

**STATE OF FLORIDA
DEPARTMENT
OF
ENVIRONMENTAL PROTECTION**



Conditions of Certification

**Progress Energy Florida
Crystal River Energy Complex
Unit 3 Nuclear Power Plant
Unit 4 and Unit 5 Fossil Plant**

PA 77-09N

XXX XX, 20XX

CONDITIONS OF CERTIFICATION Modified X/X/X

Table of Contents

	Page
I. CERTIFICATION CONTROL.....	1
II. APPLICABLE RULES	1
III. DEFINITIONS	1
IV. GENERAL CONDITIONS	2
A. Facilities Operation	2
B. Records Maintained at the Facility	3
C. Change in Discharge	3
D. Noncompliance Notification	3
E. Adverse Impact	4
F. Right of Entry.....	4
G. Enforcement.....	4
H. Revocation or Suspension.....	4
I. Civil and Criminal Liability.....	5
J. Property Rights	5
K. Severability	5
L. Review of Site Certification.....	5
M. Procedural Rights.....	6
N. Modification of Conditions.....	6
O. Transfer of Certification.....	6
P. Safety	6
Q. Screening.....	7
R. Toxic, Deleterious or Hazardous Materials	7
S. Noise	7
T. Flood Control Protection.....	7

U. Historical or Archaeological Finds	7
V. Endangered and Threatened Species.....	8
W. Dispute Resolution.....	8
X. Laboratories And Quality Assurance	8
Y. Procedures For Post-Certification Submittals.....	8
Z. Potable Water Supply System.....	10
V. CONSTRUCTION.....	11
A. Standards and Review of Plans.....	11
B. Control Measures	12
C. Environmental Control Program.....	13
D. Reporting.....	13
E. Construction in Waters of the State	13
F. Transformer and Electric Switching Gear.....	13
VI. Unit 4 & Unit 5 Specific Conditions	13
A. Air	13
1. Reporting.....	14
2. Coal Characteristics and Contracts.....	14
3. Coal Information	14
4. Natural Gas	15
B. Water Discharges	15
1. Plant Effluents and Receiving Body of Water.....	15
C. Water Monitoring Programs	16
1. Chemical Monitoring	16
2. Groundwater Monitoring.....	17
D. Percolation Pond Monitoring Requirements.....	17
E. FGD Scrubber Blowdown.....	18
F. Southwest Florida Water Management District (SWFWMD) – Groundwater.....	21
1. Withdrawal Quantities and Facilities	21
2. Submit Reports/Data	21
3. Environmental Impacts, Monitoring, and Mitigation: Environmental Assessment	22
4. Alternative Water Supply Implementation.....	23
5. Compliance Reporting.....	24

6.	Pumpage Reporting	25
7.	Distribution Flexibility	27
8.	Water quality sampling.....	27
9.	Wells.....	30
10.	Standard Conditions	31
G.	Solid Wastes	33
H.	Ash Landfill and Coal Piles	34
1.	Ash Landfill.....	34
2.	Ash Relocation Due to Installation of New Access Road to Support the Units 4 & 5 Clean Air Project.....	34
3.	Coal Pile	36
VII.	Unit 3 Specific conditions	37
A.	Air	37
B.	Water Discharges	37
C.	Groundwater – SWFWMD	37
D.	Groundwater – FDEP	37
E.	Environmental Resource Review.....	38
F.	Domestic Wastewater Treatment	39
G.	Radiological	39
1.	Decommissioning.....	39
2.	Emergency Plan.....	39
3.	Radiological Release Limitations	39
4.	Monitoring.....	40
5.	Reservation of Legal Rights	40
VIII.	Florida Department of Transportation.....	40
A.	Access Management to the State Highway System	40
B.	Overweight or Overdimensional Loads	40
C.	Use of State of Florida Right of Way or Transportation Facilities	41
D.	Standards.....	41
E.	Drainage	41
F.	Use of Air Space	41
G.	Best Management Practices	42

IX. History	42
Attachment 1: Ambient Air Monitoring Locations	43
Attachment 2: Leachate Monitoring and Testing	44
Attachment 3: Discharge Monitoring Report	47

List of Appendices

Appendix A	Current Title V Air Operation Permit
Appendix B	Air Construction Permit 0170004-013-AC
Appendix C	Air Construction Permit 0170004-014-AC
Appendix D	Air PSD Permit PSD-FL-383
Appendix E	Air PSD Permit PSD-FL-392
Appendix F	NPDES Permit FL0036366
Appendix G	NPDES Permit FL0000159
Appendix H	WUP 20004695.004
Appendix I	IWW Permit FLA016960
Appendix J	IWW Permit FLA118753

I. CERTIFICATION CONTROL

A. Pursuant to Sections 403.501-518, Florida Statutes ("F.S."), the Florida Electrical Power Plant Siting Act, this certification is issued to Progress Energy Florida, Inc (PEF) as owner/operator of Crystal River Energy Complex. The Department recognizes that Nuclear Unit 3 and Fossil Units 4 and 5 are under the control of different divisions of PEF. Unless otherwise specified, PEF shall be responsible for the compliance with the conditions herein. Violation of any conditions specific to Units 3, 4, or 5 shall solely affect the license of the responsible generating units. Under the control of these Conditions of Certification PEF will operate a 1437 MW (nominal) facility consisting of two coal-fired Units No. 4 and No. 5 (and ancillary equipment), and one 1,080 MW (nominal) nuclear plant Unit 3. These units are located on a 4,738 -acre site which is located at Township 17, Range 16, Citrus County, Florida. Existing Units 1 and 2 are not subject to this certification or these conditions.

B. The general and specific conditions contained in these Conditions of Certification, unless specifically amended or modified, are binding upon the Licensee and shall apply to the construction and operation of the certified facility. If a conflict should occur between the design criteria of this project and the Conditions of Certification, the Conditions shall prevail unless amended or modified.

II. APPLICABLE RULES

The construction and operation of the certified facility shall be in accordance with all applicable provisions of Florida Statutes and Department and Water Management District rules, including the following regulations: [Southwest Florida WMD: 40D-1, 40D-2, 40D-3, 40D-4, 40D-8, 40D-21, 40D-40] 62-4, 62-17, 62-256, 62-296, 62-297, 62-301, 62-302, 62-531, 62-532, 62-550, 62-555, 62-560, 62-600, 62-601, 62-604, 62-610, 62-620, 62-621, 62-650, 62-699, 62-660, 62-701, 62-762, 62-767, 62-769, and 62-770, Florida Administrative Code ("F.A.C."), or their successors as they are renumbered.

III. DEFINITIONS

The meaning of terms used herein shall be governed by the definitions contained in Chapter 403, F.S., 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. As used herein:

A. "Application" shall mean the Site Certification Application (SCA) for the certified facility, as supplemented.

B. "DEP" or Department shall mean the Florida Department of Environmental Protection.

C. "DHR" shall mean the Florida Department of State, Division of Historical Resources.

D. "Emergency conditions" shall mean urgent circumstances involving potential adverse consequences to human life or property as a result of weather conditions or other calamity, and necessitating new or replacement gas pipeline, transmission lines, or access

facilities.

E. "Facility" shall mean the certified electrical power generation facility and all associated structures, including but not limited to: nuclear steam generating unit, fossil steam boilers, steam turbine generators, transformers, associated transmission lines, substations, fuel and water storage tanks, air and water pollution control equipment, storm water control ponds and facilities, cooling towers, ash landfill, coal pile and related structures.

F. "Feasible" or "practicable" shall mean reasonably achievable considering a balance of land use impacts, environmental impacts, engineering constraints, and costs.

G. "FFWCC" shall mean the Florida Fish and Wildlife Conservation Commission.

H. "Licensee" means an applicant that has obtained a certification order for the subject project.

I. "NPDES permit" shall mean the federal National Pollutant Discharge Permit System permit issued in accordance with the federal Clean Water Act.

J. "Power plant" shall mean the electric power generating plant and associated structures to be modified or constructed on the certified site, as generally depicted in the Application.

K. "Project" shall mean the Units 3, 4 and 5 electrical power generating facility and all associated facilities.

L. "PSD permit" shall mean the federal Prevention of Significant Deterioration air emissions permit issued in accordance with the federal Clean Air Act.

M. "SWFWMD" shall mean the Southwest Florida Water Management District.

N. "Title V permit" shall mean the federal permit issued in accordance with Title V of the federal Clean Air Act

IV. GENERAL CONDITIONS

These General Conditions shall be applicable to all areas of the certified site. Compliance with the General Conditions shall be the joint responsibility of Progress Energy Nuclear Plant (Unit 3) and Progress Energy Fossil Fuel Plant (Units 4 and 5). Any violation of a General Condition shall be a violation by Progress Energy Florida.

A. Facilities Operation

1. The Licensee shall at all times properly operate and maintain the facility and related appurtenances, and systems of treatment and control that are installed and used to achieve compliance with the conditions of this certification, and are 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 approval and when required by Department rules.

2. In the event of a prolonged [thirty (30) days or more] equipment malfunction or shutdown of pollution control equipment, facility operation may be allowed to resume and continue to take place under an appropriate Department order, provided that the Licensee demonstrates that such operation will be in compliance with all applicable ambient air

quality standards and PSD increments, water quality standards and rules, solid waste rules, domestic wastewater rules and industrial wastewater rules. During such malfunction or shutdown, the operation of the facility shall comply with all other requirements of this certification and all applicable state and federal emission and effluent standards not affected by the malfunction or shutdown.

B. Records Maintained at the Facility

1. These Conditions of Certification or a copy thereof shall be kept at the work site of the approved activity.

2. The Licensee shall hold at the facility, or other location designated by this approval, records of all monitoring information, including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation required by this approval, copies of all reports required by this approval, and records of all data used to complete the application for this approval. These materials shall be retained at least three (3) years from the date of the sample, measurement, report, or application unless otherwise specified by Department rule. The Licensee shall provide copies of these records to the Department upon request. If the Licensee becomes aware of relevant facts that were not submitted or were incorrect in any report to the Department, such facts or information shall be promptly submitted or corrected.

C. Change in Discharge

All discharges or emissions authorized herein shall be consistent with the terms and conditions of this certification. The discharge of any regulated pollutant not identified in the application, or more frequently 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 modifications which may result in new, different or increased discharges or pollutants, change in fuel, or expansion in steam generating capacity must be reported by submission of an application for amendment or modification pursuant to Section 403.516, F.S.

D. Noncompliance Notification

If, for any reason, the Licensee does not comply with or is unable to comply with any limitation specified in this certification, the Licensee shall notify the Southwest District Office of the Department by telephone during the working day that said noncompliance occurs. After normal business hours, the Licensee shall report any condition that poses a public health threat to the State Warning Point at telephone number (850) 413-9911 or (850) 413-9912. The Licensee shall confirm this situation to the DEP District Office in writing within seventy-two (72) hours of becoming aware of such conditions and shall supply the following information:

1. A description of the discharge and cause of noncompliance; and,
2. The period of noncompliance, including exact dates and times; or, if not corrected, the anticipated time the noncompliance is expected to continue, and,
3. Steps being taken to reduce, eliminate and prevent recurrence of the non-complying event.

E. Adverse Impact

The Licensee shall take all reasonable steps to minimize any adverse impact resulting from noncompliance with any limitation specified in this certification, including such accelerated or additional monitoring as necessary to determine the nature and impact of the non-complying event.

F. Right of Entry

The Licensee shall allow authorized Department personnel, including authorized representatives of the Florida Department of Environmental Protection, Water Management Districts, and/or United States Environmental Protection Agency, when applicable, upon presentation of credentials or other documents as may be required by law, and at reasonable times, and recognizing the security that must be maintained at the facility, depending upon the nature of the concern being investigated:

1. To enter upon the Licensee'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,
2. To have access to and copy any records required to be kept under the conditions of this certification; and,
3. To inspect and observe the permitted facilities, equipment, practices, or operations regulated or required under these Conditions to determine compliance with the approved plans, specifications and conditions of this certification; and,
4. To sample or monitor any substances or parameters at any location necessary to assure compliance with these Conditions or Department rules.

G. Enforcement

1. The terms, conditions, requirements, limitations and restrictions set forth in these Conditions of Certification are binding and enforceable pursuant to Sections 403.141, 403.161, and 403.514, F.S. Any noncompliance with a Condition of Certification or condition of a federally delegated or approved permit constitutes a violation of Chapter 403, F.S., and is grounds for enforcement action, permit termination, permit revocation, or permit revision. The Licensee is placed on notice that the Department will review this approval periodically and may initiate enforcement action for any violation of these conditions.

2. All records, notes, monitoring data and other information relating to the construction or operation of this certified source which are submitted to the Department may be used by the Department as evidence in any enforcement case involving the certified source arising under the Florida Statutes or Department Rules, except where such evidence shall only be used to the extent it is consistent with the Florida Rules of Civil Procedure and appropriate evidentiary rules.

H. Revocation or Suspension

This certification may be suspended or revoked pursuant to Section 403.512, F.S., or for violations of any of these Conditions of Certification. This approval is valid only for the specific processes and operations identified within the application and indicated in the approved drawings or exhibits. Any unauthorized deviation from the approved drawings, exhibits,

specifications, or conditions of this approval may constitute grounds for revocation and enforcement action by the Department. Any enforcement action, including suspension and revocation, shall only affect the certified facilities that are the cause of such action, and other facilities at the Crystal River Energy Complex shall remain unaffected by such action.

I. Civil and Criminal Liability

1. This certification does not relieve the Licensee from civil or criminal penalties for noncompliance with any conditions of this certification, applicable rules or regulations of the Department, or Chapter 403, F.S., or regulations thereunder.

2. This certification does not relieve the Licensee 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 Licensee to cause pollution in contravention of Florida Statutes and Department rules, unless specifically authorized by an order from the Department.

3. As provided in Sections 403.087(7), 403.511, and 403.722(5), F.S., the issuance of this certification 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 any infringement of federal, state, or local laws or regulations. This approval is not a waiver of any other Department approval that may be required for other aspects of the total project under federally delegated programs.

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

J. Property Rights

The issuance of this certification does not convey any property rights in either real or personal property, or 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 shall obtain title, lease or right of use from the State of Florida, to any sovereign submerged lands utilized by the project.

K. 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.

L. 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 certification the Department will 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 Licensee's compliance with the conditions of this certification and the environmental impact of this facility. Such review will be repeated at least every five years thereafter.

M. Procedural Rights

Except as specified in Chapter 403, F.S., or Chapter 62-17, F.A.C., no term or condition of certification shall be interpreted to preclude the post-certification exercise by the Licensee of whatever procedural rights it may have under Chapter 120, F.S., including those related to rule-making proceedings.

N. Modification of Conditions

Pursuant to Sections 403.516(1)(a) and 120.569(2)(n), F.S., and Rule 62-17.211, F.A.C., the Siting Board hereby delegates the authority to the Department of Environmental Protection to modify, after notice and receipt of no objection by a party or other substantially affected person, any conditions which would not otherwise require approval by the Siting Board. In addition, the Department is delegated the authority to modify conditions as follows:

1. The certification shall be modified to conform to subsequent DEP-issued amendments, modifications, or renewals of any separately issued federal permits such as Prevention of Significant Deterioration (PSD) permit, Title V Air Operation permit, Underground Injection Control (UIC) permit, or National Pollutant Discharge Elimination System (NPDES) permit for the project. In the event of a conflict, the more stringent of the conditions of such permits or of these Conditions of Certification shall be controlling.
2. Any anticipated facility expansions, production increases, or process modifications which may result in new, different or increased discharge or emission of pollutants, change in fuel, or expansion in generating capacity must be reported by submission of an appropriate application for amendment, modification, or certification.
3. The Licensee may file a petition for modification with the department, or the department may initiate the modification upon its own initiative.
4. DEP shall make a good faith effort to give written notice to the parties to the original certification, at their last address of record, of any proposed modification of certification.

[Sections 120.569(2)(n), 403.511(5)(a) and 403.516, F.S.; Rule 62-17.211 and Chapter 62-343, F.A.C.]

O. Transfer of Certification

This certification is transferable only upon Department approval in accordance with Section 403.516, F.S., and Rules 62-17.211(3) and 62-730.300, F.A.C., as applicable. The Licensee shall be liable for any noncompliance of the approved activity until the transfer is approved by the Department.

P. Safety

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

Q. Screening

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

R. Toxic, Deleterious or Hazardous Materials

1. The Licensee shall not discharge to surface waters wastes which are acutely toxic, or present in concentrations which are carcinogenic, mutagenic, or teratogenic to human beings or to significant locally occurring wildlife or aquatic species. The Licensee shall not discharge to ground waters wastes in concentrations which, alone or in combination with other substances, or components of discharges (whether thermal or non-thermal) are carcinogenic, mutagenic, teratogenic, or toxic to human beings (unless specific criteria are established for such components in Rule 62-520.420, F.A.C.) or are acutely toxic to indigenous species of significance to the aquatic community within surface waters affected by the ground water at the point of contact with surface waters.

2. The Licensee shall report all spills of materials having potential to significantly pollute surface or ground waters and which are not confined to a building or similar containment structure, by telephone immediately after discovery of such spill. The Licensee shall submit a written report within forty-eight hours, excluding weekends, from the original notification. The telephone report shall be submitted by calling the DEP District Office Industrial Wastewater Compliance/Enforcement Section. After normal business hours, the Licensee shall contact the State Warning Point by calling (850) 413-9911 or (850) 413-9912. The written report shall include, but not be limited to, a detailed description of how the spill occurred, the name and chemical make-up (include any MSDS sheets) of the substance, the amount spilled, the time and date of the spill, the name and title of the person who first reported the spill, the size and extent of the spill and surface types (impervious, ground, water bodies, etc.) it impacted, the cleanup procedures used and status of completion, and include a map or aerial photograph showing the extent and paths of the material flow. Any deviation from this requirement must receive prior approval from the Department.

S. Noise

Construction noise shall not exceed noise criteria or any applicable requirements of Citrus County.

T. Flood Control Protection

Any new facilities for the certified facilities or associated facilities shall be constructed in such a manner as to comply with the appropriate County flood protection requirements, which may include flood proofing or raising the elevation of the new or expanded facilities above the 100-year flood level. However, existing facilities are not required to be modified to comply with such flood control protection standards.

U. Historical or Archaeological Finds

If historical or archaeological artifacts, such as Indian canoes, are discovered at any time within the certified site, the Licensee shall notify the DEP District office and the Bureau of Historic Preservation, Division of Historical Resources, R.A. Gray Building, Tallahassee,

Florida 32399, telephone number (850) 487-2073.

V. Endangered and Threatened Species

Prior to start of construction, the Licensee shall survey the portion of the certified site which may be affected by construction for endangered and threatened species of animal and plant life. Plant species listed as endangered or threatened by the federal government and plant species listed as endangered by the state shall be transplanted to an appropriate area if practicable. Gopher tortoises and any commensals on the rare or endangered species list shall be relocated after consultation with the FFWCC. A relocation program, as approved by the FFWCC, shall be followed. Entombment of gopher tortoises shall not be allowed.

W. Dispute Resolution

If a situation arises in which mutual agreement cannot be reached between the Licensee and an agency exercising its regulatory jurisdiction under these conditions, then the matter shall be immediately referred to the Division of Administrative Hearings (DOAH) for disposition in accordance with the provisions of Chapter 120, F.S.

X. Laboratories and Quality Assurance

1. The Licensee shall ensure that all laboratory analytical data submitted to the Department, as required by this Certification, are from a laboratory which has a currently valid and Department approved Comprehensive Quality Assurance Plan (CompQAP) or a CompQAP pending approval for all parameters being reported, as required by Chapter 62-160, F.A.C.

2. The Licensee shall ensure that all samples required pursuant to this certification are taken by an appropriately trained technician following EPA and Department approved sampling procedures and chain-of-custody requirements in accordance with Chapter 62-160, F.A.C. All chain-of-custody records shall be retained on-site for at least three (3) years and made available to the Department immediately upon request.

3. Records of monitoring information shall include:

the date, exact place, and time of sampling or measurements;

- a) the person responsible for performing the sampling or measurements;
- b) the dates analyses were performed;
- c) the person responsible for performing the analyses;
- d) the analytical techniques or methods used; and,
- e) the results of such analyses.

Y. Procedures for Post-Certification Submittals

1. The Licensee shall provide within 90 days after certification a complete summary of those submittals identified in the Conditions of Certification where due-dates for information required of the Licensee are identified. Such submittals shall include, but are not limited to, monitoring reports, management plans, wildlife surveys, etc. The summary shall be provided to the Siting Coordination Office and any affected agency or agency subunit to whom

the submittal is required to be provided, in a sortable spreadsheet, via CD and hard copy, in the format identified below or equivalent. (62-17.191, F.A.C.)

<u>Condition Number</u>	<u>Requirement and timeframe</u>	<u>Due Date</u>	<u>Name of Agency or agency subunit to whom the submittal is required to be provided</u>

2. Purpose of Submittals: Conditions of Certification which provide for the post-certification submittal of information to DEP or other agencies by the Licensee are for the purpose of facilitating monitoring by the Department of the effects arising from the certified facilities. This monitoring is for DEP to assure, in consultation with other agencies with applicable regulatory jurisdiction, continued compliance with the conditions of certification, without any further agency action.

3. Filings: All post-certification submittals of information by the Licensee or copies of applications for separate federal permits which are to be issued by State agencies are to be filed with DEP Siting Office. Copies of each submittal shall also be simultaneously copied to any other agency indicated in the specific conditions requiring the post-certification submittals.

4. Completeness: The DEP shall promptly review each post-certification submittal for completeness. This review shall include consultation with the other agencies receiving the post-certification submittal. For the purposes of this condition, completeness shall mean that the information submitted is both complete and sufficient. If the submittal is found to be incomplete, the Licensee shall be so notified. Failure to issue such a notice within forty-five (45) days after filing of the submittal shall constitute a finding of completeness. (62-17.191, F.A.C.)

5. Interagency Meetings: Within sixty (60) days of the filing of a complete post-certification submittal, DEP may conduct an interagency meeting with other agencies which 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 nor to delay the time frames for review established by these conditions.

6. Reasonable Assurance of Compliance: Within ninety (90) days of the

filing of a complete post-certification submittal, unless another date is specified herein, DEP shall give written notification to the Licensee and the agencies to which the post-certification information was submitted of its determination whether there is reasonable assurance of compliance with the conditions of certification. If it is determined that reasonable assurance has not been provided, the Licensee shall be notified with particularity and possible corrective measures suggested. Failure to notify the Licensee in writing within ninety (90) days of receipt of a complete post-certification submittal shall constitute a determination of reasonable assurance of compliance.

Z. Public Water System

Any new or modified component of the potable water supply system shall be designed and operated in conformance with applicable Chapters of 62-550, 62-555, and 62-560, F.A.C. Information as required in 62-555, F.A.C, shall be submitted to the Department prior to construction and operation of any new or modified components of the system. The operator of the potable water supply system shall be certified in accordance with Chapter 62-699, F.A.C. Potable water for Unit 3 shall continue to be provided by the separate potable water treatment system operated by Units 1 and 2.

[Chapters 62-550, 555, 560, and 699, F.A.C.]

AA. Environmental Resource Surface Water Management

1. All new surface water management systems, or alterations of existing stormwater management systems, shall be operated to conserve water in order to maintain environmental quality and resource protection; to increase the efficiency of transport, application and use; to decrease waste; to minimize unnatural runoff from the property and to minimize dewatering of offsite property.

2. At least 48 hours prior to commencement of any surface water management activity authorized by the Department, the Licensee shall submit to the Department's Southwest District Office and to the Siting Coordination Office a written notification of commencement using an "Environmental Resource Permit Construction Commencement" notice (Form No. 62-343.900(3), F.A.C.) indicating the actual start date and the expected completion date of the activity.

3. Each phase or independent portion of any surface water management system must be completed in accordance with the approved plans and Conditions prior to the occupation of the site or operation of site infrastructure located within the area served by that portion or phase of the system.

4. Within 30 days after completion of construction of the approved activity, the Licensee shall submit a written statement of completion and certification by a registered professional engineer or other appropriate individual as authorized by law, to the DEP Southwest District Office and to the Siting Coordination Office utilizing the required "Environmental Resource Permit As-Built Certification by a Registered Professional" (Form No. 62-343.900(5), F.A.C.), and "Request for Transfer of Environmental Resource Permit Construction Phase to Operation Phase" (Form 62-343-900(7), F.A.C.). Additionally, if deviations from the approved drawings are discovered during the certification process the certification must be accompanied by a copy of the approved drawings with deviations noted.

5. Each Department approval is valid only for the specific processes, operations and designs indicated on the approved drawings or exhibits submitted in support of the application specific to the associated project. Any substantial deviation from the approved drawings, exhibits, specifications or conditions, including construction within the total land area but outside the approved project area(s), may constitute grounds for revocation or enforcement action by the Department, unless a modification has been applied for and approved. Examples of substantial deviations include excavation of ponds, ditches or sump areas deeper than shown on the approved plans.

6. The operation phase of any system approval shall not become effective until the Licensee has complied with the requirements of the conditions herein, and the Department determines the system to be in compliance with the permitted plans.

[Rule 40D-4.381, F.A.C.]

V. CONSTRUCTION

A. Standards and Review of Plans

1. All construction at the certified facility shall be pursuant to the design standards presented in the application or amended application and the standards or plans and drawings submitted and signed by an engineer registered in the state of Florida. Specific Southwest DEP District Office acceptance of plans will be required based upon a determination of consistency with approved design concepts, regulations, and these conditions prior to initiation of construction of any: industrial waste treatment facility; domestic waste treatment facility; potable water treatment and supply system; ground water monitoring system, storm water runoff system; solid waste disposal area; and hazardous or toxic handling facility or area. The Licensee shall present specific plans for these facilities for review by the DEP Southwest District Office at least ninety (90) days prior to construction of those portions of the facility for which the plans are then being submitted, unless other time limits are specified in the following conditions herein. Review and approval or disapproval shall be accomplished in accordance with Chapter 120, F.S., or these conditions of certification as applicable. The Licensee shall not proceed with construction without a written authorization from the Department.

2. The Department must be notified in writing and prior written approval obtained for any material change, modification, or revision to be made to the project during construction which is in conflict with these conditions of certification. If there is any material change, modification, or revision made to a project approved by the Department without this prior written approval, the project will be considered to have been constructed without departmental approval, the construction will not be cleared for service, and the construction will be considered a violation of the conditions of certification.

3. Ninety (90) days prior to the anticipated date of first operation, the Licensee shall provide the Southwest District and the Siting coordination Office of the Department with an itemized list of any changes made to the facility design and operation plans that would affect a change in discharge as referenced in Condition IV.C. since the time of the approval of these conditions. This pre-operational review of the final design and operation shall demonstrate continued compliance with Department rules and standards.

4. Final drainage plans illustrating any new or modified stormwater treatment

facilities and conveyances for construction phases of the certified facility site shall be submitted to the DEP Southwest District Manager and the SWFWMD as applicable for review and approval prior to construction of any such conveyance or facility. The Department shall indicate its approval or disapproval within 60 days of the submittal. Analysis report of the produced ground samples shall be submitted 30 days before surface water discharge begins.

B. Control Measures

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 at the POD during rainfall periods not less than the 10-year, 24-hour rainfall, and to prevent an increase in turbidity to more than 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, after opportunity for reasonable mixing as defined in II.A.8.

Any open burning in connection with initial land clearing shall be in accordance with Chapter 62-256 and 5I-2, F.A.C., Uniform Fire Code Section 33.101 Addendum, and any other applicable County regulations. Any burning of construction-generated material, after initial land clearing that is allowed to be burned in accordance with Chapter 62-256, F.A.C., shall be reviewed by the DEP Southwest District office in conjunction with the Division of Forestry and any other county regulations that may apply. Burning shall not occur if not approved by the appropriate agency or if the Department or the Division of Forestry has issued a ban on burning due to fire safety conditions or due to air pollution conditions.

Disposal of sanitary wastes from construction toilet facilities shall be in accordance with applicable regulations of the appropriate local health agency. The sewage treatment plant shall be operated in accordance with Chapters 17-3, 17-16, and 17-19, F.A.C.

Solid wastes resulting from construction shall be disposed of in accordance with the applicable regulations of Chapter 62-701, F.A.C.

Construction noise shall not exceed noise criteria or any applicable requirements of Citrus County. To mitigate the effects of noise produced by any steam blowout of steam boiler tubes, the Licensee shall conduct reasonable public awareness campaigns prior to such activities to forewarn the public that may be affected by the noise of the estimated time and duration of the noise.

The Licensee shall employ proper odor and dust control techniques to minimize odor and fugitive dust emissions. The applicant shall employ control techniques sufficient to prevent nuisance conditions which interfere with enjoyment of residents of adjoining property.

Directly associated transmission lines from the facility electric switchyard to existing transmission lines shall be maintained in accordance with the application and the appropriate state and federal regulations concerning use of herbicides. The Licensee shall notify the Department of the type of herbicides to be used at least 60 days prior to their first use.

The Licensee shall develop the site so as to retain the buffer of natural vegetation as described in the Units 4 and 5 application and in Condition IV.Q. Screening.

Dewatering operations during construction shall be carried out in accordance with subsection 62-621.300(2), F.A.C.

C. Environmental Control Program

An environmental control program shall be established under the supervision of a Florida registered professional engineer or other qualified person to assure that all construction activities conform to applicable environmental regulations and the applicable conditions of certification. If a violation of standards, harmful effects or irreversible environmental damage not anticipated by the application or the evidence presented at the certification hearing are detected during construction, the Licensee shall notify the DEP Siting Office and Southwest District Office as required by Condition IV. D., Noncompliance Notification.

D. Reporting

Notice of commencement of construction shall be submitted to the Siting Coordination Office and the DEP Southwest District Office within fifteen (15) days of initiation. Starting three (3) months after construction commences, a quarterly construction status report shall be submitted to the DEP Southwest District Office. The report shall be a short narrative describing the progress of construction.

E. Construction in Waters of the State

No construction on sovereignty submerged lands shall commence without obtaining lease or title from the Department of Environmental Protection Natural Resources. Construction of intake and discharge structures should be done in a manner to minimize turbidity. Sheet piles or turbidity screens should be used if necessary to prevent turbidity in excess of 50 JTU above background beyond 150 meters from the POD and/or construction site.

F. Transformer and Electric Switching Gear

The foundations for any new or modified transformers, capacitors, and switching gear necessary for Crystal River Units 3, 4 and 5 to connect to the existing transmission 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.

VI. UNIT 4 & UNIT 5 SPECIFIC CONDITIONS

The following Specific Conditions shall apply only to Unit 4 and Unit 5. Compliance with these Specific Conditions shall be the responsibility of Progress Energy (Fossil).

A. Air

The construction and operation of the Units No. 4 and 5 at the Crystal River steam electric plant site shall be in accordance with all applicable provisions of the Chapters 62-210 through 62-297, and 62-702, F.A.C.

Title V Air Operation Permit 0170004-015-AV, Air Construction Permits 0170004-013-AC and 0170004-014-AC (including subsequent modifications), and PSD permit PSD-FL-383 (including subsequent modifications) are incorporated by reference herein as part of this Certification and attached as Appendix A through Appendix D.

The provisions of the above shall be conditions of this certification. The Licensee

shall comply with the substantive provisions and limitations set forth in Title V Air Operation Permit Number 0170004-015-AV, Air Construction Permits 017004-013-AC and 017004-014-AC, and PSD permit PSD-FL-383 as part of these Conditions of Certification, and as those provisions may be modified, amended, or renewed in the future by the Department. Such provisions shall be fully enforceable as conditions of this certification. Any violation of such provisions shall be a violation of these Conditions of Certification.

In addition to the foregoing, the Licensee shall comply with the following specific conditions of certification: Note that Sections 2 and 3 below (in italics) will be automatically deleted once a Title V permit is issued signifying the successful start-up and operation of the flue gas desulfurization system:

1. Reporting

a) For each unit, stack monitoring, fuel usage and fuel analysis data shall be reported to the Department on a quarterly basis commencing with the start of commercial operation in accordance with 40 CFR, Part 60, Section 60.7, and in accordance with Rule17-2.08, F.A.C.

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

c) Beginning one month after certification the Licensee 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 the Administrator of Power Plant Siting, Department of Environmental Regulation, 2600 Blair Stone Road, Tallahassee, Florida 32301.

2. 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 Licensee 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. Also, the Licensee must demonstrate the ability to acquire a low sulfur coal supply of sufficient length to enable the installation of sulfur removal equipment if the supplies of low sulfur coal should not become available or be discontinued. Therefore, the coal contracts must be for a period of at least five (5) years from the date of start-up of the boiler.

3. Coal Information

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

- a) *The name of the coal supplier;*
- b) *The sulfur content, ash content, and heat content of the coal as specified in the purchase contracts;*

- c) *The location of the coal deposits covered by the contract (including mine name and seam);*
- d) *The date by which the first delivery of coal will be made;*
- e) *The duration of the contract; and*
- f) *An opinion of counsel for the Licensee that the contracts are legally binding.*

4. Natural Gas

Natural Gas may be used as a startup and low-load flame stabilization fuel in Unit 4 and Unit 5.

B. Water Discharges

Any discharges into any waters of the State during construction and operation of the Units 4 & 5 shall be in accordance with all applicable provisions of Chapter 17-3, F.A.C., and 40 CFR 423, *Effluent Guidelines and Standards for Steam Electric Power Generating Point Source Category* and with NPDES permit no. FL 0036366-006-IW1S/NR (attached as Appendix F) as well as any subsequent modifications, amendments and/or renewals. Also, the Licensee shall comply with the following conditions of certification:

1. Plant Effluents and Receiving Body of Water

For discharges made from the power plant the following conditions would apply:

a) Receiving Body of Water (RBW)

The receiving body of water will be determined by the Department to be those waters affected which are considered to be waters of the State within the definition of Chapter 403, F. S.

b) 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.

c) Thermal Mixing Zone

The zone of thermal mixing for cooling tower blowdown shall not extend beyond the western end of the north bank of the existing discharge canal. During discharge, the blowdown from the cooling tower for Units No. 4 & 5 shall be withdrawn at the point of lowest temperature of the recirculating cooling water prior to the addition of makeup water.

d) Chemical Wastes and Boiler Blowdown

All discharges of 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 comply with Chapter 17-3, F.A.C. If violations of Chapter 17-3, F.A.C., occur, corrective action shall be taken. These wastewaters shall be discharged to an adequately sized and constructed percolation

pond.

e) Coal Pile and Ash Landfill Runoff

Coal pile runoff and ash landfill runoff from less than 10-year 24-hour rainfall shall be treated if required by Special Condition IV.F.8. and discharged to an adequately sized and constructed percolation ditch system.

f) Cooling Tower Blowdown

The cooling tower blowdown shall contain no detectable amounts of materials added for corrosion inhibition, unless prior approval for use of such material has been granted by the Department upon demonstration that the discharge is not toxic to aquatic life, does not contain priority pollutants and will not result in pollutant concentrations in excess of water quality standards.

g) Chlorine

The quantity of free available chlorine discharged in the blowdown from the cooling tower shall not exceed 0.5 mg/l at any one time and shall not exceed 0.2 mg/l as an average. Neither free available chlorine nor total residual chlorine may be discharged from either unit for more than two hours in any one day and Units 4 or 5 may not discharge chlorine while any other unit is discharging chlorine.

h) pH

The pH of all discharges shall be such that the pH of water in the discharge canal shall be within the range of 6.0 to 8.5, at a distance of 150 meters from the POD into the canal.

i) Polychlorinated Biphenyl Compounds

There shall be no discharge of polychlorinated biphenyl compounds.

C. Water Monitoring Programs

The Licensee shall monitor and report to the Department the listed parameters on the basis specified herein. The methods and procedures utilized shall receive written approval by the Department. The monitoring program may be reviewed annually by the Department, and a determination may be made as to the necessity and extent of continuation, and may be modified in accordance with Condition N of the General Conditions of Certification.

1. Chemical Monitoring

The following parameters shall be monitored as shown during discharge commencing with the start of commercial operation of the first unit and reported quarterly to the Department:

Parameter	Location	Sample Type	Frequency
Flow, Groundwater	Well field Pipeline	Recorder	Totalizer
Flow, Discharge	C.T. Outfall*	Recorder	Totalizer

Conductivity	C.T. Outfall	Recorder	Continuous
pH	C.T. Outfall	Grab**	Daily
Temperature	C.T. Outfall	Recorder	Continuous
TDS	C.T. Outfall	Grab	Weekly
Total Residual Oxidants	C.T. Outfall	Recorder	Continuous

* Cooling Tower Outfall Pipe

** Representative Sample

2. **Groundwater Monitoring**

a) The groundwater levels shall be monitored continuously at wells as approved by Southwest Florida Water Management District. Chemical analyses shall be made on samples from all monitored wells identified in Condition III.F. below. The location, frequency and selected chemical analyses shall be as given in Condition III.F.

b) The groundwater monitoring program shall be implemented at least one year prior to operation of Crystal River No. 4. The chemical analyses shall be in accord with the latest edition of *Standard Methods for the Analysis of Water and Wastewater*. The data shall be submitted within 30 days of collection/analysis to the Southwest Florida Water Management District (SWFWMD) and to the DEP Southwest District Office.

c) Conductivity and heavy metals shall be monitored in wells around all ash disposal sites and coal piles.

D. **Percolation Pond Monitoring Requirements**

1. Upon beginning operation of the coal pile runoff and leachate treatment system, the Licensee shall sample and analyze the wastewater in the percolation pond for the following parameters on a quarterly basis: pH, specific conductance, total recoverable arsenic, total recoverable barium, total chlorides, total recoverable iron, total recoverable magnesium, total recoverable sodium, total dissolved solids, total recoverable vanadium, and total recoverable zinc. Results shall be submitted in accordance with Condition VI.D.3 below.

2. If the appropriate primary ground water quality criteria specified in Chapter 62-520, F.A.C., is not met in the percolation pond for the parameters listed in Condition VI.D.1., the Department shall re-evaluate the Licensee's current monitoring requirements and may require the Licensee to submit a proposed ground water monitoring plan in accordance with Rule 62-522.600, F.A.C., for this percolation pond system.

3. Effluent monitoring test results shall be submitted on Part A of DEP Form 62-620.910(10) (Attachment 3). Results shall be submitted with the DMR for each month listed in the following schedule.

Sample Period	Report Due Date
January – March	April 28
April – June	July 28

July – September	October 28
October – December	January 28

4. The permittee shall make copies of the attached DMR form(s) and shall submit the original completed DMR form(s) to the Siting Office and a copy to the Department's SWD, Industrial Wastewater Program.

E. FGD Scrubber Blowdown and By-Products Handling

1. FGD scrubber blowdown wastewater shall be discharged to approved treatment systems. Any such receiving treatment system shall be permitted/licensed in accordance with all applicable requirements.

a. The Licensee may, on a temporary basis, employ the use of a filter press to treat FGD blowdown wastewater from Units 4 & 5 prior to completion of the FGD ponds. The Industrial Wastewater (IWW) Permit FLA016960, which is incorporated by reference herein as part of this Certification and attached as Appendix I, authorizes the use of the temporary filter press as an alternative clarification of the FGD blowdown.

b. Construction and monitoring of the proposed monitoring well MWC-31 to be located in the vicinity of the proposed FGD blowdown ponds is authorized under the IWW Permit FLA016960. Construction and Operational requirements are specified under Section III. of the IWW Permit FLA016960.

c. Certification of Construction Completion. All information required by this Specific Condition shall be signed and sealed by a registered professional engineer or land surveyor as appropriate. After construction has been completed and prior to the operation of the FGD ponds, the following activities shall be completed and submitted by the Licensee, and shall be approved by the Department in accordance with Condition IV.Y. Procedures for Post-Certification Submittals:

i. The owner or operator shall submit a Certification of Construction Completion, Form 62-701.900(2), signed and sealed by the professional engineer in charge of construction and quality assurance to the Department for approval, and shall arrange for Department representatives to inspect the construction in the company of the Licensee, the engineer, and the facility operator.

ii. The owner or operator shall submit Record Drawings/Documents showing all changes (i.e. all additions, deletions, or revisions to the plans previously approved by the Department including site grades and elevations). The Record Documents shall include as-built plans details and elevations (survey) as appropriate.

iii. The owner operator shall submit a narrative indicating all changes in plans, the cause of the deviations, and certification of the Record Drawings/Documents by the professional engineer to the Department.

iv. The professional engineer of record shall submit to the Department a final report to verify conformance with the plans and specifications in accordance with Rules 62-701.400(7) and (8), F.A.C.

d. The Licensee is required to measure flow from the FGD blowdown to the IWW Percolation Pond System at the locations indentified as FLW-1, FLW-2, and FLW-3 in the DMRs attached to IWW Permit FLA016960. The Licensee shall record and submit flow on the DMRs quarterly to the Industrial Wastewater Section, Florida Department of Environmental Protection, Southeast District Office, 13051 North Telecom Parkway, Temple Terrace, FL 33637-0926.

e. Sludge/Solids Management Requirements:

i. Management of sludge/solids generated by the filter press at this facility shall be transported by truck to an off-site waste management facility that is authorized by the Department.

ii. The Licensee shall be responsible for proper treatment, management, use, or land application of its sludge/solids. [62-620.320(6), F.A.C.]

iii. Disposal of sludge/solids in a solid waste management facility permitted by the Department shall be in accordance with the requirements of Chapter 62-701, F.A.C.

iv. Storage, transportation, and disposal of sludge/solids characterized as hazardous waste shall be in accordance with requirements of Chapter 62-730, F.A.C.

v. Sludge/solids shall not be applied during rains that cause runoff from the site or when surface soils are saturated. [62-620.320(6), F.A.C.]

vi. The Licensee shall maintain records available for inspection by the Department at the facility, as follows:

- 1) Quantity of sludge/solids generated;
- 2) Quantity of sludge/solids transported for treatment and/or disposal;
- 3) Name and location of the site(s) to which sludge/solids is transported; and
- 4) If a person other than the Licensee is responsible for sludge/solids transportation, treatment, and/or disposal, the Licensee shall also keep records of the name and address of each transporter, and copies of all shipping manifests. [62-620.320(6)]

f. Record Drawings/Documents. The Record Drawings/Documents shall include, but not be limited to, the following information:

- i. Location of all anchor trenches and limits of liner;
- ii. Daily construction reports;
- iii. As-built drawings showing the geotextile and geomembrane panel installation layout, locations of fabricated and field seams, type of seams, destructive sampling locations, locations of all repairs, panel designations, geomembrance booting and

connection details;

iv. As-built elevations for the FGD blowdown inlet, outlet and overflow piping leachate collection pipes (including elevations at the valve control point and inverts at the outlet manhole);

v. All geomembrane destructive test results;

vi. A compact disc or other electronic media that includes all available photographs (with camera date stamps) documenting all stages of the construction project;

vii. The information listed in Section 6.6 of the CQA Plan;

viii. Documentation of any geotechnical improvements to the subgrade during cell preparation;

ix. Records of flow data, including reports and documents used to complete DMRs for the IWW Permit FLA016960.

g. The description of the operation and maintenance procedures for the FGD blowdown ponds provided with the certification modification application received on June 24, 2009, including all subsequently related documents submitted, shall be incorporated into the PEF CCP Solid Waste Management Plan.

2. No gypsum shall be stored or handled on the gypsum handling and temporary storage pad prior to final Departmental approval of the lined Flue Gas Desulfurization (FGD) blowdown settling pond treatment system including contact stormwater from the gypsum handling and temporary storage pad.

3. No contact stormwater from the gypsum handling and temporary storage pad shall be generated prior to appropriate Department approvals.

4. All gypsum or other industrial by-products generated from the FGD process shall be removed from the site for appropriate reuse or disposal. Gypsum or other industrial by-products resulting from the FGD process shall be stored and managed such that runoff from the materials does not adversely affect ground or surface waters.

5. Within 60 days following commencement of operation of the FGD process, including the lined pond system, the Site Coal Combustion Products and Solid Waste Management Plan shall be revised to include the characterization, and management of FGD settling pond solids, gypsum, and other industrial by-products and solid wastes generated by the FGD process. The plan shall be processed in accordance with the Procedures for Post-Certification Submittals included in these Conditions of Certification.

6. Within 90 days of commencement of construction of the gypsum handling and temporary storage pad or any future changes or additions thereto, the Licensee shall develop and submit to the DEP Southwest District Office and the Siting Office for review and approval, a comprehensive non-contact Surface Water Management System Operation & Maintenance Plan (Plan) for all stormwater system components associated with the gypsum handling pad and associated truck turnaround loop. The plan must be suitably consistent with the SWFWMD *How To Operate & Maintain Your Stormwater Management System*.

7. The Licensee shall submit inspection reports for the stormwater system associated with the gypsum handling and temporary storage pad in the form required by the Department, FDEP Form # 62-343.900(6), *Inspection Certification*, in accordance with the following schedule:.

(X) For systems utilizing retention and wet detention, the inspections shall be performed 24 months after operation is authorized and every 24 months thereafter.

(X) For systems utilizing effluent filtration or exfiltration the inspections shall be performed 18 months after operation is authorized and every 18 months thereafter.

(X) For systems utilizing swales or retention-and-percolation, the inspections shall be performed 24 months after operation is authorized and every 18 months thereafter.

[Chapter 2.6.3 SWFWMD BOR]

F. Southwest Florida Water Management District (SWFWMD) – Groundwater

1. Withdrawal Quantities and Facilities

District ID/Owner ID	Water Allocation Average Gallons per Day	Well Casing/Depth Feet	STATUS
1/PW-1	250,000	35/200	EXISTING
2/PW-2	250,000	47/200	EXISTING
3/PW-3	250,000	60/200	EXISTING
4/PW-4	250,000	41/200	EXISTING
5/PW-5	521,520	35/200	EXISTING
6/PW-6	521,520	50/200	EXISTING
7/PW-7	521,520	50/200	EXISTING
14/PW-8	521,520	50/200	PROPOSED
15/PW-9a	521,520	50/200	PROPOSED
16/PW-10a	521,520	50/200	PROPOSED
Total All Wells	4,309,000		

2. Submit Reports/Data

All reports and data required by these conditions of certification shall be submitted to the SWFWMD according to the due dates contained in the specific condition. If the report or data is received on or before the tenth day of the month following data collection, it shall be deemed as a timely submittal. The Licensee may use the SWFWMD's website to submit data, plans or reports online. To set up an account, the Licensee can address the request to permitdata@watermatters.org. All mailed reports and data are to be sent to:

Permit Data Section, Regulation Performance Management Department

Southwest Florida Water Management SWFWMD
2379 Broad Street
Brooksville, Florida 34604-6899

Submission on plans and reports: Unless submitted online or otherwise indicated in the special condition, the original and two copies of each plan and report required herein.

Submission of Data: Unless submitted online or otherwise indicated in the special condition, an original (no copies) is required for data submittals such as meter readings and/or pumpage, rainfall, water level, evapotranspiration, or water quality data.

3. *Environmental Impacts, Monitoring, and Mitigation: Environmental Assessment*

a. Environmental Monitoring Plan

Licensee shall submit an Environmental Monitoring Plan for SWFWMD review and approval within 90 days of conditions of certification issuance. The monitoring plan, at a minimum shall utilize the SWFWMD's Wetland Assessment Procedure to evaluate the relative condition of surface waters and wetlands in areas affected by water withdrawals of Licensee. Upon SWFWMD approval, the plan shall be implemented and monitoring reports shall be provided in the annual monitoring report required by Condition No. C.6. After two years of monitoring following groundwater use rising to more than 3 million gallons per day (average annual daily withdrawal quantity) from all the wells included in this site certification, the Licensee may request the SWFWMD release the Licensee from monitoring. If the SWFWMD concurs with the request, the SWFWMD will request DEP modify the conditions of certification to remove the monitoring condition.

b. Data Collection:

Licensee shall maintain and monitor the environmental monitoring sites included in the approved monitoring plan. Water levels for monitor wells and staff gauges for the sites included in the monitoring plan shall be referenced to National Geodetic Vertical Datum (NGVD) and reported in a form acceptable to the SWFWMD by the 10th day of each month for the preceding month. The time and date that the elevation is taken shall be included. Any changes to the methods or frequency of monitoring for any of these data collection programs must be approved by the SWFWMD.

c. Staff Gauges:

Licensee shall install and thereafter maintain SWFWMD-approved staff gauges and shall report measurements of water levels, as indicated in the monitoring plan. Water levels shall be recorded and reported to the SWFWMD on or before the tenth day of the following month. To the maximum extent possible, water levels shall be recorded as indicated in the monitoring plan. The frequency of recording may be modified by the SWFWMD as necessary to ensure protection of the resource.

d. Rain Gauges:

Licensee shall maintain a continuous recording rain gauge within the area. Total daily rainfall shall be recorded at this station and submitted to the SWFWMD (on

SWFWMD forms or on line) on or before the tenth day of the following month. The reporting period for these data shall begin on the first day of each month and end on the last day of each month.

e. **Data Handling:**

Licensee shall monitor water levels in the monitor wells and piezometers as specified in the monitoring plan. Reports of the data shall be submitted to the SWFWMD in a form acceptable to the SWFWMD. All data shall be referenced to NGVD. The frequency of water-level recording may be modified by the SWFWMD as necessary to ensure the protection of the resource.

f. **Annual Environmental Monitoring Reports**

Licensee shall submit an annual environmental monitoring data summary by January 1st of each year for the preceding water year (October 1 - September 30). The Annual Monitoring Report shall include all raw data, essential graphs, tables, and text. Monitoring progress at each site shall be summarized in the Annual Monitoring Report, as specified below. Licensee shall submit three copies of the Annual Monitoring Report each year. Interpretive reports of wellfield environmental conditions shall incorporate all environmental monitoring sites used. The Annual Monitoring Report shall assess relationships between water level fluctuations, well pumpage, atmospheric conditions, and drainage factors related to the environmental condition of the wetlands and surface waters in the vicinity of the conditions of certification area. Pumpage data, wetland, water level data collected from the aquifer and for the region, and environmental parameters collected at the wellfield and in the region shall be used for the report results. Statistical trend analysis, such as double-mass curve analysis, multiple linear regression, time series analysis and/or factor analysis shall be performed to analyze the interactions of rainfall and pumpage on surficial water levels, potentiometric levels in the semi-confined aquifers, surface waters, and wetland water levels, rate of soil subsidence, and evidence of vegetational succession. Data shall be obtained through field measurements and aerial photo interpretation. A brief summary of any recommended changes to the monitoring requirements shall be provided.

4. *Alternative Water Supply Implementation*

The Licensee shall investigate the development of one or more alternative water supply projects to supply the water supply demands to offset all or a portion of the groundwater allocated by these conditions of certification. Alternative water supplies include seawater desalination, brackish surface or ground water, water that has been reclaimed after one or more uses, stormwater, and any other water supply source designated as non-traditional for a water supply planning region in the applicable regional water supply plan. Unless the Environmental Monitoring specified in Condition 2. above and the aquifer performance testing indicate that adverse environmental impacts are not occurring and are not predicted to occur, the Licensee shall either mitigate impacts in accordance with a plan accepted by the SWFWMD, or, select and implement an alternative water supply project, in accordance with the following schedule:

a. Within 6 months of groundwater use rising to more than 3 million gallons per day (average annual daily withdrawal quantity) from all the wells included in this site

certification, the Licensee shall submit for SWFWMD approval, an Alternative Water Supply Plan. The Alternative Water Supply Plan shall evaluate, identify, and propose alternative water supply development of at least three million two hundred thousand (3,200,000) gallons per day (gpd).

b. Within 2 years of groundwater use rising to more than 3 million gallons per day (average annual daily withdrawal quantity) from all the wells included in this site certification, Licensee shall submit to SWFWMD, a preliminary design of the approved alternative water supply project that the Licensee will implement.

c. Within 2 years of groundwater use rising to more than 3 million gallons per day (average annual daily withdrawal quantity) from all the wells included in this site certification, the Licensee shall provide an analysis of environmental conditions as specified in Condition C. above. If SWFWMD determines that adverse environmental impacts are not occurring and not predicted to occur, the Licensee may seek an extension of time or waiver for implementing the alternative water supply project. If SWFWMD determines that adverse environmental impacts are occurring or are predicted to occur, the alternative water supply project schedule must be maintained. If adverse environmental impacts are occurring or predicted to occur, the alternative water supply quantity required to be developed will be determined based upon a revised hydrogeologic evaluation performed by the Licensee and accepted by SWFWMD.

d. Within 2 years of groundwater use rising to more than 3 million gallons per day (average annual daily withdrawal quantity) from all the wells included in this site certification, submit to the Florida Department of Environmental Protection and SWFWMD, applications for authorization to develop and use at least 3,200,000 gpd of water from the project as appropriate, unless an extension of time or waiver has been granted by SWFWMD.

e. Within 2 years of groundwater use rising to more than 3 million gallons per day (average annual daily withdrawal quantity) from all the wells included in this site certification, submit to SWFWMD an alternative water supply implementation schedule detailing the dates when construction will begin and end, and the date when water will be delivered from the project for use by the Licensee. In no event shall the time when water is supplied by the project be more than more than 4 years after groundwater use has risen to more than 3 million gallons per day (average annual daily withdrawal quantity) from all the wells included in this site certification, unless an extension of time for just cause or otherwise modified in writing by SWFWMD has been granted by SWFWMD.

f. Compliance with the Alternative Water Supply Implementation Schedule is required by the Licensee, unless extended or otherwise modified in writing by SWFWMD. Each year, by March 1, after the water use triggers described above, the Licensee shall submit to SWFWMD a status report describing the progress made on the Alternative Water Supply implementation Schedule, including the specific actions taken to meet the requirements set forth above. If the project has fallen behind schedule, Licensee shall provide just cause for the delay and/or explain how the Licensee will comply with the schedule described herein.

5. Compliance Reporting

The Licensee shall submit a compliance report beginning January 28, 2013 and at 5 year intervals after the issuance date of these conditions of certification. The report must

contain sufficient information to demonstrate reasonable assurance that the withdrawals and use of water authorized by these conditions of certification continue to meet the substantive requirements set forth in Chapter 40D-2, F.A.C., and SWFWMD's Water Use Permit Information Manual Part B, Basis of Review. The compliance report must include:

- a. Information documenting water demands and updated demand projections demonstrating that allocations from all sources in the conditions of certification will continue to be needed for the remainder of the conditions of certification duration;
- b. Documentation verifying that the sources are capable of supplying the needs authorized by these conditions of certification without causing harm to water and water-related resources;
- c. Documentation verifying that the use of water is efficient and that the Licensee is implementing all feasible water conservation measures;
- e. An updated ground water modeling analysis and data analysis demonstrating that the use of groundwater does not interfere with legal uses existing at the time of issuance of this modification of the conditions of certification;
- f. An updated ground water modeling analysis, along with statistical analyses of water-level and wetland monitoring data, demonstrating that the use does not cause adverse impacts to wetlands, and surface waters, or violations of MFLs;
- g. Documentation that ground water withdrawals by the Licensee are not causing or contributing to significant saltwater intrusion, including but not limited to review and statistical analyses of groundwater level and water quality data collected by the Licensee under these conditions of certification;
- h. Information demonstrating that the lowest quality source of water is being used to meet the water demands.

Following review of this report, SWFWMD may seek modification of the conditions of certification to ensure that the use continues to meet the substantive conditions for the consumptive use of water as set forth in Section 373.223, F.S., and Chapter 40D-2, F.A.C.

6. *Pumpage Reporting*

Licensee shall meter withdrawals and record meter readings from each withdrawal point and water supply line on a monthly basis within the last week of the month. The meter readings shall be reported to the SWFWMD on or before the tenth day of the following month. If a metered withdrawal is not utilized during a given month, the meter report shall be submitted to the SWFWMD indicating the same meter reading as was submitted the previous month. The following withdrawals shall be metered:

Withdrawal facilities that are not yet constructed shall install meters on SWFWMD ID Nos. **5, 6, 7, 14, 15, 16**, Licensee ID Nos. **PW-5, PW-6, PW-7, PW-8, PW-9a, PW-10a**, within 90 days of completion of construction of the withdrawal facilities.

Licensee shall continue to maintain and operate existing, non-resettable, totalizing flow meters or other flow measuring devices as approved by the Brooksville Regulation Department Director on SWFWMD ID Nos. **1, 2, 3, 4**, Licensee ID Nos. **PW-1, PW-**

2, PW-3, PW-4.

All meters shall adhere to the following descriptions and shall be installed and maintained as follows:

a. The meters shall be non-resettable, totalizing flow meters with totalizers of sufficient capacity to retain total gallon data for a minimum of the three highest consecutive months. If other measuring devices or other accounting methods are proposed, Licensee shall submit documentation that the other measuring devices or accounting method meet the stipulations listed in this condition, prior to installation. Approval for other measuring devices or accounting methods shall be obtained in writing from the Brooksville Regulation Department Director.

b. Flow meters or other approved devices shall have and maintain accuracy within five percent of the actual flow as installed.

c. The flow meter-water piping system shall be designed for inline field access for meter accuracy testing. The meter shall be tested for accuracy on-site, as installed, every five years beginning from the date of its installation for new meters or from the date of initial issuance of these conditions of certification containing the metering condition with an accuracy-test requirement for existing meters, unless Licensee submits documentation to the satisfaction of the SWFWMD that a longer period of time for testing is warranted. The test shall be performed by a person certified to use the test equipment. If the actual flow is found to be greater than five percent different from the measured flow, within 30 days, Licensee shall have the meter re-calibrated, repaired, or replaced. Documentation of the test and a certificate of re-calibration, if applicable, shall be submitted within 30 days of each test or recalibration. If the accounting method involves a meter belonging to another entity or to the water supplier, Licensee shall submit documentation from the owner/ supplier that the meter readings continue to be accurate to five percent of the actual flow as installed. Such documentation is subject to approval by the SFWMD.

d. The meter shall be installed according to the manufacturer's instructions for achieving accurate flow to the specifications above, or it shall be installed in a straight length of pipe with at least an upstream length equal to ten times the outside pipe diameter and a downstream length equal to two times the outside pipe diameter. If sufficient pipe length is not available, flow straightening vanes shall be used in the upstream line.

e. If the meter or other flow measuring device malfunctions or has to be removed from the water supply line for maintenance or repair, Licensee shall notify the SWFWMD within 30 days of discovery and replace it with a repaired or new meter, subject to the same specifications given above. The repaired or replacement meter shall be installed within 30 days of discovery. If the meter is removed for any other reason, it shall be replaced with another meter having the same specifications given above, or the meter shall be reinstalled within 30 days of its removal. In either event, a fully functioning meter shall not be off the water supplies line for more than 60 consecutive days.

f. While the meter is being repaired or replaced, Licensee shall provide an estimate of the water supply quantities used by multiplying the number of hours the water supply was used by the capacity of the pump or mainline diameter. The estimate of the

number of gallons used each month during that period shall be noted as an estimate when it is submitted to the SWFWMD.

g. In the event a new meter is installed to replace a broken meter, the replacement meter and its installation shall meet the specifications of this condition. Licensee shall notify the SWFWMD of the replacement with the first submittal of meter readings from the new meter.

7. Distribution Flexibility

The average day, peak monthly, and maximum daily, if applicable, quantities for District ID No(s) **1, 2, 3, 4, 5, 6, 7, 14, 15, 16** Licensee ID No(s). **PW-1, PW-2, PW-3, PW-4, PW-5, PW-6, PW-7, PW-8, PW-9a, PW-10a** shown above in the production withdrawal table are estimates based on historic and projected distribution of pumpage, and are for water use inventory and impact analysis purposes. The quantities listed in the table for these individual sources are not intended to dictate the distribution of pumpage from the withdrawal sources. The Licensee may make adjustments in pumpage distribution as necessary up to **125 percent** on an average basis, up to **125 percent** on a peak monthly basis, so long as adverse environmental impacts do not result and other conditions of this certification are complied with. In all cases, the total average annual daily withdrawal and the total peak monthly daily withdrawal are limited to the quantities set forth above.

8. Water quality sampling

a. Water quality samples shall be collected and analyzed for parameters and at the frequencies specified below. Water quality samples from production wells shall be collected from all wells, unless infeasible. If sampling is infeasible, Licensee shall indicate the reason for not sampling on the water quality data form. Water quality samples shall be analyzed by a laboratory certified by the Florida Department of Health utilizing the standards and methods applicable to the parameters analyzed and to the water use pursuant to Chapter 64E-1, F.A.C., "Certification of Environmental Testing Laboratories". At a minimum, water quality samples shall be collected after pumping the well at its normal rate for a pumping time specified in the table below, or to a constant temperature, pH, and conductivity. In addition, Licensee's sampling procedure shall follow the handling and chain of custody procedures designated by the certified laboratory which will undertake the analysis. Any variance in sampling and/or analytical methods shall have prior approval of the Brooksville Regulation Department Director. Reports of the analyses shall be submitted to the Permit Data Section, Regulation Performance Management Department, (using SWFWMD forms) on or before the tenth day of the following month, and shall include the signature of an authorized representative and certification number of the certified laboratory which undertook the analysis. The parameters and frequencies of sampling and analyses may be modified by the Brooksville Regulation Department Director, as necessary to ensure the protection of the resource.

District ID No.	Licensee ID No.	Minimum Pumping Time (minutes)	Parameter	Sampling Frequency
1	PW-1	20 minutes	Chlorides,	February, May,

		Sulfates, and T.D.S.	August, and November
2	PW-2	20 minutes	
3	PW-3	20 minutes	
4	PW-4	20 minutes	
5	PW-5	20 minutes	
6	PW-6	20 minutes	
7	PW-7	20 minutes	
14	PW-8	20 minutes	
15	PW-9a	20 minutes	
16	PW-10a	20 minutes	

Water quality samples shall be collected quarterly and on the same week of the months specified. Analyses shall be performed according to procedures outlined in the current edition of Standard Methods for the Examination of Water and Wastewater by the American Public Health Association- American Water Works Association-Water Pollution Control Federation (APHA-AWWA-WPCF) or Methods for Chemical Analyses of Water and Wastes by the U.S. Environmental Protection Agency (EPA).

b. Water quality samples from monitor wells shall be collected and analyzed for the District ID No., parameter(s), and frequency(ies) specified in the table below. Water quality samples shall be collected after pumping the monitor wells(s) to a constant temperature, pH, and conductivity. Sampling method(s) shall be designed to collect water quality samples that are chemically representative of the zone to be sampled. Water quality samples shall be analyzed by a laboratory certified by the Florida Department of Health utilizing the standards and methods applicable to the parameters analyzed and to the water use pursuant to Chapter 64E-1, F. A. C., "Certification of Environmental Testing Laboratories". The Permittee's sampling procedure(s) shall follow the handling and chain of custody procedures designated by the certified laboratory which will undertake the analysis. A report describing the sampling and chain of custody procedures shall be included with the first data submitted after the date this permit is granted, and upon any change in sampling and/or analytical method(s). Any variance in sampling and/or analytical methods shall have prior approval of the SWFWMD. Reports of the analyses shall be submitted on SWFWMD forms on or before the tenth day of the following month, and shall include the signature of an authorized representative and certification number of the certified laboratory that undertook the analysis. The parameters and frequency of sampling and analysis may be modified by the SWFWMD as necessary to ensure the protection of the resource.

District I District ID No.	Licensee ID No.	Parameter	Sample Frequency
8	MZ-2I	Chlorides,	May, September

9	MZ-2D	Sulfates, and TDS
10	MZ-2S	
11	MZ-1S	
12	MZ-1I	
13	MZ-1D	

Water quality samples shall be collected based on the following timetable:

Semi-annually	Same week of months specified
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Analyses shall be performed according to procedures outlined in the current edition of Standard Methods for the Examination of Water and Wastewater by the American Public Health Association-American Water Works Association-Water Pollution Control Federation (APHA-AWWA-WPCF) or Methods for Chemical Analyses of Water and Wastes by the U.S. Environmental Protection Agency (EPA).

c. The SWFWMD reserves the right to set chloride, sulfate or TDS concentration limits on any production well in the future, based on data collected and after a sufficient data base has been established to determine limits. These limits shall be required after discussions with the Licensee. At such time as the concentration in any water sample reaches or exceeds the designated concentration limits, the Licensee shall take appropriate action to reduce concentrations to below those set for the particular well. If the SWFWMD determines that long-term upward trends or other significant water quality changes are occurring, the SWFWMD may reconsider the quantities included in these conditions of certification.

d. During drilling of District ID Nos. **14, 15, 16**, Licensee ID Nos. **PW-8, PW-9a, PW-10a**, water quality samples shall be collected at intervals of the change of drill rod or 30 feet, whichever is less, from 150 feet to a maximum depth of five feet above the bottom of the well. Regardless of the specified sample collection interval, a sample shall be collected from the depth which corresponds to five feet above the bottom of the well. Samples shall be collected during reverse air drilling, or other appropriate method with prior approval by the SWFWMD.

Samples shall be analyzed by a certified laboratory for Chloride, Sulfate, and Specific Conductivity. Licensee's sampling procedure shall follow the handling and chain of custody procedures designated by the certified laboratory which will undertake the analysis. Reports of the analyses shall be submitted to the Permit Data Section, Regulation Performance Management Department (using SWFWMD forms) within thirty days of sampling, and shall include the signature of an authorized representative and the certification number of the Florida Department of Health certified laboratory utilizing the standards and methods applicable to the parameters analyzed and to the water use pursuant to Chapter 64E-1, F.A.C., "Certification of Environmental Testing Laboratories".

Analyses shall be performed according to procedures outlined in the current edition of Standard Methods for the Examination of Water and Wastewater by the

American Public Health Association-American Water Works Association-Water Pollution Control Federation (APHA-AWWA-WPCF) or by Methods for Chemical Analyses of Water and Wastes by the U.S. Environmental Protection Agency (EPA).

e. Monthly water levels for monitor wells for the sites included in the table below shall be referenced to NGVD, and reported in a form acceptable to the SWFWMD by the tenth day of each month for the preceding month. The time and date that the elevation is taken shall be included. Changes to the methodology, extent, or frequency of monitoring at any of these sites may be modified by the SWFWMD, as necessary to ensure the protection of the resources.

District ID. No	Licensee Site No.
8	MZ-2I
9	MZ-2D
10	MZ-2S
11	MZ-1S
12	MZ-1I
13	MZ-1D

9. Wells

a. Wells not in use with no installed pumping equipment shall be capped or valved in a water tight manner in accordance with subparagraph 62-532.500(3)(a)(4), F.A.C.

b. Within 90 days of the completion of each proposed well, Licensee shall submit to the SWFWMD specific capacity (well testing) information from any test performed by the Water Well Contractor or pump installer on the well. This information shall include:

- i. Static water level before pumping
- ii. Duration of test pumping
- iii. Gallons per minute pumped
- iv. Final water level measured during pumping

If step-drawdown tests were performed, the information listed above shall be submitted for each step.

c. Within 90 days of construction, Licensee shall submit to the Permit Data Section, Regulation Performance Management Department, the specific locations of District ID Nos. 14, 15, 16 Licensee ID Nos. PW-8, PW-9a, PW-10a, on an original blue line aerial with a minimum scale of one inch equals 800 feet, or by latitude/longitude. Intake and mainline diameters for each of the above pumps shall be reported at the time of location

reporting.

d. For the purpose of determining site-specific transmissivity, a step drawdown and a multi well constant rate test shall be performed on one or more of the following: District ID Nos. 14, 15, 16 Licensee ID Nos. PW-8, PW-9a, PW-10a, after the wells have been fully developed. The test shall be performed in accordance with the specifications set forth in Design Aid 3, Water Use Permit Information Manual and an Aquifer Performance Testing (APT) Plan submitted to and approved by the SWFWMD. The APT Plan shall be submitted to the SWFWMD, within 90 days of the approval of the modification of the conditions of certification. The APT shall be conducted by the Licensee within 6 months of construction of the wells included in the APT Plan and prior to the use of any of the wells constructed for the APT'S. All recorded raw data shall be submitted to the SWFWMD within thirty (30) days of completion of the APT.

e. Within sixty (60) days, the Licensee shall designate one individual responsible for receiving and responding to the SWFWMD notices and correspondence related to these conditions of certification. Notification to the SWFWMD of the designee, including address and telephone number shall be in written form.

f. Within 90 days of conditions of certification issuance, Licensee shall develop and implement a Water Conservation Plan (Plan) that includes practices currently employed or planned. For planned components, include an estimated time-frame for implementation for each. The Plan must indicate that technically and economically feasible water conservation opportunities have been or will be employed.

g. The lowest quality water source, including reclaimed water, surface water and stormwater, must be used for each consumptive use authorized by these conditions of certification when available, except when Licensee demonstrates that the use of the lower quality water source is determined to be not economically, environmentally, or technologically feasible, in accordance with the SWFWMD's Water Use Permit Information Manual Part B, Basis of Review, Sections 4.4 and 4.1 1.

h. Wetlands and other surface waters may not be adversely impacted as a result of the water use authorized by these conditions of certification. If unacceptable adverse impacts occur, the SWFWMD will request that DEP revoke these conditions of certification in whole or in part to curtail or abate the unacceptable adverse impacts, unless the impacts can be mitigated by Licensee.

10. Standard Conditions

Licensee shall comply with the following Standard Conditions:

a. If any of the statements in the application and in the supporting data are found to be untrue and inaccurate, or if Licensee fails to comply with all of the provisions of Chapter 373, F.S., and Title 40D, F.A.C., or the conditions set forth herein, the SWFWMD shall seek revocation of any conditions of certification.

b. These conditions of certification are imposed based on information provided by Licensee demonstrating that the use of water is reasonable and beneficial, consistent with the public interest, and will not interfere with any existing legal use of water. If, during the term of this certification, it is determined by the SWFWMD that the use is not reasonable and

beneficial, in the public interest, or does impact an existing legal use of water, the SWFWMD shall seek modification these conditions of certification or revocation of the certification authorized by DEP.

c. Licensee shall not deviate from any of the SWFWMD- imposed conditions of this certification without written approval by the Department and the SWFWMD.

d. In the event the SWFWMD declares that a Water Shortage exists pursuant to Chapter 40D-21, F.A.C., Licensee agrees that portions of these conditions of certification shall be modified, or declared inactive as necessary to address the water shortage.

e. The SWFWMD shall collect water samples from any withdrawal point listed in these conditions of certification or shall require Licensee to submit water samples when the SWFWMD determines there is a potential for adverse impacts to water quality.

f. Licensee shall provide access to an authorized SWFWMD representative to enter the property at any reasonable time to inspect the facility and make environmental or hydrologic assessments. Licensee shall either accompany the SWFWMD staff onto the property or make provision for access onto the property.

g. Licensee shall cease or reduce any surface water withdrawals as directed by the SWFWMD if water levels in surface water fall below applicable minimum water level established in Chapter 40D-8, F.A.C., or rates of flow in streams fall below the minimum levels established in Chapter 40D-8, F.A.C.

h. Licensee shall cease or reduce withdrawals if water levels in aquifers fall below the minimum levels established by the SWFWMD.

i. Licensee shall practice water conservation to increase the efficiency of transport, application, and use, as well as to decrease waste and to minimize runoff from the property. At such time as the SWFWMD adopts specific conservation requirements for Licensee's water use classification, these conditions of certification shall be modified accordingly.

j. The SWFWMD may establish special regulations for Water Use Caution Areas. At such time as the Governing Board adopts such provisions, these conditions of certification shall be subject to them upon notice and after a reasonable period for compliance.

k. Licensee shall mitigate any adverse impact to existing legal uses caused by withdrawals. When adverse impacts occur or are imminent, Licensee shall be required to mitigate the impacts. Adverse impacts include:

i. A reduction in water levels which impairs the ability of the well to produce water;

ii. Significant reduction in levels or flows in water bodies such as lakes, impoundments, wetlands, springs, streams or other watercourses; or

iii. Significant inducement of natural or manmade contaminants into a water supply or into a usable portion of any aquifer water body.

l. Licensee shall mitigate any adverse impact to environmental features or offsite land uses as a result of withdrawals. When adverse impacts occur or are

imminent, the Licensee shall be required to mitigate the impacts. Adverse impacts include:

- i. Significant reduction in levels or flows in water bodies such as lakes, impoundments, wetlands, springs, streams or other watercourses;
- ii. Sinkholes or subsidence caused by reduction in water levels;
- iii. Damage to crops and other vegetation causing financial harm to the owner; and
- iv. Damage to the habitat of endangered or threatened species.
- m. When necessary to analyze impacts to the water resource or existing users, Licensee shall be required to install flow metering or other measuring devices to record withdrawal quantities and submit the data to the SWFWMD.
- n. A SWFWMD identification tag shall be prominently displayed at each withdrawal point by permanently affixing the tag to the withdrawal facility.
- o. Licensee shall notify the SWFWMD within 30 days of the sale or conveyance of permitted water withdrawal facilities or the land on which the facilities are located.
- p. The annual average daily withdrawal quantity is determined by calculating the total quantity of water to be withdrawn over a one year period, divided by 365 days, which results in a gallons per day (gpd) quantity pursuant to Basis of Review, Section 3.2, Permitted Withdrawal Quantities. This is a running 12-month average, whereby each month the annual average daily quantity is recalculated based on the previous 12-month pumpage.

G. Solid Wastes

No later than December 31, 2008 or 180 days prior to the initial operation of Unit 4 and 5 FGD scrubbers (whichever occurs first), the Licensee shall submit a site-wide Coal Combustion By-Product (CCP)/Solid Waste Materials Management Plan that addresses operations of the fossil generating units to the Department's SWD Office and Siting Office for review and approval. The plan shall, at a minimum, include the following information:

1. descriptions and procedures for all applicable processes for on-site storage practices and management of CCPs, solid wastes and industrial by-products at the site.
2. plans or methods to minimize waste streams, and maximize beneficial use opportunities of CCPs;
3. methods for preventing or minimizing the release of contaminants to the environment, including (as applicable) leachate collection and control methods that meet the requirements of Chapter 62-701, F.A.C.;
4. certification for the above information, as appropriate, by a Professional Engineer registered in the state of Florida.

The Department shall indicate its approval or disapproval of the submitted plans, drawings, maps, analyses and contingency plans within 90 days of the originally submitted information. In the event that the Department requires additional information for the Licensee to

complete, and the Department to approve the CCP/Solid Waste Materials Management Plan, the Department shall make a written request to the Licensee for additional information no later than 30 days after receipt of the originally submitted information.

H. Ash Landfill and Coal Piles

1. Ash Landfill

a) PEF shall designate a portion of the site as a temporary ash landfill. Associated with the temporary landfill shall be certain sites for the testing and monitoring of leachates and ash pile liners.

b) Adequate geophysical testing shall be conducted to determine if solution cavities are present under the landfill area. If such cavities are located, such cavities shall be sealed off and stabilized.

c) The proposed ash landfill area shall be monitored and studied pursuant to a detailed leachate testing and monitoring program to be submitted by PEF to the Department within 30 days of certification for review and approval, rejection, or modification within 60 days thereafter. The detailed leachate testing and monitoring program shall be consistent with the conceptual leachate monitoring program attached and incorporated herein as Attachment 2.

d) After approval of the program by the Department, PEF shall conduct the approved testing and monitoring program under the supervision of the Department. Results of the program shall be submitted to the Department for its review and consideration on a monthly basis.

e) The results of the program will be used by the Department in determining whether PEF has affirmatively demonstrated that Florida Water Quality Standards (62-520 and 62-550, F.A.C.) will not be violated in determining the zone of discharge and in determining the need for a liner.

f) If the Department determines that PEF has failed to affirmatively demonstrate that Florida Water Quality Standards (62-520 and 62-550, F.A.C.) will not be violated, PEF shall present to the Department, within 90 days of such determination, a plan of correction (which may include, if appropriate, a semi-permeable liner) for review and approval by the Department and for timely implementation by PEF, or PEF shall place an impermeable liner under the final ash landfill site and shall remove all ash from the temporary landfill site and place it on the lined landfill location.

g) The final cover shall be in compliance with Chapter 62-701, F.A.C., and at least 12" of clay or sufficient suitable liner material shall be placed on the top and exposed sides of each finished landfill cell. Sufficient topsoil to support vegetation shall be placed over the top and side clay liner. The top and exposed sides of the ash landfill shall be vegetated to control erosion.

2. Ash Relocation Due to Installation of New Access Road to Support the Units 4 & 5 Clean Air Project

a) Prior to commencement of modifications/additions to the existing access road located along the south and west perimeters of the ash storage area the Licensee shall

submit the following items to the DEP SWD Office and Siting Office :

i. a figure, aerial photograph or plan sheet identifying the area where the ash to be removed will be re-located;

ii. plan sheets of existing (pre-construction) conditions and final contours of the ash landfill affected by the access road installation; and

iii. a figure, aerial photograph or plan sheet showing the location and details of any collapsed surface cavities/sinkholes found on the site relative to the ash landfill and proposed access road project.

b) The working face slopes of the relocated ash shall be no steeper than 4H:1V, unless prior approval from the Department's SWD Solid Waste Section and the Siting Office for an alternative slope is obtained.

c) The filtered stormwater drainage downslope of the working face shall not discharge outside the contact stormwater or Industrial Wastewater system.

d) Within 90 days following completion of the access road and restoration of the final cover on the ash landfill in the affected portions, the Licensee shall submit to the Department's SWD Office and Siting Office the following information:

i. a final survey of the affected portions of the closed ash landfill that demonstrates that the slopes are no steeper than 4H:1V;

ii. documentation that the clay cover, if used, is no less than 12 inches thick;

iii. hydraulic conductivity testing results on the constructed clay layer, if used, (5 tests for the first acre, then 1 test/acre/lift for every other acre). Testing should be carried out in accordance with ASTM Method D5084 or equivalent; and

iv. certification for the above information by a Professional Engineer registered in the state of Florida.

v. A geosynthetic clay liner (GCL) or other alternative liner system may be used; however, prior to the installation of any alternative liner system, the Licensee shall submit a complete proposed plan to the Department's SWD Solid Waste Section and Siting Office for review and approval.

The plan shall, at a minimum, include specifications for the Construction Quality Assurance Plan and drawings showing the location of the liner cover, soil cover for the liner, and any other relevant information that may be applicable for the type of alternative liner system being proposed.

The Department shall indicate its approval or disapproval of the submitted plan within 90 days of the originally submitted information. In the event that the Department requires additional information for the Licensee to complete, and the Department to approve the GCL or alternative liner system, the Department shall make a written request to the Licensee for additional information no later than 30 days after receipt of the originally submitted information.

3. Coal Pile

a) Prior to initial operation of the Unit 4 and 5 FGD scrubber systems, the Licensee shall install an impervious liner system beneath the Unit 4 and 5 coal pile storage area and associated stormwater runoff/leachate collection, storage, and treatment ponds.

b) The liner system shall be designed and of sufficient impervious material to provide for a hydraulic conductivity equal to, or less than 10^{-7} cm/sec.

c) Prior to initial construction of each liner installation, the Licensee shall submit a complete proposed plan of the liner system to the Department's SWD Solid Waste Section and the Siting Office for review and approval. Each liner installation plan shall, at a minimum, include the following information:

- i. design drawings, calculations, and specifications of the proposed liner system;
- ii. The Construction Quality Assurance Plan (CQA);
- iii. slope stability calculations that demonstrate that the proposed slope will be stable with a 1.5 factor of safety;
- iv. anchoring details for the liner systems;
- v. permeability (hydraulic conductivity) and specifications for the "crusher run" material (or for alternate material if used);
- vi. procedures for ensuring that the clay liners will not be damaged from future coal removal operations;
- vii. the thickness (and unit weight) of material that will be placed above the GCL on the slopes and specification of the slope of the GCL sub-grade;
- viii. piping details that show how the coal pile runoff water will be discharged from the coal pile runoff ponds to the coal pile runoff settling ponds;
- ix. any other relevant information that may be applicable for the type of alternative liner system being proposed; and
- x. certification for the above information by a Professional Engineer registered in the state of Florida.

The Department shall indicate its approval or disapproval of a submitted liner system plan within 90 days of the originally submitted information. In the event that the Department requires additional information for the Licensee to complete, and the Department to approve the liner system, the Department shall make a written request to the Licensee for additional information no later than 30 days after receipt of the originally submitted information.

d) Handling and monitoring of the coal pile and associated wastes shall be in accordance with the site-wide Coal Combustion By-Product (CCP)/Solid Waste Materials Management Plan for the fossil units required by Special Condition V. Solid Wastes.

VII. UNIT 3 SPECIFIC CONDITIONS

The following Specific Conditions shall apply only to Unit 3. Compliance with these Specific Conditions shall be the responsibility of the Progress Energy (Nuclear).

A. Air

The construction and operation of the Unit No. 3 nuclear plant site shall be in accordance with all applicable provisions of Chapters 62-210 through 62-297, and 62-702, F. A. C.

Title V Air Operation Permit 0170004-015-AV, and PSD-FL-392 (017004-018-AC) including subsequent modifications are incorporated by reference herein as part of this Certification and attached as Appendix A and Appendix E.

The provisions of the above shall be conditions of this certification. The Licensee shall comply with the substantive provisions and limitations set forth in Title V Air Operation Permit Number 0170004-015-AV and Air Construction Permit PSD-FL-392 as part of these Conditions of Certification, and as those provisions may be modified, amended, or renewed in the future by the Department. Such provisions shall be fully enforceable as conditions of this certification. Any violation of such provisions shall be a violation of these Conditions of Certification.

B. Water Discharges

Any discharges into any waters of the State during construction and operation of Unit 3 shall be in accordance with all applicable provisions of Chapter 17-3, F. A. C., and 40 CFR 423, *Effluent Guidelines and Standards for Steam Electric Power Generating Point Source Category* and with NPDES permit no. FL0000159 (attached as Appendix G) as well as any subsequent modifications, amendments and/or renewals. A copy of all subsequent renewal and modification applications shall also be sent to the St. Martins Marsh & Big Bend Seagrass Aquatic Preserve of the Office of Coastal and Aquatic Managed Areas, and to the Florida Fish and Wildlife Conservation Commission, Office of Policy and Stakeholder Coordination.

C. Groundwater – SWFWMD

No groundwater use by Unit 3 is authorized by these Conditions of Certification. Potable water demand for Unit 3 shall continue to be met by water use authorized under Water Use Permit (WUP) No. 2004695.004 issued by the Southwest Florida Water Management District. (Attached as Appendix H) WUP No. 2004695.004 authorizes 1,000,000 gallons per day (annual average) and 1,500,000 gpd (peak month) for boiler makeup, pollution control, and potable water needs at Units 1, 2 and 3. PEF shall abide by the conditions of WUP No. 2004695.004 and any modification or renewal thereof for the continued authorized use of groundwater in the operation of Unit 3. Such provisions shall be fully enforceable as conditions of this certification. Any violation of such provisions, where it is determined that Unit 3 is the cause, shall be a violation of these Conditions of Certification.

D. Groundwater – FDEP

No groundwater discharge by Unit 3 is authorized by these Conditions of Certification. IWW Permit FLA016960 (attached as Appendix I) issued by the FDEP authorizes the discharge of industrial waste water from Unit 3 to a common percolation pond system. PEF

shall abide by the conditions of IWW FLA 016960 and any modification or renewal thereof for the continued authorized discharge of industrial waste water to ground water by the operation of Unit 3. Such provisions shall be fully enforceable as conditions of this certification. Any violation of such provisions, where it is determined that Unit 3 is the cause, shall be a violation of these Conditions of Certification.

E. Environmental Resource Review

1. At least 90 days prior to construction of the South Cooling Tower, the Licensee shall provide to the DEP SWD office 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 Chapters 40D-4, 40D-40 and 40D-400, F.A.C., and a Wetland Mitigation Plan if applicable. The drawings and documentation shall be signed, sealed and dated by a professional engineer registered in the State of Florida.

2. Within 60 days following certification, and prior to construction of any construction laydown and parking areas associated with Unit 3, the Licensee shall provide to the DEP SWD office 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 Chapters 40D-4, 40D-41 and 40D-42, F.A.C., and a Wetland Mitigation Plan if applicable. The drawings and documentation shall be signed, sealed and dated by a professional engineer registered in the State of Florida.

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

4. The Department shall notify the Licensee in writing that the information 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 written notification of approval of the project including the Wetland Mitigation Plan as applicable. Such approval or denial shall be provided within 30 days following completeness of the application information.

5. Turbidity and sediments must be controlled to prevent violations of water quality pursuant to Rules 62-302.500, 62-302.530(70) and 62-4.242, F.A.C. 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.

6. 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 subsection 62-4.242(2), F.A.C.

7. Prior to start of construction, PEF shall prepare a Storm Water Pollution Prevention Plan and submit a copy of the National Pollutant Discharge Elimination System

(NPDES) Notice of Intent (NOI) to use a Construction Generic Permit (CGP) for stormwater discharges (as applicable) to DEP.

F. Domestic Wastewater Treatment

Domestic wastewater from Unit 3 shall be treated by the Crystal River Units 1, 2, and 3 Sewage Treatment Plant as authorized by Domestic Wastewater Facility Permit FLA118753 issued by the DEP SW District (attached as Appendix J). PEF shall abide by the conditions of permit No. FLA118753 and any modification or renewal thereof for the continued authorized treatment of domestic wastewater from Unit 3. Such provisions shall be fully enforceable as conditions of this certification. Any violation of such provisions, where it is determined that Unit 3 is the cause, shall be a violation of these Conditions of Certification.

G. Radiological

1. Decommissioning

Upon application to the NRC for authority to decommission the plant, the applicant shall provide the Department a copy of the plan submitted to NRC for radioactive materials removal and/or containment for the site. Should the Department's review of the written plan reveal deficiencies, the Department shall bring such deficiencies to the attention of the applicant and the NRC and maintains the right to initiate a request, consistent with NRC procedural requirements that remedial action be taken to correct the deficiencies.

2. Emergency Plan

The applicant shall work with the State Division of Emergency Management in the Department of Community Affairs and the State Department of Health, Bureau of Radiation Control, and Citrus and Levy Counties in bi-annually updating the emergency procedures and evacuation planning as necessary, including but not limited to improvements in communication and warning systems and in updating predicted plume overlays.

3. Radiological Release Limitations

The recommendation in the Power Plant Site Certification Analysis that certification be issued is based in part upon the fact that in order to obtain a construction permit and operating license from NRC, the applicant must comply with all applicable regulations, requirements, and standards of the U.S. Nuclear Regulatory Commission (NRC) which limit the release of radioactive materials in solid waste, liquid or gaseous effluents to the environment. The above NRC regulations, requirements and standards include the following:

- a) Standards for Protection Against Radiation, U.S. Nuclear Regulatory Commission Rules and Regulations, Title 10, Chapter 1, Part 20, Code of Federal Regulations, as presently in effect or hereafter amended.
- b) Limitations and conditions for the controlled release of radioactive materials in solid, liquid and gaseous effluents contained in the Radiological Environmental Monitoring Program required by Title 10, 10 CFR 50, Appendix I as presently in effect or hereafter amended..

The Department has the statutory duty to insure that the location and operation of Crystal River Unit 3 will produce minimal adverse effects on human health, the

environment, the ecology and the land and its wildlife, and the ecology of State waters and their aquatic life. (Section 403.502, F.S.) The Department has determined that the construction and operation of Crystal River Unit 3 must comply with the above radiological release limitations in order to minimize adverse effects on human health and the environment. This certification is conditioned upon full compliance by the applicant with the applicable above regulations, requirements and standards.

The NRC has the duty and responsibility imposed by statute, to enforce compliance by the applicant with NRC standards and technical specifications, to assure that the construction and operation of Crystal River Unit 3 will be in accord with the common defense and security and will provide adequate protection to the health and safety of the public. See Section 103(d) of the Atomic Energy Act, 42 U.S.C. section 2133(d) (1970); accord. 42 U.S.C. section 2332(a) (1970) including any subsequent revisions.

However, should the Department determine that the NRC has failed to discharge its duty and responsibility, it may bring any such deficiencies to the attention of the applicant and the NRC, and maintains the right to initiate a request, consistent with NRC procedural requirements, that appropriate enforcement action be taken to correct the deficiencies.

4. *Monitoring*

The applicant shall comply with the most recent Department of Health Environmental Surveillance Agreement or its equivalent or future replacement. Should the Department of Health determine that additional monitoring is required, it may take appropriate action to require such monitoring by modification of this condition of certification.

5. *Reservation of Legal Rights*

The Department recognizes that the NRC has exclusive authority in certain areas related to the construction and operation of Crystal River Unit 3. These conditions of certification do no limit, expand or supersede any federal requirement or restriction under federal law, regulation, or regulatory approval or license. Compliance with the conditions herein does not constitute a waiver of the applicant's responsibility to comply with all applicable NRC requirements. Applicant's acceptance of these radiological conditions of certification does not, in and of itself, constitute a waiver by Applicant of any claim that any such radiological conditions are invalid under the doctrine of federal preemption or otherwise by law.

VIII. FLORIDA DEPARTMENT OF TRANSPORTATION

A. *Access Management to the State Highway System*

Any access to the State Highway System will be subject to the requirements of Chapters 14-96, State Highway System Connection Permits, and 14-97 Access Management Classification System and Standards, F.A.C.

B. *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 of Chapter 316, F.S., and Chapter 14-26, Safety Regulations and Permit Fees for Overweight and Overdimensional Vehicles, F.A.C..

C. Use of State of Florida Right of Way or Transportation Facilities

All usage and crossing of State of Florida right of way or transportation facilities will be subject to Chapter 14-46, Utilities Installation or Adjustment, F.A.C.; Florida Department of Transportation's (FDOT) Utility Accommodation Manual (Document 710-020-001); Design Standards for Design, Construction, Maintenance and Utility Operation on the State Highway System; Standard Specifications for Road and Bridge Construction; and pertinent sections of the FDOT's Project Development and Environmental Manual. US 19 has been identified as a Florida Intrastate Highway System (FIHS) and Strategic Intermodal System's (SIS) facilities. The placement of any transmission line or pipeline should take into consideration the planned widening of these facilities. The cost of relocating or reconstructing a transmission line or pipeline will be borne by the applicant to the extent required by Section 337.403, F.S., and Chapter 14-46, F.A.C.

D. Standards

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

E. Drainage

Any drainage onto State of Florida right of way and transportation facilities will be subject to the requirements of Chapter 14-86, Drainage Connections, F.A.C., including the attainment of any permit required thereby.

F. Use of Air Space

Any newly proposed structure or alteration of an existing structure will be subject to the requirements of Chapter 333, F.S., and Rule 14-60.009, Airspace Protection, F.A.C. Additionally, notification to the Federal Aviation Administration (FAA) is required prior to beginning construction, if the structure exceeds notification requirements of 14 CFR Part 77, Objects Affecting Navigable Airspace, Subpart B, Notice of Construction or Alteration. Notification will be provided to FAA Southern Region Headquarters using FAA Form 7460-1, Notice of Proposed Construction or Alteration in accordance with instructions therein. A subsequent Determination by the FAA stating that the structure exceeds any federal obstruction standard of 14 CFR Part 77, Subpart C for any structure that is located within a 10-nautical-mile radius of the geographical center of a public-use airport or military airfield in Florida will be required to submit information for an Airspace Obstruction Permit from the DFOT or variance from local government depending on the entity with jurisdictional authority over the site of the proposed structure. The FAA Determination regarding the structure serves only as a review of its impact on federal airspace and is not an authorization to proceed with any construction. However, FAA recommendations for marking and/or lighting of the proposed structure are made mandatory by Florida law. For a site under FDOT jurisdiction, application will be made by submitting FDOT Form 725-040-11, Airspace Obstruction Permit Application, in accordance with the instructions therein.

G. Best Management Practices

Traffic control during facility construction and maintenance will be subject to the standards contained in the Manual on Uniform Traffic Control Devices; Chapter 14-94, Statewide Minimum Level of Service Standards, F.A.C.; FDOT's Design Standards for Design, Construction, Maintenance and Utility Operation on the State highway System; FDOT's Standard Specifications for Road and Bridge Construction; and FDOT's Utility Accommodation Manual, whichever is more stringent.

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

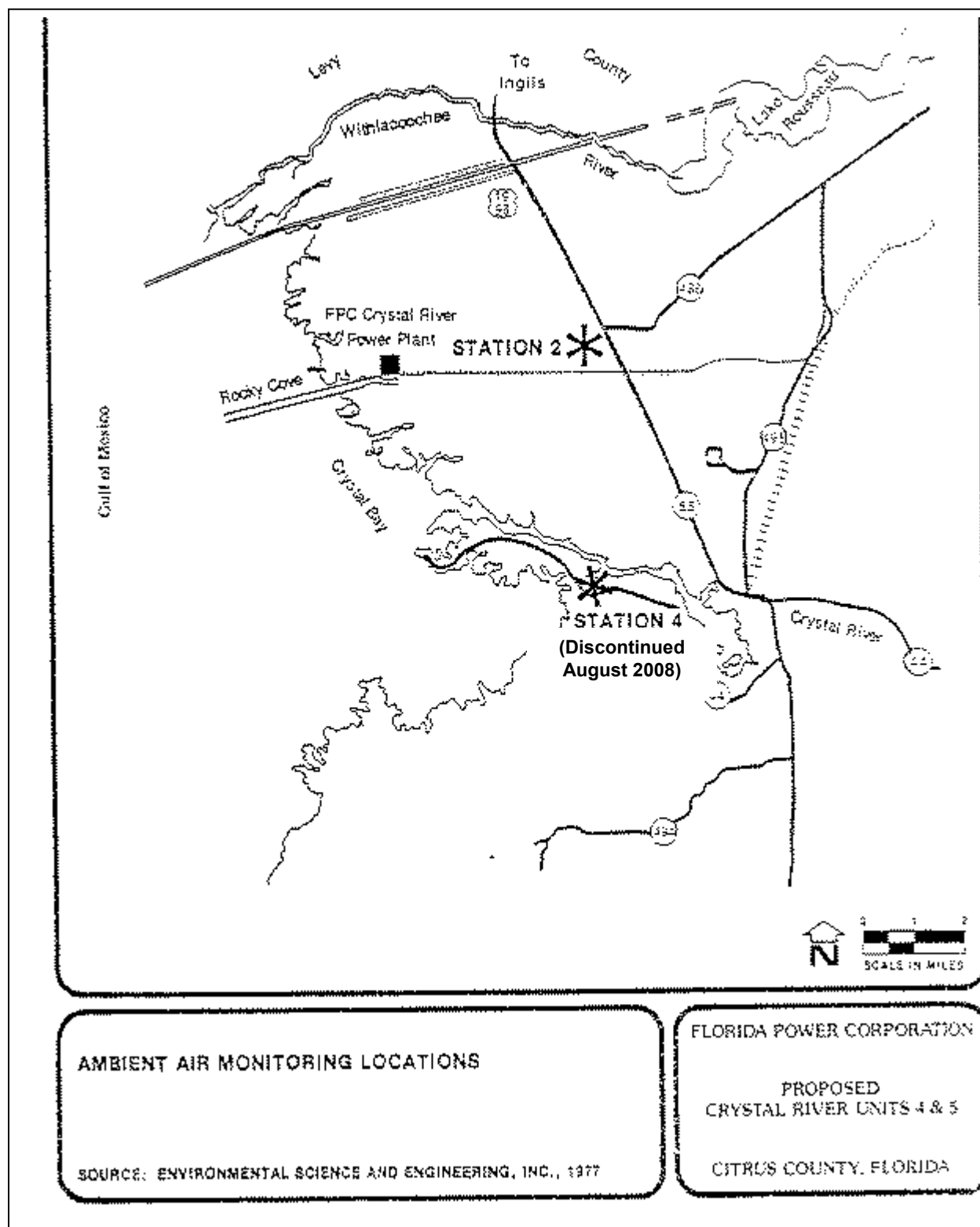
1. Placing a bulletin board on site for car pooling advertisements.
2. Requiring that heavy construction vehicles remain onsite for the duration of construction to the extent practicable.

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, F.S., and Chapter 14-26, Safety Regulations and Permit Fees for Overweight and Overdimensional Vehicles, F.A.C.

IX. HISTORY

Certification Issued 11/21/78; signed by Governor Askew
Modified 02/22/80; signed by Governor Graham
Modified 05/22/80; signed by Secretary Varn
Modified 05/04/82; signed by Secretary Tschinkel
Modified 06/29/82; signed by Governor Graham
Modified 02/02/84; signed by Secretary Tschinkel
Modified 07/03/84; signed by Governor Graham
Letter Modification 03/28/88; signed by Hamilton Oven Jr.
Modified 06/10/96; signed by Secretary Wetherell
Modification Denial 03/02/98; signed by Secretary Wetherell
Modification 02/01/05; signed by Program Administrator Oven
Modified 06/22/06; signed by Program Administrator Oven
Modified 11/29/07; signed by Program Administrator Halpin
Modified 08/07/08; signed by Program Administrator Halpin
Modified 08/28/08; signed by Governor Crist
Modified 07/09/09 signed by Program Administrator Halpin
Modified 11/30/09 signed by Program Administrator Halpin

ATTACHMENT 1: AMBIENT AIR MONITORING LOCATIONS



ATTACHMENT 2: LEACHATE MONITORING AND TESTING

PROGRESS ENERGY FLORIDA CRYSTAL RIVER UNITS 4 AND 5

PROPOSED LEACHATE MONITORING AND TESTING

I. Computerized and manual literature search with the objective of obtaining an adequate data base from literature.

II. Pre-operational Water Table Monitoring Program with the objective to acquire 12-month baseline.

- Install 12 shallow peizometer well points

- Install 2 deep peizometer well points

- Monitor water table level

 - 1 well-recorder to establish degree of tidal influences - one month

 - 13 wells - weekly

- Monitor in situ (pH, conductance, redox, dissolved oxygen) - weekly (all wells)

- Monitor key water quality indicators - monthly (4 wells)

- Monitor extended water quality indicators - quarterly (4 wells)

- Monitor rainfall and evaporation - weekly

- Develop flow net and water budget

III. Laboratory screening of ash from low pyritic sulfur coal with the objective of evaluation of leachate formation and attenuation reactions. The program will establish the following:

- Percolation rates of compacted ash (fly and bottom ash)

- Solute release rates

- Limestone neutralization effectiveness

- Clay liner effectiveness

- Correlate extended and key water quality indicators

- Total ash leachate capacity

- Active area vs. Inactive area leachate rates

- Available fractions of solutes

- Techniques for screening:

 - Shake test (fly, bottom ash)

 - Column leaching (6-10 months)

- (1) Compacted fly ash (lifts and liners)
 - (2) Alternative lifts of ash and limestone
 - (3) Ash with clay liner
 - (4) Ash with compacted limerock and fly ash liner
- IV. Evaluate leachate attenuation in subsoil and water table aquifer.
 - Oxidation - reduction
 - Chemical precipitation/solubility/pH/Eh
 - Adsorption isotherms
 - Ion exchange capacity
 - Metals content of limerock
- V. Cost-effectiveness evaluation of alternative liners
 - Water quality criteria
 - Biological effects
 - Cost of leachate control and treatment
 - Cost of runoff control and treatment
- VI. Develop final design for field test cell program defined in paragraph VII below.
- VII. Field test cells program with the objective of verifying.
 - Monitor water budget
 - Direct infiltration rates
 - Direct runoff
 - Direct rainfall
 - Water table
 - Potential test cell configuration
 - Ash with compacted fly ash liner only
 - Ash with compacted limestone and fly ash liner
 - Alternative lifts of ash and limestone with compacted fly ash liner
 - Ash with selected clay liner
 - Alternative caps and vegetation
 - Monitor leachate formation and attenuation
 - 4 well clusters per cell at three depths
 - Weekly water table elevations in situ water quality from all wells (pH, conductance, redox, dissolved oxygen)
 - Monthly key indicators from 2 clusters per cell

- Quarterly extended indicators from 2 per cell
- 2 base well points shall be maintained up slope of the active area

VIII. Evaluate leachate management program results and develop final design of ash storage area.

IX. Periodic reports on the progress of this program will be submitted to the Department for its information and review.

X. In situ water quality indicators

pH	Redox
Conductance	Dissolved Oxygen

XI. Key water quality indicators - monthly

Conductance	Cadmium
pH	Zinc
Redox	Copper
Dissolved Oxygen	Nickel
Temperature	Selenium
Color	Chromium
Turbidity	Arsenic
Chloride	Beryllium
Iron	Mercury
Lead	

XII. Extended water quality indicators - quarterly

Key indicators plus:

Total Dissolved Solids	Gross Alpha
Suspended Solids	Aluminum
Barium	Calcium
Magnesium	Sodium
Molybdenum	Vanadium
Cobalt	

ATTACHMENT 3: DISCHARGE MONITORING REPORT

Attachment 3

DEPARTMENT OF ENVIRONMENTAL PROTECTION DISCHARGE MONITORING REPORT - PART A DRAFT

When Completed mail this report to: Department of Environmental Protection, Wastewater Compliance Evaluation Section, MS 3551, 2600 Blair Stone Road, Tallahassee, FL 32399-2400

PERMITTEE NAME: Progress Energy Florida
 MAILING ADDRESS: 15760 Powerline Street, MAC CN77
 Crystal River, FL 34428

PERMIT NUMBER PA 77-09J (Siting Certification)

LIMIT: Final
 CLASS SIZE: Major
 REPORT: Quarterly
 GROUP: Industrial

FACILITY: PEF Crystal River Units 4&5
 LOCATION: 15760 Powerline Street
 US Highway 19 & Powerline Road
 Crystal River, FL 34428

MONITORING GROUP NUMBER: G-001
 MONITORING GROUP DESC: Crystal River Units 4 & 5 Percolation Ponds

COUNTY: Citrus

NO DISCHARGE FROM SITE: ☐

MONITORING PERIOD From: _____ To: _____

Parameter		Quantity or Loading		Units	Quality or Concentration			Units	No. Ex.	Frequency of Analysis	Sample Type
pH	Sample Measurement										
PARM Code 00400 1 Mon. Site No. EFF-4	Permit Requirement					Report (Min.)	Report (Max.)	SU		Quarterly	In-situ
Specific Conductance	Sample Measurement										
PARM Code 00095 1 Mon. Site No. EFF-4	Permit Requirement						Report (Max.)	UMHO/CM		Quarterly	In-situ
Arsenic, Total Recoverable	Sample Measurement										
PARM Code 00978 1 Mon. Site No. EFF-4	Permit Requirement						Report (Max.)	UG/L		Quarterly	Grab
Barium, Total Recoverable	Sample Measurement										
PARM Code 01009 1 Mon. Site No. EFF-4	Permit Requirement						Report (Max.)	MG/L		Quarterly	Grab
Chloride (as Cl)	Sample Measurement										
PARM Code 00940 1 Mon. Site No. EFF-4	Permit Requirement						Report (Max.)	MG/L		Quarterly	Grab
Iron, Total Recoverable	Sample Measurement										
PARM Code 00980 1 Mon. Site No. EFF-4	Permit Requirement						Report (Max.)	MG/L		Quarterly	Grab

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)

COMMENT AND EXPLANATION OF ANY VIOLATIONS (Reference all attachments here):

Attachment 3

DISCHARGE MONITORING REPORT - PART A DRAFT (Continued)

FACILITY: PEF Crystal River Units 4&5

MONITORING GROUP NUMBER: G-001

PERMIT NUMBER: PA 77-09J

MONITORING PERIOD From: _____ To: _____

Parameter		Quantity or Loading		Units	Quality or Concentration			Units	No. Ex.	Frequency of Analysis	Sample Type
Magnesium, Total Recoverable	Sample Measurement										
PARM Code 00921 1 Mon. Site No. EFF-4	Permit Requirement						Report (Max.)	MG/L		Quarterly	Grab
Sodium, Total Recoverable	Sample Measurement										
PARM Code 00923 1 Mon. Site No. EFF-4	Permit Requirement						Report (Max.)	MG/L		Quarterly	Grab
Solids, Total Dissolved (TDS)	Sample Measurement										
PARM Code 70295 1 Mon. Site No. EFF-4	Permit Requirement						Report (Max.)	MG/L		Quarterly	Grab
Vanadium, Total Recoverable	Sample Measurement										
PARM Code 01128 1 Mon. Site No. EFF-4	Permit Requirement						Report (Max.)	MG/L		Quarterly	Grab
Zinc, Total Recoverable	Sample Measurement										
PARM Code 01094 1 Mon. Site No. EFF-4	Permit Requirement						Report (Max.)	MG/L		Quarterly	Grab
	Sample Measurement										
	Permit Requirement										
	Sample Measurement										
	Permit Requirement										
	Sample Measurement										
	Permit Requirement										
	Sample Measurement										
	Permit Requirement										
	Sample Measurement										
	Permit Requirement										

Attachment 3

INSTRUCTIONS FOR COMPLETING THE WASTEWATER DISCHARGE MONITORING REPORT

Read these instructions as well as the SUPPLEMENTAL INSTRUCTIONS FOR COMPLETING THE WASTEWATER DISCHARGE MONITORING REPORT before completing the DMR. Hard copies and/or electronic copies of the required parts of the DMR were provided with the permit. All required information shall be completed in full and typed or printed in ink. A signed, original DMR shall be mailed to the address printed on the DMR by the 28th of the month following the monitoring period. The DMR shall not be submitted before the end of the monitoring period.

The DMR consists of three parts--A, B, 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 or reclaimed water data. All domestic wastewater facilities will have a Part B for reporting daily sample results. Part D is used for reporting ground water monitoring well data.

When results are not available, the following codes should be used on parts A and D of the DMR and an explanation provided where appropriate. Note: Codes used on Part B for raw data are 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.

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.

When reporting analytical results that fall below a laboratory's reported method detection limits or practical quantification limits, the following instructions should be used:

1. Results greater than or equal to the PQL shall be reported as the measured quantity.
2. Results less than the PQL and greater than or equal to the MDL shall be reported as the laboratory's MDL value. These values shall be deemed equal to the MDL when necessary to calculate an average for that parameter and when determining compliance with permit limits.
3. Results less than the MDL shall be reported by entering a less than sign ("<") followed by the laboratory's MDL value, e.g. < 0.001. A value of one-half the MDL or one-half the effluent limit, whichever is lower, shall be used for that sample when necessary to calculate an average for that parameter. Values less than the MDL are considered to demonstrate compliance with an effluent limitation.

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 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; however, if the 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 in the non-shaded area above the limit. Be sure the result being entered corresponds to the appropriate statistical base code (e.g. annual average, monthly average, single sample maximum, etc.) and units.

No. Ex.: Enter the number of sample measurements during the monitoring period that exceeded the permit limit for each parameter in the non-shaded area. 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 62-620.305, 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.

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.

Attachment 3

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: Transfer all analytical data from your facility's laboratory or a contract laboratory's data sheets for all day(s) that samples were collected. Record the data in the units indicated. Table 1 in Chapter 62-160, F.A.C., contains a complete list of all the data qualifier codes that your laboratory may use when reporting analytical results. However, when transferring numerical results onto Part B of the DMR, only the following data qualifier codes should be used and an explanation provided where appropriate.

CODE	DESCRIPTION/INSTRUCTIONS
<	The compound was analyzed for but not detected.
A	Value reported is the mean (average) of two or more determinations.
J	Estimated value, value not accurate.
Q	Sample held beyond the actual holding time.
Y	Laboratory analysis was from an unpreserved or improperly preserved sample.

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 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. airlift, 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 that are unexpected. If more space is needed, reference all attachments in this area.

SPECIAL INSTRUCTIONS FOR LIMITED WET WEATHER DISCHARGES

Flow (Limited Wet Weather Discharge): Enter the measured average flow rate during the period of discharge or divide gallons discharged by duration of discharge (converted into days). Record in million gallons per day (MGD).

Flow (Upstream): Enter the average flow rate in the receiving stream upstream from the point of discharge for the period 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.

Actual Stream Dilution Ratio: To calculate the Actual Stream Dilution Ratio, divide the average upstream flow rate by the average discharge flow rate. Enter the Actual Stream Dilution Ratio accurate to the nearest 0.1.

No. of Days the SDF > Stream Dilution Ratio: For each day of discharge, compare the minimum Stream Dilution Factor (SDF) from the permit to the calculated Stream Dilution Ratio. On Part B of the DMR, enter an asterisk (*) if the SDF is greater than the Stream Dilution Ratio on any day of discharge. On Part A of the DMR, add up the days with an "*" and record the total number of days the Stream Dilution Factor was greater than the Stream Dilution Ratio.

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.

Actual Rainfall: Enter the actual rainfall for each day on Part B. Enter the actual cumulative rainfall to date for this calendar year and the actual total monthly rainfall on Part A. 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.

Rainfall During Average Rainfall Year: On Part A, enter the total monthly rainfall during the average rainfall year and the cumulative rainfall for the average rainfall year. The cumulative rainfall for the average rainfall year is the amount of rain, in inches, which fell during the average rainfall year from January through the month for which this DMR contains data.

No. of Days LWWD Activated During Calendar Year: Enter the cumulative number of days that the limited wet weather discharge was activated since January 1 of the current year.

Reason for Discharge: Attach to the DMR a brief explanation of the factors contributing to the need to activate the limited wet weather discharge.