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ELECTRIC & WATER

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Farzie Shelton
ENVIRONMENTAL COORDINATOR, Ch E.

November 9, 1995

VIA HAND DELIVERY

Clair H. Fancy, Chief
Bureau of Air Regulation
Florida Department of Environmental Protection
Magnolia Park Courtyard
Tallahassee, Florida 32301

RE: City of Lakeland; C.D. McIntosh Unit No. 3;
Proposed Permit Amendment to PSD Permit PSD-FL-8

Dear Clair:

The City of Lakeland very much appreciates the Department of Environmental Protection's timely review of the City's request for permit amendment recently submitted regarding the above-referenced Prevention of Significant Deterioration (PSD) permit for the C.D. McIntosh Unit No. 3. The meeting last week between representatives from the Department and the City was very beneficial, and we appreciate the Department's efforts in quickly responding to the City's permit amendment request. Al Linero, Administrator of the Division of Air Resources Management's New Source Review Section, has diligently worked with the City to accomplish the permit amendment, and his efforts have been very much appreciated. While the proposed permit amendment is largely satisfactory to the City, in reviewing the proposed language, the City noted that a few of the proposed conditions may need to be clarified or revised.

Condition 2.B.

Under Condition 2.B., the draft permit amendment language requires that emissions information, including not only the pound-per-million-Btu emission rates but also the percentages of sulfur dioxide reductions, be provided to the Department on a quarterly basis. The City believes that it may be more appropriate to simply keep such records on site and available should the Department request to review the data. Any excess emissions or other potential non-compliance situations would, of course, need to be reported to the Department immediately. The City does not object to maintaining the information but is concerned that the paperwork burden may be unnecessary since the data would be available to the Department if requested. Because any excess emissions or other potential non-compliance situations would be reported immediately, the Department should not be as concerned with day-to-day information.

In addition, the language in Condition 2.B. should also be clarified to indicate that the emission limit of 0.718 pounds per million Btu heat input applies whenever blends of petroleum coke and other fuels are cofired. While this is the intent of the language, it could be

misinterpreted to mean that whenever coal and refuse are cofired, this limit would apply. We understand that this is not the intent of the language, and a simple clarification may be helpful.

To accomplish these changes, the City suggests the following language:

> Compliance with the sulfur dioxide emission limitation of 0.75 pound per million Btu heat input and percent reduction requirement shall be determined on a 30-day rolling average. ~~and submitted to the Department on a quarterly basis.~~ This compliance information shall be retained for a period of three years and made available upon request by the Department. Whenever blends of ~~coal and~~ petroleum coke with other fuels ~~or refuse~~ are cofired ~~burned~~, sulfur dioxide emissions shall not exceed 0.718 pounds per million Btu heat input based on a 30-day rolling average.

Conditions 2.C. and 2.D.

While the current Conditions 2.C. and 2.D. have not been proposed to be changed by the Department, it may be helpful to clarify that the "oil" referred to in these conditions relates to "high sulfur oil." Otherwise, these conditions could be interpreted to conflict with the new Condition 2.E. As stated below, it would also be helpful to indicate in new Condition 9 that high sulfur oil can also be used, consistent with Conditions 2.C. and 2.D. Additionally, "high sulfur oil" should be defined as oil with a sulfur content above 0.5 percent, based on weight. These changes are technical in nature and should help clarify future interpretations of the permit.

Condition 5.B.

In Condition 5.B., the Department is including additional reference methods for performing sulfur dioxide and nitrogen oxides tests. While these additional reference methods are appropriate, the PSD permit requirement to conduct performance tests applies only to the initial performance tests--not annual tests. In addition, because the sulfur dioxide emission limits are now based on a 30-day rolling average, it would not be appropriate to conduct a 3-hour annual stack test to determine compliance; rather, compliance must be determined based on the continuous emissions monitoring data. It may be helpful therefore to delete references to sulfur dioxide stack testing requirements.

Condition 6

In Condition 6, the proposed permit amendment clarifies that the fuel sampler will be used to analyze "solid fuel." While this language makes it clear that gaseous and liquid fuels would not be sampled and analyzed, it is not clear that "refuse" would not need to be sampled

and analyzed. It may therefore be better to include the word "fossil," so that the condition would clearly require that "solid fossil fuels" be sampled and analyzed.

Condition 8

It may be helpful to clarify that in Condition 8 that higher sulfur fuel may also be used, consistent with Conditions 2.C. and 2.D. In addition, while Condition 2.E. clarifies that low sulfur oil can be cofired with natural gas, it may be helpful to indicate in Condition 8 that natural gas may be cofired with any of the other fuels and fuel combinations. To accomplish these simple clarifications, the City suggests the following language:

Coal only
Low sulfur fuel oil only ($\leq$ 5 percent sulfur by weight)
Coal and up to 10 percent refuse (based on heat input)
Low sulfur fuel oil and up to 10 percent refuse (based on heat input)
Coal and up to 20 percent petroleum coke (based on weight)
Coal and up to 20 percent petroleum coke (based on weight) and 10 percent refuse (based on heat input)
High sulfur oil ($>$ 0.5 percent sulfur by weight) consistent with Conditions 2.C. or 2.D.
Natural gas only or in combination with any of the other fuels or fuel combinations listed above

Condition 9

The City questions whether it is necessary to demonstrate that the use of petroleum coke will not result in emission increases of carbon monoxide or sulfuric acid mist. As the City has explained previously, based on available information, carbon monoxide and sulfuric acid mist emissions are not expected to increase due to the use of petroleum coke--any increases in carbon monoxide emissions would be due to coal quality and combustion practices and there is no indication that sulfuric acid mist emissions will increase. At the most, because no increase in the emission factor is expected, it would be appropriate, and consistent with the federal rules cited, to provide information to the Department indicating that utilization of the unit has not increased due to the use of petroleum coke. The City respectfully requests, therefore, that carbon monoxide and sulfuric acid mist be deleted from the language in Condition 9.

The City would like to thank you and the Department's air staff again for your continued cooperation and assistance in this permit amendment process. We hope to receive a final permit amendment after the public comment period, which should expire on December 10, 1995. Once the final permit has been issued, we understand that the new or revised permit conditions from

this amendment along with the September 5, 1995, amendment will be incorporated into the Conditions of Certification during the current Site Certification Modification process. The City hopes that this process can also be completed within the next several weeks. To assist in this effort, Site Certification Conditions, as proposed to be revised, are attached to this letter and are included on a computer disk as well (WordPerfect 5.1 format).

If you or any of the Department's air staff have any questions regarding the clarification language being requested or other issues related to the PSD permit or Site Certification, please do not hesitate to contact me at (813) 499-6603 or (813) 254-3998.

Sincerely,

Farzie Shelton/arm

Farzie Shelton
Environmental Coordinator

cc: Howard Rhodes, FDEP
Al Linero, FDEP
Martin Costello, FDEP
Hamilton Oven, FDEP
Ken Kosky, KBN
Angela Morrison, HGSS

CITY VERSION

State of Florida Department of Environmental Regulation
City of Lakeland
C.D. McIntosh, Jr. Power Plant - Unit No. 3
Case No. PA 74-06-SR
CONDITIONS OF CERTIFICATION

GENERAL

Table of Contents

4. Adverse Impact

The permittee 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.

5. Right of Entry

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

a. To enter upon the permittee's premises where an effluent source is located or in which records are required to be kept under the terms and conditions of this permit; and

b. To have access to and copy all records required to be kept under the conditions of this certification; and

c. To inspect and test any monitoring equipment or monitoring method required in this certification and to sample any discharge or pollutants, and

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

6. Revocation or Suspension

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

7. Civil and Criminal Liability

This certification does not relieve the permittee from civil or criminal responsibility or liability for noncompliance with any conditions of this certification, applicable rules or regulations of the Department, or Chapter 403, Florida Statutes, or regulations thereunder.

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

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

9. 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.

10. Definitions

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

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

12. 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 or sampling.

b. All other modifications shall be made in accordance with Section 403.516, F.S.

State of Florida Department of Environmental Protection ~~Regulation~~
City of Lakeland
C.D. McIntosh, Jr. Power Plant Unit No. 3
Case No. PA 74-06-SR
CONDITIONS OF CERTIFICATION

SPECIAL

Table of Contents

State of Florida Department of Environmental Protection ~~Regulation~~
City of Lakeland
Power Plant No. 3 - Unit No. 3
Case No. PA 74-06
CONDITIONS OF CERTIFICATION

SPECIAL

I. Air

The construction and operation of the Unit No. 3 at the McIntosh Plant shall be in accordance with all applicable provisions of the Chapters ~~17-2, 17-5, and 17-7~~ 62-210 - 62-297, Florida Administrative Code. The permittee shall comply with the following conditions of certification:

A. Emission Limitations

1. Stack emissions shall not exceed those specified in Chapter ~~17-2.04(6)(e)1.~~ 62-296.405, FAC.

2. ~~The permittee shall not burn a fuel oil containing more than an average of 0.7% sulfur unless it can be demonstrated that either, a) heat efficiency is such as to insure compliance with all applicable emission limitations, or b) that a flue gas desulfurization unit is installed that will insure compliance with applicable emission limitations.~~

   a. Continuous burning of natural gas, low sulfur fuel oil (less than or equal to 0.5 percent sulfur by weight), or combinations of these two fuels with or without the use of SO_2 scrubber will be allowed.

   b. The burning of high sulfur oil or a combination of high sulfur oil and municipal refuse as an emergency fuel without the use of the SO_2 scrubber will be allowed only when the flue gas desulfurization system malfunctions to the extent that the burning of coal would cause emission limitations to be exceeded. Sulfur dioxide emitted to the atmosphere from the boiler shall not exceed 0.8 pound per million Btu under this condition.

   c. During malfunctions of equipment which cause an interruption of the coal feed to the boiler, the burning of high sulfur oil or a combination of high sulfur oil and municipal refuse will be allowed only if all flue gases are fully scrubbed by the SO_2 scrubber. Sulfur dioxide emitted to the atmosphere from the boiler shall not exceed 0.8 pound per million Btu under this condition.

3. The height of the boiler exhaust stack for Unit 3 shall be not less than 250 feet above grade. The height of stacks for future units shall be determined after review of supplemental applications.

4. Particulate emissions from the coal handling facilities:

a. The applicant shall not cause to be discharged into the atmosphere from any coal processing or conveying equipment, coal storage system, or coal transfer and loading system ~~processing coal~~, visible emissions which exceed 20 percent opacity.

b. The applicant must submit to the Department within five (5) working days after it becomes available, copies of technical data pertaining to the selected particulate emissions control for the coal handling facility. These data should include, but not be limited to, a copy of the formal bid from the successful bidder, guaranteed efficiency and emission rates, and major design parameters such as air/cloth ratio and flow rate. The Department may, upon review of these data, disapprove the use of such device if the Department determines the selected control device to be inadequate to meet the visible emission limit specified in 5 (a) above.

5. Particulate matter emitted into the atmosphere from the boiler shall not exceed:

Mode of Firing	$lb/10^6$ Btu Heat Input
Coal	0.044
Coal/Petcoke	0.044
Coal/Refuse	0.050
Coal/Petcoke/Refuse	0.050
Oil	0.070
Oil/Refuse	0.075

6. A flue gas desulfurization system will be installed to treat exhaust gases and will operate such that whenever coal or blends of coal and petroleum coke or refuse are burned, sulfur dioxide in gases discharged to the atmosphere from the boiler shall not exceed 1.2 pounds per million Btu heat input and 10 percent of the potential combustion concentration (90 percent reduction), or 35 percent of the potential combustion concentration (65 percent reduction), when emissions are less than 0.75 pounds per million Btu heat input. Compliance with the sulfur dioxide emission limitation of 0.75 pound per million Btu heat input and percent reduction requirement shall be determined on a 30-day rolling average. This compliance information shall be retained for a period of three years and made available upon request by the Department. Whenever blends of petroleum coke and with other fuels are cofired, sulfur dioxide emissions shall not exceed 0.718 pound per million Btu heat input based on a 30-day rolling average.

B. Air Monitoring Program

1. The permittee shall install and operate continuously monitoring devices for the Unit No. 3 boiler exhaust for sulfur dioxide, nitrogen dioxide and opacity. The monitoring devices shall meet the applicable requirements of ~~17-2.08, FAC~~ 40 CFR 60.45 and 60.13. In addition, the ASTM-certified automatic solid fossil fuel sampler shall be installed which produces a representative daily sample for analysis of sulfur, moisture, heating value and ash. The solid fossil fuel analysis data shall be used in conjunction with emission factors and the continuous monitoring data to calculate SO_2 reduction.

2. The permittee shall operate the ambient monitoring device for sulfur dioxide in accordance with EPA reference methods in 40 CFR Part 53 and two ambient monitoring device for suspended particulates. New and existing monitoring devices shall be located as designated by the Department. The frequency of operation shall be every six days or as specified by the Department.

3. The permittee shall maintain a daily log of fuels used and copies of fuel analyses containing information on sulfur content, ash content and heating values to facilitate calculations of emissions.

4. The permittee shall provide sampling ports into the stack and shall provide access to the sampling ports, in accordance with Standard Sampling Techniques and Methods of Analysis for The Determination of Air Pollutants from Point Sources, July 1975.

5. The ambient monitoring program may be reviewed annually beginning two years after start-up of Unit No. ~~2~~3 by the Department and the permittee.

6. Emission Control Systems:

   Prior to operation of the source, the owner or operator shall submit to the Department a standardized plan or procedure that will allow the company to monitor emission control equipment efficiency and enable the company to return malfunctioning equipment to proper operation as expeditiously as possible.

C. Stack Testing:

1. Within 60 days after achieving the maximum capacity at which the facility will be operated, but no later than 180 days after initial startup, the owner or operator shall conduct performance tests for particulates and SO_2 and promptly furnish the Department a written report of the results of such performance tests.

2. Performance tests shall be conducted and data reduced in accordance with methods and procedures in accordance with EPA or DEP-approved test methods. ~~Standard Sampling Techniques and Methods of the Determination on Air Pollutants from Point Sources, July 1975.~~

3. Performance tests shall be conducted under such conditions as the Department shall specify based on representative performance of the facility. The owner or operator shall make available to the Department such records as may be necessary to determine the conditions of the performance tests.

4. The owner or operator shall provide the Department with 30 days prior notice of the performance tests and afford the Department the opportunity to have an observer present.

5. Stack tests for particulates and NO_x ~~and SO_2~~ shall be performed annually in accordance with conditions 2, 3 and 4 above.

D. Reporting

1. Stack monitoring~~, fuel usage and fuel analysis~~ data shall be reported to the Department on a quarterly basis in accordance with 40 CFR, Part 60, Section 60.7(c),(d) and in accordance with ~~17-2.08~~ 62-297.405(1)(g), FAC. Fuel usage and fuel analysis data shall be reported to the Department on an annual basis.

2. Ambient air monitoring data shall be reported to the Department quarterly by the last day of the month following the quarterly reporting period utilizing the SAROAD or other format approved by the Department in writing.

E. Coal Characteristics and Contracts

Before approval can be granted by the Department for use of control devices, characteristics of the coal to be fired must be known. Therefore, before these approvals are granted, the applicant must submit to the Department copies of coal contracts which should include the expected sulfur content, ash content, and heat content of the coal to be fired. These data will be used by the Department in its evaluation of the adequacy of the control devices.

F. Coal Information

As an alternative to the submittal of contracts for purchase of coal under condition E above, the applicant may submit the following information:

1. The name of the coal supplier;

2. The sulfur content, ash content, and heat content of the coal as specified in the purchase contracts;

3. The location of the coal deposits covered by the contract (including mine name and seam);

4. The date by which the first delivery of coal will be made;

5. The duration of the contract; and

1. Cooling Tower Blowdown

There shall be no detectable amounts of materials added for corrosion inhibition containing zinc and chromium in cooling tower blowdown discharged to the City of Lakeland wetland treatment system. ~~On an emergency basis the on site Marsh Treatment System may be used to treat cooling tower blowdown.~~

2. pH

The pH of all discharges shall be within the range of 6.0 to 9.0.

3. Polychlorinated Biphenyl Compounds

There shall be no release to the environment of polychlorinated biphenyl compounds.

4. Chemical Wastes and Boiler Blowdown

All low volume wastes (demineralizer regeneration, cooling tower basin cleaning wastes, floor drainage, sample drains and similar wastes), metal cleaning wastes (including preheater and fireside wash) and boiler blowdown shall be treated as required for pH adjustment and removal of chemical constituents. These wastewaters will be treated in an process wastewater treatment system capable of complying with 40 CFR~~,~~ ~~Part~~ § 423.16 ~~423.12~~ and discharged with the cooling tower blowdown via a return pipeline to the Lakeland wetlands treatment system. The remaining sludge shall be disposed of in the on site FGD stabilized sludge landfill.

5. Sluice Pond Overflow

Sluice pond overflow (coal pile runoff from less than 10-year, 24-hour rainfall and bottom and fly ash transport water) shall be treated if necessary ~~required~~ to meet the requirements of 40 CFR § ~~Part~~ 423.16 ~~423.12~~ and discharged with the cooling tower blowdown to the Lakeland wetlands treatment system.

6. Flue Gas Desulfurization Sludge Pond Overflow

The flue gas desulfurization sludge pond overflow shall be treated if required to meet the requirements of 40 CFR § ~~Part~~ 423.16 ~~423.12~~ in a process waste system and discharged with the cooling tower blowdown to the Lakeland wetlands treatment system.

~~B. In-Plant Water Monitoring Program~~

~~A monitoring program shall be undertaken by the City of Lakeland on each effluent stream within the facility to determine compliance by Unit 3 with the applicable effluent guidelines of 40 CFR, Part 423.12 § 423.16 for those wastewaters discharged to the Lakeland wetlands treatment system. This monitoring program may be reviewed annually to determine the necessity for its continuance.~~

6. An opinion of counsel for the applicant that the contract(s) are legally binding and enforceable.

G. Reporting:

Beginning one month after certification the applicant shall submit to the Department a quarterly status report briefly outlining progress made on engineering design and purchase of major pieces of equipment (including control equipment). All reports and information required to be submitted under this condition shall be submitted to Mr. Hamilton S. Oven, Jr., Administrator of Power Plant Siting, Department of Environmental Protection ~~Regulation~~, 2600 Blair Stone Road, Tallahassee, Florida 32301.

H. Fuels:

The following fuels may be burned:

Coal only
Low sulfur fuel oil only (< 5 percent sulfur by weight)
Coal and up to 10 percent refuse (based on heat input)
Low sulfur fuel oil and up to 10 percent refuse (based on heat input)
Coal and up to 20 percent petroleum coke (based on weight)
Coal and up to 20 percent petroleum coke (based on weight) and 10 percent refuse (based on heat input)
High sulfur oil (> 0.5 percent sulfur by weight) consistent with Conditions I.A.2.b. or I.A.2.c.
Natural gas only or in combination with any of the other fuels or fuel combinations listed above

II. Water Discharges

Discharges during construction and operation of the Unit No. 3 shall be in accordance with all applicable provisions of Chapter 62-302 ~~17-3~~, Florida Administrative Code and 40 CFR 423, Effluent Guidelines and Standards for Steam Electric Power Generating Point Source Category. In addition, the permittee shall comply with the following conditions of certification:

A. Pretreatment Standards

Wastewater discharges from Unit No. 3 to the Lakeland wetlands treatment system shall comply with the effluent limitation guidelines contained in 40 CFR~~,~~ ~~Part~~ § 423.16 ~~423.12~~ and amendments. The specific standards applicable to the facilities as planned are:

III. Groundwater

A. General

The use of groundwater shall be minimized to the greatest extent practicable.

B. Well Criteria

The well locations shall be approved by the Southwest Florida Water Management District. Design and construction of new wells shall be in accordance with the applicable rules of the Department of Environmental Protection ~~Regulation~~ and Southwest Florida Water Management District.

C. Groundwater Use Limitations

1. Groundwater used for makeup for the cooling tower for Unit No. 3 shall be limited to emergency use only, not to exceed 0.2166 million gallons per day on an average annual basis or 5.271 mgd on a maximum daily basis from 3 new wells.

2. Daily water use from the new wells shall be reported quarterly to the Southwest Florida Water Management District.

IV. Leachate

A. Compliance

Leachate from coal storage piles, settling and treatment ponds, ~~artificial marsh, rapid infiltration beds,~~ secure land fills and flue gas desulfurization sludge ponds (FGD) shall not contaminate waters of the State (including both surface and groundwaters) in excess of the limitations of Chapters 62-302 and 62-520 ~~17-3~~, FAC.

B. Monitoring

A monitoring well system shall be used to determine whether or not leachate from the treatment ponds, ~~artificial marsh,~~ secure landfill, ash sluice ponds, and the flue gas desulfurization sludge ponds is reaching the groundwater.

1. Permittee shall collect background samples monthly commencing at least two months prior to construction of the waterwater treatment system sampling the following parameters: specific conductance, chlorides, sulfates, pH, zinc and iron.

2. The permittee shall annually monitor Arsenic, Barium, Cadmium, Lead, Mercury, Nitrates, Gross Alpha, Selenium and Silver beginning with commencement of construction of the wastewater treatment system.

3. The permittee shall monthly monitor specific conductance, chlorides, sulfates, pH, zinc and iron beginning with commencement of operation of the wastewater treatment system.

4. If any the monitoring parameters listed in paragraph 3 above exceed the average background levels by 35%, the permittee shall commence monthly monitoring on the parameters listed in paragraph 2 above.

5. A quarterly summary of the results of the monitoring shall be provided by the permittee to the Southwest District of the Department of Environmental Protection ~~Regulation~~ and to the Southwest Florida Water Management District.

6. The permittee shall keep a monthly record of the monitoring results and shall notify the Department's Southwest District Manager and the Southwest Florida Water Management District when said measurements reach 90% of the levels permitted in the water quality standards of Rule 62-520.420 ~~17-3.101~~, F.A.C.

C. Corrective Action

When the leachate monitoring system indicates significant leakage to the groundwater in the shallow aquifer, the appropriate ponds (settling spray or sludge) shall be sealed, relocated or closed, or the operation of the affected pond shall be altered in such a manner as to assure the Department that no significant contamination of the groundwater will occur.

V. Control Measures During Construction

A. Stormwater Runoff

During construction and plant operation, necessary measures shall be used to settle, filter, treat or absorb silt containing or pollutant laden stormwater runoff to limit the suspended solids to 50 mg/1 or less during rainfall periods not exceeding the 10-year, 24-hour rainfall, and to prevent an increase in turbidity to more than 29 NTUs ~~50 Jackson Turbidity Units~~ above background in waters of the State.

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

B. Sanitary Wastes

Disposal of sanitary wastes from construction toilet facilities shall be in accordance with applicable regulations of the Department and appropriate local health agency.

C. Environmental Control Program

An environmental control program 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 shall notify the Department if unexpected harmful effects or evidence of irreversible environmental damage are detected during construction, shall immediately cease work and shall provide an analysis of the problem and a plan to eliminate or significantly reduce the harmful effects or damage, and to prevent reoccurrence.

VI. Solid Wastes

Solid Wastes resulting from construction or operation shall be disposed of in accordance with the applicable regulations of Chapter ~~17-7~~ 62-701, FAC.

Open burning in connection with land clearing shall be in accordance with Chapter ~~71-5~~ 62-256, FAC, no additional permits shall be required, but the Division of Forestry shall be notified. Open burning shall not occur if the Division of forestry has issued a ban on burning due to fire hazard conditions.

VII. Operation Safeguards

The overall design and layout of the facilities shall be such as to minimize hazards to humans and the environment. Security control measures shall be utilized to prevent exposure of the public to hazardous conditions.

VIII. Solid Waste Utilization System

The solid waste utilization facility shall be designed and operated in compliance with all applicable regulations of the Department, including but not limited to Chapter ~~71-7~~ 62-701, FAC.

IX. Screening

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

X. Potable Water Supply System

The potable water supply system shall be designed and operated in conformance with Chapter ~~17-22~~ 62-550, 62-551, 62-555, and 62-560, FAC. ~~Information as required in 17-22.05 shall be submitted to the Department prior to construction and operation. The operator of the potable water supply system shall be certified in accordance with Chapter 17-16, FAC.~~

XI. Transformer and Electric Switching Gear

The foundations for transformers, capacitors, and switching gear necessary for McIntosh Unit 3 to the existing distribution system shall be constructed of an impervious material and shall be constructed in such a manner to allow complete collection and recovery of any spills or leakage of oily, toxic, or hazardous substances.

XII. Toxic, Deleterious, or Hazardous Materials

The spill of any toxic, deleterious, or hazardous materials shall be reported in the manner specified by General Condition 2.

XIII. Transmission Line

Directly associated transmission lines shall be constructed and maintained in a manner to minimize environmental impacts in accordance with Chapter 403, F.S., and Chapter ~~22~~27F-6, FAC.

A. Construction

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

2. Placement of fill in wetland areas shall be minimized by spanning such areas with the maximum transmission lines span practicable. Such areas should be bridged by maintenance or access roads.

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 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 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 DE~~R~~RP field inspectors.

6. Maintenance roads 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, shall be employed to prevent violation of water quality standards.

9. Good environmental practices as described in Environmental Criteria for Electric Transmission Systems or 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 line shall be disturbed as little as possible and such discovery shall be communicated to the Department of State, Division of Archive History and Records Management.

B. Maintenance

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

Vegetation within the right-of-way may be cut or removed no lower than the soil surface under the conductor, and for a distance up to 20 feet to either side of the outermost conductor, while maintaining the remainder of the project right-of-way by selectively clearing vegetation which has an expected mature height above 14 feet. Brazilian pepper, Australian pine and Melaleuca shall be eradicated throughout the wetland portion of the right-of-way.

2. Herbicides registered with the U.S. Environmental Protection Agency may be used for vegetation control within the transmission line easement without prior approval of the Department.

XIV. Construction in Waters of the State

No construction in waters of the State shall commence without obtaining lease or title from the Board of Trustees of the Internal Improvement Trust Fund ~~Department of Natural Resources~~.

XV. Cooling Water Treatment

A study to determine the presence of pathogenic organisms in the sewage treatment plant effluent shall be performed to determine the degree of treatment required prior to use in cooling towers. A plan or study will be developed by the Department and the Department of Health & Rehabilitative Services. Based on the number of pathogenic organisms detected, the final degree of treatment and amount of chlorination to be required will be determined by the Department.

XVI. Sanitary Waste Disposal

Sanitary waste from operating plant facilities shall be disposed of in a septic tank system, as approved by the ~~Health~~ Department of Health & Rehabilitative Services, as long as the average daily flow does not exceed 2,000 gallons per day. If the sanitary waste exceeds 2000 gpd, a properly designed treatment system shall be constructed upon receipt of approval by the Department.