. No owner or operator subject to the provisions of 40 CFR 60, Subpart Da shall cause to be discharged into the atmosphere from any affected facility any gases which contain particulate matter in excess of:

- (1) 13 ng/J (0.03 lb/million Btu) heat input derived from the combustion of coal or fuel oil;
- (2) 1 percent of the potential combustion concentration (99 percent reduction) when combusting solid fuel; and
- (3) 30 percent of potential combustion concentration (70 percent reduction) when combusting liquid fuel.

[40 CFR 60.42a(a) and PSD-FL-018]

A.6. Particulate Matter. No owner or operator shall cause to be discharged into the atmosphere when combusting a coal and petroleum coke blend any gases which contain particulate matter in excess of 0.03 lb/million Btu heat input, and one percent of the potential combustion concentration (99 percent reduction). Compliance with the 0.03 lb/million Btu heat input emission limitation shall also constitute compliance with the 99 percent reduction requirement.
[PSD-FL-018(A)]

A.7. Visible Emissions. No owner or operator subject to the provisions of 40 CFR 60, Subpart Da shall cause to be discharged into the atmosphere from any affected facility any gases which exhibit greater than 20 percent opacity (6 minute average), except for one 6-minute period per hour of not more than 27

percent opacity.
[40 CFR 60.42a(b)]

A.8. Sulfur Dioxide (Coal, Only). No owner or operator subject to the provisions of 40 CFR 60, Subpart Da shall cause to be discharged into the atmosphere from any affected facility which combusts coal any gases which contain sulfur dioxide in excess of:

- (1) 520 ng/J (1.20 lb/million Btu) heat input and 10 percent of the potential combustion concentration (90 percent reduction), or
- (2) 30 percent of the potential combustion concentration (70 percent reduction), when emissions are less than 260 ng/J (0.60 lb/million Btu) heat input.

[40 CFR 60.43a(a)(1) & (2); and, PSD-FL-018]

A.9. Sulfur Dioxide. No owner or operator subject to the provisions of 40 CFR 60, Subpart Da shall cause to be discharged into the atmosphere from any affected facility which combusts liquid fuel any gases which contain sulfur dioxide in excess of:

- (1) 340 ng/J (0.80 lb/million Btu) heat input and 10 percent of the potential combustion concentration (90 percent reduction), or
- (2) 100 percent of the potential combustion concentration (zero percent reduction), when emissions are less than 86 ng/J (0.20 lb/million Btu) heat input.

[40 CFR 60.43a(b)(1) & (2); and, PSD-FL-018]

A.10. Sulfur Dioxide. Compliance with the emission limitation and percent reduction requirements are both determined on a 30-day rolling average basis.

[40 CFR 60.43a(g)]

A.11. Sulfur Dioxide. When coal and fuel oil are combusted simultaneously, the applicable standard is determined by proration using the following formula:

$$PS_{SO_2} = X(340) + Y(520) / 100$$

where:

PS_{SO_2} is the prorated standard for sulfur dioxide when combusting coal and fuel oil simultaneously (ng/J heat input).

X is the percentage of total heat input derived from the combustion of fuel oil.

Y is the percentage of total heat input derived from the combustion of coal.

[PSD-FL-018]

A.12. Sulfur Dioxide. Stack emissions from Units 1 and 2 shall comply with the following standards when burning blends of coal and petroleum coke:

(1) Unit 1:

$$E_{SO_2} = [(\%C_{HI} / 100) * (P_S) * (1 - (\%R_O / 100))] + [(1 - (\%C_{HI} / 100)) * (0.74 \text{ lb } SO_2 / \text{MMBtu})]$$

(2) Unit 2:

$$E_{SO_2} = [(\%C_{HI} / 100) * (P_S) * (1 - (\%R_O / 100))] + [(1 - (\%C_{HI} / 100)) * (0.72 \text{ lb } SO_2 / \text{MMBtu})]$$

where:

E_{SO_2} = allowable SO_2 emission rate; pounds per million Btu heat input (lb SO_2 /MMBtu), 30-day rolling average.

$\%C_{Hi}$ = percent of coal used on a heat input basis.

P_S = potential SO_2 combustion concentration (unwashed coal without emission control systems) as defined by NSPS Subpart Da; lb SO_2 /MMBtu, 30-day rolling average.

$\%R_O$ = overall percent SO_2 reduction from Equation 19-21 of EPA Reference Method 19. Per NSPS Subpart Da, $\%R_O$ must not be less than 90%, 30-day rolling average.

0.74 = historical 2-year annual average SO_2 emission rate for Unit 1, lb/MMBtu.

0.72 = historical 2-year annual average SO_2 emission rate for Unit 2, lb/MMBtu.

Compliance with the lb/MMBtu heat input emission limitations and percent reduction requirement shall be determined on a 30-day rolling average basis.
[PSD-FL-018(A)]

A.13. Sulfur Dioxide. The petroleum coke sulfur content shall not exceed 7.0 percent by weight, dry basis.
[PSD-FL-018(A)]

A.14. Nitrogen Oxides. No owner or operator subject to the provisions of 40 CFR 60, Subpart Da shall cause to be discharged into the atmosphere from any affected facility any gases which contain nitrogen oxides in excess of the following emission limits, based on a 30-day rolling average.
(1) NO_x emissions limits. Bituminous coal emission limit for heat input: 260 ng/J (0.60 lb/million Btu); All other liquid fuels emission limit for heat input: 130 ng/J (0.30 lb/million Btu).
(2) NO_x reduction requirement. Solid fuels: 65 percent reduction of potential combustion concentration; Liquid fuels: 30 percent reduction of potential combustion concentration.
[40 CFR 60.44a(a)(1) & (2)]

A.15. Nitrogen Oxides. When coal and fuel oil are combusted simultaneously, the applicable standard is determined by proration using the following formula:

$$PS_{NOX} = X(130) + Y(260) / 100$$

where:

PS_{NOX} is the prorated standard for nitrogen oxides when combusting coal and fuel oil simultaneously (ng/J heat input).

X is the percentage of total heat input derived from the combustion of fuel oil.

Y is the percentage of total heat input derived from the combustion of coal.
[PSD-FL-018]

A.16. Nitrogen Oxides. Stack emissions from Units 1 and 2 shall comply with the following standards when burning blends of coal and petroleum coke:

(1) 0.60 lb/MMBtu heat input, and 35 percent of the potential combustion concentration (65 percent reduction). Compliance with the lb/MMBtu heat input emission limitation and the percent reduction requirement shall be determined on a 30-day rolling average basis. Compliance with the 0.60 lb/MMBtu heat input emission limitation shall also constitute compliance with the 65 percent reduction requirement; and,

(2) 0.50 lb/MMBtu heat input determined on an annual average basis, when subject to the 40 CFR 76.8 Early Election Program for Group 1, Phase II Boilers or in any year when petroleum coke is burned.

[40 CFR 60.44a(a)(1) & (2) and PSD-FL-018(A)]

A.17. "On-Specification" Used Oil. Only "on-specification" used oil shall be fired in each unit. The quantity fired in each unit shall not exceed 500,000 gallons per calendar year. "On-specification" used oil is defined as used oil that meets the 40 CFR 279 (Standards for the Management of Used Oil) specifications listed below. Used oil that does not meet all of the following specifications is considered "off-specification" oil and shall not be fired.

<u>CONSTITUENT / PROPERTY</u>	<u>ALLOWABLE LEVEL</u>
Arsenic	5 ppm maximum
Cadmium	2 ppm maximum
Chromium	10 ppm maximum
Lead	100 ppm maximum
Total Halogens	1000 ppm maximum
Flash Point	100 °F minimum
PCBs	less than 50 ppm

* As determined by approved methods specified in EPA Publication SW-846 (Test Methods for Evaluating Solid Waste, Physical/Chemical Methods).

[40 CFR 279.11; and, Requested by the Applicant in the initial Title V application received June 17, 1996]

Excess Emissions

A.18. The opacity standards set forth in 40 CFR 60 shall apply at all times except during periods of startup, shutdown, malfunction and as otherwise provided in the applicable standard.

At all times, including periods of startup, shutdown, and malfunction, owners and operators shall, to the extent practicable, maintain and operate any affected facility including associated air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Administrator which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source.

[40 CFR 60.11(c) & (d)]

{Permitting note: The Excess Emissions Rule at Rule 62-210.700, F.A.C., cannot vary any requirement of a NSPS, NESHAP, or Acid Rain program provision.}

A.19. Excess emissions resulting from malfunction shall be permitted provided that best operational practices to minimize emissions are adhered to and the duration of excess emissions shall be minimized but in no case exceed two hours in any 24 hour period unless specifically authorized by the Department for longer duration.

[Rule 62-210.700(1), F.A.C.]

A.20. As necessary, the permittee will operate in accordance with the Procedures for Startup and Shutdown attached to this permit. The Procedures shall be used where applicable and where there is/are conflict with Specific Condition A.19.

[Rule 62-210.700(5), F.A.C.]

A.21. Excess emissions which are caused entirely or in part by poor maintenance, poor operation, or any other equipment or process failure which may reasonably be prevented during startup, shutdown or malfunction shall be prohibited.

[Rule 62-210.700(4), F.A.C.]

Monitoring of Operations

A.22. Determination of Process Variables.

(a) **Required Equipment.** The owner or operator of an emissions unit for which compliance tests are required shall install, operate, and maintain equipment or instruments necessary to determine process variables, such as process weight input or heat input, when such data are needed in conjunction with emissions data to determine the compliance of the emissions unit with applicable emission limiting standards.

(b) **Accuracy of Equipment.** Equipment or instruments used to directly or indirectly determine process variables, including devices such as belt scales, weight hoppers, flow meters, and tank scales, shall be calibrated and adjusted to indicate the true value of the parameter being measured with sufficient accuracy to allow the applicable process variable to be determined within 10% of its true value.

[Rule 62-297.310(5), F.A.C.]

Compliance Provisions

A.23. Compliance with the particulate matter emission limitation under 40 CFR 60.42a(a)(1) constitutes compliance with the percent reduction requirements for particulate matter under 40 CFR 60.42a(a)(2) and (3).

[40 CFR 60.46a(a)]

A.24. Compliance with the nitrogen oxides emission limitation under 40 CFR 60.44a(a)(1) constitutes compliance with the percent reduction requirements under 40 CFR 60.44a(a)(2).

[40 CFR 60.46a(b)]

A.25. The particulate matter emission standards under 40 CFR 60.42a and the nitrogen oxide standards under 40 CFR 60.44a apply at all times except during periods of startup, shutdown, or malfunction. The sulfur dioxide emission standards under 40 CFR 60.43a apply at all times except during periods of startup, shutdown, or when both emergency conditions exist and the procedures under 40 CFR 60.46a(d) are implemented.

[40 CFR 60.46a(c)]

A.26. During emergency conditions in the principle company, an affected facility with a malfunctioning flue gas desulfurization system may be operated if sulfur dioxide emissions are minimized by:

(1) Operating all operable flue gas desulfurization modules, and bringing back into operation any malfunctioned module as soon as repairs are completed,

(2) Bypassing flue gases around only those flue gas desulfurization system modules that have been taken out of operation because they were incapable of any sulfur dioxide emission reduction or

which would have suffered significant physical damage if they had remained in operation.
[40 CFR 60.46a(d)(1) & (2)]

A.27. Compliance with the sulfur dioxide emission limitations and the percentage reduction requirements under 40 CFR 60.43a and the nitrogen oxides emissions limitations under 40 CFR 60.44a is based on the average emission rate for 30 successive boiler operating days. A separate performance test is completed at the end of each boiler operating day and a new 30 day average emission rate for both sulfur dioxide and nitrogen oxides and a new percent reduction for sulfur dioxide are calculated to show compliance with the standards.
[40 CFR 60.46a(e)]

A.28. Compliance is determined by calculating the arithmetic average of all hourly emission rates for SO₂ and NO_x for the 30 successive boiler operating days, except for data obtained during startup, shutdown, or malfunction (NO_x only), or emergency conditions (SO₂ only). Compliance with the percentage reduction requirement for SO₂ is determined based on the average inlet and average outlet SO₂ emissions rates for the 30 successive boiler operating days.
[40 CFR 60.46a(g)]

A.29. If the owner or operator has not obtained the minimum quantity of emission data as required under 40 CFR 60.47a, compliance of the affected facility with the emission requirements under 40 CFR 60.43a and 60.44a for the day on which the 30-day period ends may be determined by the Administrator following the applicable procedures in section 7 of Method 19.
[40 CFR 60.46a(h)]

Continuous Monitoring Requirements

A.30. Opacity. The owner or operator of an affected facility shall install, calibrate, maintain, and operate a continuous monitoring system, and record the output of the system, for measuring the opacity of emissions discharges to the atmosphere. If opacity interference due to water droplets exists in the stack (for example, from the use of a FGD system), the opacity is monitored upstream of the interference (at the inlet to the FGD system). If opacity interference is experienced at all locations (both at the inlet and outlet of the sulfur dioxide control system), alternate parameters indicative of the particulate matter control system's performance are monitored (subject to the approval of the Administrator).
[40 CFR 60.47a(a)]

A.31. Sulfur Dioxide. The owner or operator of an affected facility shall install, calibrate, maintain, and operate a continuous monitoring system, and record the output of the system, for measuring sulfur dioxide emissions as follows:
(1) Sulfur dioxide emissions are monitored at both the inlet and outlet of the sulfur dioxide control device.
(3) An "as fired" fuel monitoring system (upstream of coal pulverizers) meeting the requirements of Method 19 (appendix A) may be used to determine potential sulfur dioxide emissions in place of a continuous sulfur dioxide emission monitor at the inlet to the sulfur dioxide control device as required by paragraph (1), above.
[40 CFR 60.47a(b)(1) & (3)]

A.32. Nitrogen Oxides. The owner or operator of an affected facility shall install, calibrate, maintain, and operate a continuous monitoring system, and record the output of the system, for measuring nitrogen oxides emissions discharged to the atmosphere.

[40 CFR 60.47a(c)]

A.33. The owner or operator of an affected facility shall install, calibrate, maintain, and operate a continuous monitoring system, and record the output of the system, for measuring the oxygen or carbon dioxide content of the flue gases at each location where sulfur dioxide or nitrogen oxides emissions are monitored.

[40 CFR 60.47a(d)]

A.34. The continuous monitoring systems required under specific conditions **A.31.**, **A.32.** and **A.33.** are operated and data recorded during all periods of operation at the affected facility including periods of startup, shutdown, malfunction, or emergency conditions, except for continuous monitoring system breakdowns, repairs, calibration checks, and zero and span adjustments.

[40 CFR 60.47a(e)]

A.35. The owner or operator shall obtain emission data for at least 18 hours in at least 22 out of 30 successive boiler operating days. If this minimum data requirement cannot be met with a continuous monitoring system, the owner or operator shall supplement emission data with other monitoring systems approved by the Administrator or the reference methods and procedures as described in 40 CFR 60.47a(h).

[40 CFR 60.47a(f)]

A.36. The 1-hour averages required under 40 CFR 60.13(h) are expressed in ng/J (lb/million Btu) heat input and used to calculate the average emission rates under 40 CFR 60.46a. The 1-hour averages are calculated using the data points required under 40 CFR 60.13(b). At least two data points must be used to calculate the 1-hour averages.

[40 CFR 60.47a(g)]

A.37. When it becomes necessary to supplement continuous monitoring system data to meet the minimum data requirements in 40 CFR 60.47a(f), the owner or operator shall use the reference methods and procedures as specified in this paragraph. acceptable alternative methods are given in 40 CFR 60.47a(j).

(1) Method 6 shall be used to determine the SO₂ concentration at the same location as the SO₂ monitor. Samples shall be taken at 60-minute intervals. The sampling time and sample volume for each sample shall be at least 20 minutes and 0.020 dscm (0.71 dscf). Each sample represents a 1-hour average.

(2) Method 7 shall be used to determine the NO_x concentration at the same location as the NO_x monitor. Samples shall be taken at 30-minute intervals. The arithmetic average of two consecutive samples represents a 1-hour average.

(3) The emission rate correction factor, integrated bag sampling and analysis procedure of Method 3B shall be used to determine the O₂ or CO₂ concentration at the same location as the O₂ or CO₂ monitor. Samples shall be taken for at least 30 minutes in each hour. Each sample represents a 1-hour average.

(4) The procedures in Method 19 shall be used to compute each 1-hour average concentration in ng/J (lb/million Btu) heat input.
[40 CFR 60.47a(h)]

A.38. The owner or operator shall use methods and procedures in this paragraph to conduct monitoring system performance evaluations under 40 CFR 60.13(c) and calibration checks under 40 CFR 60.13(d). Acceptable alternative methods and procedures are given in 40 CFR 60.47a(j).

(1) Methods 6, 7, and 3B, as applicable, shall be used to determine O₂, SO₂, and NO_x concentrations.

(2) SO₂ or NO_x (NO), as applicable, shall be used for preparing the calibration gas mixtures (in N₂, as applicable) under Performance Specification 2 of appendix B of 40 CFR 60.

(3) For affected facilities burning only fossil fuel, the span value for a continuous monitoring system for measuring opacity is between 60 and 80 percent and for a continuous monitoring system measuring nitrogen oxides firing solid fuel is 1,000 ppm.

(5) For affected facilities burning fossil fuel, alone or in combination with non-fossil fuel, the span value of the sulfur dioxide continuous monitoring system at the inlet to sulfur dioxide control device is 125 percent of the maximum estimated hourly potential emissions of the fuel fired, and the outlet of the sulfur dioxide control device is 50 percent of maximum estimated hourly potential emissions of the fuel fired.

[40 CFR 60.47a(i)(1), (2), (3), & (5)]

A.39. The owner or operator may use the following as alternatives to the reference methods and procedures specified in 40 CFR 60.47a.

(1) For Method 6, Method 6A or 6B (whenever Methods 6 and 3 or 3B data are used) or 6C may be used. Each Method 6B sample obtained over 24 hours represents 24 1-hour averages. If Method 6A or 6B is used under 40 CFR 60.47a(i), the conditions under 40 CFR 60.46(d)(1) apply (see specific condition A.71.); these conditions do not apply under 40 CFR 60.47a(h).

(2) For Method 7, Method 7A, 7C, 7D, or 7E may be used. If Method 7C, 7D, or 7E is used, the sampling time is 1 hour.

(3) For Method 3, Method 3A or 3B may be used if the sampling time is 1 hour.

(4) For Method 3B, Method 3A may be used.

[40 CFR 60.47a(j)]

Test Methods and Procedures

{Permitting note: Table 2-1, Summary of Compliance Requirements, summarizes information for convenience purposes only. This table does not supersede any of the terms or conditions of this permit.}

A.40. In conducting performance tests, the owner or operator shall use as reference methods and procedures the methods in appendix A of 40 CFR 60 or the methods and procedures as specified in 40 CFR 60.48a, except as provided in 40 CFR 60.8(b). 40 CFR 60.8(f) does not apply for SO₂ and NO_x. Acceptable alternative methods are given in 40 CFR 60.48a(e).

[40 CFR 60.48a(a)]

A.41. Particulate Matter. The owner or operator shall determine compliance with the particulate matter standard as follows:

(1) The dry basis F factor (O₂) procedures in Method 19 shall be used to compute the emission rate of particulate matter.

(2) For the particulate matter concentration, Method 5 shall be used at affected facilities without wet

FGD systems and Method 5B shall be used after wet FGD systems.

- (i) The sampling time and sample volume for each run shall be at least 120 minutes and 1.70 dscm (60 dscf). The probe and filter holder heating system in the sampling train may be set to provide an average gas temperature of no greater than 160 ± 14 °C (320 ± 25 °F).
- (ii) For each particulate run, the emission rate correction factor, integrated or grab sampling and analysis procedures of Method 3B shall be used to determine the O₂ concentration. The O₂ sample shall be obtained simultaneously with, and at the same traverse points as, the particulate run. If the particulate run has more than 12 traverse points, the O₂ traverse points may be reduced to 12 provided that Method 1 is used to locate the 12 O₂ traverse points. If the grab sampling procedure is used, the O₂ concentration for the run shall be the arithmetic mean of all the individual O₂ concentrations at each traverse point.
- (3) Method 9 and the procedures in 40 CFR 60.11 shall be used to determine opacity, or,
- (4) Use of a continuous opacity monitor is authorized to determine opacity.
[40 CFR 60.48a(b) and 40 CFR 60.11(b)]

A.42. Sulfur Dioxide. The owner or operator shall determine compliance with the sulfur dioxide standards as follows:

- (1) The percent of potential SO₂ emissions (%P_S) to the atmosphere shall be computed using the following equation:

$$\%P_S = [(100 - \%R_F)(100 - \%R_S)] / 100$$

where:

%P_S = percent of potential SO₂ emissions, percent.

%R_F = percent reduction from fuel pretreatment, percent.

%R_S = percent reduction by SO₂ control system, percent.

- (2) The procedures in Method 19 may be used to determine percent reduction (%R_F) of sulfur by such processes as fuel pretreatment (physical coal cleaning, hydrodesulfurization of fuel oil, etc.), coal pulverizers, and bottom and fly ash interactions. This determination is optional.
- (3) The procedures in Method 19 shall be used to determine the percent SO₂ reduction (%R_S) of any SO₂ control system. Alternatively, a combination of an "as fired" fuel monitor and emission rates measured after the control system, following the procedures in Method 19, may be used if the percent reduction is calculated using the average emission rate from the SO₂ control device and the average SO₂ input rate from the "as fired" fuel analysis for 30 consecutive boiler operating days.
- (4) The appropriate procedures in Method 19 shall be used to determine the emission rate.
- (5) The continuous monitoring system in 40 CFR 60.47a(b) and (d) shall be used to determine the concentrations of SO₂ and CO₂ or O₂.
[40 CFR 60.48a(c)]

A.43. Nitrogen Oxides. The owner or operator shall determine compliance with the NO_x standard as follows:

- (1) The appropriate procedures in Method 19 shall be used to determine the emission rate of NO_x.
- (2) The continuous monitoring system in 40 CFR 60.47a(c) and (d) shall be used to determine the concentrations of NO_x and CO₂ or O₂.
[40 CFR 60.48a(d)]

A.44. The owner or operator may use the following as alternatives to the reference methods and procedures specified in 40 CFR 60.48a:

(1) For Method 5 or 5B, Method 17 may be used at facilities with or without wet FGD systems if the stack temperature at the sampling location does not exceed the average temperature of 160 °C (320 °F). Procedures 2.1 and 2.3 of Method 5B in 40 CFR 60, Appendix A may be used in Method 17 only if it is used after wet FGD systems. Method 17 shall not be used after wet FGD systems if the effluent is saturated or laden with water droplets.

(2) The F_C factor (CO_2) procedures in Method 19 may be used to compute the emission rate of particulate matter under the stipulations of 40 CFR 60.46(d)(1). The CO_2 shall be determined in the same manner as the O_2 concentration.

[40 CFR 60.48a(e)]

A.45. Compliance with the "on-specification" used oil requirements will be determined as follows:

- (a) Analysis of a sample collected from each batch delivered for firing; or,
- (b) The new batch delivery is from a collection site that has an acceptable analysis already on file with the facility and the analytical results are assumed by the facility for the batch.
- (c) For quantification purposes, the highest concentration of each constituent as determined by any analysis is assumed to be the concentration of the constituent of the blended used oil.

See specific condition **A.17**.

[Rule 62-213.440(1)(b)2.a., F.A.C.]

A.46. Required Number of Test Runs. For mass emission limitations, a compliance test shall consist of three complete and separate determinations of the total air pollutant emission rate through the test section of the stack or duct and three complete and separate determinations of any applicable process variables corresponding to the three distinct time periods during which the stack emission rate was measured provided, however, that three complete and separate determinations shall not be required if the process variables are not subject to variation during a compliance test, or if three determinations are not necessary in order to calculate the unit's emission rate. The three required test runs shall be completed within one consecutive five day period. In the event that a sample is lost or one of the three runs must be discontinued because of circumstances beyond the control of the owner or operator, and a valid third run cannot be obtained within the five day period allowed for the test, the Secretary or his or her designee may accept the results of the two complete runs as proof of compliance, provided that the arithmetic mean of the results of the two complete runs is at least 20 percent below the allowable emission limiting standards.

[Rule 62-297.310(1), F.A.C.]

A.47. Operating Rate During Testing. Testing of emissions shall be conducted with the emissions unit operation at permitted capacity, which is defined as 90 to 100 percent of the maximum operation rate allowed by the permit. If it is impracticable to test at permitted capacity, an emissions unit may be tested at less than the minimum permitted capacity; in this case, subsequent emissions unit operation is limited to 110 percent of the test load until a new test is conducted. Once the emissions unit is so limited, operation at higher capacities is allowed for no more than 15 consecutive days for the purpose of additional compliance testing to regain the authority to operate at the permitted capacity.

[Rules 62-297.310(2) & (2)(b), F.A.C.]

A.48. Calculation of Emission Rate. The indicated emission rate or concentration shall be the arithmetic average of the emission rate or concentration determined by each of the three separate test runs unless otherwise specified in a particular test method or applicable rule.

[Rule 62-297.310(3), F.A.C.]

A.49. Applicable Test Procedures.

- (a) Required Sampling Time.

1. Unless otherwise specified in the applicable rule, the required sampling time for each test shall be no less than one hour and no greater than four hours, and the sampling time at each sampling point shall be of equal intervals of at least two minutes.

2. **Opacity Compliance Tests.** When either EPA Method 9 or DEP Method 9 is specified as an applicable opacity test method, the required minimum period of observation for a compliance test shall be sixty (60) minutes for emissions units which emit or have the potential to emit 100 tons per year or more of particulate matter, and thirty (30) minutes for emissions units which have potential emissions less than 100 tons per year of particulate matter and are not subject to a multiple-valued opacity standard. The opacity test observation period shall include the period during which the highest opacity emissions can reasonably be expected to occur. Exceptions to these requirements are as follows:

a. For batch, cyclical processes, or other operations which are normally completed within less than the minimum observation period and do not recur within that time, the period of observation shall be equal to the duration of the batch cycle or operation completion time.

b. The observation period for special opacity tests that are conducted to provide data to establish a surrogate standard pursuant to Rule 62-297.310(5)(k), F.A.C., Waiver of Compliance Test Requirements, shall be established as necessary to properly establish the relationship between a proposed surrogate standard and an existing mass emission limiting standard.

c. The minimum observation period for opacity tests conducted by employees or agents of the Department to verify the day-to-day continuing compliance of a unit or activity with an applicable opacity standard shall be twelve minutes.

(b) **Minimum Sample Volume.** Unless otherwise specified in the applicable rule, the minimum sample volume per run shall be 25 dry standard cubic feet. **See Specific Condition A.41.**

(c) **Required Flow Rate Range.** For EPA Method 5 particulate sampling, acid mist/sulfur dioxide, and fluoride sampling which uses Greenburg Smith type impingers, the sampling nozzle and sampling time shall be selected such that the average sampling rate will be between 0.5 and 1.0 actual cubic feet per minute, and the required minimum sampling volume will be obtained.

(d) **Calibration of Sampling Equipment.** Calibration of the sampling train equipment shall be conducted in accordance with the schedule shown in Table 297.310-1, attached as part of this permit.

(e) **Allowed Modification to EPA Method 5.** When EPA Method 5 is required, the following modification is allowed: the heated filter may be separated from the impingers by a flexible tube. [Rule 62-297.310(4), F.A.C.]

A.50. Required Stack Sampling Facilities. When a mass emissions stack test is required, the permittee shall comply with the requirements contained in Appendix SS-1, Stack Sampling Facilities, attached to this permit.

[Rule 62-297.310(6), F.A.C.]

A.51. Frequency of Compliance Tests. The following provisions apply only to those emissions units that are subject to an emissions limiting standard for which compliance testing is required.

(a) **General Compliance Testing.**

2. For excess emission limitations for particulate matter specified in Rule 62-210.700, F.A.C., a compliance test shall be conducted annually while the emissions unit is operating under soot blowing conditions in each federal fiscal year during which soot blowing is part of normal emissions unit operation, except that such test shall not be required in any federal fiscal year in which a fossil fuel steam generator does not burn liquid and/or solid fuel for more than 400 hours other than during startup.

3. The owner or operator of an emissions unit that is subject to any emission limiting standard shall conduct a compliance test that demonstrates compliance with the applicable emission

limiting standard prior to obtaining a renewed operation permit. Emissions units that are required to conduct an annual compliance test may submit the most recent annual compliance test to satisfy the requirements of this provision. In renewing an air operation permit pursuant to Rule 62-210.300(2)(a)3.b., c., or d., F.A.C., the Department shall not require submission of emission compliance test results for any emissions unit that, during the year prior to renewal:

- a. Did not operate; or
 - b. In the case of a fuel burning emissions unit, burned liquid and/or solid fuel for a total no more than 400 hours.
4. During each federal fiscal year (October 1 - September 30), unless otherwise specified by rule, order, or permit, the owner or operator of each emissions unit shall have a formal compliance test conducted for:
- a. Visible emissions, if there is an applicable standard;
 - b. Each of the following pollutants, if there is an applicable standard, and if the emissions unit emits or has the potential to emit: 5 tons per year or more of lead or lead compounds measured as elemental lead; 30 tons per year or more of acrylonitrile; or 100 tons per year or more of any other regulated air pollutant; and,
 - c. Each NESHAP pollutant, if there is an applicable emission standard.
5. An annual compliance test for particulate matter emissions shall not be required for any fuel burning emissions unit that, in a federal fiscal year, does not burn liquid and/or solid fuel, other than during startup, for a total of more than 400 hours.
9. The owner or operator shall notify the Department, at least 15 days prior to the date on which each formal compliance test is to begin, of the date, time, and place of each such test, and the test contact person who will be responsible for coordinating and having such test conducted for the owner or operator.

(b) **Special Compliance Tests.** When the Department, after investigation, has good reason (such as complaints, increased visible emissions or questionable maintenance of control equipment) to believe that any applicable emission standard contained in a Department rule or in a permit issued pursuant to those rules is being violated, it may require the owner or operator of the emissions unit to conduct compliance tests which identify the nature and quantity of pollutant emissions from the emissions unit and to provide a report on the results of said tests to the Department.

(c) **Waiver of Compliance Test Requirements.** If the owner or operator of an emissions unit that is subject to a compliance test requirement demonstrates to the Department, pursuant to the procedure established in Rule 62-297.620, F.A.C., that the compliance of the emissions unit with an applicable weight emission limiting standard can be adequately determined by means other than the designated test procedure, such as specifying a surrogate standard of no visible emissions for particulate matter sources equipped with a bag house or specifying a fuel analysis for sulfur dioxide emissions, the Department shall waive the compliance test requirements for such emissions units and order that the alternate means of determining compliance be used, provided, however, the provisions of Rule 62-297.310(7)(b), F.A.C., shall apply.

[Rule 62-297.310(7), F.A.C.; and, SIP approved]

Recordkeeping and Reporting Requirements

A.52. For sulfur dioxide, nitrogen oxides, and particulate matter emissions, the performance test data from the performance evaluation of the continuous monitors (including the transmissometer) are submitted to the Administrator.

[40 CFR 60.49a(a)]

A.53. For sulfur dioxide and nitrogen oxides the following information is reported to the Administrator for each 24-hour period.

- (1) Calendar date.

- (2) The average sulfur dioxide and nitrogen oxides emission rates (ng/J or lb/million Btu) for each 30 successive boiler operating days, ending with the last 30-day period in the quarter; reasons for non-compliance with the standards; and, description of corrective actions taken.
 - (3) Percent reduction of the potential combustion concentration of sulfur dioxide for each 30 successive boiler operating days, ending with the last 30-day period in the quarter; reasons for non-compliance with the standard; and, description of corrective actions taken.
 - (4) Identification of the boiler operating days for which pollutant or diluent data have not been obtained by an approved method for at least 18 hours of operation of the facility; justification for not obtaining sufficient data; and, description of corrective actions taken.
 - (5) Identification of the times when emissions data have been excluded from the calculation of average emission rates because of startup, shutdown, malfunction (NO_x only), emergency conditions (SO₂ only), or other reasons, and justification for excluding data other than startup, shutdown, malfunction, or emergency conditions.
 - (6) Identification of "F" factor used for calculations, method of determination, and type of fuel combusted.
 - (7) Identification of the times when hourly averages have been obtained based on manual sampling methods.
 - (8) Identification of the times when the pollutant concentration exceeded full span of the continuous monitoring system.
 - (9) Description of any modifications to the continuous monitoring system which could affect the ability of the continuous monitoring system to comply with Performance Specifications 2 or 3.
- [40 CFR 60.49a(b)]

A.54. If the minimum quantity of emission data as required by 40 CFR 60.47a is not obtained for any 30 successive boiler operating days, the following information obtained under the requirements of 40 CFR 60.46a(h) is reported to the Administrator for that 30-day period:

- (1) The number of hourly averages available for outlet emission rates (n_o) and inlet emission rates (n_i) as applicable.
 - (2) The standard deviation of hourly averages for outlet emission rates (s_o) and inlet emission rates (s_i) as applicable.
 - (3) The lower confidence limit for the mean outlet emission rate (E_o^*) and the upper confidence limit for the mean inlet emission rate (E_i^*) as applicable.
 - (4) The applicable potential combustion concentration.
 - (5) The ratio of the upper confidence limit for the mean outlet emission rate (E_o^*) and the allowable emission rate (E_{std}) as applicable.
- [40 CFR 60.49a(c)]

A.55. If any standards under 40 CFR 60.43a are exceeded during emergency conditions because of control system malfunction, the owner or operator of the affected facility shall submit a signed statement:

- (1) Indicating if emergency conditions existed and requirements under 40 CFR 60.46a(d) were met during each period, and
- (2) Listing the following information:
 - (i) Time periods the emergency condition existed;
 - (ii) Electrical output and demand on the owner or operator's electric utility system and the affected facility;
 - (iii) Amount of power purchased from interconnected neighboring utility companies during the emergency period;
 - (iv) Percent reduction in emissions achieved;
 - (v) Atmospheric emission rate (ng/J) of the pollutant discharged; and,
 - (vi) Actions taken to correct control system malfunction.

[40 CFR 60.49a(d)]

A.56. If fuel pretreatment credit toward the sulfur dioxide emission standard under 40 CFR 60.43a is claimed, the owner or operator of the affected facility shall submit a signed statement:

- (1) Indicating what percentage cleaning credit was taken for the calendar quarter, and whether the credit was determined in accordance with the provisions of 40 CFR 60.48a and Method 19 (appendix A); and
- (2) Listing the quantity, heat content, and date each pretreated fuel shipment was received during the previous quarter, the name and location of the pretreatment facility; and the total quantity and total heat content of all fuels received at the affected facility during the previous quarter.

[40 CFR 60.49a(e)]

A.57. For any periods for which opacity, sulfur dioxide or nitrogen oxides emissions data are not available, the owner or operator of the affected facility shall submit a signed statement indicating if any changes were made in operation of the emission control system during the period of data unavailability. Operations of the control system and the affected facility during periods of data unavailability are to be compared with operation of the control system and the affected facility before and following the period of data unavailability.

[40 CFR 60.49a(f)]

A.58. The owner or operator of the affected facility shall submit a signed statement indicating whether:

- (1) The required continuous monitoring system calibration, span, and drift checks or other periodic audits have or have not been performed as specified.
- (2) The data used to show compliance was or was not obtained in accordance with approved methods and procedures of this part and is representative of plant performance.
- (3) The minimum data requirements have or have not been met; or, the minimum data requirements have not been met for errors that were unavoidable.
- (4) Compliance with the standards has or has not been achieved during the reporting period.

[40 CFR 60.49a(g)]

A.59. For the purposes of the reports required under 40 CFR 60.7, periods of excess emissions are defined as all 6-minute periods during which the average opacity exceeds the applicable opacity standards under 40 CFR 60.42a(b). Opacity levels in excess of the applicable opacity standard and the date of such excesses are to be submitted to the Administrator each calendar quarter.

[40 CFR 60.49a(h)]

A.60. The owner or operator of an affected facility shall submit the written reports required under this section and Subpart A to the Administrator for every calendar quarter. All quarterly reports shall be postmarked by the 30th day following the end of each calendar quarter.

[40 CFR 60.49a(i)]

A.61. In the case of excess emissions resulting from malfunctions, each owner or operator shall notify the Department in accordance with Rule 62-4.130, F.A.C. A full written report on the malfunctions shall be submitted in a quarterly report, if requested by the Department.

[Rule 62-210.700(6), F.A.C.]

A.62. Submit to the Department a written report of emissions in excess of emission limiting for each calendar quarter. The nature and cause of the excess emissions shall be explained. This report does not relieve the owner or operator of the legal liability for violations. All recorded data shall be maintained on file by the Source for a period of five years.

[Rule 62-213.440, F.A.C.]

A.63. Test Reports.

(a) The owner or operator of an emissions unit for which a compliance test is required shall file a report with the Department on the results of each such test.

(b) The required test report shall be filed with the Department as soon as practical but no later than 45 days after the last sampling run of each test is completed.

(c) The test report shall provide sufficient detail on the emissions unit tested and the test procedures used to allow the Department to determine if the test was properly conducted and the test results properly computed. As a minimum, the test report, other than for an EPA or DEP Method 9 test, shall provide the following information:

1. The type, location, and designation of the emissions unit tested.
2. The facility at which the emissions unit is located.
3. The owner or operator of the emissions unit.
4. The normal type and amount of fuels used and materials processed, and the types and amounts of fuels used and material processed during each test run.
5. The means, raw data and computations used to determine the amount of fuels used and materials processed, if necessary to determine compliance with an applicable emission limiting standard.
6. The type of air pollution control devices installed on the emissions unit, their general condition, their normal operating parameters (pressure drops, total operating current and GPM scrubber water), and their operating parameters during each test run.
7. A sketch of the duct within 8 stack diameters upstream and 2 stack diameters downstream of the sampling ports, including the distance to any upstream and downstream bends or other flow disturbances.
8. The date, starting time and duration of each sampling run.
9. The test procedures used, including any alternative procedures authorized pursuant to Rule 62-297.620, F.A.C. Where optional procedures are authorized in this chapter, indicate which option was used.
10. The number of points sampled and configuration and location of the sampling plane.
11. For each sampling point for each run, the dry gas meter reading, velocity head, pressure drop across the stack, temperatures, average meter temperatures and sample time per point.
12. The type, manufacturer and configuration of the sampling equipment used.
13. Data related to the required calibration of the test equipment.
14. Data on the identification, processing and weights of all filters used.
15. Data on the types and amounts of any chemical solutions used.
16. Data on the amount of pollutant collected from each sampling probe, the filters, and the impingers, are reported separately for the compliance test.
17. The names of individuals who furnished the process variable data, conducted the test, analyzed the samples and prepared the report.
18. All measured and calculated data required to be determined by each applicable test procedure for each run.
19. The detailed calculations for one run that relate the collected data to the calculated emission rate.
20. The applicable emission standard, and the resulting maximum allowable emission rate for the emissions unit, plus the test result in the same form and unit of measure.
21. A certification that, to the knowledge of the owner or his authorized agent, all data submitted are true and correct. When a compliance test is conducted for the Department or its agent, the person who conducts the test shall provide the certification with respect to the test procedures used. The owner or his authorized agent shall certify that all data required and provided to the person conducting the test are true and correct to his knowledge.

[Rule 62-297.310(8), F.A.C.]

A.64. Records shall be kept of each delivery of "on-specification" used oil with a statement of the origin of the used oil and the quantity delivered/stored for firing. In addition, monthly records shall be kept of the quantity of "on-specification" used oil fired in this unit. The above records shall be maintained in a form suitable for inspection, retained for a minimum of five years, and be made available upon request.

[Rule 62-213.440(1)(b)2.b., F.A.C.]

A.65. The permittee shall include in the "Annual Operating Report for Air Pollutant Emitting Facility" a summary of the "on-specification" used oil analyses for the calendar year and a statement of the total quantity of "on-specification" used oil fired during the calendar year.

[Rule 62-213.440(1)(b)2.b., F.A.C.]

A.66. Reporting and Recordkeeping.

(1) Documentation verifying that the coal and petroleum coke fuel blends combusted in Units 1 and 2 have not exceeded the 30 percent maximum petroleum coke by weight limit shall be maintained and submitted to the Department's Northeast District office with each annual report; and,

(2) The permittee shall maintain and submit to the Department, on an annual basis for a period of five years from the date the units begin firing petroleum coke, data demonstrating that the operational change associated with the use of petroleum coke did not result in a significant emission increase pursuant to Rule 62-210.200(12)(d), F.A.C.

[PSD-FL-018(A)]

Miscellaneous Requirements.

A.67. These emissions units are subject to the Compliance Assurance Monitoring (CAM) requirements contained in the attached Appendix CAM. Failure to adhere to the monitoring requirements specified does not necessarily indicate an exceedance of a specific emissions limitation; however, it may constitute good reason to require compliance testing pursuant to Rule 62-297.310(7)(b), F.A.C.

[40 CFR 64; Rules 62-204.800 and 62-213.440(1)(b)1.a., F.A.C.]

A.68. The permittee shall comply with the requirements contained in Appendix 40 CFR 60, Subpart A, attached to this permit.

[Rule 62-204.800(7)(d), F.A.C.]

A.69. Carbon Monoxide. The permittee shall maintain and submit to the Department on an annual basis for a period of five years from the date the units begin firing petroleum coke, test results demonstrating that the operational changes associated with the use of petroleum coke did not result in a significant emission increase of the pollutant when compared to past emissions while firing coal.

The carbon monoxide emissions shall be based on test results using EPA Method 10.

[PSD-FL-018(A)] {Permitting Note: Condition completed.}

A.70. Sulfuric Acid Mist. The permittee shall maintain and submit to the Department on an annual basis for a period of five years from the date the units begin firing petroleum coke, test results demonstrating that the operational changes associated with the use of petroleum coke did not result in a significant emission increase of the pollutant when compared to past emissions while firing coal.

The sulfuric acid mist emissions shall be based on test results using EPA Method 8.

[PSD-FL-018(A)] {Permitting Note: Condition completed.}

A.71. The owner or operator may use the following as alternatives to the reference methods and procedures in 40 CFR 60.46 or in other sections as specified:

(1) The emission rate (E) of particulate matter, SO₂ and NO_x may be determined by using the F_c factor, provided that the following procedure is used:

(i) The emission rate (E) shall be computed using the following equation:

$$E = C F_c (100 / \% \text{ CO}_2)$$

where:

E = emission rate of pollutant, ng/J (lb/million Btu).

C = concentration of pollutant, ng/dscm (lb/dscf).

% CO₂ = carbon dioxide concentration, percent dry basis.

F_c = factor as determined in appropriate sections of Method 19.

(ii) If and only if the average F_c factor in Method 19 is used to calculate E and either E is from 0.97 to 1.00 of the emission standard or the relative accuracy of a continuous emission monitoring system is from 17 to 20 percent, then three runs of Method 3B shall be used to determine the O₂ and CO₂ concentration according to the procedures in 40 CFR 60.46(b)(2)(ii), (4)(ii), or (5)(ii). Then if F_o (average of three runs), as calculated from the equation in Method 3B, is more than ± 3 percent than the average F_o value, as determined from the average values of F_d and F_c in Method 19, i.e., F_{oa} = 0.209 (F_{da} / F_{ca}), then the following procedure shall be followed:

(A) When F_o is less than 0.97 F_{oa}, then E shall be increased by that proportion under 0.97 F_{oa}, e.g., if F_o is 0.95 F_{oa}, E shall be increased by 2 percent. This recalculated value shall be used to determine compliance with the emission standard.

(B) When F_o is less than 0.97 F_{oa} and when the average difference ($\bar{d}$) between the continuous monitor minus the reference methods is negative, then E shall be increased by that proportion under 0.97 F_{oa}, e.g., if F_o is 0.95 F_{oa}, E shall be increased by 2 percent. This recalculated value shall be used to determine compliance with the relative accuracy specification.

(C) When F_o is greater than 1.03 F_{oa} and when $\bar{d}$ is positive, then E shall be decreased by that proportion over 1.03 F_{oa}, e.g., if F_o is 1.05 F_{oa}, E shall be decreased by 2 percent. This recalculated value shall be used to determine compliance with the relative accuracy specification.

[40 CFR 60.46(d)(1)]

Ambient Monitoring.

A.72. Reserved.

[PA 78-10, Revised July 5, 2005]

A.73. Reserved.

[PA 78-10, Revised July 5, 2005]

Section III. Emissions Unit(s) and Conditions.

Subsection C. This section addresses the following emissions unit(s).

E.U.

<u>ID No.</u>	<u>Brief Description</u>
-004	Coal Storage Yard

The coal receiving, storage and transfer systems at the coal storage yard support the operation of the two power boilers. Particulate matter emissions are controlled at the "as-received transfer tower", the "as-fired transfer tower", and the conveyors to the silos by fabric filter systems. Water sprays, full enclosures or partial enclosures are also utilized, where appropriate.

{Permitting note(s): IMPORTANT REGULATORY CLASSIFICATIONS - The emissions unit is regulated under NSPS - 40 CFR 60, Subpart Y, Standards of Performance for Coal Preparation Plants, adopted and incorporated by reference in Rule 62-204.800(7), F.A.C.; Prevention of Significant Deterioration (PSD); Rule 62-212.400(6), F.A.C., Best Available Control Technology (BACT) Determination, dated June 15, 1979. The coal storage yard began commercial operation in 1985.}

The following specific conditions apply to the emissions unit(s) listed above:

Essential Potential to Emit (PTE) Parameters

C.1. Permitted Capacity. The maximum throughput rate shall not exceed 3,000 tons per hour for unloading trains and 1,700 tons per hour for reclaim operation.
[Rules 62-4.160(2) and 62-210.200(PTE), F.A.C.; and, Initial Title V application received June 17, 1996]

{Permitting note: The throughput limitations have been placed in each permit to identify the capacity of each unit for the purposes of confirming that emissions testing is conducted within 90 to 100 percent of the unit's rated capacity (or to limit future operation to 110 percent of the test load), to establish appropriate emission limits and to aid in determining future rule applicability. Regular record keeping is not required for throughput. Also, see permitting note under specific condition C.7.}

C.2. Emissions Unit Operating Rate Limitation After Testing. See specific condition C.7.
[Rule 62-297.310(2), F.A.C.]

C.3. Hours of Operation. This emissions unit is allowed to operate continuously, i.e., 8,760 hours/year.
[Rule 62-210.200(PTE), F.A.C.]

Emission Limitations and Standards

{Permitting note: Table 1-1, Summary of Air Pollutant Standards and Terms, summarizes information for convenience purposes only. This table does not supersede any of the terms or conditions of this permit.}

{Permitting note: Unless otherwise specified, the averaging times for Specific Condition C.4 is

based on the specified averaging time of the applicable test method.}

C.4. Visible Emissions. An owner or operator shall not cause to be discharged into the atmosphere from any coal processing and conveying equipment, coal storage system, or coal transfer and loading system

processing coal, gases which exhibit 20 percent opacity or greater.
[40 CFR 60.252(c); and, PSD-FL-018]

Monitoring of Operations

C.5. Determination of Process Variables.

(a) **Required Equipment.** The owner or operator of an emissions unit for which compliance tests are required shall install, operate, and maintain equipment or instruments necessary to determine process variables, such as process weight input or heat input, when such data are needed in conjunction with emissions data to determine the compliance of the emissions unit with applicable emission limiting standards.

(b) **Accuracy of Equipment.** Equipment or instruments used to directly or indirectly determine process variables, including devices such as belt scales, weight hoppers, flow meters, and tank scales, shall be calibrated and adjusted to indicate the true value of the parameter being measured with sufficient accuracy to allow the applicable process variable to be determined within 10% of its true value.

[Rule 62-297.310(5), F.A.C.]

{Permitting note: Emission limiting standards for the coal handling and storage emission unit consist only of visible emissions (VE). Compliance with the VE standard is determined using EPA Method 9. A determination of compliance is not dependent on the use of instruments or equipment to determine process variables.}

Test Methods and Procedures

{Permitting note: Table 2-1, Summary of Compliance Requirements, summarizes information for convenience purposes only. This table does not supersede any of the terms or conditions of this permit.}

C.6. Visible Emissions. EPA Method 9 and the procedures in 40 CFR 60.11 shall be used to determine opacity.

[40 CFR 60.254(b)(2); and, PSD-FL-018]

C.7. Operating Rate During Testing. Testing of emissions shall be conducted with the emissions unit operation at permitted capacity, which is defined as 90 to 100 percent of the maximum operation rate allowed by the permit. If it is impracticable to test at permitted capacity, an emissions unit may be tested at less than the minimum permitted capacity; in this case, subsequent emissions unit operation is limited to 110 percent of the test load until a new test is conducted. Once the emissions unit is so limited, operation at higher capacities is allowed for no more than 15 consecutive days for the purpose of additional compliance testing to regain the authority to operate at the permitted capacity.

[Rules 62-297.310(2) & (2)(b), F.A.C.]

{Permitting note: The permitted capacity of the coal handling and storage emissions unit is based on conveyor belt capacity. Conveyor belt speed is set and does not vary during normal operation. However, feeder belts which supply coal to the conveyor belts are variable speed. Bins, crushers, and silos are filled on a batch process basis by the conveyor belts which are either on or off. The period at which the highest opacity emissions can reasonably be expected to occur at the emissions points subject to the standard, (i.e., CH-002, CH-011, and U1 and U2 Silo Dust Collectors) will be when the conveyor belts are on during normal operation. Therefore, the period during which the conveyor belts are on during normal operation shall represent permitted capacity of this emissions

unit for purposes of compliance testing.}

C.8. Applicable Test Procedures.

(a) Required Sampling Time.

2. Opacity Compliance Tests. When either EPA Method 9 or DEP Method 9 is specified as the applicable opacity test method, the required minimum period of observation for a compliance test shall be sixty (60) minutes for emissions units which emit or have the potential to emit 100 tons per year or more of particulate matter, and thirty (30) minutes for emissions units which have potential emissions less than 100 tons per year of particulate matter and are not subject to a multiple-valued opacity standard. The opacity test observation period shall include the period during which the highest opacity emissions can reasonably be expected to occur. Exceptions to these requirements are as follows:

c. The minimum observation period for opacity tests conducted by employees or agents of the Department to verify the day-to-day continuing compliance of a unit or activity with an applicable opacity standard shall be twelve minutes.

[Rule 62-297.310(4)(a)2.c., F.A.C.]

{Permitting note: EPA Method 9 has been previously specified as the applicable opacity test method.}

C.9. Frequency of Compliance Tests. The following provisions apply only to those emissions units that are subject to an emissions limiting standard for which compliance testing is required.

(a) General Compliance Testing.

3. The owner or operator of an emissions unit that is subject to any emission limiting standard shall conduct a compliance test that demonstrates compliance with the applicable emission limiting standard prior to obtaining a renewed operation permit. Emissions units that are required to conduct an annual compliance test may submit the most recent annual compliance test to satisfy the requirements of this provision. In renewing an air operation permit pursuant to Rule 62-210.300(2)(a)3.b., c., or d., F.A.C., the Department shall not require submission of emission compliance test results for any emissions unit that, during the year prior to renewal:

a. Did not operate;

4. During each federal fiscal year (October 1 - September 30), unless otherwise specified by rule, order, or permit, the owner or operator of each emissions unit shall have a formal compliance test conducted for:

a. Visible emissions, if there is an applicable standard;

9. The owner or operator shall notify the Department, at least 15 days prior to the date on which each formal compliance test is to begin, of the date, time, and place of each such test, and the test contact person who will be responsible for coordinating and having such test conducted for the owner or operator.

(b) Special Compliance Tests. When the Department, after investigation, has good reason (such as complaints, increased visible emissions or questionable maintenance of control equipment) to believe that any applicable emission standard contained in a Department rule or in a permit issued pursuant to those rules is being violated, it may require the owner or operator of the emissions unit to conduct compliance tests which identify the nature and quantity of pollutant emissions from the emissions unit and to provide a report on the results of said tests to the Department.

(c) Waiver of Compliance Test Requirements. If the owner or operator of an emissions unit that is subject to a compliance test requirement demonstrates to the Department, pursuant to the procedure established in Rule 62-297.620, F.A.C., that the compliance of the emissions unit with an applicable weight emission limiting standard can be adequately determined by means other than the designated test procedure, such as specifying a surrogate standard of no visible emissions for

particulate matter sources equipped with a bag house or specifying a fuel analysis for sulfur dioxide emissions, the Department shall waive the compliance test requirements for such emissions units and order that the alternate means of determining compliance be used, provided, however, the provisions of Rule 62-297.310(7)(b), F.A.C., shall apply.
[Rule 62-297.310(7), F.A.C.; and, SIP approved]

{Permitting note: The individual coal handling and storage emission points requiring an annual VE test are those containing baghouse controls. These baghouse locations are emission points CH-002, CH-011, and U1 and U2 Silo Dust Collectors. For those emissions points specified herein containing a baghouse, the permittee shall maintain daily records of the differential pressure to assure that the baghouse is operating properly. Maintenance activities are initiated according to Seminole's previously submitted Action Plan.}

Recordkeeping and Reporting Requirements

C.10. Test Reports.

- (a) The owner or operator of an emissions unit for which a compliance test is required shall file a report with the Department on the results of each such test.
 - (b) The required test report shall be filed with the Department as soon as practical but no later than 45 days after the last sampling run of each test is completed.
- [Rule 62-297.310(8), F.A.C.]

Miscellaneous Requirements.

- C.11.** The permittee shall comply with the requirements contained in Appendix 40 CFR 60, Subpart A, attached to this permit.
[Rule 62-204.800(7)(d), F.A.C.]

- C.12.** The opacity standards set forth in 40 CFR 60 shall apply at all times except during periods of startup, shutdown, malfunction and as otherwise provided in the applicable standard.
At all times, including periods of startup, shutdown, and malfunction, owners and operators shall, to the extent practicable, maintain and operate any affected facility including associated air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Administrator which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source.
[40 CFR 60.11(c) & (d)]

Section III. Emissions Unit(s) and Conditions.

Subsection D. This section addresses the following emissions unit(s).

E.U.

<u>ID No.</u>	<u>Brief Description</u>
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-005	Limestone and FGD Sludge Handling and Storage
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(1) *The limestone handling and storage system consists of a limestone unloading facility where particulate matter emissions are controlled by a panel filter, a limestone handling and storage system which utilizes a partial enclosure to control particulate matter emissions. In the FGD sludge processing system particulate emissions, which originate from the transfer of lime and fly ash from both truck and rail delivery, are controlled by the use of bag house filters. Scrubbers are also utilized to control particulate emissions in the FGD sludge processing building.*

{Permitting note(s): IMPORTANT REGULATORY CLASSIFICATIONS - The emissions unit is regulated under Prevention of Significant Deterioration (PSD); Rule 62-212.400(6), F.A.C., Best Available Control Technology (BACT) Determination, dated June 15, 1979.}

The following specific conditions apply to the emissions unit(s) listed above:

Essential Potential to Emit (PTE) Parameters

D.1. Permitted Capacity. The maximum limestone unloading or transfer rate shall not exceed 400 tons per hour. The throughput rates for the sludge stabilization system are intermittent and variable. [Rules 62-4.160(2) and 62-210.200(PTE), F.A.C.; and, Initial Title V application received June 17, 1996]

{Permitting note: The limestone unloading or transfer rate limitations have been placed in each permit to identify the capacity of each unit for the purposes of confirming that emissions testing is conducted within 90 to 100 percent of the unit's rated capacity (or to limit future operation to 110 percent of the test load), to establish appropriate emission limits and to aid in determining future rule applicability. Regular record keeping is not required for unloading or transfer rates. Also, see permitting note under specific condition D.7.}

D.2. Emissions Unit Operating Rate Limitation After Testing. See specific condition D.7. [Rule 62-297.310(2), F.A.C.]

D.3. Hours of Operation. This emissions unit is allowed to operate continuously, i.e., 8,760 hours/year. [Rule 62-210.200(PTE), F.A.C.]

Emission Limitations and Standards

{Permitting note: Table 1-1, Summary of Air Pollutant Standards and Terms, summarizes information for convenience purposes only. This table does not supersede any of the terms or conditions of this permit.}

{Permitting note: Unless otherwise specified, the averaging times for Specific Condition D.4 is based on the specified averaging time of the applicable test method.}

D.4. Visible Emissions. An owner or operator shall not cause to be discharged into the atmosphere gases which exhibit 20 percent opacity or greater.
[PSD-FL-018]

Monitoring of Operations

D.5. Determination of Process Variables.

(a) **Required Equipment.** The owner or operator of an emissions unit for which compliance tests are required shall install, operate, and maintain equipment or instruments necessary to determine process variables, such as process weight input or heat input, when such data are needed in conjunction with emissions data to determine the compliance of the emissions unit with applicable emission limiting standards.

(b) **Accuracy of Equipment.** Equipment or instruments used to directly or indirectly determine process variables, including devices such as belt scales, weight hoppers, flow meters, and tank scales, shall be calibrated and adjusted to indicate the true value of the parameter being measured with sufficient accuracy to allow the applicable process variable to be determined within 10% of its true value.

[Rule 62-297.310(5), F.A.C.]

{Permitting note: Emission limiting standards for the limestone and FGD sludge handling and storage emission unit consist only of visible emissions (VE). Compliance with the VE standard is determined using EPA Method 9, which is not dependent on the use of instruments or equipment to determine process variables.}

Test Methods and Procedures

{Permitting note: Table 2-1, Summary of Compliance Requirements, summarizes information for convenience purposes only. This table does not supersede any of the terms or conditions of this permit.}

D.6. Visible Emissions. EPA Method 9 shall be used to determine opacity compliance pursuant to Chapter 62-297, F.A.C.

[Rules 62-213.440 and 62-297.401, F.A.C.]

D.7. Operating Rate During Testing. Testing of emissions shall be conducted with the emissions unit operation at permitted capacity, which is defined as 90 to 100 percent of the maximum operation rate allowed by the permit. If it is impracticable to test at permitted capacity, an emissions unit may be tested at less than the minimum permitted capacity; in this case, subsequent emissions unit operation is limited to 110 percent of the test load until a new test is conducted. Once the emissions unit is so limited, operation at higher capacities is allowed for no more than 15 consecutive days for the purpose of additional compliance testing to regain the authority to operate at the permitted capacity.

[Rules 62-297.310(2) & (2)(b), F.A.C.]

{Permitting note: The permitted capacity of the limestone handling and storage emissions unit is based on trucks per hour. Trucks per hour has no bearing on determining the period at which the highest opacity emissions can reasonably be expected to occur at emission point L-001. Normal operating conditions when trucks are delivering/unloading constitute the appropriate time period for VE testing. Therefore, such periods shall represent permitted capacity for compliance testing.}

D.8. Applicable Test Procedures.

(a) Required Sampling Time.

2. **Opacity Compliance Tests.** When either EPA Method 9 or DEP Method 9 is specified as the applicable opacity test method, the required minimum period of observation for a compliance test shall be sixty (60) minutes for emissions units which emit or have the potential to emit 100 tons per year or more of particulate matter, and thirty (30) minutes for emissions units which have potential emissions less than 100 tons per year of particulate matter and are not subject to a multiple-valued opacity standard. The opacity test observation period shall include the period during which the highest opacity emissions can reasonably be expected to occur. Exceptions to these requirements are as follows:

c. The minimum observation period for opacity tests conducted by employees or agents of the Department to verify the day-to-day continuing compliance of a unit or activity with an applicable opacity standard shall be twelve minutes.

[Rule 62-297.310(4)(a)2.c., F.A.C.]

{Permitting note: EPA Method 9 has been previously specified as the applicable opacity test method.}

D.9. Frequency of Compliance Tests. The following provisions apply only to those emissions units that are subject to an emissions limiting standard for which compliance testing is required.

(a) General Compliance Testing.

3. The owner or operator of an emissions unit that is subject to any emission limiting standard shall conduct a compliance test that demonstrates compliance with the applicable emission limiting standard prior to obtaining a renewed operation permit. Emissions units that are required to conduct an annual compliance test may submit the most recent annual compliance test to satisfy the requirements of this provision. In renewing an air operation permit pursuant to Rule 62-210.300(2)(a)3.b., c., or d., F.A.C., the Department shall not require submission of emission compliance test results for any emissions unit that, during the year prior to renewal:

a. Did not operate;

4. During each federal fiscal year (October 1 - September 30), unless otherwise specified by rule, order, or permit, the owner or operator of each emissions unit shall have a formal compliance test conducted for:

a. Visible emissions, if there is an applicable standard;

9. The owner or operator shall notify the Department, at least 15 days prior to the date on which each formal compliance test is to begin, of the date, time, and place of each such test, and the test contact person who will be responsible for coordinating and having such test conducted for the owner or operator.

(b) Special Compliance Tests. When the Department, after investigation, has good reason (such as complaints, increased visible emissions or questionable maintenance of control equipment) to believe that any applicable emission standard contained in a Department rule or in a permit issued pursuant to those rules is being violated, it may require the owner or operator of the emissions unit to conduct compliance tests which identify the nature and quantity of pollutant emissions from the emissions unit and to provide a report on the results of said tests to the Department.

(c) Waiver of Compliance Test Requirements. If the owner or operator of an emissions unit that is subject to a compliance test requirement demonstrates to the Department, pursuant to the procedure established in Rule 62-297.620, F.A.C., that the compliance of the emissions unit with an applicable weight emission limiting standard can be adequately determined by means other than the designated test procedure, such as specifying a surrogate standard of no visible emissions for particulate matter sources equipped with a bag house or specifying a fuel analysis for sulfur dioxide emissions, the Department shall waive the compliance test requirements for such emissions units

and order that the alternate means of determining compliance be used, provided, however, the provisions of Rule 62-297.310(7)(b), F.A.C., shall apply.
[Rule 62-297.310(7), F.A.C.; and, SIP approved]

{Permitting note: The individual limestone and FGD sludge handling points requiring an annual VE test are those containing filter and wet scrubber equipment. These locations are emissions points L-001, FGD-002, FGD-003 or FGD-004, FGD-005 or FGD-006, FGD-007 or FGD-008, and FGD-009 or FGD-010. For those emissions points specified herein containing a baghouse, the permittee shall maintain daily records of the differential pressure to assure that the baghouse is operating properly. Maintenance activities are initiated according to Seminole's previously submitted Action plan.}

Recordkeeping and Reporting Requirements

D.10. Test Reports.

- (a) The owner or operator of an emissions unit for which a compliance test is required shall file a report with the Department on the results of each such test.
 - (b) The required test report shall be filed with the Department as soon as practical but no later than 45 days after the last sampling run of each test is completed.
- [Rule 62-297.310(8), F.A.C.]

Section IV. This section is the Acid Rain Part.

Operated by: Seminole Electric Cooperative, Inc.
ORIS code: 136

Subsection A. This subsection addresses Acid Rain, Phase II.

The emissions units listed below are regulated under Acid Rain, Phase II.

E.U.

<u>ID No.</u>	<u>Brief Description</u>
-001	Steam Electric Generator No. 1
-002	Steam Electric Generator No. 2

A.1. The Phase II permit application(s) submitted for this facility, as approved by the Department, are a part of this permit. The owners and operators of these Phase II acid rain unit(s) must comply with the standard requirements and special provisions set forth in the application(s) listed below:

DEP Form No. 62-210.900(1)(a), dated June 8, 2004

A.2. Sulfur dioxide (SO₂) allowance allocations for each Acid Rain unit is as follows:

<u>E.U. ID</u> <u>No.</u>	<u>EPA ID</u>	<u>Year</u>	<u>2005</u>	<u>2006</u>	<u>2007</u>	<u>2008</u>	<u>2009</u>
-001	1	SO2 allowance s, under Table 2 or 3 of 40 CFR Part 73	18,381 *	18,381*	18,381*	18,381*	18,381*
-002	2	SO2 allowance s, under Table 2 or 3 of 40 CFR Part 73	18,381 *	18,381*	18,381*	18,381*	18,381*

* The number of allowances held by an Acid Rain source in a unit account may differ from the number allocated by the USEPA under Table 2 or 3 of 40 CFR 73.]

A.3. Emission Allowances. Emissions from sources subject to the Federal Acid Rain Program (Title IV) shall not exceed any allowances that the source lawfully holds under the Federal Acid Rain Program. Allowances shall not be used to demonstrate compliance with a non-Title IV applicable requirement of the Act.

1. No permit revision shall be required for increases in emissions that are authorized by allowances acquired pursuant to the Federal Acid Rain Program, provided that such increases do not require a

permit revision pursuant to Rule 62-213.400(3), F.A.C.

2. No limit shall be placed on the number of allowances held by the source under the Federal Acid Rain Program.

3. Allowances shall be accounted for under the Federal Acid Rain Program.

[Rule 62-213.440(1)(c), F.A.C.]

A.4. Fast-Track Revisions of Acid Rain Parts. Those Acid Rain sources making a change described at Rule 62- 214.370(4), F.A.C., may request such change as provided in Rule 62-213.413, F.A.C., Fast-Track Revisions of Acid Rain Parts.

[Rules 62-213.413 and 62-214.370(4), F.A.C.]

A.5. No permit revision shall be required for increases in emissions that are authorized by allowances acquired pursuant to the Federal Acid Rain Program, provided that such increases do not require a permit revision pursuant to Rule 62-213.400, F.A.C.

[40 CFR 70.6(a)(4)(i); and, Rule 62-213.440(1)(c)1., F.A.C.]

A.6. Where an applicable requirement of the Act is more stringent than an applicable requirement of regulations promulgated under Title IV of the Act, both provisions shall be incorporated into the permit and shall be enforceable by the Administrator.

[40 CFR 70.6(a)(1)(ii); and, Rule 62-210.200, Definitions - Applicable Requirements, F.A.C.]

A.7. Comments, notes, and justifications: None.

Subsection B. This subsection addresses Acid Rain, Phase II.

The emissions unit listed below is regulated under Acid Rain Part, Phase II, for Seminole Electric Cooperative, Inc, Seminole Generating Station, Facility ID No.: 1070025, ORIS code: 136.

E.U. ID

<u>No.</u>	<u>Brief Description</u>
-001	Steam Electric Generator No. 1
-002	Steam Electric Generator No. 2

The provisions of the Phase II permit govern(s) those emissions unit(s) from January 1, 2000 through the expiration date of this Title V permit. The Phase II permit governs all other affected units for the effective period of this permit.

B.1. The owners and operators of these Phase II acid rain unit(s) must comply with the standard requirements and special provisions set forth in the plan(s) listed below:

Phase II NO_x Compliance Plan dated June 29, 2004. **See Specific Condition B.2.**
[Chapter 62-213, F.A.C. and Rule 62-214.320, F.A.C.]

B.2. Nitrogen oxide (NO_x) requirements for each Acid Rain unit is as follows:

<u>E.U. ID</u>		
<u>No.</u>	<u>EPA ID</u>	<u>NO_x limit</u>
-001	1	Pursuant to 40 CFR 76.8(d)(2), the Florida Department of Environmental Protection approves a NO_x early election compliance plan for unit U1. The compliance plan is effective for calendar year 2000 through calendar year 2007. Under the compliance plan, this unit's annual average NO_x emission rate for each year, determined in accordance with 40 CFR part 75, shall not exceed the applicable emission limitation, under "40 CFR 76.5(a)(2) of 0.50 lb/MMBtu" for dry bottom wall-fired boilers. If the unit is in compliance with its applicable emission limitation for each year of the plan, then the unit shall not be subject to the applicable emission limitation, under "40 CFR 76.7(a)(2) of 0.46 lb/MMBtu" for dry bottom wall-fired boilers until calendar year 2008. In addition to the described NO_x compliance plan, this unit shall comply with all other applicable requirements of 40 CFR part 76, including the duty to reapply for a NO_x compliance plan and the requirements covering excess emissions.

-002	2	Pursuant to 40 CFR 76.8(d)(2), the Florida Department of Environmental Protection approves a NO_x early election compliance plan for unit U2. The compliance plan is effective for calendar year 2000 through calendar year 2007. Under the compliance plan, this unit's annual average NO_x emission rate for each year, determined in accordance with 40 CFR part 75, shall not exceed the applicable emission limitation, under "40 CFR 76.5(a)(2) of 0.50 lb/MMBtu" for dry bottom wall-fired boilers. If the unit is in compliance with its applicable emission limitation for each year of the plan, then the unit shall not be subject to the applicable emission limitation, under "40 CFR 76.7(a)(2) of 0.46 lb/MMBtu" for dry bottom wall-fired boilers until calendar year 2008. In addition to the described NO_x compliance plan, this unit shall comply with all other applicable requirements of 40 CFR part 76, including the duty to reapply for a NO_x compliance plan and the requirements covering excess emissions.

B.3. Comments, notes, and justifications: none

Draft PSD Permit FL-375

DRAFT

APPENDIX A

PERMITTEE:

Seminole Electric Cooperative, Inc.
16313 North Dale Mabry Highway
Tampa, Florida 33618

Authorized Representative:

James R. Frauen, Project Director SGS Unit 3

Seminole Generating Station SGS Unit 3 Draft Permit No. PSD-FL-375 Project No. 1070025-005-AC Siting No. PA 78-10A2 Expires: December 31, 2012

PROJECT AND LOCATION

This permit authorizes the construction of a nominal 750-MW pulverized coal-fired supercritical steam generating unit at the existing Seminole Generating Station. The facility is located east of U.S. Highway 17, approximately seven miles north of Palatka, Putnam County.

STATEMENT OF BASIS

This construction permit is issued under the provisions of Chapter 403 of the Florida Statutes (F.S.), Chapters 62-4, 62-204, 62-210, 62-212, 62-296, and 62-297 of the Florida Administrative Code (F.A.C.). The project was processed in accordance with the requirements of Rule 62-212.400, F.A.C., the preconstruction review program for the Prevention of Significant Deterioration (PSD) of Air Quality. Pursuant to Chapter 62-17, F.A.C. and Chapter 403 Part II, F.S., the project is also subject to Electrical Power Plant Siting. The permittee is authorized to install the proposed equipment in accordance with the conditions of this permit and as described in the application, approved drawings, plans, and other documents on file with the Department of Environmental Protection (Department).

DRAFT

Joseph Kahn, P.E., Acting Director
Division of Air Resources Management

Date: _____

SECTION I - GENERAL INFORMATION

FACILITY DESCRIPTION

The existing Seminole Generating Station (SGS) consists of: two 714.6 megawatt, electric, coal fired steam electric generators (SGS Units 1 and 2); a coal handling and storage system; a limestone unloading, handling and storage system; and a flue gas desulfurization (FGD) sludge stabilization system. The existing units are currently undergoing pollution control upgrades, including burner replacements, the addition of SCRs, an alkali injection system, a carbon burnout (CBO) unit, as well as improvements to the existing FGD system and steam turbines.

PROJECT DESCRIPTION

Seminole proposes to integrate SGS Unit 3 into the existing, certified SGS Site located north of Palatka in Putnam County. SGS Unit 3 will be a nominal 750 MW (net) pulverized coal-fired supercritical steam generating unit located adjacent to the existing SGS Units 1 and 2. Seminole anticipates beginning commercial operation of Unit 3 in 2012. The addition of SGS Unit 3 will increase the total output capability of the SGS by almost 60 percent. The design of SGS Unit 3 will maximize the co-use of existing site facilities to the greatest extent possible, including fuel handling facilities (SGS Unit 3 proposes the same fuel slate as SGS Units 1 and 2). The project also includes a new Zero Liquid Discharge (ZLD) Spray Dryer System, a new emergency generator, and a new 26-cell mechanical draft cooling tower.

SGS Unit 3 will feature supercritical pulverized coal technology with modern emission controls. The Unit 3 air pollution control equipment will include wet Flue Gas Desulfurization (FGD) for SO₂ removal, selective catalytic reduction (SCR) for control of nitrogen oxides (NO_x), electrostatic precipitator (ESP) for collection and removal of fine particles, a Wet ESP (WESP) for control of sulfuric acid mist (SAM), with fluoride (HF) and mercury (Hg) removal to be accomplished through co-benefits of the above technologies. Fuel (coal and petroleum coke) for SGS Unit 3 will be delivered by an existing rail system. No. 2 diesel fuel will be used for startup, shutdown and for firing the Zero Liquid Discharge (ZLD) Spray Dryers as well as an Emergency Generator (unregulated emissions unit).

EMISSIONS UNITS

This permit authorizes construction and installation of the following new emissions units:

EU ID NO.	EMISSION UNIT DESCRIPTION
014	SGS Unit 3, 750 MW Supercritical Pulverized Coal
015	Mechanical Draft Cooling Tower, 26-cell
016	Diesel-Fired Zero Liquid Discharge (ZLD) Spray Dryers (bank of 3)

REGULATORY CLASSIFICATION

Title III: The facility is a "Major Source" of hazardous air pollutants (HAPs).

Title IV: The facility operates units subject to the Acid Rain provisions of the Clean Air Act.

Title V: The facility is a Title V or "Major Source" of air pollution in accordance with Chapter 62-213, F.A.C. because the potential emissions of at least one regulated pollutant exceed 100 tons per year. Regulated pollutants include pollutants such as carbon monoxide (CO), nitrogen oxides (NO_x), particulate matter (PM/PM₁₀), sulfur dioxide (SO₂), sulfuric acid mist (SAM), and volatile organic compounds (VOC).

PSD: The facility is located in an area that is designated as "attainment", "maintenance", or "unclassifiable" for each pollutant subject to a National Ambient Air Quality Standard. It is classified as a "fossil fuel-fired steam electric plant of more than 250 million BTU per hour of heat input", which is one of the facility categories listed at 62-210.200(Definitions, Major Stationary Source) with the lower PSD applicability threshold of 100 tons per

SECTION I - GENERAL INFORMATION

year. Potential emissions of at least one regulated pollutant exceed 100 tons per year, therefore the facility is classified as a "Major Stationary Source" with respect to Rule 62-212.400 F.A.C., Prevention of Significant Deterioration (PSD).

NSPS: The following New Source Performance Standards of 40 CFR 60 are applicable to the SGS Unit 3 as described in Section III, Subsection A, Federal Requirements of this permit.

- Subpart Da (Standards of Performance for Electric Utility Steam Generating Units For Which Construction is Commenced After September 18, 1978).

NESHAP: The facility is a "Major Source" of HAPs. The Emergency Generator is subject to the notification requirements of 40 CFR 63, Subpart ZZZZ; there are no applicable NESHAP requirements for the steam generating unit.

CAIR: As an electric generating unit, SGS Unit 3 may be subject to the Clean Air Interstate Rule pending the finalization of DEP rules.

CAMR: SGS Unit 3 is a new coal-fired power plant and will be subject to the Clean Air Mercury Rule pending finalization of DEP rules.

Siting: The facility is a steam electrical generating plant and is subject to the power plant siting provisions of Chapter 62-17, F.A.C.

PERMITTING AUTHORITY

All documents related to applications for permits to construct, operate or modify an emissions unit shall be submitted to the Bureau of Air Regulation of the Florida Department of Environmental Protection (DEP) at 2600 Blair Stone Road (MS #5505), Tallahassee, Florida 32399-2400. Copies of all such documents shall also be submitted to the Compliance Authority.

COMPLIANCE AUTHORITY

All documents related to compliance activities such as reports, tests, and notifications shall be submitted to the Department's Northeast District Office at 7825 Baymeadows Way, Suite B200, Jacksonville, Florida 32256-7577.

APPENDICES

The following Appendices are attached as part of this permit.

Appendix TEBD	Final BACT Determinations and Emissions Standards
Appendix GC	General Conditions

RELEVANT DOCUMENTS:

The documents listed below are not a part of this permit, however they are specifically related to this permitting action and are on file with the Department.

- March 9, 2006: Received Site Certification Application (SCA) including PSD application.
- May 15, 2006: SCA determined to be insufficient by SCO.
- July 3, 2006: Received all responses from applicant.
- August 21, 2006: Intent to Issue PSD Permit distributed.
- December XX, 2006: Final Certification by the Power Plant Siting Board

SECTION II. ADMINISTRATIVE REQUIREMENTS

1. General Conditions: The permittee shall operate under the attached General Conditions listed in Appendix GC of this permit. General Conditions are binding and enforceable pursuant to Chapter 403 of the Florida Statutes. [Rule 62-4.160, F.A.C.]
2. Applicable Regulations, Forms and Application Procedures: Unless otherwise indicated in this permit, the construction and operation of the subject emissions unit shall be in accordance with the capacities and specifications stated in the application. The facility is subject to all applicable provisions of: Chapter 403 of the Florida Statutes (F.S.); Chapters 62-4, 62-204, 62-210, 62-212, 62-213, 62-296, and 62-297 of the Florida Administrative Code (F.A.C.); and the Title 40, Parts 51, 52, 60, 63, 72, 73, and 75 of the Code of Federal Regulations (CFR), adopted by reference in Rule 62-204.800, F.A.C. The terms used in this permit have specific meanings as defined in the applicable chapters of the Florida Administrative Code. The permittee shall use the applicable forms listed in Rule 62-210.900, F.A.C. and follow the application procedures in Chapter 62-4, F.A.C. Issuance of this permit does not relieve the permittee from compliance with any applicable federal, state, or local permitting or regulations. [Rules 62-204.800, 62-210.300 and 62-210.900, F.A.C.]
3. Construction and Expiration: Authorization to construct shall expire if construction is not commenced within 18 months after receipt of the permit, if construction is discontinued for a period of 18 months or more, or if construction is not completed within a reasonable time. This provision does not apply to the time period between construction of the approved phases of a phased construction project except that each phase must commence construction within 18 months of the commencement date established by the Department in the permit. The Department may extend the 18-month period upon a satisfactory showing that an extension is justified. In conjunction with an extension of the 18-month period to commence or continue construction (or to construct the project in phases), the Department may require the permittee to demonstrate the adequacy of any previous determination of Best Available Control Technology (BACT) for emissions units regulated by the project. For good cause, the permittee may request that this PSD air construction permit be extended. Such a request shall be submitted to the Department's Bureau of Air Regulation at least sixty (60) days prior to the expiration of this permit. [Rules 62-4.070(4), 62-4.080, 62-210.300(1), and 62-212.400(12)(a), F.A.C.]
4. New or Additional Conditions: For good cause shown and after notice and an administrative hearing, if requested, the Department may require the permittee to conform to new or additional conditions. The Department shall allow the permittee a reasonable time to conform to the new or additional conditions, and on application of the permittee, the Department may grant additional time. [Rule 62-4.080, F.A.C.]
5. Source Obligation.
 - a. At such time that a particular source or modification becomes a major stationary source or major modification (as these terms were defined at the time the source obtained the enforceable limitation) solely by virtue of a relaxation in any enforceable limitation which was established after August 7, 1980, on the capacity of the source or modification otherwise to emit a pollutant, such as a restriction on hours of operation, then the requirements of subsections 62-212.400(4) through (12), F.A.C., shall apply to the source or modification as though construction had not yet commenced on the source or modification.
 - b. At such time that a particular source or modification becomes a major stationary source or major modification (as these terms were defined at the time the source obtained the enforceable limitation) solely by exceeding its projected actual emissions, then the requirements of subsections 62-212.400(4) through (12), F.A.C., shall apply to the source or modification as though construction had not yet commenced on the source or modification.

[Rule 62-212.400(12), F.A.C.]

SECTION II. ADMINISTRATIVE REQUIREMENTS

6. Modifications: No emissions unit or facility subject to this permit shall be constructed or modified without obtaining an air construction permit from the Department. Such permit shall be obtained prior to beginning construction or modification. [Chapters 62-210 and 62-212, F.A.C.]
7. Application for Title IV Permit: At least 24 months before the date on which the new unit begins serving an electrical generator greater than 25 MW, the permittee shall submit an application for a Title IV Acid Rain Permit to the Department's Bureau of Air Regulation in Tallahassee and a copy to the Region 4 Office of the U.S. Environmental Protection Agency in Atlanta, Georgia. [40 CFR 72]
8. Title V Permit: This permit authorizes construction of the permitted emissions unit and initial operation to determine compliance with Department rules. A Title V operation permit is required for regular operation of the permitted emission units. The permittee shall apply for and obtain a Title V operation permit in accordance with Rule 62-213.420, F.A.C. To apply for a Title V operation permit, the applicant shall submit the appropriate application form, compliance test results, and such additional information as the Department may by law require. The application shall be submitted to the Department's Bureau of Air Regulation and a copy to the Compliance Authority.
[Rules 62-4.030, 62-4.050, 62-4.220, and Chapter 62-213, F.A.C.]
9. Annual Operating Report: The permittee shall submit an annual report that summarizes the actual operating hours and emissions from this facility in accordance with 62-210.370. Annual operating reports shall be submitted to the Compliance Authority by March 1st of each year.
[Rule 62-210.370(2), F.A.C.]

SECTION III - EMISSIONS UNITS SPECIFIC CONDITIONS

A. SGS Unit 3 - Pulverized Coal-Fired Supercritical Steam Generating Unit (EU 014)

The specific conditions of this subsection apply to the following emissions unit after construction is complete.

E.U. ID	Emission Unit Description
014	SGS Unit 3 – Nominal 750 MW (net) Supercritical Pulverized Coal Fired Boiler

APPLICABLE STANDARDS AND REGULATIONS

1. **BACT Determinations:** A determination of the Best Available Control Technology (BACT) was made for carbon monoxide (CO), particulate matter (PM/PM₁₀), fluorides (HF) and volatile organic compounds (VOCs). [Rule 62-210.200 (BACT), F.A.C.]
2. **PSD Netting:** Emissions caps were accepted on Units 1 and 2, in part for the purpose of ensuring that this project "nets out" with respect to SO₂, SAM, Mercury and NO_x emissions, thus avoiding BACT determinations for those pollutants. The facility-wide annual emission limits are:

Pollutant	Annual Emission Limit ^a (TPY)
SO ₂	29,074
SAM	2,129
Hg	0.059
NO _x	23,289

Note ^a: The facility-wide limit includes SGS Units 1, 2, 3, Cooling Towers and the ZLD Spray Dryers.

3. **NSPS Requirements:** This unit is subject to 40 CFR 60 NSPS Subpart Da, which is applicable to new affected facilities that commence construction after February 28, 2005. The NSPS provisions establish emission limits for PM, SO₂ and NO_x. The PM emission limit is 0.015 lb/MMBtu or 0.03 lb/MMBtu and 99.9 percent reduction. The SO₂ and NO_x emission limits are production-based and are 1.4 and 1.0 pounds per megawatt hour (lb/MW-hr) gross energy output, respectively. In addition, the SO₂ standard allows for either meeting the above production-based limit or a 95 percent reduction. Visible emissions are limited to 20 percent opacity (6-minute average) except up to 27 percent opacity is allowed for one 6-minute period per hour. The NSPS mercury (Hg) emission limit for new sources (40 CFR 60.45a; 71 FR 33388; June 6, 2006) is 20×10^{-6} lb/MW-hr for bituminous coal. [40 CFR 60, Subpart A and Da]

EQUIPMENT DESCRIPTION

4. **Steam Generator:** The permittee is authorized to construct and operate a pulverized coal, balanced draft type unit employing supercritical steam and equipped with low NO_x burners. The boiler will be fired by either coal or a blend of coal and petroleum coke (up to 30% by weight), with No. 1 or 2 diesel oil for auxiliary purposes. The steam generator shall be designed for a maximum heat input of 7,500 MMBtu per hour of coal. [Application; Design]
5. **Electrical Generating Capacity:** SGS Unit 3 will have a nominal electrical generating capacity of 750 MW net and 820 MW gross. [Application; Design]

CONTROL TECHNOLOGY

6. **Post-Combustion:** The emission unit flue shall be equipped with a wet FGD System, a Selective Catalytic Reduction System, an Electrostatic Precipitator and a Wet Electrostatic Precipitator.
 - a. **Electrostatic Precipitators (ESP):** The permittee shall install, operate, and maintain an Electrostatic Precipitator and a Wet Electrostatic Precipitator (WESP) to reduce PM/PM₁₀ emissions from SGS Unit 3.

SECTION III - EMISSIONS UNITS SPECIFIC CONDITIONS

A. SGS Unit 3 - Pulverized Coal-Fired Supercritical Steam Generating Unit (EU 014)

- b. *Selective Catalytic Reduction (SCR) System:* The permittee shall install, tune, operate, and maintain an SCR system to control NO_x emissions. The SCR system consists of an ammonia (NH₃) injection grid, catalyst, a urea unloading system, a urea storage area, facilities to convert the urea to ammonia, a monitoring and control system, electrical, piping and other ancillary equipment. The SCR system shall be designed, constructed and operated to meet the permitted levels of NO_x emissions on a continuous basis.
- c. *Flue Gas Desulfurization (FGD) System:* The permittee shall install, operate, and maintain a flue gas desulfurization system for the reduction of SO₂ and SAM emissions from SGS Unit 3. The FGD System shall be designed to meet the permitted emission levels of SO₂ on a continuous basis.

Prior to the initial emissions performance tests, the emissions control systems shall be tuned to achieve permitted emissions levels. Thereafter, the systems shall be maintained and tuned in accordance with the manufacturer's recommendations so as to ensure the permitted levels are consistently achieved.

- d. The emissions from the CBOTM Process Fluidized Bed Combustor (EU-013) may be routed back to SGS Unit 3 flue gas ductwork, upstream of the ESP, SCR and FGD System, so as to ensure that emissions are minimized. However, the combined emissions from SGS Unit 3 with the CBOTM Unit (when operating) shall comply with the permit standards for SGS Unit 3 as well as the applicable standards in NSPS Subpart Db.

[Design; Rules 62-210.200(PTE and BACT), 62-210.650, 62-212.400(PSD), F.A.C.]

7. Technology Co-benefits: The following technologies shall be installed and operated as described herein.

- a. *Mercury Removal System:* Mercury removal is enhanced when PM controls are used with NO_x and SO₂ controls (ESP, WESP, SCR and FGD). Accordingly, these control technologies shall be designed and tuned to achieve the permitted levels of mercury emissions from SGS Unit 3.
- b. *Fluoride Removal System:* Fluoride removal has recognized co-benefits from an ESP, Wet FGD and WESP. Accordingly, these technologies shall be designed, operated and tuned to achieve the permitted level of fluorides from SGS Unit 3.
- c. *SAM Removal System:* SAM removal shall be accomplished by the use of the FGD system and the Wet ESP. The permittee shall design, install, operate, and maintain these systems in order to achieve the permitted emission level of SAM.

[Design; Rule 62-212.400(PSD), F.A.C.]

PERFORMANCE REQUIREMENTS

8. Hours of Operation: The coal-fired boiler may operate throughout the year (8,760 hours per year). Restrictions on individual methods of operation are specified in separate conditions.
[Rules 62-210.200(PTE, and BACT) and 62-212.400 (PSD), F.A.C.]

9. Authorized Fuels:

- a. *Coal* – SGS Unit 3 may combust bituminous coal up to 318.3 tons per hour based upon 11,300 BTU/lb HHV.
- b. *Coal/Pet-coke blend* – SGS Unit 3 may combust coal and pet-coke blend. The pet-coke shall not exceed 30% of the hourly heat input, or 95.5 tons per hour based upon a 12,900 BTU/lb HHV.
- c. *No. 1 or 2 Diesel Oil* – SGS Unit 3 may combust up to 3,320 gallons per hour of 0.05% No. 2 diesel fuel based upon 136 MMBtu/1000 gallons heat value. The combustion of this fuel shall be for the purposes of startups, flame stabilization, limited supplemental load and emergency reserve during statewide capacity shortages.

SECTION III - EMISSIONS UNITS SPECIFIC CONDITIONS

A. SGS Unit 3 - Pulverized Coal-Fired Supercritical Steam Generating Unit (EU 014)

[Rules 62-210.200(PTE, and BACT) and 62-212.400 (PSD), F.A.C.]

EMISSIONS STANDARDS

10. Emission Standards: Emissions from the pulverized-coal fired boiler shall not exceed the following standards.

Best Available Control Technology (BACT) – Rule 62-210.400, F.A.C.		
Pollutant	BACT Emission Limits	Compliance Method
PM/PM ₁₀	0.013 lb/MMBtu filterable PM; 98 lb/hr equivalent	Annual Stack Test
Opacity	20% with up to 27% for 6-minutes per hour	COMS
CO	0.13 lb/MMBtu (coal only); 975 lb/hr equivalent 0.15 lb/MMBtu 30-day rolling average (all fuels); 1,125 lb/hr equivalent	Initial Stack Test (100% coal) CEMS (all fuels)
VOC	0.0034 lb/MMBtu; 16.7 lb/hr equivalent	Initial Test
HF	0.00023 lb/MMBtu; 1.72 lb/hr equivalent	Initial & T-5 Renewal Test
Pollutant	Non-BACT Established Emission Limits	Compliance Method
SO ₂	0.165 lb/MMBtu 24-hour rolling; 1,238 lb/hr equivalent	CEMS
SAM	0.005 lb/MMBtu; 37.5 lb/hr equivalent	Annual Test
NO _x	0.07 lb/MMBtu; 525 lb/hr equivalent	CEMS
Hg	7.05 E-6 lb/MWh; 0.005 lb/hr equivalent	CEMS or sorbent traps
NH ₃	5 ppmvd corrected to 6% O ₂	Annual Stack Test

[Rules 62-4.070(3), 62-210.200 (BACT), and 62-212.400(PSD), F.A.C.]

11. Carbon Monoxide (CO): Emissions of CO from SGS Unit 3 shall not exceed the following BACT limits:

- Stack test: CO emissions shall not exceed 0.13 lb/MMBtu while firing 100% coal as determined by an initial stack test (average of 3-test runs) in accordance with EPA Method 25, 25A or 25B.
- CEMS: CO emissions shall not exceed 0.15 lb/MMBtu as determined by CEMS on a 30-day rolling average, regardless of fuel type. Testing shall be according to EPA Method 10.

[Rules 62-4.070(3), 62-210.200 (BACT), and 62-212.400(PSD), F.A.C.]

12. Volatile Organic Compounds (VOCs): Emissions of VOC from SGS Unit 3 shall not exceed 0.0034 lb/MMBtu as determined by an initial stack test in accordance with EPA Method 25A and (optionally) EPA Method 18 (to deduct non-VOC methane emissions). Thereafter, compliance with the CO limits herein shall serve as a surrogate for the emissions of VOCs. [Rules 62-4.070(3), 62-210.200 (BACT), and 62-212.400(PSD), F.A.C.]

13. Sulfur Dioxide (SO₂): Emissions of SO₂ from SGS Unit 3 shall not exceed 1.4 pounds per megawatt hour (lb/MW-hr) gross energy output nor 0.165 lb/MMBtu, based upon a 24-hour rolling average as determined by CEMS. In addition, SO₂ emissions shall not exceed 29074 tons per 12-month rolling period (facility-wide), based upon CEMS. [62-210.200 (Net Emissions Increase), and 62-212.400(12) (Source Obligation), F.A.C.]

14. Sulfuric Acid Mist (SAM): Emissions of Sulfuric Acid Mist from SGS Unit 3 shall not exceed 0.005 lb/MMBtu as determined by EPA Method 8A. In addition, SAM emissions shall not exceed 2129 tons per 12-month rolling period (facility-wide), based upon tack testing. The combined total shall be computed by measuring the lb/MMBtu emission rate on each unit, multiplying each unit's emission rate by its annual heat input (MMBtu) and adding the total lbs emitted, divided by 2000. [62-210.200 (Net Emissions Increase), and 62-212.400(12) (Source Obligation), F.A.C.]

15. Particulate Matter (PM/PM₁₀): Emissions of filterable Particulate Matter (PM and PM₁₀) from SGS Unit 3 shall not exceed 0.013 lb/MMBtu while firing 100% coal as determined by EPA Method 5. Condensables

SECTION III - EMISSIONS UNITS SPECIFIC CONDITIONS

A. SGS Unit 3 - Pulverized Coal-Fired Supercritical Steam Generating Unit (EU 014)

shall be captured (from the impingers) and reported (only) in accordance with EPA Method 202. Additionally, opacity shall be limited to 20% except that one 6-minute period per hour may be up to 27%. For opacity, the method of compliance shall be COMS or EPA Method 9 when the COMS data is unavailable. [Rules 62-4.070(3), 62-210.200 (BACT), and 62-212.400(PSD)]

16. Ammonia: Ammonia slip shall not exceed 5 ppmvd @ 6% O₂ as determined by EPA Conditional Test Method CTM-027.
17. Mercury (Hg): Emissions of mercury from SGS unit 3 shall not exceed 7.05×10^{-6} lb/MWh based on a 12-month rolling average as determined by the methods and requirements specified in the NSPS Subpart Da provisions of 40 CFR 60.45(b) and 60.50(g). In addition, mercury emissions shall not exceed 0.059 tons per 12-month rolling period (combined for SGS Units 1, 2 and Unit 3), based upon a CEMS or sorbent trap monitoring system (when operational and certified). Testing of mercury emissions shall be required if installation/certification of the CEMS or sorbent trap monitoring system is delayed. [Rules 62-4.070(3), and 62-212.400(12)(PSD Avoidance), F.A.C., and 40 CFR 60.45Da (b) and 60.50Da(g)]
18. Nitrogen Oxides (NO_x): Emissions of NO_x from SGS Unit 3 shall not exceed 1.0 pounds per megawatt hour (lb/MW-hr) gross energy output nor 0.07 lb/MMBtu, based upon a 30-day rolling average as determined by CEMS. In addition, NO_x emissions shall not exceed 23,289 tons per 12-month rolling period (facility-wide), based upon CEMS. [Rules 62-4.070(3), and 62-212.400(12)(PSD Avoidance), F.A.C., Applicant Request]

{Permitting Note: This project did not trigger PSD for SO₂, SAM, Hg and NO_x due to emissions caps taken on existing coal fired boiler steam electric generating Units 1 and Unit 2. The conditions herein establish the requirements for meeting the specified emission limitations for purposes of avoiding PSD preconstruction review. These requirements in no way supersede any federal requirement of applicable NSPS provisions.}

19. Fluorides (HF): Emissions of fluorides from SGS Unit 3 shall not exceed 0.00023 lb/MMBtu as determined by an initial (and Title V renewal) stack test and in accordance with EPA Method 13A or 13B. [Rules 62-4.070(3), 62-210.200 (BACT), and 62-212.400(PSD), F.A.C.]
20. Unconfined Particulate Emissions: The following requirements shall be met to minimize fugitive dust emissions from the storage and handling facilities, including haul roads:
 - a. All conveyors and conveyor transfer points will be enclosed to the extent practical, so as to preclude PM emissions.
 - b. Water sprays or chemical wetting agents and stabilizers will be applied to storage piles, handling equipment, roadways, etc. as necessary to minimize opacity.[Rule 62-296.320(4)(c), F.A.C.]
21. Testing Requirements: Initial tests shall be conducted between 90% and 100% of permitted capacity; otherwise, this permit shall be modified to reflect the true maximum capacity as constructed. Subsequent annual tests shall be conducted between 90% and 100% of permitted capacity in accordance with the requirements of Rule 62-297.310(2), F.A.C. For each run during tests for visible emissions and ammonia slip, emissions of CO and NO_x recorded by the CEMS shall also be reported. [Rule 62-297.310(7)(a), F.A.C.; 40 CFR 60.8]
22. Initial Compliance Demonstration: Initial tests when firing 100% coal shall be conducted to demonstrate compliance with the emissions standards for CO, PM, opacity, VOC, HF, SAM, Hg, and ammonia slip. Initial compliance stack tests shall be conducted within 60 days after achieving the maximum production rate at which SGS Unit 3 will be operated, but not later than 180 days after the initial startup. The initial CO emissions test when firing 100% coal is a one-time validation test. The permittee shall provide the

SECTION III - EMISSIONS UNITS SPECIFIC CONDITIONS

A. SGS Unit 3 - Pulverized Coal-Fired Supercritical Steam Generating Unit (EU 014)

Compliance Authority with any other emissions performance tests conducted to satisfy vendor guarantees. [Rules 62-4.070, 62-297.310(7)(a), F.A.C. and 40 CFR 60.8]

23. Subsequent Compliance Testing: During each federal fiscal year (October 1st, to September 30th), annual tests shall be conducted to demonstrate compliance with the emissions standards for PM, opacity, VOC, SAM, Hg, and ammonia slip. During the year prior to renewal of the Title V Air operation permit, tests shall be conducted to demonstrate compliance with the HF emissions standard. The Department may require additional testing for ammonia slip following catalyst replacement. [Rules 62-4.070, 62-210.200(BACT), and 62-297.310(7)(a)4, F.A.C., and 40 CFR 60.50]
24. Continuous Compliance: Continuous compliance with the permit standards for emissions of CO, Hg, NO_x, and SO₂ shall be demonstrated with data collected from the required continuous monitoring systems. [Rules 62-4.070, and 62-210.200(BACT), F.A.C., 40 CFR 60.50Da]
25. Special Compliance Tests: When the Department, after investigation, has good reason (such as complaints, increased visible emissions or questionable maintenance of control equipment) to believe that any applicable emission standard contained in a Department rule or in a permit issued pursuant to those rules is being violated, it shall require the owner or operator of the emissions unit to conduct compliance tests which identify the nature and quantity of pollutant emissions from the emissions unit and to provide a report on the results of said tests to the Department. [Rule 62-297.310(7)(b), F.A.C.]

EXCESS EMISSIONS

26. Operating Procedures: The Best Available Control Technology (BACT) determinations established by this permit rely on "good operating practices" to reduce emissions. Therefore, all operators and supervisors shall be properly trained to operate and ensure maintenance of the SGS unit 3 pollution control systems in accordance with the guidelines and procedures established by each manufacturer. The training shall include good operating practices as well as methods for minimizing excess emissions. [Rules 62-4.070(3) and 62-210.200(BACT), F.A.C.]
27. Definitions:
 - a. Startup is defined as the commencement of operation of any emissions unit which has shut down or ceased operation for a period of time sufficient to cause temperature, pressure, chemical or pollution control device imbalances, which result in excess emissions.
 - b. Shutdown is the cessation of the operation of an emissions unit for any purpose.
 - c. Malfunction is defined as any unavoidable mechanical and/or electrical failure of air pollution control equipment or process equipment or of a process resulting in operation in an abnormal or unusual manner.[Rule 62-210.200(164, 241, and 257), F.A.C.]
28. Excess Emissions Prohibited: Excess emissions caused entirely or in part by poor maintenance, poor operation or any other equipment or process failure that may reasonably be prevented during startup, shutdown or malfunction shall be prohibited. All such preventable emissions shall be included in any compliance determinations based on CEMS data. [Rule 62-210.700(4), F.A.C.]
29. Excess Emissions Allowed: Excess emissions resulting from startup, shutdown and malfunction of SGS Unit 3 shall be permitted providing:
 - a. Best operational practices to minimize emissions are adhered to, and
 - b. The duration of excess emissions from startup, shutdown and malfunction of SGS Unit 3 shall be minimized, but in no case exceed 60 hours during any calendar month.

SECTION III - EMISSIONS UNITS SPECIFIC CONDITIONS

A. SGS Unit 3 - Pulverized Coal-Fired Supercritical Steam Generating Unit (EU 014)

{Permitting Note: Due to of the large size of this boiler and steam turbine, and the design necessity to minimize thermal stresses, unit start-ups are expected to be long in duration. As a result, this condition provides authorization of 2 hours per 24 hour period of excess emissions related to startup, shutdown, and malfunction to be averaged over a calendar month rather than fixed on a daily basis.} [Rule 62-210.700(5), F.A.C.]

30. Data Exclusion Procedures: Limited amounts of CEMS emissions data collected during startup, shutdown, and malfunction may be excluded from compliance demonstrations (not including annual emissions caps) as approved by the Compliance Authority, provided that best operational practices to minimize emissions are adhered to, they are authorized by this permit and the duration of data excluded is minimized. The startup and shutdown of Unit 3 will follow an established startup and shutdown procedure, which shall be submitted prior to the initial unit start-up, for the Department's review and acceptance. [Design; Rules 62-210.200(BACT), 62-212.400(PSD), and 62-210.700, F.A.C.]
31. Ammonia Injection: Ammonia injection shall begin as soon as the SCR achieves the operating parameters specified by the manufacturer. Such information shall be provided within the startup and shutdown protocol identified above. [Design; Rules 62-210.200(BACT), 62-212.400(PSD), and 62-210.700, F.A.C.]
32. Notification Requirements: The owner or operator shall notify the Compliance Authority within one working day of discovering any emissions that demonstrate non-compliance for a given averaging period. Within one working day of occurrence, the owner or operator shall notify the Compliance Authority of any malfunction resulting in the exclusion of CEMS data. [Rule 62-4.070, F.A.C.]

CONTINUOUS MONITORING REQUIREMENTS

33. CEM Systems: The permittee shall install, calibrate, operate, and maintain continuous emission monitoring systems (CEMS) to measure and record the emissions of CO, NO_x, SO₂, and Hg. Each monitoring system shall be installed, and functioning within the required performance specifications by the time of the initial compliance demonstration.
 - a. CO Monitor: The CO monitor shall be installed pursuant to 40 CFR 60, Appendix B, Performance Specification 4 or 4A. Quality assurance procedures shall conform to the requirements of 40 CFR 60, Appendix F. The RATA tests required for the CO monitor shall be performed using EPA Method 10 in Appendix A of 40 CFR 60 and shall be based on a continuous sampling train. The CO monitor span values shall be set appropriately, considering the allowable methods of operation and corresponding emission standards.
 - b. NO_x Monitor: A NO_x monitor installed to meet the requirements of 40 CFR 75, and that is continuing to meet the ongoing requirements of Part 75, may be used to meet the requirements of this permit and 40 CFR 60.49(c), Subpart Da, except that the owner or operator shall also meet the requirements of 40 CFR 60.51 and the specific conditions of this permit. Data reported to meet the requirements of 40 CFR 60.51 and the limits of this permit shall not include data substituted using the missing data procedures in Subpart D of Part 75, nor shall the data have been bias adjusted according to Part 75. The RATA tests required for the NO_x monitor shall be performed using EPA Method 7 or 7E in Appendix A of 40 CFR 60 or as allowed by Part 75.
 - c. SO₂ Monitor: The SO₂ monitor shall be installed pursuant to 40 CFR 60, Appendix B, Performance Specification 2. Quality assurance procedures shall conform to the requirements of 40 CFR 60, Appendix F. The RATA tests required for the SO₂ monitor shall be performed using EPA Method 6 or 6C in Appendix A of 40 CFR 60. The SO₂ monitor span value shall be set according to 40 CFR 60.49(i).
 - d. Mercury Monitor: Either a mercury CEMS shall be installed to measure mercury emissions pursuant to 40 CFR 60, Performance Specification 12A and to meet the requirements of 40 CFR 60.49(p); or a sorbent trap monitoring system shall be installed pursuant to 40 CFR Part 75, Appendix K.

SECTION III - EMISSIONS UNITS SPECIFIC CONDITIONS

A. SGS Unit 3 - Pulverized Coal-Fired Supercritical Steam Generating Unit (EU 014)

- e. *Diluent Monitor:* The oxygen (O₂) or carbon dioxide (CO₂) content of the flue gas shall be continuously monitored at the location where CO, NO_x, and SO₂ are monitored. Each monitor shall comply with the performance and quality assurance requirements of 40 CFR 75.

[Rules 62-4.070(3), 62-210.200(BACT), F.A.C., and 40 CFR 60.49 and Part 75]

34. *Continuous Flow Monitor:* A continuous flow monitor shall be installed to determine stack exhaust flow rate to be used in determining mass emission rates. The flow monitor shall be certified and operated according to the requirements of 40 CFR 75. As an alternative to the stack flow monitor, a fuel flow monitoring system certified and operated according to the requirements of Appendix D of 40 CFR Part 75 may be installed. [Rules 62-4.070(3), 62-210.200(BACT), F.A.C., and 40 CFR 60.49 and Part 75]
35. *Wattmeter:* A wattmeter (or meters) to continuously measure the gross electrical output of the unit in megawatt-hours must be installed, calibrated, maintained, and operated in accordance with the manufacturer's specifications. [40 CFR 60.49]
36. *Moisture Correction:* If necessary, the owner or operator shall install a system to determine the moisture content of the exhaust gas and develop an algorithm to enable correction of the monitoring results to a dry basis (0% moisture). [Rules 62-4.070(3), 62-210.200(BACT), F.A.C.]
37. *Ammonia Monitoring Requirements:* In accordance with the manufacturer's specifications, the permittee shall install, calibrate, operate and maintain an ammonia flow meter to measure and record the ammonia injection rate to the SCR system prior to the initial compliance tests. The permittee shall document and periodically update the general range of ammonia flow rates required to meet permitted emissions levels over the range of load conditions allowed by this permit by comparing NO_x emissions recorded by the CEM system with ammonia flow rates recorded using the ammonia flow meter. During NO_x monitor downtimes or malfunctions, the permittee shall operate at the ammonia flow rate that is consistent with the documented flow rate for the load condition. [Rules 62-4.070(3) and 62-210.200(BACT), F.A.C.]
38. *CEMS Data Requirements:*
- Data Collection:* Except for continuous monitoring system breakdowns, repairs, calibration checks, and zero and span adjustments, emissions shall be monitored and recorded during all operation including startup, shutdown, and malfunction.
 - Operating Hours and Operating Days:* An hour is the 60-minute period beginning at the top of each hour. Any hour during which an emissions unit is in operation for more than 15 minutes is an operating hour for that emission unit. A day is the 24-hour period from midnight to midnight. Any day with at least one operating hour for an emissions unit is an operating day for that emission unit.
 - Valid Hour:* Each CEMS shall be designed and operated to sample, analyze, and record data evenly spaced over the hour at a minimum of one measurement per minute. All valid measurements collected during an hour shall be used to calculate a 1-hour block average that begins at the top of each hour.
 - Hours that are not operating hours are not valid hours.
 - For each operating hour, the 1-hour block average shall be computed from at least two data points separated by a minimum of 15 minutes. If less than two such data points are available, there is insufficient data and the 1-hour block average is not valid.
 - Rolling 24-Hour Average:* Compliance shall be determined after each valid hourly average is obtained by calculating the arithmetic average of that valid hourly average and the previous 23 valid hourly averages.
 - Rolling 30-day Average:* Compliance shall be determined after each operating day by calculating the arithmetic average of all the valid hourly averages from that operating day and the prior 29 operating days.

SECTION III - EMISSIONS UNITS SPECIFIC CONDITIONS

A. SGS Unit 3 - Pulverized Coal-Fired Supercritical Steam Generating Unit (EU 014)

- f. *Rolling 12-month Period:* Compliance shall be determined after each calendar month by calculating the total emissions from that calendar month and the last 11 calendar months.
- g. *Missing Data/Bias Adjustments:* If the owner or operator has installed a CEMS to meet the requirements of Part 75, data reported to show compliance with any SIP-based limit shall not include data substituted using the missing data procedures in Subpart D of Part 75, nor shall the data have been bias adjusted according to the procedures of Part 75.
- h. *Data Exclusion:* Each CEMS shall monitor and record emissions during all operations including episodes of startup, shutdown and malfunction. Limited amounts of CEMS emissions data recorded during these events may be excluded from the corresponding compliance demonstration subject to the provisions of Condition 29 in this section. When authorized, excess emissions data shall be excluded as a continuous block attributable to the startup, shutdown and malfunction event. Valid data shall not be excluded from any annual emissions caps or other annual averages (i.e., mercury).
- i. *Availability:* Monitor availability for the Hg CEMS shall be 75% or greater, and for all other CEMS shall be 95% or greater in any calendar quarter. The quarterly excess emissions report shall be used to demonstrate monitor availability. In the event the applicable availability is not achieved, the permittee shall provide the Department with a report identifying the problems in achieving the required availability and a plan of corrective actions that will be taken to achieve 95% or 75% availability. The permittee shall implement the reported corrective actions within the next calendar quarter. Failure to take corrective actions or continued failure to achieve the minimum monitor availability shall be violations of this permit, except as otherwise authorized by the Department's Compliance Authority.

[Rules 62-4.070(3) and 62-210.200(BACT), F.A.C.]

REPORTING AND RECORD KEEPING REQUIREMENTS

- 39. Monthly Operations Summary: By the fifth calendar day of each month, the permittee shall record the following for each fuel in a written or electronic log for the previous month of operation: fuel consumption (tons or gallons as applicable), heat content of each fuel, hours of operation, and the updated 12-month rolling totals for each. Information recorded and stored as an electronic file shall be available for inspection and printing within at least three days of a request by the Department. The fuel consumption shall be monitored in accordance with the provisions of 40 CFR 75 Appendix D. [Rules 62-4.070(3) and 62-210.200(BACT), F.A.C.]
- 40. Emissions Performance Test Reports: A report indicating the results of any required emissions performance test shall be submitted to the Compliance Authority no later than 45 days after completion of the last test run. The test report shall provide sufficient detail on the tested emission unit and the procedures used to allow the Department to determine if the test was properly conducted and if the test results were properly computed. At a minimum, the test report shall provide the applicable information listed in Rule 62-297.310(8)(c), F.A.C. [Rule 62-297.310(8), F.A.C.]
- 41. CEMS Data Assessment Report: The Data Assessment Report required by 40 CFR 60, Appendix F shall be submitted to the Compliance Authority on a quarterly basis for each CEMS required. Separate reporting may be required for CEMS installed for purposes of compliance with an NSPS limit, or Acid Rain.

SECTION III - EMISSIONS UNITS SPECIFIC CONDITIONS

A. SGS Unit 3 - Pulverized Coal-Fired Supercritical Steam Generating Unit (EU 014)

42. Excess Emissions Reporting:

- a. *Malfunction Notification:* If emissions in excess of a standard (subject to the specified averaging period) occur due to malfunction, the permittee shall notify the Compliance Authority within (1) working day of: the nature, extent, and duration of the excess emissions; the cause of the excess emissions; and the actions taken to correct the problem. In addition, the Department may request a written summary report of the incident.
- b. *Quarterly Report:* Within 30 days following the end of each calendar-quarter, the permittee shall submit a report to the Compliance Authority summarizing periods of any emissions in excess of the permit standards following the NSPS format in 40 CFR 60.7(c), Subpart A. The report shall include a summary of emissions data excluded from compliance calculations due to startup, shutdown, and malfunctions as well as the duration of each event. In addition, the report shall summarize the CO, NO_x, SO₂, and Hg CEMS systems monitor availability for the previous quarter.

[Rules 62-4.130, 62-204.800, 62-210.700(6), F.A.C., and 40 CFR 60.7, 60.51, and 60.4375]

43. CBO Configuration: Daily records shall be daily kept of the CBO operation and configuration, such that the permittee can demonstrate compliance with the emission limitations of the affected emissions units.

SECTION III - EMISSIONS UNITS SPECIFIC CONDITIONS

B. ZLD Spray Dryers (EU 016)

ID	Emission Unit Description
016	Diesel-Fired Zero Liquid Discharge (ZLD) Spray Dryers (bank of 3)

APPLICABLE STANDARDS AND REGULATIONS

1. BACT Determinations: The emission unit addressed in this section is subject to a Best Available Control Technology (BACT) determination for carbon monoxide (CO), volatile organic compounds (VOC) and particulate matter (PM/PM₁₀). [Rule 62-210.200 (BACT), F.A.C.]

EQUIPMENT SPECIFICATIONS

2. Equipment: The permittee is authorized to install, operate, and maintain one liquid spray dryer system consisting of a bank of three, diesel-fired liquid spray dryers. This system will be designed to remove the moisture from the wastewater treatment effluent, via a process which involves the atomization of concentrated wastewater into a spray of droplets and contacting the droplets with hot air in a drying chamber. The dryers will be fired by diesel fuel oil. [Applicant Request; Rule 62-210.200(PTE), F.A.C.]

PERFORMANCE REQUIREMENTS

3. Hours of Operation: The hours of operation are not restricted (8760 hours per year). [Applicant Request; Rule 62-210.200(PTE), F.A.C.]
4. Authorized Fuels: Only No.1 or No. 2 diesel fuel containing no more than 0.05% sulfur by weight shall be fired in the spray dryers. The maximum design heat input for the bank of spray dryers shall be limited to 50 MMBtu per hour. [Applicant Request; Rule 62-210.200(PTE), F.A.C.]
5. Control Equipment: A baghouse will be used to limit PM/PM₁₀ emissions, having an efficiency of greater than 99.5 percent. The baghouse must be designed, operated, and maintained to achieve 0.3 lb/hr/dryer. As a work practice standard, an opacity limit of 5% is established. [Application; Rules 62-210.200 (PTE, and BACT) and 62-212.400 (PSD), F.A.C.]
6. Work Practice: Good combustion practices will be utilized at all times to ensure that CO (and VOC) emissions from the dryer system are minimized. The Best Available Control Technology (BACT) determinations established by this permit rely on "good operating practices" to reduce emissions. Therefore, all operators and supervisors shall be properly trained to operate and ensure maintenance of the ZLD Spray Dryers in accordance with the guidelines and procedures established by the manufacturer. The training shall include good operating practices as well as methods for minimizing excess emissions. [Rules 62-4.070(3) and 62-210.200(BACT), F.A.C.]

NOTIFICATION, REPORTING, AND RECORDS

7. Control Device Records: The permittee shall keep readily accessible records which demonstrate that the ZLD Spray Dyer baghouse is operating properly. Such records shall include documentation of daily observations by operators as well as maintenance records on the baghouse and bag replacements. [Rule 62-4.030, F.A.C.]
8. Fuel Records: The permittee shall keep records sufficient to determine the daily throughput of diesel fuel oil for use in ensuring compliance with the heat input limitation. [Rule 62-204.800(7)(b)16, F.A.C.]

SECTION III - EMISSIONS UNITS SPECIFIC CONDITIONS

C. SGS Unit 3 Cooling Tower (EU 015)

This section of the permit addresses the following emissions unit.

ID	Emission Unit Description
015	SGS Unit 3 Mechanical Draft Cooling Tower – twenty six cells with a 200 HP cooling fan

APPLICABLE STANDARDS AND REGULATIONS

1. BACT Determinations: The emission unit addressed in this section is subject to a Best Available Control Technology (BACT) determination for particulate matter (PM/PM₁₀). [Rule 62-210.200 (BACT), F.A.C.]

EQUIPMENT

2. Cooling Tower: The permittee is authorized to install one induced draft, counter-flow, rectangular in-line design mechanical draft cooling tower with the following nominal design characteristics: a circulating water flow rate of 360,352 gpm; a design air flow rate of 1,259,541 acfm per cell; drift eliminators; and a drift rate of no more than 0.0005 percent of the circulating water flow. [Application; Design]

EMISSIONS AND PERFORMANCE REQUIREMENTS

3. Drift Rate: Within 60 days of commencing commercial operation, the permittee shall certify that the cooling tower was constructed to achieve the specified drift rate of no more than 0.0005 percent of the circulating water flow rate. [Rule 62-210.200(BACT), F.A.C.]

{Permitting Note: This work practice standard is established as BACT for PM/PM₁₀ emissions from the cooling tower. Based on these design criteria, potential emissions are estimated to be less than 10 tons of PM per year and less than 6 tons of PM₁₀ per year. Actual emissions are expected to be lower than these rates.}

APPENDIX B – NPDES Permit

**STATE OF FLORIDA
INDUSTRIAL WASTEWATER FACILITY PERMIT**

PERMITTEE:

Seminole Electric Cooperative, Inc.
Post Office Box 272000
Tampa, Florida 33688-2000

Attention: Plant General Manager

PERMIT NUMBER: FL0036498 - Major

ISSUANCE DATE: January 7, 2000

EXPIRATION DATE: January 6, 2005

FACILITY:

Seminole Electric Cooperative, Inc.
Palatka Plant
State Road 17
Putnam County
Palatka, Florida 32078

Latitude: 29° 42' 41"

Longitude: 81° 38' 14"

This permit is issued under the provisions of Chapter 403, Florida Statutes, and applicable rules of the Florida Administrative Code and constitutes authorization to discharge to waters of the state under the National Pollutant Discharge Elimination System (NPDES) program. The above named permittee is hereby authorized to operate the facilities shown on the application and other documents attached hereto or on file with the Department and made a part hereof and specifically described as follows:

The facility consists of two coal-fired steam boilers (Units 1 and 2) for electric generation with a nameplate rating of 1200 MW.

WASTEWATER TREATMENT:

Coal pile runoff, bottom ash dewatering system flow, water treatment system wastewater, and other low volume wastewater are treated in an on-site wastewater treatment system (herein referred to as the low volume wastewater treatment system) consisting of equalization, neutralization, coagulation/flocculation, and sedimentation. Domestic wastewater is treated in an on-site 0.018 MGD extended aeration package treatment plant. Cooling tower make-up water is treated for biofouling control and the cooling tower blowdown is dehalogenated prior to discharge. All the above treated effluent streams are discharged to the plant's surge tank and subsequently discharged by common Outfall D-001 to surface waters.

The facility proposes to modify the plant's Flue Gas Desulfurization (FGD) system at the Palatka Plant resulting in a new wastewater purge stream from the FGD system. The new purge stream will be treated in a new on-site wastewater treatment system consisting of chemical precipitation/flocculation followed by clarification and filtration. The treated purge stream will be combined with the low volume wastewater treatment system effluent and discharged

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to the plant's surge tank. Alternatively, the treated FGD purge stream may be discharged to the head of the low volume wastewater treatment system.

EFFLUENT DISPOSAL:

Surface Water Discharge:

This permit authorizes the discharge from Outfall D-001 (combined plant discharge from Units 1 and 2); Internal Outfall I-002 (low volume treated effluent); Internal Outfall I-003 (domestic wastewater treatment system effluent); Internal Outfalls I-04A and I-04B (cooling tower blowdown from Units 1 and 2, respectively); and Outfall I-006 - Treated FGD Purge Stream (proposed). The combined plant discharge, Outfall D-001, discharges to the St. Johns River, a Class III fresh water. The existing annual average daily surface water discharge at Outfall D-001 is 3.77 MGD. The projected annual average daily surface water discharge at Outfall D-001, after the addition of the new purge stream from the FGD system, is 4.346 MGD.

Land Application:

Air preheater wash, boiler fireside wash, and boiler blowdown are discharged to the plant's percolation ponds. The permittee is authorized to discharge to the percolation ponds and to monitor groundwater quality in accordance with the Conditions of Certification, PA 78-10, or modifications thereof.

IN ACCORDANCE WITH: The limitations, monitoring requirements and other conditions set forth in Part I through Part VIII on pages 3 through 26 of this permit.

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I. Effluent Limitations and Monitoring Requirements

A. Surface Water Discharges

1. During the period beginning on the effective date of this permit and lasting through expiration, the permittee is authorized to discharge from **Outfall D-001 - Combined Plant Discharge from Units 1 and 2** during periods of normal plant operation to the St. Johns River.

- a. Such discharges shall be limited and monitored by the permittee as specified below:

DISCHARGE LIMITATIONS			MONITORING REQUIREMENTS		
EFFLUENT PARAMETERS	Maximum Daily Avg.	Instantaneous Maximum	Measurement Frequency	Sample Type	Sample Point
Flow, MGD	Report	Report	1/Hour	Recorder	EFF-1
Discharge Temperature, °F	96.3	98.9	Continuous	Recorder	EFF-1
Total Residual Oxidant (TRO), mg/l	N/A	0.01	1/Week	Multiple Grabs	EFF-1
Turbidity, NTU	See Item c. below		1/Week	Grab	EFF-1
pH, standards units	See Item d. below		1/Week	Grab	EFF-1
Oil and Grease, mg/l	N/A	7.68	1/Week	Grab	EFF-1
Whole Effluent Toxicity	See Item i. below			Grab	EFF-1
Unionized Ammonia, mg/l as NH ₃	N/A	0.02	1/Quarter	Calculated	EFF-1
Total Ammonia, mg/l as N	N/A	Report	1/Quarter	8-Hr Composite	EFF-1
Total Kjeldahl Nitrogen, mg/l as N	N/A	Report	1/Quarter	8-Hr Composite	EFF-1
Nitrate-Nitrite, mg/l as N	N/A	Report	1/Quarter	8-Hr Composite	EFF-1
Total Phosphorus, mg/l	N/A	Report	1/Quarter	8-Hr Composite	EFF-1
Orthophosphate, mg/l	N/A	Report	1/Quarter	8-Hr Composite	EFF-1
Effluent Hardness, mg/l as CaCO ₃	NA	Report	1/Quarter	8-Hr Composite	EFF-1
Specific Conductivity, umhos/cm	N/A	8,653	1/Quarter	8-Hr Composite	EFF-1
Beryllium, µg/l	See Item e. below		1/Quarter	8-Hr Composite	EFF-1
Copper, µg/l	N/A	306.0/295.0 ³	1/Quarter	8-Hr Composite	EFF-1
Cyanide, µg/l	N/A	19.6	1/Quarter	8-Hr Composite	EFF-1
Iron, mg/l	N/A	2.40/2.33 ³	1/Quarter	8-Hr Composite	EFF-1
Mercury, µg/l	N/A	0.2	1/Quarter	8-Hr Composite	EFF-1
Nickel, µg/l	N/A	See Footnote ⁴	1/Quarter	8-Hr Composite	EFF-1
Selenium, µg/l	N/A	11.7	1/Quarter	8-Hr Composite	EFF-1
Silver, µg/l	N/A	0.07	1/Quarter	8-Hr Composite	EFF-1
Zinc, µg/l	N/A	434.0/419.0 ³	1/Quarter	8-Hr Composite	EFF-1

¹ Multiple grabs shall consist of grab samples collected at approximately the beginning, middle, and end of an 8-hour period following initiation of cooling tower blowdown.

² Upon initiation of the new FGD purge stream sampling shall be monitored and reported in accordance with General Condition VIII.18.b.

³ The first value is the interim limitation and the second value is the final limitation. Interim limitations apply until such time there is discharge from the new FGD purge stream wastewater treatment plant after which time final limitations apply.

⁴ The water quality standard is the hardness-based standard as specified in FAC 62-302.530 (dated 12-26-96) for Class III freshwater. The water quality standard shall be calculated by inserting the appropriate effluent hardness value into the following formula: $Ni = e^{0.846(\ln H + 1.1643)}$

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- b. The location of sampling points as specified above are as follows:

EFF-1 - at the discharge from the surge tank prior to mixing with the receiving waters.

- c. The turbidity shall be not greater than 29 NTUs above background as measured at the plant intake.
- d. The pH shall not be less than 6.0 standard units or greater than 8.5 standard units.
- e. The annual average limitation for beryllium is 0.13 µg/l.
- f. All metals shall be analyzed and reported as total recoverable.
- g. Interim and final mixing zones for those effluent parameters identified below are being granted to the permittee. Due to the fact that the proposed FGD purge stream will act as a diluent for some parameters it became necessary to grant interim and final mixing zones for those parameters. The interim mixing zones will be in effect at the time of permit issuance and will remain in effect until there is a discharge from the new FGD purge stream wastewater treatment plant. After that time final mixing zones will be in effect for those parameters. For parameters that do not have interim mixing zones, final mixing zones are in effect at the time of permit issuance.

Parameter	Interim Mixing Zone Size (m ²)	Final Mixing Zone Size (m ²)
Copper	110,040	36,949
Cyanide	NA	108
Iron	154	15
Mercury	NA	36,277
Oil and Grease	NA	23
Selenium	NA	7
Specific Conductivity	NA	170
Temperature	NA	39
Zinc	315	29

Compliance with the effluent limitations in Section 1.A.1.a above will provide demonstration that State water quality standards at the edge of the approved mixing zones are being met.

- h. The segment of the St. Johns River (2213L) that the Palatka Plant discharges into via Outfall D-001 is listed in the State 305(b) report for lead, cadmium, copper, silver, and nutrients; however, the Total Maximum Daily Load(s) (TMDL) for this segment of the St. Johns River has not been established for these parameters. Once a final TMDL for Segment 2213L of the St. Johns River has been established, this permit may be modified, by the Department and pursuant to Florida Administrative Code rule 62-620.325, to incorporate the final findings of the TMDL.
- i. The permittee shall initiate a series of tests described below (beginning within 30 days of permit issuance) to evaluate whole effluent toxicity of the discharge from Outfall D-001. The permittee is required to conduct toxicity tests twice per year for the duration of the permit or until the initiation of discharge of the proposed treated FGD purge stream at which time the frequency of toxicity testing shall be increased to four times per year. If the results of the toxicity tests during a one year period (four quarterly tests) indicate no unacceptable toxicity as defined in 4.a. below, the permittee may petition the Department to reduce the frequency of toxicity testing. Only upon written approval by the Department shall the testing frequency be reduced.

All test species, procedures and quality assurance criteria used shall be in accordance with Methods for

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Measuring Acute Toxicity of Effluents to Freshwater and Marine Organisms, EPA/600/4-90/027F, or the most current edition.

The control water and the effluent used will be adjusted to an appropriate salinity using artificial sea salts as described in EPA/600/4-90/027F, Section 7, or the most current edition. The appropriate tests salinity shall be determined as follows:

- When the salinity of the effluent is between 1 and 5 parts per thousand (ppt), the following salinity adjustment shall be used in the test of 100% effluent. For the Mysidopsis bahia bioassays, the effluent and the control (0% effluent) shall be adjusted using artificial sea salts to a final test salinity determined as the effluent salinity plus 6 ppt. No salinity adjustment shall be done for the Menidia beryllina bioassay test of the 100% effluent.
- When the salinity of the effluent is greater than 5 parts per thousand, no salinity adjustment shall be made and the test shall be run at the effluent salinity.

A standard reference toxicant quality assurance (QA) acute toxicity test shall be conducted concurrently or no greater than 30 days before the date of the "routine" test, with each species used in the toxicity tests. The results of all QA toxicity tests shall be submitted with the discharge monitoring report (DMR). Any deviation from the bioassay procedures outlined herein shall be submitted in writing to the Department for review and approval prior to use.

1. (a) The permittee shall conduct 96-hour acute static renewal toxicity tests using the mysid shrimp, Mysidopsis bahia, and the inland silverside, Menidia beryllina. All tests will be conducted on a single grab sample of 100% effluent collected during the mid-period of cooling tower blowdown.

(b) If control mortality exceeds 10% for either species in any test, the test(s) for that species (including the control) shall be repeated. A test will be considered valid only if control mortality does not exceed 10% for either species. If, in any separate grab sample test, 100% mortality occurs prior to the end of the test, and control mortality is less than 10% at that time, that test (including the control) shall be terminated with the conclusion that the sample demonstrates unacceptable acute toxicity.
2. Results from "routine" tests shall be reported according to EPA/600/4-90/027F, Section 12, Report Preparation (or the most current edition), and shall be submitted to:

Florida Department of Environmental Protection
Industrial Wastewater Section
Twin Towers Office Building
2600 Blair Stone Road
Tallahassee, Florida 32399-2400

3. (a) All "routine" test shall be conducted using a control (0% effluent) and one test concentration of 100% final effluent.

(b) Mortalities of greater than 50% in any sample of 100% effluent in any "routine" test or an LC50 of less than 100% effluent in any additional definitive test will constitute a violation of these permit conditions and Rule 62-302.200(1), Rule 62-302.500(1)(a)4, and Rule 62-4.244(3)(a), F. A. C.
4. (a) If unacceptable acute toxicity (greater than 20% mortality in any grab sample of 100% effluent) is determined in a "routine" test, the permittee shall conduct three additional tests on each species indicating acute toxicity. Each additional test will include a grab sample taken as described in 1.a. and

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run as a definitive analysis. Results for each additional test will include the determination of LC50 values with 95% confidence limits.

(b) The first additional test shall be conducted using a control (0% effluent) and a minimum of five dilutions: 100%, 50%, 25%, 12.5% and 6.25% effluent. The dilution series may be modified in the second and third test to more accurately identify the toxicity, such that at least two dilutions above and two dilutions below the target toxicity and a control (0% effluent) are run.

(c) For each additional test, the sample collection requirements and the test acceptability criteria specified in Section 1 above must be met for the test to be considered valid. The first test shall begin within two weeks of the end of the "routine" tests, and shall be conducted weekly thereafter until three additional, valid tests are completed. The additional tests will be used to determine if the toxicity found in the "routine" test is still present.

(d) Results from additional tests, required due to unacceptable toxicity in the "routine" tests, shall be submitted in a single report prepared according to EPA/600/4-90/027F, Section 12, or the most current edition and submitted within 45 days of completion of the third additional, valid test. If the additional test(s) demonstrate unacceptable toxicity, the permittee will meet with the Department within 30 days of the report submittal to identify corrective actions necessary to remedy the unacceptable toxicity.

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Tampa, Florida 33688-2000

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2. During the period beginning on the effective date of this permit and lasting through expiration, the permittee is authorized to discharge from **Internal Outfall I-002 - Low Volume Treated Effluent⁵**, during periods of normal plant operation to the surge tank thence Outfall D-001.

- a. Such discharges shall be limited and monitored by the permittee as specified below:

EFFLUENT PARAMETERS	DISCHARGE LIMITATIONS		MONITORING REQUIREMENTS		
	Maximum Monthly Average	Instantaneous Maximum	Measurement Frequency	Sample Type	Sample Point
Flow, MGD	Report	Report	Continuous	Recorder	EFF-2
Oil and Grease, mg/l	12.0	15.0	1/Week	Grab	EFF-2
Total Suspended Solids, mg/l	30.0	81.0	1/Week	Grab	EFF-2

- b. The location of sampling points as specified above are as follows: EFF-2 - at a location after low volume wastewater treatment system effluent mixes with the treated FGD purge stream but prior to discharge to the surge tank.

3. During the period beginning on the effective date of this permit and lasting through expiration date of this permit, the permittee is authorized to discharge from **Internal Outfall I-003 - Domestic Wastewater Treatment System Effluent**, during periods of normal plant operation to the surge tank thence Outfall D-001.

- a. Such discharge shall be limited and monitored by the permittee as specified below:

EFFLUENT PARAMETERS	DISCHARGE LIMITATIONS			MONITORING REQUIREMENTS		
	Maximum Annual Average	Maximum Monthly Average	Maximum Daily Average	Measurement Frequency	Sample Type	Sample Point
Flow, MGD	N/A	N/A	0.018	Continuous	Totalizer	EFF-3
Biochemical Oxygen Demand (5-day), mg/l	20.0	25.0	60.0	1/month	Grab	EFF-3
Total Suspended Solids, mg/l	20.0	30.0	60.0	1/month	Grab	EFF-3
Fecal Coliform Bacteria, #/100ml	See Item b. below			1/month	Grab	EFF-3
Total Residual Chlorine, mg/l	See Item c. below			5/Week	Grab	EFF-3

- b. The fecal coliform count shall not exceed 800 per 100 ml for any one sample and the annual average shall not exceed 200 per 100 ml.

⁵ This outfall includes the discharge from both the low volume wastewater treatment system and the proposed FGD purge stream treatment system.

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- c. The total residual chlorine shall not be less than 0.5 mg/l.
- d. During the period of operation authorized by this permit, the wastewater facilities shall be operated under the supervision of an operator certified in accordance with Chapter 61E12-41, F.A.C. In accordance with Chapter 62-699, F.A.C., this facility is a Category III, Class D facility and, at a minimum, an operator with appropriate certification must be on the site as follows:

A Class D or higher operator for 3 nonconsecutive visits/week for 1 1/2 hours/week.

- e. The location of sampling points as specified above are as follows: EFF-3 - at the outlet from the domestic wastewater treatment system but prior to discharge to the surge tank.
4. During the period beginning on the effective date of this permit and lasting through expiration date of this permit, the permittee is authorized to discharge from **Internal Outfalls I-04A and I-04B - Cooling Tower Blowdown From Units 1 and 2**, respectively, during periods of normal plant operation to the surge tank thence Outfall D-001.
- a. Such discharge shall be limited and monitored by the permittee as specified below:

EFFLUENT PARAMETERS	DISCHARGE LIMITATIONS		MONITORING REQUIREMENTS		
	Monthly Average	Instantaneous Maximum	Measurement Frequency	Sample Type	Sample Point
Flow, MGD	Report	Report	Continuous	Recorder	EFF-4, -5
Temperature, °F	Report	Report	Continuous	Recorder	EFF-4, -5
Total Suspended Solids, mg/l	Report	NA	1/week	Grab	EFF-4, -5
Time of Chlorine Discharge, hours/day/unit	See Item f. below		Daily	Logs	EFF-4, -5
Specific Conductivity, µmhos/cm	Report	Report	Continuous	Recorder	EFF-4, -5

- b. The location of sampling points as specified above are as follows:

EFF- 4 and 5 - the outlets from the Unit 1 and 2 cooling towers, respectively, and at a location after the dechlorination system but prior to discharge to the surge tank.
- c. Discharge of blowdown from the cooling towers shall be limited to the minimum discharge of recirculating water necessary for the purpose of discharging materials, contained in the process, the further buildup of which would cause concentrations or amounts exceeding limits established by best engineering practice. Discharge temperature shall not exceed the lowest temperature of the recirculating cooling water prior to the addition of makeup.
- d. Discharge of detectable levels of asbestos due to asbestos-containing fill or other cooling tower components is not authorized by this permit.

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- e. The permittee shall, within 30 days of permit issuance and yearly thereafter, provide certification that the 126 priority pollutants (as listed in 40 CFR Part 423, Appendix A) are not being discharged in detectable concentrations in the cooling tower blowdown as a result of the addition of any maintenance chemicals. Compliance shall be demonstrated by one of the three methods:

Method 1 - sampling at a frequency of not less than once per year for all priority pollutants referenced above with submission of analysis results with each certification.

Method 2 - submission of certification(s) from the manufacturer that each product used contains no priority pollutants. Such submission is required only once for each product used, unless subsequent changes in the product formulation occur or the product is obtained from a different source. Certifications for all products in use shall be maintained on site.

Method 3 - calculations to assure that if priority pollutants are contained in any product(s), no discharge of any individual priority pollutant can occur at concentrations greater than 10 micrograms per liter due to dilution within the cooling system.

The certification shall be in the following form: "I certify that no priority pollutants in excess of 10 ppb are being discharged from any maintenance chemicals added to the cooling towers. Compliance is demonstrated by Method ____."

- f. Neither Free Available Oxidant (FAO) nor Total Residual Oxidant (TRO) shall be discharged from any one unit for more than two hours in any one day and not more than one unit shall discharge FAO or TRO at any one time (as required in 40 CFR 423.15(j)(1) and (2)).

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5. During the period beginning at discharge and lasting through expiration date of this permit, the permittee is authorized to discharge from **Outfall I-006 - Treated FGD Purge Stream** (proposed) to the surge tank or, alternatively, to the head of the low volume wastewater treatment system.

- a. The discharge shall be monitored by the permittee as specified below:

EFFLUENT PARAMETERS	DISCHARGE LIMITATIONS		MONITORING REQUIREMENTS		
	Maximum Daily Average	Instantaneous Maximum	Measurement Frequency	Sample Type	Sample Point
Flow, MGD	Report	Report	Continuous	Totalizer	EFF-6
Total Ammonia, mg/l as N	NA	Report	1/Quarter	8-Hr Comp.	EFF-6
Arsenic (total), µg/l	NA	Report	1/Quarter	8-Hr Comp.	EFF-6
Beryllium, µg/l	NA	Report	1/Quarter	8-Hr Comp.	EFF-6
Cadmium, µg/l	NA	Report	1/Quarter	8-Hr Comp.	EFF-6
Total Chromium, µg/l	NA	Report	1/Quarter	8-Hr Comp.	EFF-6
Copper, µg/l	NA	Report	1/Quarter	8-Hr Comp.	EFF-6
Cyanide, µg/l	NA	Report	1/Quarter	8-Hr Comp.	EFF-6
Iron, mg/l	NA	Report	1/Quarter	8-Hr Comp.	EFF-6
Lead, µg/l	NA	Report	1/Quarter	8-Hr Comp.	EFF-6
Mercury, µg/l	NA	Report	1/Quarter	8-Hr Comp.	EFF-6
Nickel, µg/l	NA	Report	1/Quarter	8-Hr Comp.	EFF-6
Selenium, µg/l	NA	Report	1/Quarter	8-Hr Comp.	EFF-6
Silver, µg/l	NA	Report	1/Quarter	8-Hr Comp.	EFF-6
Zinc, µg/l	NA	Report	1/Quarter	8-Hr Comp.	EFF-6
Specific Conductivity, µmhos/cm	NA	Report	1/Quarter	8-Hr Comp.	EFF-6

- b. The location of sampling points as specified above are as follows:

EFF-6 - after the discharge from the FGD purge stream wastewater treatment plant but prior to mixing with other waste streams.

- c. After four quarters of reporting the permittee may request a reduction or discontinuance of monitoring for the above parameters.

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6. During the period beginning on the effective date of this permit and lasting through expiration date of this permit, the permittee shall monitor the Plant Intake (D-005).

a. The intake shall be monitored by the permittee as specified below:

EFFLUENT PARAMETERS	DISCHARGE LIMITATIONS		MONITORING REQUIREMENTS		
	Maximum Daily Average	Instantaneous Maximum	Measurement Frequency	Sample Type	Sample Point
Flow, MGD	Report	Report	Continuous	Totalizer	INT-1
Temperature, °F	Report	Report	Continuous	Recorder	INT-1
Oil and Grease, mg/l	NA	Report	1/Week	Grab	INT-1
Turbidity, NTU	NA	Report	1/Week	Grab	INT-1
Ammonia, mg/l	NA	Report	1/Quarter	8-Hr Comp.	INT-1
Unionized Ammonia, mg/l as NH ₃	NA	Report	1/Quarter	Calculated	INT-1
Total Kjeldahl Nitrogen, mg/l as N	NA	Report	1/Quarter	8-Hr Comp.	INT-1
Nitrate-Nitrite, mg/l as N	NA	Report	1/Quarter	8-Hr Comp.	INT-1
Copper, µg/l	NA	Report	1/Quarter	8-Hr Comp.	INT-1
Cyanide, µg/l	NA	Report	1/Quarter	8-Hr Comp.	INT-1
Iron, mg/l	NA	Report	1/Quarter	8-Hr Comp.	INT-1
Mercury, µg/l	NA	Report	1/Quarter	8-Hr Comp.	INT-1
Selenium, µg/l	NA	Report	1/Quarter	8-Hr Comp.	INT-1
Zinc, µg/l	NA	Report	1/Quarter	8-Hr Comp.	INT-1
Specific Conductivity, µmhos/cm	NA	Report	1/Quarter	8-Hr Comp.	INT-1

b. The location of sampling points as specified above are as follows:

INT-1 - at the intake to the plant.

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B Other Limitations and Monitoring and Reporting Requirements:

1. The approved analytical methods and corresponding Department established MDL (method detection limit) and PQL (practical quantification limit) are listed for the following parameters:

Parameter	EPA Method	MDL (ug/l)	PQL (ug/l)
Arsenic	206.2/200.7	1.0/3.2	4.0/10.0
Beryllium	200.7/210.2	1.0/1.0	5.0/5.0
Cadmium	213.2/200.7	0.02/0.71	0.08/5.0
Total Chromium	218.2/200.7	1.0/2.1	4.0/10.0
Copper	220.2/200.7/220.1	1.0/6.0/15.0	10.0/25.0/50.0
Cyanide	335.3/335.2	8.8/10.0	10.0/16.0
Iron	236.2/200.7/236.1	2.0/18/30.0	10.0/50.0/100.0
Lead	239.2/200.7	1.0/1.5	4.0/5.0
Mercury	245.1/245.2	0.2/0.2	0.5/0.5
Nickel	200.7/249.1	10.0/20.0	50.0/50.0
Selenium	270.3/200.7/270.2	2.0/2.0/3.3	5.0/5.0/10.0
Silver	272.2/200.7	0.10/0.10	0.50/0.50
Zinc	289.1/200.7	15.0/5.9	15.0/20.0
Oil & Grease	1664	1800	5000
Total Residual Oxidant	330.1/330.5/330.4	10.0/10.0/10.0	30.0/30.0/30.0

The MDLs and PQLs listed above shall constitute the minimum reporting levels for the life of the permit. The Department shall not accept results for which the laboratory's MDLs or PQLs are greater than those listed above. Unless otherwise specified, sample results shall be reported as follows:

When the analytical results are below method detection or practical quantification limits, the permittee shall report the analytical results in accordance with the instructions on the applicable discharge monitoring report (DMR).

2. Monitoring results obtained for each calendar month shall be summarized for that month and reported on a Discharge Monitoring Report (DMR), Form 62-620.910(10), postmarked no later than the 28th day of the month following the completed calendar month. For example, data for January shall be submitted by February 28. Signed copies of the DMR shall be submitted to the address specified below:

Florida Department of Environmental Protection
Mail Station 3551
Twin Towers Office Building
2600 Blair Stone Road
Tallahassee, Florida 32399-2400

If no discharge occurs during the reporting period, sampling requirements of this permit do not apply. The statement "No discharge" shall be written on the DMR form. If, during the time period of this permit, the facility ceases to discharge, the Department shall be notified immediately upon cessation of discharge. Such notification shall be in writing.

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3. Unless specified otherwise in this permit, all other reports and notifications required by this permit, including twenty-four hour notifications, shall be submitted to or reported to, as appropriate, the Department's Northeast District Office at the address specified below:

Florida Department of Environmental Protection
Northeast District
Suite 2008, 7825 Baymeadows Way
Jacksonville, FL 32256
Phone Number (904) 448-4300

4. The discharge of metal cleaning waste to surface waters is not authorized by this permit. Metal cleaning waste is any wastewater resulting from cleaning, with or without chemical cleaning compounds any metal process equipment including, but not limited to, boiler tube cleaning, boiler fireside cleaning, and air preheater cleaning. For clarification, waterborne residues derived from cleaning any metal process equipment are considered metal cleaning waste. Other unauthorized discharges includes the discharge of construction runoff.
5. The permittee shall not store coal, soil, or other similar erodable materials in a manner in which runoff is uncontrolled, nor conduct construction activities in a manner which produces uncontrolled runoff unless such uncontrolled runoff has been specifically approved by the Department. "Uncontrolled shall mean without a sedimentation basin or other controls approved by the Department.
6. Flush water used to remove ash adhering to the boiler tubes after a unit is taken off-line (i.e., non-chemical boiler flush water) may be discharged to the bottom ash transport water system and the low volume wastewater treatment facility prior to final discharge via Outfall D-001.
Intake screen backwash may be discharged without limitation or monitoring requirements.
7. In order to determine compliance with the discharge limitations specified in Section I.A of this permit sampling results shall be calculated and reported as follows:

Daily Average Value - the average of all sampling results for a parameter for a single day.

Monthly Average Value - the average of all daily average values for a monthly period.

Instantaneous Value - the value of a single sampling result taken at any given time or for composite samples the value of a single composite sample result.

When only one sample is required to be taken per day then the value of that sampling result shall be the daily average value. Likewise for weekly and monthly averages when only one sample is taken during the week or month, respectively.

8. There shall be no discharge of polychlorinated biphenyl compounds such as those commonly used for transformer fluid.
9. There shall be no discharge of floating debris, scum, oil, or other matter in such amounts as to form nuisances or produce color, odor, taste, turbidity, or other conditions in such degree as to create a nuisance or otherwise interfere with the beneficial use of the receiving waters in accordance with FAC 62-302.500(1)(a) and 62-302.530(50)(b). Any such discharges to water of the State shall be reported to the Department when submitting DMR's.

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10. Monitoring requirements specified in Section I.A of this permit shall begin on the first day of the next month after the permit issuance date.
11. Discharge of any product registered under the Federal Insecticide, Fungicide, and Rodenticide Act to any waste stream which ultimately may be released to lakes, rivers, streams, or other waters of the United States is prohibited unless specifically authorized elsewhere in this permit. This requirement is not applicable to products used for lawn and agricultural purposes or to the use of herbicides if used in accordance with labeled instructions and any applicable State permit. Discharge of chlorine from the use of chlorine gas, sodium hypochlorite, or other similar chlorination compounds for disinfection in plant potable and service water systems and in sewage treatment is authorized. The company shall notify the Department in writing prior to instituting use of any biocide or chemical (except the use of chlorine in the cooling towers) used in the cooling systems or any other portion of the treatment system which may be toxic to aquatic life. Such notification shall include:
- a. Name and general composition of biocide or chemical
 - b. Frequencies of use
 - c. Quantities to be used
 - d. Proposed effluent concentrations
 - e. Acute and/or chronic toxicity data (laboratory reports shall be prepared according to Section 12 of EPA document no. EPA/600/4-90/027 entitled, Methods for Measuring the Acute Toxicity of Effluents and Receiving Waters for Freshwater and Marine Organisms, or most current addition.)
 - f. Product data sheet
 - g. Product label

The Department shall review the above information to determine if a minor or major permit revision is necessary. Discharge associated with the use of such biocide or chemical is not authorized without prior approval by the Department.

12. Discharge of any waste resulting from the combustion of toxic, hazardous, or metal cleaning wastes to any waste stream which ultimately discharges to waters of the United States is prohibited, unless specifically authorized elsewhere in this permit.
13. The permittee shall ensure that all laboratory analytical data submitted to the department as required by this permit is from a laboratory which has a currently valid and Department-approved Comprehensive Quality Assurance Plan (ComQAP) [or a ComQAP pending approval] for all parameters being reported as required by Chapter 62-160, Florida Administrative Code
14. Within 60 days of initiation of discharge of the treated FGD purge stream to Outfall 001, the permittee shall perform a one time chemical analysis of the combined discharge from Outfall 001. This analysis shall include all parameters included in DEP Form 2CS-Part VII-C except for pesticide compounds. This data is subject to the re-opener clause of Section VII-C of this permit.
15. Within 60 days of initiation of discharge of the treated FGD purge stream to Outfall 001, the permittee shall conduct additional mercury monitoring of the combined discharge from Outfall 001 and the intake at D-005 using the low-level EPA Method 1631. Monitoring shall consist of a minimum of one grab sample taken once every month for 18 months at both the intake (INT-1) and the discharge (EFF-1). Sampling at the intake and discharge shall be done concurrently. Results of the monitoring shall be submitted to the Department in accordance with the compliance schedule contained in Part VI of this permit. The monitoring results will be used by the Department to further assess the mercury levels in the discharge and to determine the size of the mercury mixing zone for the next permit cycle, if a mixing zone is requested at that time.

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years from date on the logs for schedule.

VI. Compliance Schedules and Self-Imposed Improvements Schedules

1. The permittee shall achieve compliance with the effluent limitations specified for discharge in accordance with the following schedule:
 - a. Operational level attained..... Issuance Date (ID) of permit
 - b. Best Management Practices Pollution Prevention (BMP3) Plan (See Part VII, Subpart D)
 - (1) Develop plan..... ID of permit plus 3 months
 - (2) Implement plan..... ID of permit plus 6 months
 - b. Submittal of DEP Form 2CS-Part VII-C except for pesticide compounds (See Condition I.B.14) Initiation of FGD purge stream discharge plus 3 months
 - d. Submittal of additional Mercury monitoring (See Condition I.B.15) Initiation of FGD purge stream discharge plus 20 months
2. No later than 14 calendar days following a date identified in the above schedule of compliance, the permittee shall submit either a report of progress or, in the case of specific actions being required by an identified date, a written notice of compliance or noncompliance. In the latter case, the notice shall include the cause of noncompliance, any remedial actions taken, and the probability of meeting the next scheduled requirement.

VII. Other Specific Conditions

A. Specific Conditions Applicable to all permits

1. Drawings, plans, documents or specifications submitted by the permittee, not attached hereto, but retained on file with the Department, are made a part hereof.
2. If significant historical or archaeological artifacts are discovered at any time within the project site, the permittee shall immediately notify the District Office and the Bureau of Historic Preservation, Division of Archives, History and Records Management, R.A. Gray Building, Tallahassee, Florida 32301.
3. Where required by Chapter 471 (P.E.) or Chapter 492 (P.G.) Florida Statutes, applicable portions of reports to be submitted under this permit, shall be signed and sealed by the professional(s) who prepared them.
4. This permit satisfies industrial wastewater program permitting requirements only and does not authorize operation of this facility prior to obtaining any other permits required by local, state or federal agencies.

B. Duty to Reapply

1. The permittee shall submit an application to renew this permit at least 180 days before the expiration date of this permit.
2. The permittee shall apply on the appropriate form listed in Rule 62-620.910, F.A.C., and in the manner

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established in Rules 62-620.400 through 62-620.460, F.A.C., including submittal of the appropriate processing fee set forth in Rule 62-4.050, F.A.C.

3. An application filed in accordance with subsections 1. and 2. of this part shall be considered timely and sufficient. When an application for renewal of a permit is timely and sufficient, the existing permit shall not expire until the Department has taken final action on the application for renewal or until the last day for seeking judicial review of the agency order or a later date fixed by order of the reviewing court.
4. The late submittal of a renewal application shall be considered timely and sufficient for the purpose of extending the effectiveness of the expiring permit only if it is submitted and made complete before the expiration date.

C. Reopener Clause

1. The permit shall be modified, or alternatively, revoked and reissued to comply with any applicable effluent standard or limitation issued or approved under Sections 301(b)(23)(C) and (D), 304(b)(2) and 307(a)(2) of the Clean Water Act (the Act), as amended, if the effluent standard or limitation so issued or approved:
 - a.) Contains different conditions or is otherwise more stringent than any condition in the permit/or;
 - b.) Controls any pollutant not addressed in the permit.

The permit as modified or reissued under this paragraph shall contain any other requirements of the Act then applicable.

The permit may be reopened to adjust effluent limitations or monitoring requirements should future wasteload allocation determinations, water quality studies, DEP approved changes in water quality standards, or other information show a need for a different limitation or monitoring requirement.

D. Specific Conditions Related to Best Management Practices Condition

1. Best Management Practices Plan:

In accordance with Rule 62-620.620(1)(n), the permittee shall develop and implement a Best Management Practices plan incorporating pollution prevention measures. References which may be used in developing the plan are "Criteria and Standards for Best Management Practices Authorized Under Section 304(e) of the Act", found at 40 CFR Section 122.44(k), the Storm Water Management Industrial Activities Guidance Manual, EPA/833-R92-002 and other EPA documents relating to Best Management Practice guidance.

2. Definitions:

- a. The term "pollutants" refers to conventional, non-conventional and toxic pollutants, as appropriate for the NPDES storm water program and toxic pollutants.
- b. Conventional pollutants are: biochemical oxygen demand (BOD), suspended solids, pH, fecal coliform bacteria and oil & grease.
- c. Non-conventional pollutants are those which are not defined as conventional or toxic, such as phosphorus, nitrogen or ammonia. (Ref: 40 CFR Part 122, Appendix D, Table IV)
- d. For purposes of this part, Toxic pollutants include, but are not limited to: a) any toxic substance listed in Section 307(a)(1) of the CWA, any hazardous substance listed in Section 311 of the CWA, and b) any substance (that is not also a conventional or non-conventional pollutant) for which EPA has published an acute or chronic toxicity criterion, or that is a pesticide regulated by the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA).

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- e. "Pollution prevention" refers to the first category of EPA's preferred hazardous waste management strategy - source reduction.
 - f. "Significant Materials" is defined as raw materials; fuels; materials such as solvents and detergents; hazardous substances designated under Section 101(14) of CERCLA; and any chemical the facility is required to report pursuant to EPCRA, Section 313; fertilizers; pesticides; and waste products such as ashes, slag and sludge.
 - g. "Source reduction" means any practice which: i) reduces the amount of any pollutant entering a waste stream prior to recycling, treatment or disposal; and ii) reduces the hazards to public health and the environment associated with the release of such pollutant. The term includes equipment or technology modifications, process or procedure modifications, substitution of raw materials, and improvements in housekeeping, maintenance, training, or inventory control. It does not include any practice which alters the physical, chemical, or biological characteristics or the volume of a pollutant through a process or activity which itself is not integral to, or previously considered necessary for, the production of a product or the providing of a service.
 - h. "BMP3" means a Best Management Plan incorporating the requirements of 40 CFR § 125, Subpart K, plus pollution prevention techniques, except where other existing programs are deemed equivalent by the permittee. The permittee shall certify the equivalency of the other referenced programs.
 - i. "Reportable Quantity (RQ) Discharge" A RQ release occurs when a quantity of a hazardous substance or oil is spilled or released within a 24-hour period of time and exceeds the RQ level assigned to that substance under CERCLA or the Clean Water Act. These levels or quantities are defined in terms of gallons or pounds. Regulations listing these quantities are contained at 40 CFR 302.4, 40 CFR 117.21 and 40 CFR 110.
 - j. The term "material" refers to chemicals or chemical products used in any plant operation (i.e., caustic soda, hydrazine, degreasing agents, paint solvents, etc.). It does not include lumber, boxes, packing materials, etc.
3. Best Management Practices/Pollution Prevention Plan:
- The permittee shall develop and implement a BMP3 plan for the facility which is the source of wastewater and storm water discharges. The plan shall be directed toward reducing those pollutants of concern which discharge, or could discharge, to surface waters to and shall be prepared in accordance with good engineering and good housekeeping practices. For the purposes of this permit, pollutants of concern shall be limited to toxic pollutants and significant materials, as defined above, known to the discharger. The plan shall address all activities which could or do contribute these pollutants to the surface water discharge, including storm water, water and waste treatment, and plant ancillary activities.
4. Signatory Authority & Management Responsibilities:
- A copy of the BMP3 plan shall be retained at the facility and shall be made available to the permit issuing authority upon request.
- The BMP3 plan shall contain a written statement from corporate or plant management indicating management's commitment to the goals of the BMP3 program. The BMP3 plan shall be signed and reviewed by the plant management.

5. BMP3 Plan Requirements:

The following requirements may be incorporated by reference from existing facility procedures:

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- a. Name and description of facility
- b. A site map - At a minimum the site map must include information of the following: discharge points ("outfalls"); drainage patterns; identification of the types of pollutants likely to be discharged from each drainage area; direction of flow; surface water bodies, including any proximate stream, river, lake, or other waterbody receiving storm water discharge from the site; structural control measures (physically constructed features used to control storm water flows); locations of "significant materials" exposed to storm water; locations of industrial activities (such as fueling stations, loading and unloading areas, vehicle or equipment maintenance areas, waste disposal areas, storage areas).
- c. A materials inventory including the types of materials that are handled, stored, or processed onsite, particularly significant materials. To complete the materials inventory, the permittee must list materials that have been exposed to storm water in the past 3 years (focus on areas where materials are stored, processed, transported, or transferred and provide a narrative description of methods and location of storage and disposal areas, materials management practices, treatment practices, and any structural/nonstructural control measures.
- d. A list of significant spills and leaks of toxic or hazardous materials that have occurred in the past 3 years. "Significant spills" includes releases in excess of reportable quantities.
- e. A summary of any existing storm water sampling data and a description of the sample collection procedures used.
- f. A site evaluation summary - The Site Evaluation Summary should provide a narrative description of activities with a high potential to contaminate storm water at the site, including those associated with materials loading and unloading, outdoor storage, outdoor manufacturing or processing, onsite disposal, and significant dust or particulate generating activities. The summary should also include a description of any pollutants of concern that may be associated with such activities.
- g. A narrative description of the following BMP's:
 - (i) - Good Housekeeping Practices
 - (ii) - Preventive Maintenance The permittee must develop a preventive maintenance program that involves inspections and maintenance of storm water management devices and routine inspections of facility operations to detect faulty equipment. Equipment (such as tanks, containers, and drums) should be checked regularly for signs of deterioration.
 - (iii) - Visual Inspections Regular inspections shall be performed by qualified, trained plant personnel. Reports shall note when inspections were done, the name of the person who conducted the inspection, which areas were inspected, what problems were found, and what steps were taken to correct any problems.
 - (iv) - Spill Prevention and Responses Areas where spills are likely to occur and their drainage points must be clearly identified in the BMP3 plan. Employees shall be made aware of response procedures, including material handling and storage requirements, and should have access to appropriate cleanup equipment.
 - (v) - Sediment and Erosion Control The BMP3 must identify activities that present a potential for significant soil erosion and measures taken to control such erosion.
 - (vi) - Management of Runoff The permittee must describe existing storm water controls found at the

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Seminole Electric Cooperative, Inc.
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Post Office Box 272000
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facility and any additional measures that can be implemented to improve the prevention and control of polluted storm water. Examples include: vegetative swales, reuse of collected storm water, infiltration trenches, and detention ponds.

6. Best Management Practices & Pollution Prevention Committee:

A Best Management Practices Committee (Committee) should be established to direct or assist in the implementation of the BMP3 plan. The Committee should be comprised of individuals within the plant organization who are responsible for developing, implementing, monitoring of success, and revision of the BMP3 plan. The activities and responsibilities of the Committee should address all aspects of the facility's BMP3 plan. The scope of responsibilities of the Committee should be described in the plan.

7. Employee Training:

Employee training programs shall inform appropriate personnel of the components & goals of the BMP3 plan and shall describe employee responsibilities for implementing the plan. Training shall address topics such as good housekeeping, materials management, recordkeeping and reporting, spill prevention & response, as well as specific waste reduction practices to be employed. The plan shall identify periodic dates for such training.

8. Plan Development & Implementation:

The BMP3 plan shall be developed or updated 6 months prior to commercial operation and implemented upon commercial operation, unless any later dates are specified by the Department.

9. Plan Review & Modification:

If following review by the Permit Issuing Authority, or authorized representative, the BMP3 plan is determined insufficient, he/she may notify the permittee that the BMP3 plan does not meet one or more of the minimum requirements of this Part. Upon such notification from the Permit Issuing Authority, or authorized representative, the permittee shall amend the plan and shall submit to the Permit Issuing Authority a written certification that the requested changes have been made. Unless otherwise provided by the Permit Issuing Authority, the permittee shall have 30 days after such notification to make the changes necessary.

The permittee shall modify the BMP3 plan whenever there is a change in design, construction, operation, or maintenance, which has a significant effect on the potential for the discharge of pollutants to surface waters of the State or if the plan proves to be ineffective in achieving the general objectives of reducing pollutants in wastewater or storm water discharges. Modifications to the plan may be reviewed by Permit Issuing Authority in the same manner as described above.

10. Annual Site Compliance Evaluation:

Qualified personnel must conduct site compliance evaluations at appropriate intervals, but at least once a year. Compliance evaluations shall include:

- inspection of storm water drainage areas for evidence of pollutants entering the drainage system;
- evaluation of the effectiveness of BMP's;
- observations of structural measures, sediment controls, and other storm water BMP's to ensure proper operation
- revision of the plan as needed within 2 weeks of the inspection, and implementation of any necessary changes within 12 weeks of the inspection; and
- preparation of a report summarizing inspection results and follow-up actions, identifying the date of inspection and personnel who conducted the inspection.

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The inspection report shall be signed by the plant environmental engineering staff and plant management and kept with the BMP3 plan.

11. Recordkeeping and Internal Reporting:

For at least one year after the expiration of this permit, the permittee shall record and maintain records of spills, leaks, inspections, and maintenance activities. For spills and leaks, records should include information such as the date and time of the incident, weather conditions, cause, and resulting environmental problems.

E. Specific Conditions Related to Existing Manufacturing, Commercial, Mining, and Silviculture Wastewater Facilities or Activities

1. Existing manufacturing, commercial, mining, and silvicultural wastewater facilities or activities that discharge into surface waters shall notify the Department as soon as they know or have reason to believe:
[62-620.624(1)]
 - (a) That any activity has occurred or will occur which would result in the discharge, on a routine or frequent basis, of any toxic pollutant which is not limited in the permit, if that discharge will exceed the highest of the following levels
 - (1) One hundred micrograms per liter,
 - (2) Two hundred micrograms per liter for acrolein and acrylonitrile; five hundred micrograms per liter for 2,4-dinitrophenol and for 2-methyl-4,6-dinitrophenol; and one milligram per liter for antimony, or
 - (3) Five times the maximum concentration value reported for that pollutant in the permit application.
 - (b) That any activity has occurred or will occur which would result in any discharge, on a non-routine or infrequent basis, of a toxic pollutant which is not limited in the permit, if that discharge will exceed the highest of the following levels
 - (1) Five hundred micrograms per liter,
 - (2) One milligram per liter for antimony, or
 - (3) Ten times the maximum concentration value reported for that pollutant in the permit application.

VIII. General Conditions

1. The terms, conditions, requirements, limitations and restrictions set forth in this permit are binding and enforceable pursuant to Chapter 403, Florida Statutes. Any permit noncompliance constitutes a violation of Chapter 403, Florida Statutes, and is grounds for enforcement action, permit termination, permit revocation and reissuance, or permit revision. [62-620.610(1), 11-29-94]
2. This permit is valid only for the specific processes and operations applied for and indicated in the approved drawings or exhibits. Any unauthorized deviations from the approved drawings, exhibits, specifications or conditions of this permit constitutes grounds for revocation and enforcement action by the Department. [62-620.610(2), 11-29-94]
3. As provided in Subsection 403.087(6), F.S., the issuance of this permit does not convey any vested rights or any exclusive privileges. Neither does it authorize any injury to public or private property or any invasion of personal rights, nor authorize any infringement of federal, state, or local laws or regulations. This permit is not

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a waiver of or approval of any other Department permit or authorization that may be required for other aspects of the total project which are not addressed in this permit. [62-620.610(3), 11-29-94]

4. This permit conveys no title to land or water, does not constitute state recognition or acknowledgment of title, and does not constitute authority for the use of submerged lands unless herein provided and the necessary title or leasehold interests have been obtained from the State. Only the Trustees of the Internal Improvement Trust Fund may express State opinion as to title. [62-620.610(4), 11-29-94]
5. This permit does not relieve the permittee from liability and penalties for harm or injury to human health or welfare, animal or plant life, or property caused by the construction or operation of this permitted source; nor does it allow the permittee to cause pollution in contravention of Florida Statutes and Department rules, unless specifically authorized by an order from the Department. The permittee shall take all reasonable steps to minimize or prevent any discharge, reuse of reclaimed water, or residuals use or disposal in violation of this permit which has a reasonable likelihood of adversely affecting human health or the environment. It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit. [62-620.610(5), 11-29-94]
6. If the permittee wishes to continue an activity regulated by this permit after its expiration date, the permittee shall apply for and obtain a new permit. [62-620.610(6), 11-29-94]
7. The permittee shall at all times properly operate and maintain the facility and systems of treatment and control, and related appurtenances, that are installed and used by the permittee to achieve compliance with the conditions of this permit. This provision includes the operation of backup or auxiliary facilities or similar systems when necessary to maintain or achieve compliance with the conditions of the permit. [62-620.610(7), 11-29-94]
8. This permit may be modified, revoked and reissued, or terminated for cause. The filing of a request by the permittee for a permit revision, revocation and reissuance, or termination, or a notification of planned changes or anticipated noncompliance does not stay any permit condition. [62-620.610(8), 11-29-94]
9. The permittee, by accepting this permit, specifically agrees to allow authorized Department personnel, including an authorized representative of the Department and authorized EPA personnel, when applicable, upon presentation of credentials or other documents as may be required by law, and at reasonable times, depending upon the nature of the concern being investigated, to
 - a. Enter upon the permittee's premises where a regulated facility, system, or activity is located or conducted, or where records shall be kept under the conditions of this permit;
 - b. Have access to and copy any records that shall be kept under the conditions of this permit;
 - c. Inspect the facilities, equipment, practices, or operations regulated or required under this permit; and
 - d. Sample or monitor any substances or parameters at any location necessary to assure compliance with this permit or Department rules. [62-620.610(9), 11-29-94]
10. In accepting this permit, the permittee understands and agrees that all records, notes, monitoring data, and other information relating to the construction or operation of this permitted source which are submitted to the Department may be used by the Department as evidence in any enforcement case involving the permitted source arising under the Florida Statutes or Department rules, except as such use is proscribed by Section 403.111, Florida Statutes, or Rule 62-620.302, Florida Administrative Code. Such evidence shall only be used to the extent that it is consistent with the Florida Rules of Civil Procedure and applicable evidentiary rules. [62-620.610(10), 11-29-94]

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10. When requested by the Department, the permittee shall within a reasonable time provide any information required by law which is needed to determine whether there is cause for revising, revoking and reissuing, or terminating this permit, or to determine compliance with the permit. The permittee shall also provide to the Department upon request copies of records required by this permit to be kept. If the permittee becomes aware of relevant facts that were not submitted or were incorrect in the permit application or in any report to the Department, such facts or information shall be promptly submitted or corrections promptly reported to the Department. [62-620.610(11), 11-29-94]
12. Unless specifically stated otherwise in Department rules, the permittee, in accepting this permit, agrees to comply with changes in Department rules and Florida Statutes after a reasonable time for compliance; provided, however, the permittee does not waive any other rights granted by Florida Statutes or Department rules. A reasonable time for compliance with a new or amended surface water quality standard, other than those standards addressed in Rule 62-302.500, F.A.C., shall include a reasonable time to obtain or be denied a mixing zone for the new or amended standard. [62-620.610(12), 11-29-94]
13. The permittee, in accepting this permit, agrees to pay the applicable regulatory program and surveillance fee in accordance with Rule 62-4.052, F.A.C. [62-620.610(13), 11-29-94]
14. This permit is transferable only upon Department approval in accordance with Rule 62-620.340, F.A.C. The permittee shall be liable for any noncompliance of the permitted activity until the transfer is approved by the Department. [62-620.610(14), 11-29-94]
15. The permittee shall give the Department written notice at least 60 days before inactivation or abandonment of a wastewater facility and shall specify what steps will be taken to safeguard public health and safety during and following inactivation or abandonment. [62-620.610(15), 11-29-94]
16. The permittee shall apply for a revision to the Department permit in accordance with Rules 62-620.300, 62.420 or 62.620.450, F.A.C., as applicable, at least 90 days before construction of any planned substantial modifications to the permitted facility is to commence or with Rule 62-620.300 for minor modifications to the permitted facility. A revised permit shall be obtained before construction begins except as provided in Rule 62-620.300, F.A.C. [62-620.610(16), 11-29-94]
17. The permittee shall give advance notice to the Department of any planned changes in the permitted facility or activity which may result in noncompliance with permit requirements. The permittee shall be responsible for any and all damages which may result from the changes and may be subject to enforcement action by the Department for penalties or revocation of this permit. The notice shall include the following information:
- a. A description of the anticipated noncompliance;
 - b. The period of the anticipated noncompliance, including dates and times; and
 - c. Steps being taken to prevent future occurrence of the noncompliance.
- [62-620.610(17), 11-29-94]

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18. Sampling and monitoring data shall be collected and analyzed in accordance with Rule 62-4.246, Chapter 62-160 and 62-601, F.A.C., and 40 CFR 136, as appropriate.
- Monitoring results shall be reported at the intervals specified elsewhere in this permit and shall be reported on a Discharge Monitoring Report (DMR), DEP Form 62-620.910(10).
 - If the permittee monitors any contaminant more frequently than required by the permit, using Department approved test procedures, the results of this monitoring shall be included in the calculation and reporting of the data submitted in the DMR.
 - Calculations for all limitations which require averaging of measurements shall use an arithmetic mean unless otherwise specified in this permit.
 - Any laboratory test required by this permit for domestic wastewater facilities shall be performed by a laboratory that has been certified by the Department of Health and Rehabilitative Services (DHRS) under Chapter 10D41, F.A.C., to perform the test. In domestic wastewater facilities, on-site tests for dissolved oxygen, pH, and total chlorine residual shall be performed by a laboratory certified to test for those parameters or under the direction of an operator certified under Chapter 61E12-41, F.A.C.
 - Under Chapter 62-160, F.A.C., sample collection shall be performed by following the protocols outlined in "DEP Standard Operating Procedures for Laboratory Operations and Sample Collection Activities" (DEP-QA-001/92). Alternatively, sample collection may be performed by an organization who has an approved Comprehensive Quality Assurance Plan (CompQAP) on file with the Department. The CompQAP shall be approved for collection of samples from the required matrices and for the required tests. [62-620.610(18), 11-29-94]
19. Reports of compliance or noncompliance with, or any progress reports on, interim and final requirements contained in any compliance schedule detailed elsewhere in this permit shall be submitted no later than 14 days following each schedule date. [62-620.610(19), 11-29-94]
20. The permittee shall report to the Department any noncompliance which may endanger health or the environment. Any information shall be provided orally within 24 hours from the time the permittee becomes aware of the circumstances. A written submission shall also be provided within five days of the time the permittee becomes aware of the circumstances. The written submission shall contain: a description of the noncompliance and its cause; the period of noncompliance including exact dates and time, and if the noncompliance has not been corrected, the anticipated time it is expected to continue; and steps taken or planned to reduce, eliminate, and prevent recurrence of the noncompliance.
- The following shall be included as information which must be reported within 24 hours under this condition:
 - Any unanticipated bypass which causes any reclaimed water or the effluent to exceed any permit limitation or results in an unpermitted discharge,
 - Any upset which causes any reclaimed water or the effluent to exceed any limitation in the permit,
 - Violation of a maximum daily discharge limitation for any of the pollutants specifically listed in the permit for such notice, and
 - Any unauthorized discharge to surface or ground waters.
 - If the oral report has been received within 24 hours, the noncompliance has been corrected, and the noncompliance did not endanger health or the environment, the Department shall waive the written report. [62-620.610(20), 11-29-94]

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21. The permittee shall report all instances of noncompliance not reported under Conditions VIII.17 and .19 of this permit at the time monitoring reports are submitted. This report shall contain the same information required by Condition VIII.20 of this permit. [62-620.610(21), 11-29-94]
22. Bypass Provisions.
- a. Bypass is prohibited, and the Department may take enforcement action against a permittee for bypass, unless the permittee affirmatively demonstrates that:
 - (1) Bypass was unavoidable to prevent loss of life, personal injury, or severe property damage; and
 - (2) There were no feasible alternatives to the bypass, such as the use of auxiliary treatment facilities, retention of untreated wastes, or maintenance during normal periods of equipment downtime. This condition is not satisfied if adequate back-up equipment should have been installed in the exercise of reasonable engineering judgment to prevent a bypass which occurred during normal periods of equipment downtime or preventive maintenance; and
 - (3) The permittee submitted notices as required under Condition VIII.22.b. of this permit.
 - b. If the permittee knows in advance of the need for a bypass, it shall submit prior notice to the Department, if possible at least 10 days before the date of the bypass. The permittee shall submit notice of an unanticipated bypass within 24 hours of learning about the bypass as required in Condition VIII. 20. of this permit. A notice shall include a description of the bypass and its cause; the period of the bypass, including exact dates and times; if the bypass has not been corrected, the anticipated time it is expected to continue; and the steps taken or planned to reduce, eliminate, and prevent recurrence of the bypass.
 - c. The Department shall approve an anticipated bypass, after considering its adverse effect, if the permittee demonstrates that it will meet the three conditions listed in Condition VIII.22. a. of this permit.
 - d. A. permittee may allow any bypass to occur which does not cause reclaimed water or effluent limitations to be exceeded if it is for essential maintenance to assure efficient operation. These bypasses are not subject to the provision of Condition VIII.22. a. through c. of this permit.
[62-620.610(22), 11-29-94]
23. Upset Provisions
- a. A permittee who wishes to establish the affirmative defense of upset shall demonstrate, through properly signed contemporaneous operating logs, or other relevant evidence that:
 - (1) An upset occurred and that the permittee can identify the cause(s) of the upset;
 - (2) The permitted facility was at the time being properly operated;
 - (3) The permittee submitted notice of the upset as required in Condition VIII. 20. of this permit; and
 - (4) The permittee complied with any remedial measures required under Condition VIII.5. of this permit.
 - b. In any enforcement proceeding, the permittee seeking to establish the occurrence of an upset has the burden of proof.
 - c. Before an enforcement proceeding is instituted, no representation made during the Department review of a claim that noncompliance was caused by an upset is final agency action subject to judicial review.
[62-620.610(23), 11-29-94]

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EXPIRATION DATE: January 6, 2005

Executed in Tallahassee, Florida.

STATE OF FLORIDA
DEPARTMENT OF
ENVIRONMENTAL PROTECTION

Mimi Drew
Director
Division of Water Resource Management

2600 Blair Stone Road
Tallahassee, FL 32399-2400
(850) 487-1855

APPENDIX C – Ground Water Monitoring Well Report Form

GROUND WATER MONITORING WELL REPORT - PART D

Facility Name: Seminole Electric Cooperative
 Permit Number: FLD036498
 County: Putnam

Monitoring Well ID: MWI-8R (Site # 10172)
 Well Type: Intermediate
 Description: See Location Map

Monitoring Period: (Check all that apply) ☐ 1st Qtr ☐ 2nd Qtr ☐ 3rd Qtr ☐ 4th Qtr ☐ Annual ☐ Year
 Was the well purged before ☐ Yes ☐ No
 Date Sample Obtained: _____
 Time Sample Obtained: _____

Parameter	PARM Code	Sample Measurement	Permit Requirement	Units	Sample Type	Monitoring Frequency	Detection Limits	Analysis Method	Sampling Equipment Used	San Fill (L)
Water Level Relative to NGVD	82545		Report	FEET	In-situ	Annual				
Arsenic, Total	01002		Report	UG/L	Grab	Annual				
Barium, Total	01007		Report	UG/L	Grab	Annual				
Beryllium, Total	01012		Report	UG/L	Grab	Annual				
Cadmium, Total	01027		Report	UG/L	Grab	Annual				
Chloride (as Cl)	00940		Report	MG/L	Grab	Annual				
Chromium, Total	01034		Report	UG/L	Grab	Annual				
Copper, Total	01042		Report	UG/L	Grab	Annual				
Gross Alpha	80045		Report	PC/L	Grab	Annual				
Iron, Total	01045		Report	UG/L	Grab	Annual				
Lead, Total	01051		Report	UG/L	Grab	Annual				
Mercury, Total	71900		Report	UG/L	Grab	Annual				
Nickel, Total	01067		Report	UG/L	Grab	Annual				
Nitrate plus Nitrate, Total (as N)	00830		Report	MG/L	Grab	Annual				
pH	00406		Report	SI	In-situ	Annual				
Selenium, Total	01147		Report	UG/L	Grab	Annual				
Silver, Total	01077		Report	UG/L	Grab	Annual				
Specific Conductance	00094		Report	UMHOS/CM	Grab	Annual				
Sulfate, Total	00945		Report	MG/L	Grab	Annual				
TOC	00880		Report	MG/L	Grab	Annual				
TOH	78115		Report	MG/L	Grab	Annual				
Turbidity	82079		Report	NTU	In-situ	Annual				
Vanadium, Total	01087		Report	UG/L	Grab	Annual				
Zinc, Total	01092		Report	UG/L	Grab	Annual				

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

NAME/TITLE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT	SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT	TELEPHONE NO	DATE (yy/mm/dd)

COMMENTS AND EXPLANATION (Reference all attachments here):

GROUND WATER MONITORING WELL REPORT - PART D

Facility Name:
Permit Number:
County:

Seminole Electric Cooperative
FL0038498
Pulnam

Monitoring Well ID:
Well Type:
Description:
MWC-9 (Site # 10171)
Compliance
See Location Map

Monitoring Period: (Check all that apply) ☐ 1st Qtr ☐ 2nd Qtr ☐ 3rd Qtr ☐ 4th Qtr ☐ Annual ☐ Year
Was the well purged before ☐ Yes ☐ No
Date Sample Obtained:
Time Sample Obtained:

Parameter	PARM Code	Sample Measurement	Permit Requirement	Units	Sample Type	Monitoring Frequency	Detection Limits	Analysis Method	Sampling Equipment Used	Samples Filtered (L/F/N)
Water Level Relative to NGVD	82545		Report	FEET	In-situ	Annual				
Arsenic, Total	01002		10	UG/L	Grab	Annual				
Barium, Total	01007		2	UG/L	Grab	Annual				
Beryllium, Total	01012		4	UG/L	Grab	Annual				
Cadmium, Total	01027		5	UG/L	Grab	Annual				
Chloride (as Cl)	00940		250	MG/L	Grab	Annual				
Chromium, Total	01034		100	UG/L	Grab	Annual				
Copper, Total	01042		1000	UG/L	Grab	Annual				
Gross Alpha	80045		15	PG/L	Grab	Annual				
Iron, Total	01045		300	UG/L	Grab	Annual				
Lead, Total	01051		15	UG/L	Grab	Annual				
Mercury, Total	71900		2	UG/L	Grab	Annual				
Nickel, Total	01067		100	UG/L	Grab	Annual				
Nitrite plus Nitrate, Total (as N)	00630		10	MG/L	Grab	Annual				
pH	00408		6.5 - 8.5	SU	In-situ	Annual				
Selenium, Total	01147		50	UG/L	Grab	Annual				
Silver, Total	01077		100	UG/L	Grab	Annual				
Specific Conductance	00094		Report	UMHOS/CM	Grab	Annual				
Sulfate, Total	00945		250	MG/L	Grab	Annual				
TOC	00680		Report	MG/L	Grab	Annual				
TOH	78115		Report	MG/L	Grab	Annual				
Turbidity	82079		Report	NTU	In-situ	Annual				
Vanadium, Total	01087		Report	UG/L	Grab	Annual				
Zinc, Total	01092		5000	UG/L	Grab	Annual				

COMMENTS AND EXPLANATION (Reference all attachments here):

GROUND WATER MONITORING WELL REPORT - PART D

Facility Name: Seminole Electric Cooperative
 Permit Number: FL0038498
 County: Putnam

MW-10 (Site # 10170)
 Intermediate
 See Location Map

Monitoring Well ID:
 Well Type:
 Description:

Monitoring Period: (Check all that apply) ☐ 1st Qtr ☐ 2nd Qtr ☐ 3rd Qtr ☐ 4th Qtr ☐ Annual ☐ Year
 Was the well purged before ☐ Yes ☐ No
 Date Sample Obtained:
 Time Sample Obtained:

Parameter	PARAM Code	Sample Measurement	Permit Requirement	Units	Sample Type	Monitoring Frequency	Detection Limits	Analysis Method	Sampling Equipment Used	Samples Filtered (L/F/N)
Water Level Relative to NGVD	B2545		Report	FEET	In-situ	Annual				
Arsenic, Total	01002		Report	UG/L	Grab	Annual				
Barium, Total	01007		Report	UG/L	Grab	Annual				
Beryllium, Total	01012		Report	UG/L	Grab	Annual				
Cadmium, Total	01027		Report	UG/L	Grab	Annual				
Chloride (as Cl)	00940		Report	MG/L	Grab	Annual				
Chromium, Total	01034		Report	UG/L	Grab	Annual				
Copper, Total	01042		Report	UG/L	Grab	Annual				
Gross Alpha	80045		Report	EC/L	Grab	Annual				
Iron, Total	01045		Report	UG/L	Grab	Annual				
Lead, Total	01051		Report	UG/L	Grab	Annual				
Mercury, Total	71900		Report	UG/L	Grab	Annual				
Nickel, Total	01087		Report	UG/L	Grab	Annual				
Nitrite plus Nitrate, Total (as N)	00630		Report	MG/L	Grab	Annual				
pH	00408		Report	SU	In-situ	Annual				
Selenium, Total	01147		Report	UG/L	Grab	Annual				
Silver, Total	01077		Report	UG/L	Grab	Annual				
Specific Conductance	00094		Report	UMHOS/CM	Grab	Annual				
Sulfate, Total	00945		Report	MG/L	Grab	Annual				
TOC	00580		Report	MG/L	Grab	Annual				
TOH	78115		Report	MG/L	Grab	Annual				
Turbidity	82079		Report	NTU	In-situ	Annual				
Vanadium, Total	01087		Report	UG/L	Grab	Annual				
Zinc, Total	01092		Report	UG/L	Grab	Annual				

COMMENTS AND EXPLANATION (Reference all attachments here):

GROUND WATER MONITORING WELL REPORT - PART D

Facility Name: Samnola Electric Cooperative
 Permit Number: FL0036498
 County: Putnam

Monitoring Well ID: MWI-12 (Site # 10168)
 Well Type: Intermediate
 Description: See Location Map

Monitoring Period: (Check all that apply) ☐ 1st Qtr ☐ 2nd Qtr ☐ 3rd Qtr ☐ 4th Qtr ☐ Annual ☐ Year
 Was the well purged before ☐ Yes ☐ No
 Date Sample Obtained:
 Time Sample Obtained:

Parameter	PARM Code	Sample Measurement	Permit Requirement	Units	Sample Type	Monitoring Frequency	Detection Limits	Analysis Method	Sampling Equipment Used	Samples Filtered (L/F/N)
Water Level Relative to NGVD	82545		Report	FEET	In-situ	Annual				
Arsenic, Total	01002		Report	UG/L	Grab	Annual				
Barium, Total	01007		Report	UG/L	Grab	Annual				
Beryllium, Total	01012		Report	UG/L	Grab	Annual				
Cadmium, Total	01027		Report	UG/L	Grab	Annual				
Chloride (as Cl)	00940		Report	MG/L	Grab	Annual				
Chromium, Total	01034		Report	UG/L	Grab	Annual				
Copper, Total	01042		Report	UG/L	Grab	Annual				
Cross Alpha	80045		Report	PC/L	Grab	Annual				
Iron, Total	01045		Report	UG/L	Grab	Annual				
Lead, Total	01051		Report	UG/L	Grab	Annual				
Mercury, Total	71900		Report	UG/L	Grab	Annual				
Nickel, Total	01067		Report	UG/L	Grab	Annual				
Nitrate plus Nitrate, Total (as N)	00630		Report	MG/L	Grab	Annual				
pH	00408		Report	SU	In-situ	Annual				
Selenium, Total	01147		Report	UG/L	Grab	Annual				
Silver, Total	01077		Report	UG/L	Grab	Annual				
Specific Conductance	00094		Report	UMHOS/CM	Grab	Annual				
Sulfate, Total	00945		Report	MG/L	Grab	Annual				
TOC	00680		Report	MG/L	Grab	Annual				
TOH	78115		Report	MG/L	Grab	Annual				
Turbidity	82079		Report	NTU	In-situ	Annual				
Vanadium, Total	01087		Report	UG/L	Grab	Annual				
Zinc, Total	01092		Report	UG/L	Grab	Annual				

COMMENTS AND EXPLANATION (Reference all attachments here):

GROUND WATER MONITORING WELL REPORT - PART D

Facility Name: Seminole Electric Cooperative
 Permit Number: FL0036498
 County: Putnam

MWC-13A (Site # 10167)
 Compliance
 See Location Map

Monitoring Well ID:
 Well Type:
 Description:

Date Sample Obtained:
 Time Sample Obtained:

Monitoring Period: (Check all that apply) ☐ 1st Qtr ☐ 2nd Qtr ☐ 3rd Qtr ☐ 4th Qtr ☐ Annual ☐ Year
 Was the well purged before ☐ Yes ☐ No

Parameter	PARM Code	Sample Measurement	Permit Requirement	Units	Sample Type	Monitoring Frequency	Detection Limits	Analysis Method	Sampling Equipment Used	Samples Filled (L/F/N)
Water Level Relative to NGVD	82545		Report	FEET	In-situ	Annual				
Arsenic, Total	01002		10	UG/L	Grab	Annual				
Barium, Total	01007		2	UG/L	Grab	Annual				
Beryllium, Total	01012		4	UG/L	Grab	Annual				
Cadmium, Total	01027		5	UG/L	Grab	Annual				
Chloride (as Cl)	00940		250	MG/L	Grab	Annual				
Chromium, Total	01034		100	UG/L	Grab	Annual				
Copper, Total	01042		1000	UG/L	Grab	Annual				
Gross Alpha	80045		15	PC/L	Grab	Annual				
Iron, Total	01045		300	UG/L	Grab	Annual				
Lead, Total	01051		15	UG/L	Grab	Annual				
Mercury, Total	71900		2	UG/L	Grab	Annual				
Nickel, Total	01067		100	UG/L	Grab	Annual				
Nitrite plus Nitrate, Total (as N)	00630		10	MG/L	Grab	Annual				
pH	00406		6.5 - 8.5	SIU	In-situ	Annual				
Selenium, Total	01147		50	UG/L	Grab	Annual				
Silver, Total	01077		100	UG/L	Grab	Annual				
Specific Conductance	00094		Report	UMHOS/CM	Grab	Annual				
Sulfate, Total	00945		250	MG/L	Grab	Annual				
TOC	00688		Report	MG/L	Grab	Annual				
TOH	78115		Report	MG/L	Grab	Annual				
Turbidity	82079		Report	NTU	In-situ	Annual				
Vanadium, Total	01087		Report	UG/L	Grab	Annual				
Zinc, Total	01092		5000	UG/L	Grab	Annual				

COMMENTS AND EXPLANATION (Reference all attachments here):

GROUND WATER MONITORING WELL REPORT - PART D

Facility Name: Seminole Electric Cooperative
 Permit Number: FL0036498
 County: Putnam

MWI-14A (Site # 10165)
 Intermediate
 See Location Map

Monitoring Well ID:
 Well Type:
 Description:

Monitoring Period: (Check all that apply) ☐ 1st Qtr ☐ 2nd Qtr ☐ 3rd Qtr ☐ 4th Qtr ☐ Annual ☐ Year
 Was the well purged before ☐ Yes ☐ No
 Date Sample Obtained:
 Time Sample Obtained:

Parameter	PARM Code	Sample Measurement	Permit Requirement	Units	Sample Type	Monitoring Frequency	Detection Limits	Analysis Method	Sampling Equipment Used	Samples Filtered (L/FIN)
Water Level Relative to NGVD	82545		Report	FEET	In-situ	Quarterly				
Arsenic, Total	01002		Report	UG/L	Grab	Quarterly				
Barium, Total	01007		Report	UG/L	Grab	Quarterly				
Beryllium, Total	01012		Report	UG/L	Grab	Quarterly				
Cadmium, Total	01027		Report	UG/L	Grab	Quarterly				
Chloride (as Cl)	00940		Report	MG/L	Grab	Quarterly				
Chromium, Total	01034		Report	UG/L	Grab	Quarterly				
Copper, Total	01042		Report	UG/L	Grab	Quarterly				
Gross Alpha	80045		Report	PC/L	Grab	Quarterly				
Iron, Total	01045		Report	UG/L	Grab	Quarterly				
Lead, Total	01051		Report	UG/L	Grab	Quarterly				
Mercury, Total	71900		Report	UG/L	Grab	Quarterly				
Nickel, Total	01067		Report	UG/L	Grab	Quarterly				
Nitrite plus Nitrate, Total (as N)	00630		Report	MG/L	Grab	Quarterly				
pH	00408		Report	SU	In-situ	Quarterly				
Selenium, Total	01147		Report	UG/L	Grab	Quarterly				
Silver, Total	01077		Report	UG/L	Grab	Quarterly				
Specific Conductance	00094		Report	UMHOS/CM	Grab	Quarterly				
Sulfate, Total	00645		Report	MG/L	Grab	Quarterly				
TOC	00680		Report	MG/L	Grab	Quarterly				
TOH	78115		Report	MG/L	Grab	Quarterly				
Turbidity	82079		Report	NTU	In-situ	Quarterly				
Vanadium, Total	01087		Report	UG/L	Grab	Quarterly				
Zinc, Total	01092		Report	UG/L	Grab	Quarterly				

COMMENTS AND EXPLANATION (Reference all attachments here):

GROUND WATER MONITORING WELL REPORT - PART D

Facility Name:
 Permit Number:
 County:

Seminole Electric Cooperative
 FL0036498
 Putnam

MWC-16R2 (Site # 34906)
 Compliance
 See Location Map

Monitoring Well ID:
 Well Type:
 Description:

Date Sample Obtained:

☐ 1st Qtr ☐ 2nd Qtr ☐ 3rd Qtr ☐ 4th Qtr ☐ Annual Year

Was the well purged before sampling? Yes ☐ No ☐

Time Sample Obtained:

Parameter	PARAM Code	Sample Measurement	Permit Requirement	Units	Sample Type	Monitoring Frequency	Detection Limits	Analysis Method	Sampling Equipment Used	Samples Filtered (L/F/N)
Water Level Relative to NGVD	82545		Report	FEET	In-situ	Quarterly				
Arsenic Total	01002		10	UG/L	Grab	Quarterly				
Barium Total	01007		2	UG/L	Grab	Quarterly				
Beryllium Total	01012		4	UG/L	Grab	Quarterly				
Cadmium Total	01027		5	UG/L	Grab	Quarterly				
Chloride (as Cl)	00940		250	MG/L	Grab	Quarterly				
Chromium Total	01034		100	UG/L	Grab	Quarterly				
Copper Total	01042		1000	UG/L	Grab	Quarterly				
Gross Alpha	80045		15	PC/L	Grab	Quarterly				
Iron Total	01045		300	UG/L	Grab	Quarterly				
Lead Total	01051		15	UG/L	Grab	Quarterly				
Mercury Total	71800		2	UG/L	Grab	Quarterly				
Nickel Total	01067		100	UG/L	Grab	Quarterly				
Nitrate plus Nitrate Total (as N)	00580		10	MG/L	Grab	Quarterly				
pH	00406		6.5 - 8.5	SU	In-situ	Quarterly				
Selenium Total	01147		50	UG/L	Grab	Quarterly				
Silver Total	01077		100	UG/L	Grab	Quarterly				
Specific Conductance	00084		Report	UMHOS/CM	Grab	Quarterly				
Sulfate Total	00945		250	MG/L	Grab	Quarterly				
TOC	00680		Report	MG/L	Grab	Quarterly				
TOH	78115		Report	MG/L	Grab	Quarterly				
Turbidity	82079		Report	NTU	In-situ	Quarterly				
Vanadium Total	01087		Report	UG/L	Grab	Quarterly				
Zinc Total	01092		5000	UG/L	Grab	Quarterly				

COMMENTS AND EXPLANATION (Reference all attachments here):

GROUND WATER MONITORING WELL REPORT - PART D

Facility Name: Seminole Electric Cooperative
 Permit Number: FL0036498
 County: Putnam
 Monitoring Period: (Check all that apply) ☐ 1st Qtr ☐ 2nd Qtr ☐ 3rd Qtr ☐ 4th Qtr ☐ Annual ☐ Year
 Monitoring Well ID: MWI-17C (Site # 35185)
 Well Type: Intermediate
 Description: See Location Map

Was the well purged before sampling? Yes ☐ No ☐
 Date Sample Obtained: _____
 Time Sample Obtained: _____

Parameter	PARM Code	Sample Measurement	Permit Requirement	Units	Sample Type	Monitoring Frequency	Detection Limits	Analysis Method	Sampling Equipment Used	Samples Filtered (L/F/N)
Water Level Relative to NGVD	82545		Report	FEET	In-situ	Quarterly				
Arsenic, Total	01002		Report	UG/L	Grab	Quarterly				
Barium, Total	01007		Report	UG/L	Grab	Quarterly				
Beryllium, Total	01012		Report	UG/L	Grab	Quarterly				
Cadmium, Total	01027		Report	UG/L	Grab	Quarterly				
Chloride (as Cl)	00940		Report	MG/L	Grab	Quarterly				
Chromium, Total	01034		Report	UG/L	Grab	Quarterly				
Copper, Total	01042		Report	UG/L	Grab	Quarterly				
Gross Alpha	80045		Report	PC/L	Grab	Quarterly				
Iron, Total	01045		Report	UG/L	Grab	Quarterly				
Lead, Total	01051		Report	UG/L	Grab	Quarterly				
Mercury, Total	71900		Report	UG/L	Grab	Quarterly				
Nickel, Total	01067		Report	UG/L	Grab	Quarterly				
Nitrite plus Nitrate, Total (as N)	00530		Report	MG/L	Grab	Quarterly				
pH	00406		Report	SU	In-situ	Quarterly				
Selenium, Total	01147		Report	UG/L	Grab	Quarterly				
Silver, Total	01077		Report	UG/L	Grab	Quarterly				
Specific Conductance	00094		Report	UMHOS/CM	Grab	Quarterly				
Sulfate, Total	00945		Report	MG/L	Grab	Quarterly				
TOC	00580		Report	MG/L	Grab	Quarterly				
TOH	78115		Report	MG/L	Grab	Quarterly				
Turbidity	82079		Report	NTU	In-situ	Quarterly				
Vanadium, Total	01087		Report	UG/L	Grab	Quarterly				
Zinc, Total	01092		Report	UG/L	Grab	Quarterly				

COMMENTS AND EXPLANATION (Reference all attachments here):

INSTRUCTIONS FOR COMPLETING THE WASTEWATER DISCHARGE MONITORING REPORT

The DMR consists of four parts--A, B, C, and D--all of which may or may not be applicable to every facility. Facilities may have one or more Part A's for reporting effluent data. All domestic wastewater facilities will have a Part B for reporting daily sample results. Part C is only applicable for domestic wastewater facilities with limited wet weather discharges permitted under Chapter 62-610.860, F.A.C. Part D is used for reporting ground water monitoring well data.

Hard copies and/or electronic copies of the required parts of the DMR were provided with the permit. All required information shall be typed or printed in ink.

In addition to filling in numerical results on various parts of the DMR, the following codes should be used and an explanation provided where appropriate. Note: Codes used by the lab for raw data may be different.

CODE	DESCRIPTION/INSTRUCTIONS
ANC	Analysis not conducted.
DRY	Dry Well
FLD	Flood disaster.
IFS	Insufficient flow for sampling.
LS	Lost sample.
MNR	Monitoring not required this period since limit is conditional.

CODE	DESCRIPTION/INSTRUCTIONS
NOD	No discharge from/to site.
OPS	Operations were shutdown so no sample could be taken.
OTH	Other. Please enter an explanation of why monitoring data were not available.
SEF	Sampling equipment failure.
TNTG	Too numerous to count (for fecal coliform bacteria only).

When reporting analytical results that fall below a laboratory's reported method detection limits or practical quantification limits, the following instructions and code should be used:

CODE	DESCRIPTION/INSTRUCTIONS
<	If the sampled value is less than the method detection limit (MDL), enter a less than sign followed by the laboratory's MDL value, e.g., < 0.001. In cases where a laboratory reports a value which is less than the parameter's practical quantification limit (PQL), but not less than the MDL, the value should be reported as the laboratory's MDL value. For example, where the MDL = 0.001, the PQL = 0.005 and the laboratory reports < 0.005 (the PQL), the value of 0.001 should be reported on the DMR.

PART A - DISCHARGE MONITORING REPORT (DMR)

Part A of the DMR is comprised of one or more sections, each having its own header information. Facility information is preprinted in the header as well as the monitoring group number, whether the limits and monitoring requirements are interim or final, and the required submittal frequency (e.g., monthly, annually, quarterly, etc.) Submit Part A based on the required reporting frequency in the header and the instructions shown in the permit. The following blanks in the header should be completed by the permittee or authorized representative:

No Discharge From Site: Check this box if no discharge occurs and, as a result, there are no data or codes to be entered for all of the parameters on the DMR for the entire monitoring group number. If there was no discharge of effluent for a particular outfall, reuse, or land application system and the DMR monitoring group includes other monitoring locations (e.g., influent sampling), the "NOD" code should be used to individually denote those parameters for which there was no discharge.

Monitoring Period: Enter the month, day, and year for the first and last day of the monitoring period (i.e., the month, the quarter, the year, etc.) during which the data on this report were collected and analyzed.

Sample Measurement: Before filling in sample measurements in the table, check to see that the data collected correspond to the limit indicated on the DMR (i.e., interim or final) and that the data correspond to the monitoring group number in the header. Enter the data or calculated results for each parameter on this row. Be sure the result being entered corresponds to the appropriate statistical base code (e.g., annual average, monthly average, single sample maximum, etc.).

No. Ex.: Enter the number of sample measurements during the monitoring period that exceeded the permit limit for each parameter. If none, enter zero.

Frequency of Analysis: The shaded areas in this column contain the minimum number of times the measurement is required to be made according to the permit. Enter the actual number of times the measurement was made in the space above the shaded area.

Sample Type: The shaded areas in this column contain the type of sample (e.g., grab, composite, continuous) required by the permit. Enter the actual sample type that was taken in the space above the shaded area.

Signature: This report must be signed in accordance with Rule 62-520.305, F.A.C. Type or print the name and title of the signing official. Include the telephone number where the official may be reached in the event there are questions concerning this report. Enter the date when the report is signed.

Comment and Explanation of Any Violations: Use this area to explain any exceedances, any upset or by-pass events, or other items which require explanation. If more space is needed, reference all attachments in this area.

PART B - DAILY SAMPLE RESULTS

Monitoring Period: Enter the month, day, and year for the first and last day of the monitoring period (i.e. the month, the quarter, the year, etc.) during which the data on this report were collected and analyzed.

Daily Monitoring Results: Record the results of daily monitoring for the parameters required to be sampled by your permit. Record the data in the units indicated. Add the results to get the Total and divide by the number of days in the month to get the Monthly Average.

Plant Staffing: List the name, certificate number, and class of all state certified operators operating the facility during the monitoring period. Use additional sheets as necessary.

PART C - LIMITED WET WEATHER DISCHARGE

This part is to be completed and submitted each month reclaimed water or effluent is discharged by a limited wet weather discharge permitted under Rule 62-610.860, F.A.C. For months with no discharge, Part C need not be submitted. All information is to be provided for each day on which the limited wet weather discharge was activated.

Month/Year: Enter the month and year during which the data on this report were collected and analyzed.

Rainfall Information: Enter the name and location of the rainfall gauging station, the source of climatological (normal rainfall) data, the cumulative rainfall for the average rainfall year, and the cumulative rainfall to date for this calendar year. The cumulative rainfall for the average rainfall year is the amount of rain, in inches, which falls during an average rainfall year from January through the month for which this part contains data. The cumulative rainfall to date for this calendar year is the total amount of rain, in inches, that has been recorded since January 1 of the current year through the month for which this DMR contains data.

Date: Enter the date on which the discharge occurred.

Duration of Discharge: Enter the number of hours, to the nearest 0.1 of an hour (0.1 hr. = 6 min.) during each day of discharge that reclaimed water was actually discharged to surface waters. Gallons Discharged: Enter the quantity in millions of gallons of reclaimed water discharged during the period shown in duration of discharge. Show the units as millions of gallons (mg), accurate to the nearest 0.01.

Average Discharge Flow Rate: Divide gallons discharged by duration of discharge (converted into days). Record in million gallons per day (MGD).

Average Upstream Flow Rate: Enter the average flow rate in the receiving stream upstream from the point of discharge for the period shown in duration of discharge. The average flow rate can be calculated based on two measurements; one made at the start and one made at the end of the discharge period. Measurements are to be made at the upstream gauging station described in the permit.

Stream Dilution Factor: Enter the actual stream dilution ratio accurate to the nearest 0.1. To calculate the factor, divide the average upstream flow rate by the average discharge flow rate.

CBOD₅: Enter the average CBOD₅ of the reclaimed water discharged during the period shown in duration of discharge.

TKN: Enter the average TKN of the reclaimed water discharged during the period shown in duration of discharge.

Total P: Enter the cumulative number of days since January 1 of the current year during which the limited wet weather discharge was activated divided by the total number of days since January 1 of the current year multiplied by 100%.

Reason for Discharge: Provide a brief explanation of the factors contributing to the need to activate the limited wet weather discharge.

PART D - GROUND WATER MONITORING REPORT

Monitoring Period: Enter the month, day, and year for the first and last day of the monitoring period (i.e. the month, the quarter, the year, etc.) during which the data on this report were collected and analyzed.

Date Sample Obtained: Enter the date the sample was taken. Also, check whether or not the well was purged before sampling.

Time Sample Obtained: Enter the time the sample was taken.

Sample Measurement: Record the results of the analysis, if the result was below the minimum detection limit, indicate that.

Detection Limits: Record the detection limits of the analytical methods used.

Analysis Method: Indicate the analytical method used. Record the method number from Chapter 62-160 or Chapter 62-601, F.A.C., or from other sources.

Sampling Equipment Used: Indicate the procedure used to collect the sample (e.g. affix, bucket/bailer, centrifugal pump, etc.)

Samples Filtered: Indicate whether the sample obtained was filtered by laboratory (L), filtered in field (F), or unfiltered (N).

Signature: This report must be signed in accordance with Rule 62-620.305, F.A.C. Type or print the name and title of the signing official. Include the telephone number where the official may be reached in the event there are questions concerning this report. Enter the date when the report is signed.

Comments and Explanation: Use this space to make any comments on or explanations of results which are unexpected. If more space is needed, reference all attachments in this area.