STATE OF FLORIDA

DEPARTMENT

OF

ENVIRONMENTAL PROTECTION

Conditions of Certification

Tampa Electric Company

Big Bend Power Station

PA 79-12U

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SECTION A: GENERAL CONDITIONS

I. SCOPE

A. Pursuant to the Florida Electrical Power Plant Siting Act (PPSA), Sections 403.501-518, Florida Statutes (F.S.), this certification is issued to Tampa Electric Company (TECO) as owner/operator and Licensee of the Big Bend Power Station. Subject to the requirements contained in these Conditions of Certification (Conditions), TECO currently operates a nominal 1,863-megawatt (MW) facility consisting of Units 1, 4, 5, 6, CT4, and two photovoltaic solar generating facilities. Unit 1 is a steam turbine with a nominal generating capacity of 445 MW. Unit 4 is a fossil fuel fired boiler with a design electrical generating capacity of 486 MW. Units 5 and 6 are natural gas fired combustion turbines with a nominal generating capacity of 398 MW each, and they are each equipped with heat recovery steam generators that are used to power Unit 1. Together, Units 1, 5, and 6 constitute a two-on-one combined cycle system. CT4 is a combustion turbine set with a nominal generating capacity of 70 MW. Big Bend I Solar facility has a nominal generating capacity of 20 MW, and Big Bend II Solar facility has a nominal generating capacity of 46 MW. The facility is located on a 1,188-acre Site within Hillsborough County, Florida. UTM coordinates are: Zone 17; 361.9 km East; 3,075.0 km North.

B. The Certified Facility includes but is not limited to the following major associated facilities;

Big Bend Units 1 (with CT 5 & 6), and 4;
Unit 4 flue gas desulfurization system;
Unit 4 selective catalytic reduction system;
Solid fuel yard and coal handling facilities;
Coal combustion products handling and storage systems;
Limestone handling and storage;
Condenser cooling water intake and discharge systems;
Water Settling Recycle System;
FGD wastewater treatment facilities;
Four emergency diesel engine generators;
Black Start diesel generator;
Big Bend Station dock, coal unloading and gypsum loading facilities;
Rail loop, spur, coal unloading and gypsum rail loading facilities;
No. 2 fuel oil bulk storage and transfer facilities;
Big Bend Station substation/switchyard;
Dredge disposal areas DA-1 and DA-5;
Big Bend Units 1 and 4 Organism Return Systems;
Big Bend I Solar Facility (20MW);
Big Bend II Solar Facility (46MW);New Administration Building;
Manatee Viewing Center (MVC).

C. These Conditions, unless specifically amended or modified, are binding upon the Licensee and shall apply to the construction, operation, and maintenance of the Certified Facility. If a conflict should occur between the design criteria of this Certified Facility and the Conditions, the Conditions shall prevail unless amended or modified. In any conflict between any of these Conditions, the more specific condition governs.

D. Within 60 days after completion of construction of the electrical power plant as defined by 403.503(14), F.S., but excluding off-site linear and non-linear associated facilities, the Licensee shall provide to the Department in .pdf format: a survey map signed by a professional land surveyor, or acceptable equivalent documentation such as an official legal description, delineating the boundaries of the site as defined by Section 403.503(28), F.S., and an aerial photograph delineating the boundaries of the site. The survey map and aerial photograph shall be identified as the Site Delineation and attached hereto as part of Attachment A (Maps).

Within 120 days following approval of a change to Site boundaries, the Licensee shall submit to the Department an updated land survey (or legal description) and aerial photograph delineating the new boundaries of the Site. The survey and aerial photograph shall be identified as "Site Delineation" and attached hereto as part of Attachment A. Absent the above description/delineation of the Site, the Department will consider the perimeter fence line of the property on which the Certified Facilities are located to be the boundaries of the Site.

E. Within 60 days after completion of construction of a new generating unit or units or any on-site associated facilities, but excluding off-Site linear and non-linear associated facilities, the Licensee shall provide to the Department in .pdf format: acceptable documentation identifying the certified facilities within the site such as an aerial photograph identifying these. Certified facilities identified within the site shall include both the certified electrical power plant's generating facilities as defined in Section 403.503(28), F.S. and its on-site certified associated facilities (including on-site linear facilities) as defined by Section 403.503(7), F.S. The document shall be known as the Certified Facilities Identification of the Site and attached hereto as part of Attachment A (Maps).

F. Within 120 days after completion of construction of any off-site associated non-linear facilities, the Licensee shall provide to the Department in .pdf format; a survey map signed by a professional land surveyor, or acceptable equivalent documentation such as an official legal description, delineating the boundaries of the Certified Site for each off-site non-linear Certified Facility; and an aerial photograph delineating the boundaries of the Certified Areas for each off-site non-linear Certified Facility. The survey map(s) and aerial photograph(s) shall be known as Delineation of the Certified Off-site Non-linear Facilities and attached hereto as part of Attachment A (Maps).

G. Within 180 days after completion of construction of off-site associated linear facilities, as defined by Section 403.503(7), F.S., the Licensee shall provide; an aerial photograph(s)/map(s) at a scale of at least 1:400, or acceptable equivalent documentation such as an official legal description or survey map(s) signed by a professional land surveyor, delineating the boundaries of the Certified Facilities, following acquisition of all necessary property interests and the corridor narrowing as described in Section 403.503(11), F.S., which shall be known as the Delineation of Certified Off-Site Linear Facilities and attached as part of Attachment A (Maps).

H. If both certified and uncertified facilities lie within the boundaries of the site, the Licensee shall also comply with the requirements of this paragraph. Within 60 days after completion of construction of the plant and on-site associated facilities, but excluding off-site linear and non-linear associated facilities, the Licensee shall provide to the Department in .pdf format acceptable documentation identifying the certified and non-certified facilities within the site such as an aerial photograph. Certified facilities identified within the site shall include both

the certified electrical power plant's generating and its on-site certified associated facilities (including on-site linear facilities) as defined by Section 403.503(7), F.S. The document shall be labeled as the "Certified Facilities Identification Map" and attached hereto as part of Attachment A.

[Sections 403.511, 403.5113, F.S.; Rules 62-4.160(1-2) and 62-17.205(2), F.A.C.]

II. APPLICABLE DEPARTMENT RULES

The construction, operation, and maintenance of the Certified Facility shall be in accordance with all applicable non-procedural provisions of F.S. and Florida Administrative Code (F.A.C.), including, but not limited to, the applicable non-procedural portions of the following regulations, except to the extent a variance, exception, exemption or other relief is granted in the Final Order of Certification or in a subsequent modification to the Conditions, under any federal permit or as otherwise provided under Chapter 403:

Florida Administrative Codes:
18-2 (Management of Uplands Vested in the Board of Trustees)
18-14 (Administrative Fines for Damaging State Lands)
18-20 (Aquatic Preserves)
18-21 (Sovereign Submerged Lands Management)
62-4 (Permits)
62-6 (Standards for Onsite Sewage Treatment and Disposal Systems)
62-17 (Electrical Power Plant Siting)
62-40 (Water Resource Implementation Rule)
62-150 (Hazardous Substance Release Notification)
62-160 (Quality Assurance)
62-204 (Air Pollution Control-General Provisions)
62-210 (Stationary Sources-General Requirements)
62-212 (Stationary Sources-Preconstruction Review)
62-213 (Operation Permits for Major Sources of Air Pollution)
62-256 (Open Burning)
62-296 (Stationary Sources-Emission Standards)
62-297 (Stationary Sources-Emission Monitoring)
62-302 (Surface Water Quality Standards)
62-303 (Identification of Impaired Surface Waters)
62-304 (Total Maximum Daily Loads)
62-330 (Environmental Resource Permitting)
62-340 (Delineation of the Landward Extent of Wetlands and Surface Waters)
62-342 (Mitigation Banks)
62-345 (Uniform Mitigation Assessment Method)
62-520 (Groundwater Classes, Standards and Exemptions)
62-528 (Underground Injection Control)
62-531 (Water Well Contractor Licensing Requirements)
62-532 (Water Well Permitting and Construction Requirements)
62-550 (Drinking Water Standards, Monitoring and Reporting)
62-555 (Permitting, Construction, Operation, and Maintenance of Public Water Systems)
62-560 (Requirements for Public Water Systems That Are Out of Compliance)

62-600 (Domestic Wastewater Facilities)
62-604 (Collection Systems and Transmission Facilities)
62-610 (Reuse of Reclaimed Water and Land Application)
62-620 (Wastewater Facility and Activities Permitting)
62-621 (Generic Permits)
62-650 (Water Quality Based Effluent Limitations)
62-660 (Industrial Wastewater Facilities)
62-699 (Classification and Staffing of Water or Domestic Wastewater Treatment Plants and Water Distribution Systems)
62-701 (Solid Waste Management Facilities)
62-709 (Criteria for Organics Processing and Recycling Facilities)
62-710 (Used Oil Management)
62-730 (Hazardous Waste)
62-737 (Management of Spent Mercury-Containing Lamps and Devices Destined For Recycling)
62-740 (Petroleum Contact Water)
62-761 (Underground Storage Tank Systems)
62-762 (Aboveground Storage Tank Systems)
62-777 (Contaminated Site Clean-Up Target Levels)
62-780 (Contaminated Site Clean-Up Criteria)
62-814 (Electric and Magnetic Fields)

III. REVISIONS TO DEPARTMENT STATUTES AND RULES

A. The Licensee shall comply, after a reasonable time, with rules adopted by the Department subsequent to the issuance of the certification under the PPSA which prescribe new or stricter criteria, to the extent that the rules are applicable to electrical power plants. Except when express variances, exceptions, exemptions, or other relief have been granted by the conditions of the certification, subsequently adopted Department rules which prescribe new or stricter criteria shall operate as automatic modifications to this Certification.

B. Upon written notification to the Department, the Licensee may choose to operate the certified electrical power plant in compliance with any rule subsequently adopted by the Department which prescribes criteria more lenient than the criteria required by the terms and conditions in the certification which are not site-specific.

[Section 403.511(5)(a) and (b), F.S.; Rule 62-4.160(10), F.A.C.]

IV. DEFINITIONS

The meaning of terms used herein shall be governed by the applicable definitions contained in Chapters 373 and 403, F.S., and any regulation adopted pursuant thereto. In the event of any dispute over the meaning of a term used in these 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 used herein, the following shall apply:

A. "Application" or "SCA" as defined in Section 403.503(6), F.S. For purposes of this license, "Application" shall also include materials submitted for post-certification

amendments and petitions for modification to the Conditions of Certification, as well as supplemental applications.

B. "Associated Facilities" is defined by Section 403.503(7), F.S.

C. "Certified Facility" or "Certified Facilities" means the certified electrical power generation facilities and all certified on- or off-site associated facilities identified/described in the Application, in the Final Order of Certification, or in a post-certification amendment or modification.

D. "DEO" means the Florida Department of Economic Opportunity.

E. "DEM" shall mean the Florida Division of Emergency Management.

F. "DEP" or "Department" means the Florida Department of Environmental Protection.

G. "DHR" means the Florida Department of State, Division of Historical Resources.

H "DOT" means the Florida Department of Transportation.

I. "Emergency conditions" or "Emergency reporting" means urgent circumstances involving potential adverse consequences to human life or property as a result of weather conditions or other calamity.

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

K. "FWC" means the Florida Fish and Wildlife Conservation Commission.

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

M. "NPDES permit" means a federal National Pollutant Discharge Permit System permit issued by DEP in accordance with the federal Clean Water Act.

N. "Post-certification submittal" shall mean a submittal made by the Licensee pursuant to a Condition of Certification.

O. "PSD permit" means a federal Prevention of Significant Deterioration air emissions permit issued by DEP in accordance with the federal Clean Air Act.

P. "ROW" means the right-of-way to be selected by the Licensee within the certified corridor in accordance with the Conditions of Certification and as defined in Section 403.503(27), F.S.

Q. "Site" as defined in Section 403.503(28), F.S.

R. "State Water Quality Standards" shall mean the numerical and narrative criteria applied to specific water uses or classifications set forth in Chapters 62-302, and 62-520, F.A.C.

S. "Surface Water Management System" or "System" means a stormwater management system, dam, impoundment, reservoir, appurtenant work, or works, or any combination thereof. The terms "surface water management system" or "system" include areas of dredging or filling, as those terms are defined in Sections 373.403(13) and (14), F.S.

T. "SWD" shall mean the Southwest DEP district office.

U. "SWFWMD" means the Southwest Florida Water Management District, respectively.

V. "Title V permit" means a federal permit issued by DEP in accordance with Title V provisions of the federal Clean Air Act.

W. "Wetlands" shall mean those areas meeting the definition set forth in Section 373.019(27), F.S., as delineated pursuant to Chapter 62-340, F.A.C.

V. FEDERALLY DELEGATED OR APPROVED PERMIT PROGRAMS

Subject to the conditions set forth herein, this certification shall constitute the sole license of the state and any agency as to the approval of the location of the site and any associated facility and the construction and operation of the proposed electrical power plant, except for the issuance of department licenses required under any federally delegated or approved permit program. This certification is not a waiver of any other Department approval that may be required under federally delegated or approved programs. In the event of a conflict between the certification process and federally required procedures, the applicable federal requirements shall control.

[Sections 403.5055, 403.508(8), and 403.511(1), F.S.]

VI. DESIGN AND PERFORMANCE CRITERIA

Certification, including these Conditions, is predicated upon preliminary designs, concepts, and performance criteria described in the site certification application (SCA) or in testimony and exhibits in support of certification. Final engineering design will be consistent and in substantial compliance with the preliminary information described in the SCA or as explained at the certification hearing (if any). Conformance to those criteria, unless specifically modified in accordance with Sections 403.516, F.S., and Rule 62-17.211, F.A.C., is binding upon the Licensee in the design, construction, operation, and maintenance of the Certified Facility.

[Sections 403.511(2)(a), 403.516, F.S.; Rules 62-4.160(2) and 62-17.211, F.A.C.]

VII. NOTIFICATION

A. If, for any reason, the Licensee does not comply with or will be unable to comply with any condition or limitation specified in this license, the Licensee shall immediately provide the appropriate DEP District Office with the following information:

1. A description of and cause of noncompliance; and

2. The period of noncompliance, including dates and times; or, if not corrected, the anticipated time the noncompliance is expected to continue, and steps being taken to reduce, eliminate, and prevent recurrence of the noncompliance. The Licensee shall be responsible for any and all damages which may result and may be subject to enforcement action by the Department for penalties or for revocation of this certification.

All notifications which are made in writing shall additionally be immediately provided to the Siting Coordination Office (SCO) via email to SCO@dep.state.fl.us.

[Rule 62-4.160(8), F.A.C.]

B. The Licensee shall promptly notify the SCO in writing (email acceptable) of any previously submitted information concerning the Certified Facility that is later discovered to be inaccurate.

[Rule 62-4.160(15), F.A.C.]

C. Within 60 days after certification of an associated linear facility the Licensee shall file a notice of the certified route with the Department and the clerk of the circuit court for each county through which the corridor will pass.

The notice shall consist of maps or aerial photographs in the scale of 1:24,000 which clearly show the location of the certified route and shall state that the certification of the corridor will result in the acquisition of rights-of-way within the corridor.

[Section 403.5112, F.S.]

D. Any owner or operator of a facility who has knowledge of any incident reportable to the State Watch Office regarding a certified facility shall notify the State Watch Office at (800) 320-0519 as soon as possible, but not later than 24 hours after discovery of the incident.

E. Any owner or operator of a facility who has knowledge of any reportable pollution release shall submit a Public Notice of Pollution by following the instructions at https://prodenv.dep.state.fl.us/DepPNP/user/pnpRequest, as soon as possible, but not later than 24 hours after discovery of the release.

[Section 403.077, F.S.]

VIII. EMERGENCY CONDITION NOTIFICATION AND RESTORATION

If the Licensee is temporarily unable to comply with any of the conditions of the License due to breakdown of equipment or destruction by hazard of fire, wind or following an emergency as defined by Sections 252.34(2), (4), (7), (8), or (10), F.S., the Licensee shall immediately notify the Department. Notification shall include pertinent information as to the cause of the problem, and what steps are being taken to correct the problem and to prevent its recurrence, and where applicable, the owner's intent toward reconstruction of destroyed facilities. Such notification does not release the Licensee from any liability for failure to comply with Department rules. Any exceedances and/or violations recorded during emergency conditions shall be reported as such, but the Department acknowledges that it intends to use its enforcement discretion during this timeframe. This acknowledgement by the Department does not constitute a waiver or variance from any requirements of any federal permit. Relief from any federal agency must be separately sought.

[Section 62-4.130, F.A.C.]

IX. CONSTRUCTION PRACTICES

A. Local Building Codes

Subject to the conditions set forth herein, this certification constitutes the sole license of the state and any agency as to the approval of the location of the site and any associated facility and the construction and operation of any certified facility. The licensee is not required to obtain building permits for certified facilities. However, this certification shall not affect in any way the right of any local government to charge appropriate fees for and require

that construction of installations used by the electric utility that are not an integral part of a generating plant, substation, or control center be in compliance with applicable building construction codes.

[Section 403.511(4), F.S.]

B. Open Burning

Prior to open burning in connection with land clearing, the Licensee shall seek authorization from the Florida Forest Service in accordance with the requirements of Chapters 62-256 and 5I-2, F.A.C.

[Chapters 5I-2 and 62-256, F.A.C.]

C. Vegetation

For areas located in any Florida Department of Transportation (DOT) ROW, Chapter 3.18 of the 2017 Florida DOT *Utility Accommodation Manual* available on the DOT website (https://www.fdot.gov/programmanagement/utilities/default.shtm) shall serve as guidelines for best management practices.

D. Existing Underground Utilities

The Licensee must follow all applicable portions of the Underground Facility Damage Prevention and Safety Act, Chapter 556, F.S. The Licensee shall provide the affected local government and the SCO with copies of valid tickets obtained from Sunshine State One Call of Florida upon request. Tickets shall be available for request until the underground work is completed for the affected area.

[Chapter 556, F.S.]

E. Electric and Magnetic Fields (EMF)

Any transmission lines and electrical substations shall comply with the applicable requirements of Chapter 62-814, F.A.C.

[Chapter 62-814, F.A.C.]

F. Existing Wells

Any existing wells to be impacted in the path of construction that will no longer be used shall be abandoned by a licensed well contractor. All abandoned wells shall be filled and sealed in accordance with Rules 62-532.500(5), F.A.C., or with the rules of the authorizing agency, or consistent with these Conditions.

[Rules 62-532.400 and 62-532.500(5), F.A.C.]

G. Abandonment of Existing Septic Tanks

Any existing septic tanks to be impacted by construction and that will no longer be used shall be abandoned in accordance with Rule 64E-6.011, F.A.C., unless these Conditions provide otherwise.

[Chapter 64E-6, F.A.C.]

H. Sanitary Wastes

Disposal of sanitary wastes from construction toilet facilities shall be in accordance with applicable regulations of the Department.

[Rule 62-6.0101, F.A.C.]

X. RIGHT OF ENTRY

A. Upon presentation of credentials or other documents as may be required by law, the Licensee shall allow authorized representatives of the Department or other agencies with jurisdiction over a portion of the Certified Facility:

1. At reasonable times, to enter upon the Certified Facility in order to monitor activities within their respective jurisdictions for purposes of assessing compliance with this certification; or

2. During business hours, to enter the Licensee's premises in which records are required to be kept under this Certification; and to have access to and copy any records required to be kept under this Certification.

B. When requested by the Department, on its own behalf or on behalf of another agency with regulatory jurisdiction, the Licensee shall within 10 working days, or such longer period as may be mutually agreed upon by the Department and the Licensee, furnish any information required by law, which is needed to determine compliance with the Certification.

[Rules 62-4.160(7)(a) and 62-4.160(15), F.A.C.]

XI. DISPUTE RESOLUTION

A. General

If a situation arises in which mutual agreement between either the Department and the Licensee, or the Department and an agency with substantive regulatory jurisdiction over a matter cannot be reached, the Department can act as a facilitator in an attempt to resolve the issue. If the dispute is not resolved in this initial informal meeting, Licensee may request a second informal meeting in which both Licensee and the agency with substantive regulatory jurisdiction over the matter at issue can participate in an attempt to resolve the issue. If, after such meetings, a mutual agreement cannot be reached between the parties, then the matter shall be referred to the Division of Administrative Hearings (DOAH) for disposition in accordance with the provisions of Chapter 120, F.S. The Licensee or the Department may request DOAH to establish an expedited schedule for the processing of such a dispute. Any filing with DOAH shall state with particularity the specific project and geographic location to which the dispute relates. Work unrelated to the specific project and in areas other than the location to which the dispute relates will not be affected by the dispute.

B. Modifications

If written objections are filed regarding a modification, and the objections address only a portion of a requested modification, then the department shall issue a Final Order approving the portion of the modification to which no objections were filed, unless that portion of the requested modification is substantially related to or necessary to implement the portion to which written objections are filed.

C. Post-Certification Submittals

If it is determined, after assessment of a post-certification submittal, that compliance with the conditions will not be achieved for a particular portion of a submittal, the Department may make a separate assessment of other portions of the submittal, unless those portions of the submittal are substantially related to or necessary to implement that portion for which it has been determined that compliance with the conditions will not be achieved. The Licensee may proceed with those portions of the submittal which were separately assessed and approved by the Department.

[Section 120.57, F.S.; Rule 62-17.211, F.A.C.]

XII. 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 circumstance is held invalid, the remainder of the Certification or the application of such provision to other circumstances shall not be affected thereby.

XIII. ENFORCEMENT

A. The terms, conditions, requirements, limitations and restrictions set forth in these Conditions are binding and enforceable pursuant to Sections 403.141, 403.161, 403.514, 403.727, and 403.859 through 403.861, F.S., as applicable. Any noncompliance by the Licensee with these Conditions constitutes a violation of Chapter 403, F.S., and is grounds for enforcement action, license termination, license revocation, or license revision. The Licensee is placed on notice that the Department may review this Certification periodically and may initiate enforcement action for any violation of these Conditions.

B. All records, notes, monitoring data and other information relating to the construction or operation of the Certified Facility which are submitted to the Department may be used by the Department as evidence in any enforcement case involving the Certified Facility and arising under the Florida Statutes or Department rules, subject to the restrictions in Sections 403.111 and 403.73, F.S. During enforcement actions, the retention period for all records will be extended automatically unless otherwise stipulated by the Department. Such evidence shall only be used to the extent it is consistent with the Florida Rules of Civil Procedure and appropriate evidentiary rules.

[Sections 403.121, 403.131, 403.141, 403.151, 403.161, and 403.514, F.S.; Rules 62-4.160(1) and (9), F.A.C.]

XIV. REVOCATION OR SUSPENSION

The Certification shall be final unless revised, revoked, or suspended pursuant to law. This Certification may be suspended or revoked pursuant to Section 403.512, F.S. This Certification is valid only for the specific processes and operations identified in the SCA and approved in the Final Order of Certification and indicated in the testimony and exhibits in support of certification or approved in a subsequent amendment or modification of the certification. 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 portion(s) of the Certified Facility that are the cause of such action, and other portions of the Certified Facility shall remain unaffected by such action.

[Sections 403.512, F.S.; Rule 62-4.160(2), F.A.C.]

XV. REGULATORY COMPLIANCE

As provided in Sections 403.087(7) and 403.722(5), F.S., except as specifically provided in the Final Order of Certification, a subsequent modification or amendment, or these Conditions, the issuance of this license 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 License is not a waiver of or approval of any other Department license/permit that may be required for other aspects of the Certified Facility which are not addressed in this license. This license does not relieve the Licensee from liability for harm or injury to human health or welfare, animal, or plant life, or public or private property caused by the construction or operation of the Certified Facility, or from penalties therefore.

[Rules 62-4.160(3) and 62-4.160(5), F.A.C.]

XVI. CIVIL AND CRIMINAL LIABILITY

Except to the extent a variance, exception, exemption or other relief is granted in the Final Order of Certification, in a subsequent modification to these Conditions, or as otherwise provided under Chapter 403, F.S, this Certification does not relieve the Licensee from civil or criminal penalties for noncompliance with any Condition of Certification, applicable rules or regulations of the Department, or any other state statutes or regulations which may apply.

[Sections 403.141, 403.161, and 403.511, F.S.]

XVII. USE OF STATE LANDS

A. Except as specifically provided in the Final Order of Certification or these Conditions, the issuance of this License conveys no title to land or water, does not constitute State recognition or acknowledgment of title, and does not constitute authority for the use of submerged lands unless the necessary title or leasehold interests have been obtained from the State. Only the Trustees of the Internal Improvement Trust Fund may express State opinion as to title.

B. If any portion of the Certified Facility is located on sovereign submerged lands, state-owned uplands, or within an aquatic preserve, then the Licensee must comply with the applicable portions of Chapters 18-2, 18-20, and 18-21, F.A.C., and Chapters 253 and 258, F.S., except as specifically provided in the Final Order of Certification or these Conditions. If any portion of the Certified Facility is located on sovereign submerged lands, the Licensee must submit section F of Form 62-330.060(1), *Application for Individual and Conceptual Approval Environmental Resource Permit and Authorization Use State-owned Submerged Lands* to the Department prior to construction. If any portion of the Certified Facility is located on state-owned uplands, the Licensee must submit an Upland Easement Application to the Department prior to construction.

C. If a portion of the Certified Facility is located on sovereign submerged lands or state-owned uplands owned by the Board of Trustees of the Internal Improvement Trust Fund, pursuant to Article X, Section 11 of the Florida Constitution, then the proposed activity on such

lands requires a proprietary authorization. Under such circumstances, the proposed activity is not exempt from the need to obtain a proprietary authorization. Unless otherwise provided in the Final Order of Certification or these Conditions, the Department has the responsibility to review and take action on requests for proprietary authorization in accordance with Rule 18-2.018 or 18-21.0051, F.A.C.

D. The Licensee is hereby advised that Florida law, in 253.77, F.S. states: "A person may not commence any excavation, construction, or other activity involving the use of sovereign or other state lands of the state, title to which is vested in the Board of Trustees of the Internal Improvement Trust Fund under this chapter, until such person has received from the Board of Trustees of the Internal Improvement Trust Fund the required lease, license, easement, or other form of consent authorizing the proposed use." Pursuant to Chapter 18-14, F.A.C., if such work is done without consent, or if a person otherwise damages state land or products of state land, the Board of Trustees may levy administrative fines of up to $10,000 per offense.

E. The terms, conditions, and provisions of any required lease or easement issued by the State shall be met. Any construction activity associated with the Certified Facility shall not commence on sovereign submerged lands or state-owned uplands, title to which is held by the Board of Trustees of the Internal Improvement Trust Fund, until all required lease or easement documents have been executed.

[Chapters 253 and 258, F.S.; Chapters 18-2, 18-14, 18-21, 62-340, and Rules 62-330.060(1) and 62-4.160(4), F.A.C.]

XVIII. 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 any party of whatever procedural rights it may have under Chapter 120, F.S., including those related to rule-making proceedings.

[Section 403.511(5)(c), F.S.]

XIX. AGENCY ADDRESSES FOR POST-CERTIFICATION SUBMITTALS AND NOTICES

Where a Condition requires post-certification submittals and/or notices to be sent to a specific agency, the following agency addresses shall be used unless the Conditions specify otherwise or unless the Licensee and the Department are notified in writing of an agency's change in address for such submittals and notices:

Florida Department of Environmental Protection
Siting Coordination Office, MS 5500
2600 Blair Stone Road.
Tallahassee, Florida 32399-3000
SCO@dep.state.fl.us

Florida Department of Environmental Protection
Southwest District Office
13051 North Telecom Parkway
Temple Terrace, Florida 33637-0926

Florida Department of Economic Development
Bureau of Planning and Growth
107 East Madison Street
Tallahassee, Florida 32399-2100

Florida Fish & Wildlife Conservation Commission
Conservation Planning Services
620 South Meridian Street
Tallahassee, Florida 32399-1600
FWCConservationPlanningServices@myfwc.com

Florida Department of Transportation
District Administration
605 Suwannee Street
Tallahassee, FL 32399-0450

Florida Department of Agriculture and Consumer Services
Office of General Counsel
407 South Calhoun Street
Tallahassee, Florida 32399-0800

Southwest Florida Water Management District
Office of General Counsel
7601 U.S. 301 North
Tampa, Florida 33637-6759

Florida Department of State
R.A. Gray Building 4th Floor
Division of Historical Resources
500 South Bronough Street
Tallahassee, Florida 32399-0250

Hillsborough County
Office of General Council
601 East Kennedy Boulevard
County Center, 27th Floor
Tampa, Florida 33602

[Section 403.511, F.S.]

XX. PROFESSIONAL CERTIFICATION

To ensure protection of public health, safety, and welfare, any construction, modification, or operation of an installation which may be a source of pollution, or of a public drinking water supply, shall be in accordance with sound professional engineering practices pursuant to Chapter 471, F.S.; and all final geological papers or documents involving the practice of the profession of geology shall be in accordance with sound professional geological practices pursuant to Chapter 492, F.S. Where required by Chapter 471 or 492, F.S., applicable portions

of amendment requests, petitions for modifications, post certification submittals, and supporting documents which are submitted to the Department for public record shall be signed and sealed by the professional(s) who prepared or approved them.

[62-4.050, F.A.C.]

XXI. PROCEDURES FOR POST-CERTIFICATION SUBMITTALS

A. Purpose of Submittals

Conditions which provide for the post-certification submittal of information to DEP or other agencies by the Licensee are for the purpose of facilitating the agencies' monitoring of the effects arising from the location of the Certified Facility and the construction and maintenance of the Certified Facility. This monitoring is for DEP to assure, in consultation with other agencies with applicable regulatory jurisdiction, continued compliance with these Conditions, without further agency action. A submittal of information or determination of compliance pursuant to a post-certification submittal under this condition does not provide a point of entry for a third party.

B. Filings

All post-certification submittals of information by Licensee are to be filed with the DEP SWD Office, and any other agency that is entitled to receive a submittal pursuant to these Conditions. The SCO shall be copied on all post-certification submittals in electronic .pdf format only, unless otherwise requested, via email to SCO@dep.state.fl.us. Each submittal shall clearly identify the Certified Facility name, PA#, and the Condition number/s (i.e. Section X, Condition XX.y.(z)) requiring the submittal. As required by Section 403.5113(2), F.S., each post-certification submittal will be reviewed by each agency with regulatory authority over the matters addressed in the submittal on an expedited and priority basis.

[Section 403.5113, F.S., Rule 62-17.191(3), F.A.C.]

C. Completeness

DEP shall review each post-certification submittal for completeness. This review may include consultation with the other agency/ies receiving the post-certification submittal with regulatory jurisdiction over the matter addressed in the submittal. DEP's finding of completeness shall specify the area of the Certified Facility affected, and, shall not delay further processing of the post-certification submittal for non-affected areas.

If any portion of a post-certification submittal is found to be incomplete, the Licensee shall be so notified. Failure to issue such a notice within 30 days after filing of the submittal shall constitute a finding of completeness. Subsequent findings of incompleteness, if any, shall address only the newly filed information.

[Rule 62-17.191(1)(c) 2, F.A.C.]

D. Interagency Meetings

DEP may conduct an interagency meeting with other agencies that received a post-certification 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 compliance with these Conditions has been provided. Failure of DEP to conduct an interagency meeting or 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 timeframes for review established by these Conditions. At DEP's request, a field inspection shall be conducted with the Licensee and the agency representative in conjunction with the interagency meeting.

E. Determination of Compliance

DEP shall give written notification within 90 days, to the Licensee and the other agency/ies to which the post-certification information was submitted of DEP's determination of whether there is demonstration of compliance with these Conditions. If it is determined that compliance with the Conditions has not been provided, the Licensee shall be notified with particularity of the deficiencies and possible corrective measures suggested. Failure to notify Licensee in writing within 90 days of receipt of a complete post-certification submittal shall constitute a determination of compliance. A post-certification compliance review may be the basis for initiating modifications to the relevant Condition or to other related Conditions.

F. Commencement of Construction

If DEP does not object within the time period specified in paragraph E. above, Licensee may begin construction pursuant to the terms of these Conditions and the subsequently submitted construction details.

G. Revisions to Design Previously Reviewed for Compliance

If revisions to site-specific designs occur after submittal, the Licensee shall submit revised plans prior to construction for review in accordance with the post-certification process specified in this Condition.

[Sections 120.569, 373.413, 373.416, and 403.511, F.S.; Rules 62-17.191 and 62-17.205, F.A.C.]

XXII. POST-CERTIFICATION SUBMITTAL REQUIREMENTS SUMMARY

Within 90 days after certification, and within 90 days after any subsequent modification or certification, the Licensee shall provide the Department a complete summary of those post-certification submittals that are identified in these Conditions when due-dates for the information required of the Licensee have been identified. A summary shall be provided as a separate document for each transmission line, if any. Such submittals shall include, but are not limited to, monitoring reports, management plans, wildlife surveys, etc. The summary shall be provided to the SCO, in a sortable spreadsheet, electronically, in the format shown below or equivalent. For subsequent modifications and certifications, a Post-Certification Submittal Requirements Summary shall be required for only those resulting in new or altered post-certification requirements.

Condition Number	Requirement and Timeframe	Due Date	Name of Agency or Agency Subunit to whom the submittal is required to be provided

[Section 403.5113, F.S.; Rule 62-17.191(3), F.A.C.]

XXIII. POST CERTIFICATION AMENDMENTS

If, subsequent to certification, the Licensee proposes any material change to the SCA and revisions or amendments thereto, as certified, the Licensee shall submit a written request for amendment and a description of the proposed change to the SCA to the Department. Within 30 days after the receipt of a complete request for an amendment, the Department shall determine whether the proposed change to the SCA requires a modification to the Conditions.

A. If the Department concludes that the change would not require a modification to the Conditions, the Department shall provide written notification of the approval of the proposed amendment to the Licensee, all agencies, and all other parties to the Certification.

B. If the Department concludes that the change would require a modification to the Conditions, the Department shall provide written notification to the Licensee that the proposed change to the SCA requires a request for modification pursuant to Section 403.516, F.S.

[Section 403.5113, F.S]

XXIV. MODIFICATION OF CERTIFICATION

A. Pursuant to Sections 403.516(1)(a), F.S., and Rule 62-17.211, F.A.C., the Siting Board hereby delegates the authority to the Department to modify any Condition which would not otherwise require approval by the Siting Board, after notice and receipt of no objection by a party to the certification within 45 days after notice by mail to the party's last address of record, and if no other person whose substantial interests will be affected by the modification objects in writing within 30 days of public notice.

B. The Department may modify Conditions, in accordance with Section 403.516(1)(b), F.S., which are inconsistent with the terms of any subsequent and separately DEP-issued permits, permit amendments, permit modifications, or permit renewals under a federally delegated or federally approved permit program. Such modification may be made without further notice if the matter has been previously noticed under the requirements for any federally delegated or approved permit program.

C. In accordance with Section 403.516(1)(c), F.S., the Licensee may file a petition for modification with the Department, or the Department may initiate the modification upon its own initiative.

D. 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 request for an amendment, modification, or certification.

E. Alteration of Site boundaries may require modification of the Conditions of Certification.

[Section 403.516, F.S.; Rule 62-17.211 F.A.C.]

XXV. COASTAL ZONE CONSISTENCY

Pursuant to Sections 373.428 and 403.511, F.S., certification of the Facility constitutes the State's concurrence that the licensed activity or use is consistent with the federally approved program under the Florida Coastal Management Act.

[Sections 373.428, 380.23, and 403.511(7), F.S.]

XXVI. WATER QUALITY CERTIFICATION

Pursuant to the Operating Agreement between the Department, Water Management Districts and U.S. Army Corps of Engineers, a written Final Order granting 'certification' constitutes certification by the Department that the project activities comply with applicable state water quality standards.

[2012 Operating Agreement, Jacksonville District USACOE, DEP and Water Management Districts, Section II.A.1.(f)]

XXVII. TRANSFER OF CERTIFICATION

A. This Certification is transferable in whole or in part, upon Department approval, to an entity determined to be able to comply with these Conditions. A transfer of certification of all or part of the Certified Facility may be initiated by the Licensee's filing of a Notice of Intent to Transfer Certification with the Department. The Notice of Intent shall: identify the intended new certification holder or Licensee; identity current and new entity responsible for compliance with the certification; and include a written agreement from the intended Licensee/Transferee to abide by all Conditions of Certification and applicable laws and regulations. Upon receiving a complete notice of intent, the transfer shall be approved by the Department unless the Department objects to the transfer on the grounds that the new Licensee will be unable to comply with the Conditions of Certification, specifies in writing its reasons for its objections, and gives notice and an opportunity to petition and administrative hearing pursuant to Section 120.57, F.S. Upon approval, the Department will initiate a modification to the Conditions to reflect the change in ownership in accordance with Rule 62-17.211, F.A.C.

B. In the event of the dissolution of the Licensee, the Department may transfer certification to successor entities which are determined to be competent to construct, operate and maintain the Certified Facility in accordance with the Conditions of Certification and which are proper applicants as defined by the PPSA. Upon determination that such a successor entity complies with the requirements for transfer of certification, the Department will initiate a modification to the Conditions to reflect the change in ownership in accordance with Rule 62-17.211, F.A.C.

[Chapter 120, F.S.; Rule 62-17.211, F.A.C]

XXVIII. LABORATORIES AND QUALITY ASSURANCE

Chemical, physical, biological, microbiological, and toxicological data collected as a requirement of these Conditions must be reliable and collected and analyzed by scientifically sound procedures. Unless otherwise specified in these Conditions, the Licensee shall adhere to the minimum field and laboratory quality assurance, methodological and reporting requirements of the Department as set forth in Chapter 62-160, F.A.C.

[Rule 62-160, F.A.C.]

XXIX. ENVIRONMENTAL RESOURCES

A. General

1. Submittals for Construction Activities

a. Prior to the commencement of construction of new facilities and/or new Associated facilities the Licensee shall provide to the appropriate DEP District for review, all information necessary for a complete *Application for Individual and Conceptual Approval Environmental Resource Permit and Authorization to Use State-Owned Lands* (ERP), DEP Form 62-330.060(1), F.A.C., or other applicable ERP authorization form. A copy of the submittal shall also be provided to the SCO.

b. This form may: 1) be submitted concurrently with a SCA; 2) be submitted as part of an amendment request or a petition for modification; or 3) be submitted as a post-certification submittal following approval of a Project through certification, modification, or amendment. Such ERP submittals, once received, shall be reviewed in accordance with the non-procedural standards and criteria for issuance of an ERP, including all the provisions related to reduction and elimination of impacts, conditions for issuance, additional conditions for issuance, and mitigation contained in Chapter 62-330, F.A.C., as applicable, unless otherwise stated in these Conditions. While the information is provided for review via submittal of the ERP form, consistent with Section 403.511, F.S., a separate ERP is not required for certified facilities, and therefore, a separate ERP will not be issued.

c. Those forms submitted as part of a SCA, an amendment, or modification, shall be processed concurrently with the respective SCA, amendment, or modification, in compliance with the applicable PPSA procedures. Those forms submitted as a post-certification submittal (after certification, modification, or amendment and prior to construction) shall be processed in accordance with Section A. General Conditions, Condition XXI., Procedures for Post-Certification Submittals. Post-certification submittal information may be submitted for discrete portions of the certified facilities for a determination of compliance with these Conditions.

d. No construction shall commence on a project feature, or in a particular segment of a linear facility, until the Department has determined that there is a demonstration of compliance with these Conditions. For post-certification submittal reviews, the Department's determination is governed by Section A, General Conditions, Condition XXI, Procedures for Post-Certification Submittals.

e. Concurrent with submittal of the DEP form required in subparagraph A.1.a., above, the Licensee shall submit, as applicable, a survey of wetland and surface water areas as delineated in accordance with Chapter 62-340, F.A.C., and verified by appropriate agency staff for Department compliance review. Available DEP-approved wetland and surface water delineations within the boundaries of a certified site or a portion thereof may be used and reproduced for this delineation submittal and verification. Formal DEP-approved wetland and surface water delineations are valid only for a period of five years.

[Section 373.416, F.S.; Chapters 62-330 and 62-340, F.A.C.]

2. Construction, operation, and maintenance of the proposed project (including any access roads and structures constructed within wetlands and other surface waters, and/or Associated facilities) shall satisfy any applicable non-procedural requirements in the Department rules.

[Section 373.414(1)(a), F.S.]

3. Any delineation of the extent of a wetland or other surface water submitted as part of the DEP ERP Application Form required by subparagraph A.1.a., above, including plans or other supporting documentation, shall not be considered binding on the Department unless a specific condition of this certification or a formal wetlands jurisdictional determination under Section 373.421(2), F.S., provides otherwise.

[Sections 373.421, and 403.504, F.S.]

4. Silt screens, hay bales, turbidity screens/barriers or other such sediment control measures shall be utilized during construction. The selected sediment control measure shall be installed landward of all protected wetlands and other surface waters and shall be properly "trenched" etc. All areas shall be stabilized and vegetated immediately after construction to prevent erosion into wetlands and other surface waters.

[Chapter 62-330, F.A.C.]

B. Surface Water Management Systems

1. Information regarding surface water management systems (SWMS) will be reviewed for consistency with the applicable non-procedural requirements of Part IV of Chapter 373, F.A.C. following submittal of Form 62-330.060(1), F.A.C., to the appropriate DEP District.

2. All construction, operation, and maintenance of the SWMS(s) for the Certified Facilities shall be as set forth in the plans, specifications and performance criteria contained in the SCA and other materials presented during the certification proceeding, post-certification submittals, and as otherwise approved. If specific requirements are necessary for construction, operation and/or maintenance of an approved SWMS, those requirements shall be incorporated into a SWMS Plan for that system and included in Attachment B (Surface Water Management System Plans). Any alteration or modification to the SWMS Plan or the SWMS as certified requires prior approval from the Department.

3. To allow for stabilization of all disturbed areas, immediately prior to construction, during construction, and for the period of time after construction of the SWMS, the Licensee shall implement and maintain erosion and sediment control best management practices, such as silt fences, erosion control blankets, mulch, sediment traps, polyacrylamide (PAM), temporary grass seed, permanent sod, and floating turbidity screens to retain sediment on-site and to prevent violations of state water quality standards. These devices shall be installed, used, and maintained at all locations where the possibility exists of transferring suspended solids into the receiving waterbody due to the licensed work, and shall remain in place at all locations until construction in that location is completed and soils are permanently stabilized. All best management practices shall be in accordance with the guidelines and specifications described in *the State of Florida Erosion and Sediment Control Designer and Reviewer Manual* (Florida Department of Transportation and Florida Department of Environmental Protection, by HydroDynamics Incorporated in cooperation with Stormwater Management Academy, June

2007) unless a project-specific erosion and sediment control plan is approved as part of this License. If project-specific conditions require additional measures during any phase of construction or operation to prevent erosion or control sediments beyond those specified in the approved erosion and sediment control plan, the Licensee shall implement additional best management practices as necessary, in accordance with the guidelines and specifications in *the State of Florida Erosion and Sediment Control Designer and Reviewer Manual*. The Licensee shall correct any erosion or shoaling that causes adverse impacts to the water resources as soon as feasible. Once project construction is complete in an area, including the re-stabilization of all side slopes, embankments and other disturbed areas, and before conversion to the operation and maintenance phase, all silt screens and fences, temporary baffles, and other materials that are no longer required for erosion and sediment control shall be removed.

4. The Licensee shall complete construction of all aspects of the SWMS described in the ERP Application Form, submitted as part of a post-certification submittal, amendment, modification, or certification application including water quality treatment features, and discharge control facilities prior to use of the portion of the Certified Facility being served by the SWMS.

5. At least 48 hours prior to beginning the authorized activities, the Licensee shall submit to the DEP District a fully executed Form 62-330.350(1), "Construction Commencement Notice," (October 1, 2013), (http://www.flrules.org/Gateway/reference.asp?No=Ref-02505), indicating the expected start and completion dates. A copy of this form may be obtained from the Department, as described in subsection 62-330.010(5), F.A.C., and shall be submitted electronically. However, for activities involving more than one acre of construction that also require a NPDES stormwater construction general permit, submittal of the Notice of Intent to Use Generic Permit for Stormwater Discharge from Large and Small Construction Activities, DEP Form 62-621.300(4)(b), shall also serve as notice of commencement of construction and, in such a case, submittal of Form 62-330.350(1) is not required.

6 Each phase or independent portion of the approved system must be completed in accordance with the submitted DEP Form prior to the operation of the portion of the Certified Facility being served by that portion or phase of the system.

7. Within 30 days, or such other date as agreed to by DEP and the Licensee, after completion of construction of any new portions of the SWMS, the Licensee shall submit to the SWD, and copy the SCO, a written statement of completion and certification by a registered professional engineer (P.E.), or other appropriate registered professional, as authorized by law, utilizing the required "As-Built Certification and Request for Conversion to Operation Phase" (DEP Form 62-330.310(1), F.A.C.). Additionally, if deviations from the approved drawings are discovered, the As-Built Certification must be accompanied by a copy of the approved drawings with deviations noted.

8. Any substantial deviation from the approved drawings, exhibits, specifications or Conditions, may constitute grounds for revocation or enforcement action by the Department.

9. The operation phase of any new SWMS approved by the Department shall not become effective until the Licensee has complied with the requirements of the conditions herein, the Department determines the system to be in compliance with the approved plans, and the entity approved by the Department accepts responsibility for operation and maintenance of the system.

10. The DEP District must be notified in advance of any proposed construction dewatering. If the dewatering activity is likely to result in offsite discharge or sediment transport into wetlands or surface waters, a written dewatering plan must be submitted to and approved by the Department prior to the dewatering event. Additional authorizations may be required for certain dewatering activities.

[Section 373.414, F.S.; Chapters 62-302, 62-330, F.S., and Rule 62-4.242, F.A.C.]

C. Wetland and Other Surface Water Impacts

1. All Certified Facilities shall be constructed in a manner which will eliminate or reduce adverse impacts to on-site and/or adjacent wetlands or other surface waters to the extent practicable or otherwise comply with substantive criteria for elimination or reduction. When impacts to wetlands will occur as a result of a future amendment, modification, or certification, and cannot be practicably eliminated or reduced, the Licensee may propose, and the Department or Board shall consider mitigation to offset otherwise such activities under the ERP review process pursuant to subparagraph A.1., above.

2. Proposed mitigation requirements/plans submitted with the DEP ERP Application forms required in subparagraph A.1.a. above, or submitted and approved as part of an amendment, modification, or certification, and that are deemed acceptable by DEP, shall include applicable construction conditions, success criteria, monitoring plans, and remedial actions (if applicable), and shall be incorporated into these Conditions as Attachment C (Mitigation Requirements/Plans).

[Sections 373.413, 373.414, 373.4145, 403.511, 403.814(6), and F.S.; Chapters 62-330, 62-340 62-342, and 62-345, F.A.C.]

XXX. THIRD PARTY IMPACTS

The Licensee is responsible for maintaining compliance with these Conditions even when third party activities authorized by the Licensee occur in or on the Certified Site.

[Section 403.506(1), F.S.]

XXXI. FACILITY OPERATION

The Licensee shall properly operate and maintain the Certified Facility and systems of treatment and control (and related appurtenances) that are installed and used by the Licensee to achieve compliance with these Conditions, as required by the Final Order of Certification, these Conditions, or a post-certification amendment or modification. This provision includes the operation of backup or auxiliary facilities or similar systems when necessary to achieve compliance with the Final Order of Certification, these Conditions, or a post-certification amendment or modification.

[Rule 62-4.160(6), F.A.C.]

XXXII. RECORDS MAINTAINED AT THE FACILITY

A. These Conditions or a copy thereof shall be available in either hardcopy or electronic form at the Site.

B. The Licensee shall have available at the Site, or other location designated by these Conditions, records of all monitoring information, including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation required by these Conditions, copies of all reports required by these Conditions, and records of all data used to complete the SCA for this approval. These materials may be maintained in either hardcopy or electronic form and shall be retained at least three (3) years from the date of the sample, measurement, report, or application unless otherwise specified by Department rule.

C. Records of monitoring information shall include:

1. the date, exact place, and time of sampling or measurements;
2. the person responsible for performing the sampling or measurements;
3. the dates analyses were performed;
4. the person responsible for performing the analyses;
5. the analytical techniques or methods used; and
6. the results of such analyses.

[Rules 62-4.160(12) and (14)(b), F.A.C.]

XXXIII. WATER DISCHARGES

A. Discharges

1. Except as otherwise authorized by a permit issued by the Department under a federally approved or delegated program or to the extent a variance, exception, exemption or other relief is granted or authorized by these Conditions, the Licensee shall not discharge to surface or ground waters of the State, wastes in concentrations, which, alone or in combinations with other substances or components of discharges (whether thermal or non-thermal), are carcinogenic, mutagenic, or teratogenic to human beings (unless specific criteria are established for such components in Rule 62-520.400, 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. Except as otherwise authorized by a permit issued by the Department under a federally approved or delegated program or to the extent a variance, exception, exemption, or other relief is granted or authorized by these Conditions, all discharges and activities must be conducted so as to not cause a violation of applicable water quality standards set forth in Chapters 62-4, 62-302, 62-520, 62-550, and, 62-620, F.A.C., including the provisions of Rules 62-4.243, 62-4.244, and 62-4.246, F.A.C., the antidegradation provisions of Rules 62-4.242(1)(a), (2), and (3), F.A.C., and Rule 62-302.300, F.A.C., and any special standards for Outstanding Florida Waters and Outstanding National Resource Waters set forth in Rule 62-4.242(2) and (3), F.A.C. and for which an effluent limitation has been included in Facility NPDES Permit FL0000187. All discharges to groundwater and activities must be conducted so

as to not cause a violation of the applicable groundwater standards in Chapters 62-520 and 62-550, F.A.C., except as provided in Consent Order No. 00-1275 and the Big Bend Remedial Action Plan being implemented thereunder. In accordance with Rule 62-520.520(1), F.A.C., the Department considers TEC's Big Bend Station to be an "existing installation" that is exempt from compliance with secondary standards for Class G-II ground water referenced in Rule 62-520.420(1), F.A.C., at the property boundary.

3. Except as otherwise authorized by a permit issued by the Department under a federally approved or delegated program or to the extent a variance, exception, exemption, or other relief is granted or authorized by these Conditions, all dewatering discharges must be in compliance with Rule 62-621.300, F.A.C.

[Chapters 62-4, 62-302, 62-520, 62-550, and 62-620, F.A.C., and Rule 62-621.300, F.A.C.]

B. Wastewater Incident Reporting

The Licensee shall report to the Department any noncompliance which may endanger health or the environment. Any information shall be provided orally within 24 hours from the time the Licensee becomes aware of the circumstances. A written submission shall also be provided within five days of the time the Licensee becomes aware of the circumstances. The written submission shall contain a description of the noncompliance and its cause; the period of noncompliance including exact dates and times, and if the noncompliance has not been corrected, the anticipated time it is expected to continue; clean up actions taken and status; and steps taken or planned to reduce, eliminate, and prevent recurrence of the noncompliance. For noncompliance events related to sanitary sewer overflows, bypass events, or unauthorized discharges, these reports must include the data described above (with the exception of time of discovery) as well as the type of event (e.g., sanitary sewer overflow, bypass, unauthorized discharge); type of sanitary sewer overflow structure (e.g., manhole); the discharge location address and latitude/longitude; type of water discharged; discharge volumes and volumes recovered; volume discharged to surface waters and receiving waterbody name; types of human health and environmental impacts of the sanitary sewer overflow, bypass event, or unauthorized discharge (e.g., beach closure); whether the noncompliance was caused by a third party; and whether the noncompliance was related to wet weather. The written submission may be provided electronically using the Department's Business Portal at http://www.fldepportal.com/go/ (via "Submit" followed by "Report" or "Registration/Notification"). Notice required for public notice of pollution under paragraph (d) may be provided together with the written submission using the Business Portal. All noncompliance events related to sanitary sewer overflows or bypass events submitted after (September 14, 2021), shall be submitted electronically.

1. The following shall be included as information, to the extent known, which must be reported within 24 hours under this condition:

a. Any unanticipated bypass which causes any reclaimed water or the effluent to exceed any permit limitation or results in an unpermitted discharge,

b. Any upset which causes any reclaimed water or the effluent to exceed any limitation in the permit,

c. Violation of a maximum daily discharge limitation for any of the pollutants specifically listed in the permit for such notice; and,

d. Any unauthorized discharge to surface or ground waters, except for discharges to ground water of reclaimed water meeting Part III or Part V treatment standards under Chapter 62-610, F.A.C.

2. Oral reports as required by this subsection shall be provided as follows:

a. For unauthorized releases or spills of treated or untreated wastewater reported pursuant to subparagraph 1.d. above, that are in excess of 1,000 gallons per incident, or where information indicates that public health or the environment will be endangered, oral reports shall be provided to the Department by calling the State WATCH OFFICE toll free number (800)320-0519, as soon as practicable, but no later than 24 hours from the time the Licensee becomes aware of the discharge. The Licensee, to the extent known, shall provide the following information to the State Watch Office:

(1) Name, address, and telephone number of person reporting,

(2) Name, address, and telephone number of Licensee or responsible person for the discharge,

(3) Date and time of the discharge and status of discharge (ongoing or ceased),

(4) Characteristics of the wastewater spilled or released (untreated or treated, industrial or domestic wastewater),

(5) Estimated amount of the discharge,

(6) Location or address of the discharge,

(7) Source and cause of the discharge,

(8) Whether the discharge was contained on-site, and cleanup actions taken to date,

(9) Description of area affected by the discharge, including name of water body affected, if any; and,

(10) Other persons or agencies contacted.

b. Oral reports, not otherwise required to be provided pursuant to subparagraph 2.a., above, shall be provided to the Department within 24 hours from the time the Licensee becomes aware of the circumstances.

3. If the oral report has been received within 24 hours, the noncompliance has been corrected, and the noncompliance did not endanger health or the environment, the Department shall waive the written report.

4. In accordance with Section 403.077, F.S., unauthorized releases or spills reportable to the State Watch Office pursuant to subparagraph 2.a. above shall also be reported to the Department within 24 hours from the time the Licensee becomes aware of the discharge. The Licensee shall provide to the Department information reported to the State Watch Office. Notice of unauthorized releases or spills may be provided to the Department through the Department's Public Notice of Pollution web page at https://floridadep.gov/pollutionnotice or by reporting electronically using the Department's Business Portal at http://www.fldepportal.com/go/ (via "Submit" followed by "Report" or "Registration/Notification").

a. If, after providing notice pursuant to paragraph (d) above, the Licensee determines that a reportable unauthorized release or spill did not occur or that an amendment to the notice is warranted, the Licensee may submit a letter to the Department documenting such determination at pollution.notice@floridadep.gov.

b. If, after providing notice pursuant to paragraph 4. above, the Licensee discovers that a reportable unauthorized release or spill has migrated outside the property boundaries of the installation, the Licensee must provide an additional notice to the Department that the release has migrated outside the property boundaries within 24 hours after its discovery of the migration outside of the property boundaries.

5. Unless discharged to surface waters, a spill, release, discharge, upset or bypass involving reclaimed water meeting Part III or Part V treatment standards under Chapter 62-610, F.A.C., shall not be considered to endanger health or the environment and shall be reported under subsection (21) of Rule 62-610, F.A.C.

[Chapter 403, F.S.; Rule 62-620.610(20), F.A.C.]

C. Bypass Provisions

1. Bypass is prohibited, and the Department may take enforcement action against a Licensee for bypass, unless the Licensee affirmatively demonstrates that:

a. Bypass was unavoidable to prevent loss of life, personal injury, or severe property damage; and,

b. There were no feasible alternatives to the bypass, such as the use of auxiliary treatment facilities, retention of untreated wastes, or maintenance during normal periods of equipment downtime. This condition is not satisfied if adequate back-up equipment should have been installed in the exercise of reasonable engineering judgment to prevent a bypass which occurred during normal periods of equipment downtime or preventive maintenance; and,

c. The Licensee submitted notices as required under Condition XXXIII. Water Discharges, paragraph C.2.

2. If the permittee knows in advance of the need for a bypass, it shall submit prior notice to the Department, if possible at least 10 days before the date of the bypass. The permittee shall submit notice of an unanticipated bypass within 24 hours of learning about the bypass as required in Condition XXXIII. Water Discharges, paragraph B, above. A notice shall include a description of the bypass and its cause; the period of the bypass, including exact dates and times; if the bypass has not been corrected, the anticipated time it is expected to continue; and the steps taken or planned to reduce, eliminate, and prevent recurrence of the bypass.

3. The Department shall approve an anticipated bypass, after considering its adverse effect, if the Licensee demonstrates that it will meet the three conditions listed in Condition XXXIII. Water Discharges, paragraph C.1., above.

4. A Licensee may allow any bypass to occur which does not cause reclaimed water or effluent limitations to be exceeded if it is for essential maintenance to assure efficient operation. These bypasses are not subject to the provision of Condition XXXIII. Water Discharges, paragraph C.1., above.

[Chapter 403, F.S.; Rule 62-620.610(22), F.A.C.]

D. Upset Provisions

1. A Licensee who wishes to establish the affirmative defense of upset shall demonstrate, through properly signed, contemporaneous operating logs, or other relevant evidence that:

a. An upset occurred and that the Licensee can identify the cause(s) of the upset,

b. The certified facility was at the time being properly operated,

c. The License submitted notice of the upset as required in Condition XXXIII. Water Discharges, paragraph B.; and,

d. The Licensee complied with any remedial measures required.

2. In any enforcement proceeding, the burden of proof for establishing the occurrence of an upset rests with the Licensee.

3. Before an enforcement proceeding is instituted, no representation made during the Department review of a claim that noncompliance was caused by an upset is final agency action subject to judicial review.

[Chapter 403, F.S.; Rule 62-620.610(23), F.A.C.]

XXXIV. SOLID AND HAZARDOUS WASTE

A. Solid Waste

1. The Licensee shall comply with all applicable non-procedural provisions of Chapter 62-701, F.A.C., for any solid waste generated within the Certified Facility during construction, operation, maintenance, and closure.

2. Any ash residue generated by the Licensee at the certified facility shall be disposed of, and/or managed, at a permitted solid waste facility in accordance with Chapter 62-701, F.A.C.

[Chapter 62-701, F.A.C.]

B. Hazardous Waste, Used Oil, Petroleum Contact Water, and Spent Mercury

The Licensee shall comply with all applicable non-procedural provisions of Chapter 62-730, F.A.C., for any hazardous waste generated within the Certified Facility. An EPA identification number must be obtained before beginning hazardous waste activities unless the facility is a Very Small Quantity Generators (VSQGs). VSQGs generate no more than 100 kg (220 lbs) of hazardous waste in any month and have less than 1,000 kg (2,200 lbs) of accumulated hazardous waste at any one time.

The Licensee shall comply with all applicable provisions of Chapter 62-710, F.A.C., for any used oil and used oil filters generated within the Certified Facility.

The Licensee shall comply with all applicable provisions of Chapter 62-737, F.A.C., for any spent mercury-containing lamps and devices generated within the Certified Facility.

The Licensee shall comply with all applicable provisions of Chapter 62-740, F.A.C., for any petroleum contact water located within the Certified Facility.

[Chapters 62-710, 62-730, 62-737, and 62-740, F.A.C.]

C. Hazardous Substance Release Notification

1. Any owner or operator of a facility who has knowledge of any release of a hazardous substance from a Certified Facility in a quantity equal to or exceeding the reportable quantity in any 24-hour period shall notify the Department by calling the State Watch Office, (800) 320-0519, as soon as possible, but not later than one working day of discovery of the release.

2. Any owner or operator of a facility who has knowledge of any release of a hazardous substance from a certified facility in a quantity equal to or exceeding the reportable quantity in any 24-hour period shall notify the public by submitting a Public Notice of Pollution, https://prodenv.dep.state.fl.us/DepPNP/user/pnpRequest, as soon as possible, but not later than 24 hours after discovery of the release.

3. Releases of mixtures and solutions are subject to these notification requirements only where a component hazardous substance of the mixture or solution is released in a quantity equal to or greater than its reportable quantity.

4. Notification of the release of a reportable quantity of solid particles of antimony, arsenic, beryllium, cadmium, chromium, copper, lead, nickel, selenium, silver, thallium, or zinc is not required if the mean diameter of the particles released is larger than 100 micrometers (0.004 inches).

[Chapter 62-150, F.A.C.]

D. Contaminated Site Cleanup

The Licensee shall comply with all applicable non-procedural provisions of Chapter 62-780, F.A.C., for any violations of relevant provisions of Chapter 376 or 403, F.S., that result in legal responsibility for site rehabilitation pursuant to those chapters. This responsibility for site rehabilitation does not affect any activity or discharge permitted or exempted pursuant to Chapter 376 or 403, F.S., or rules promulgated pursuant to Chapter 376 or 403, F.S.

[Chapter 62-780, F.A.C.]

XXXV. STORAGE TANK SYSTEMS

Registration, construction, installation, operation, maintenance, repair, closure, and disposal of storage tank systems that store regulated substances shall be in accordance with Chapters 62-761 and 62-762, F.A.C., in order to minimize the occurrence and environmental risks of releases and discharges. Mineral acid storage tank systems are subject only to Rule 62-762.891, F.A.C.

A. Incident Notification Requirements.

Notification of any condition or situation indicating that a release or discharge may have occurred from a storage tank system or system component shall be made to the County

on Incident Notification Form 62-761.900(6) or 62-762.901(6) within 24 hours of discovery or before the close of the County's next business day.

B. Discharge Reporting Requirements

Notification of the discovery of a discharge of a regulated substance shall be made to the county in writing or electronic format on Form 62-761.900(1), Discharge Report Form (DRF) within 24 hours of the discovery or before the close of the County's next business day, except as provided in subsection 62-761.440(5), F.A.C.

C. Discharge Cleanup

If a discharge of a regulated substance occurs at a Certified Facility, actions shall be taken immediately to contain, remove, and abate the discharge under all applicable Department rules. The Licensees is advised that other federal, state, or local requirements may apply to these activities. If the contamination present is subject to the provisions of Chapter 62-780, F.A.C., corrective action, including free product recovery, shall be performed in accordance with that Chapter.

D. Out of Service and Closure Requirements

Storage tank systems shall be taken out-of-service and/or closed as necessary in accordance with Rules 62-761.800 and 62-762.801, F.A.C., as applicable.

[Chapters 62-761, 62-762, and 62-780, F.A.C.]

SECTION B. SPECIFIC CONDITIONS

I. DEPARTMENT OF ENVIRONMENTAL PROTECTION

A. Industrial Wastewater Ground Water Monitoring

1. Ground water monitoring is required around all Industrial Wastewater sites described in Attachment F, Ground Water Monitoring, Operation and Maintenance Requirements (GWMOMR), hereto incorporated and enforceable. The Licensee shall install and maintain an industrial wastewater ground water monitoring well network to monitor the water quality of the aquifer(s) around the Industrial Wastewater sites, in accordance with Chapter 62-520, F.A.C.

2. During the period of operation authorized by this Site Certification, the Licensee shall conduct ground water monitoring at the specified monitor wells for the parameters and frequency identified in Attachment F and the Big Bend Remedial Action Plan to comply with the requirements [at the "Solid Waste related" storage/management areas] and [at the "Industrial Wastewater related" areas]. The Licensee shall report to the Department the required parameters at the stated frequencies to comply with the Remedial Action Plan and Attachment F. The existing monitoring requirements may be modified in accordance with the ECAP Groundwater Monitoring Termination Process contained in the Remedial Action Plan, if requested prior to Closure of CO 00-1275.

A site-wide monitoring plan shall be submitted to the Department for review prior to closure of CO 00-1275. The site-wide monitoring plan shall include, but not be limited to, the following:

- discharge limitations,
- monitoring requirements,
- monitoring well construction requirements,
- updated aerial showing all monitoring wells (existing and new).
- a description of the complete IWW system including IWW treatment systems, monitoring wells, and ponds,
- a description of the coal combustion by-products management/storage areas,
- sampling locations and parameters to be sampled at each monitoring well,
- monitoring frequencies,
- reporting and recordkeeping requirements, and

operational requirements such as testing requirements, impoundment operation and maintenance, and impoundment integrity.

3. For any new or revised industrial wastewater site, the Licensee shall submit a revised GWMOMR to the DEP-SWD Ground Water Section with an electronic copy to the DEP Siting Office mailbox for review and approval at least 90 days prior to operation of a new or revised site. In addition to the items for the updated plan listed in the above condition, the revised plan shall include new monitor well locations and designs, seasonal ground water depths and flow directions at the site through preparation of seasonal water table contour maps, based upon water level data obtained during the pre-operational and existing monitoring programs, location of potable wells located within one quarter mile of a new site, history of activity,

geology, soil borings, mounding analysis of any new ponds, wastewater application of rate, and analysis or characterization of Industrial Wastewater to be discharged to the new site. Based on the contour maps, and in accordance with Chapter 62-520, F.A.C., a revised ground water monitoring well network shall be located. An initial ground water sample shall be conducted prior to operation of any new industrial wastewater site.

4. Any revisions to the GWMOMR shall be submitted, reviewed and approved through the post-certification process referred to in "Procedures for Post-Certification Submittals" of Section A., and Attachment F will be amended to reflect any changes.

5. The GWMOMR shall be revised to comply with the provisions contained in Rules 62-620.325 and 62-620.345, F.A.C., if applicable, or to comply with any applicable effluent standard or limitation issued or approved under Section 301(b)(2)(C) and (D), 304(b)(2) and 307(a)(2) of the Clean Water Act (the Act), as amended, by change in the effluent standards, limitations, or water quality standards previously issued or approved.

6. At a minimum, projects which involve any one of the following shall be reviewed by the Department for a determination on the requirement of a modification to these Conditions and if a modification is required, it shall be processed in accordance with Section 403.516(1)(c), F.S., and Rule 62-17.211, F.A.C., as applicable.

a. New major sources or deletion of existing major sources of wastewater;

b. Improvements made to existing, or new wastewater treatment facilities including those which provide for a new or expanded land application system which will result in an increase in the permitted capacity;

c. Pollutants not addressed in the GWMOMR or these Conditions;

d. Other projects that cause or may cause changes to the quantity and/or quality of discharges to groundwater as a result of solid waste disposal or industrial wastewater treatment.

7. Upon Department approval of the site-wide monitoring plan and closure of CO 00-1275, the Conditions of Certification, and/or Attachment F, shall be modified to incorporate the site-wide monitoring plan and any additional requirements based on the site conditions at the time of modification.

8. If the concentration for any constituent listed in Attachment F, in the natural background quality of the ground water is greater than the stated maximum, or in the case of pH is also less than the minimum, the representative natural background quality shall be the prevailing standard.

9. For the land application system G-001, all ground water quality criteria specified in Chapter 62-520, F.A.C., shall be met at the edge of the zone of discharge. The zone of discharge for this project shall hydrologically defined and shall extend to the boundary established by the placement of compliance monitor wells as depicted, and to the base of the surficial aquifer.

a. TECO Big Bend is an existing installation as defined by Rule 62-520.200(10), F.A.C., thus the ZOD has been established per the discretion of the Department in consideration of the property extent and site-specific hydrology. Accordingly, the ZOD is

defined by the downgradient terminus of the upland ground water regime prior to transition to a surface water regime. This ground water, surface water ZOD boundary is delineated by the location of compliance monitor wells. The vertical limit of the ZOD as defined by Rule 62-520.200(27), F.A.C., is the base of the Floridan aquifer.

10. Every 5 years the licensee shall submit a proposal identifying the IWW wells in the Department-approved monitoring requirements that will be sampled for the Primary drinking water parameters included in Chapter 62-550, F.A.C., (excluding radionuclides, asbestos, acrylamide, Dioxin, butachlor, epichlorohydrin, pesticides, and PCBs, unless reasonably expected to be a constituent of the discharge or an artifact of the site). The selection of the wells should include at least one background well, one intermediate well and one compliance well. Compliance well selections should be based on recent groundwater conditions. Sampling results should be submitted sixty days [60] upon Department's approval of the well proposal sampling.

[Rules 62-520.420(2), 62-520.200(26), 62-520.465, and 62-520.600(5)(b), F.A.C.]

11. The licensee shall report to the Department all wastewater discharges from the Culbreath Bayside Station into the settling/recycle pond system. The report should include flows, duration and water quality analyses results for the parameters listed in Part II. C of Attachment F, every time wastewater is diverted to the Big Bend Facility. The Department's approval is required prior to diverting the flow.

12. There shall be no discharge of industrial wastewater from this facility to ground or surface waters, except as authorized by the COC including this GWMOMR or by NPDES Permit No. FL0000817.

13. The Licensee shall provide verbal notice to the Department's Southwest District Office as soon as practical after discovery of a sinkhole or other karst feature within an area for the management or application of wastewater, or wastewater sludges. The licensee shall immediately implement measures appropriate to control the entry of contaminants and shall detail these measures to the Department's Southwest District in a written report within 7 days of the sinkhole discovery.

14. Existing manufacturing, commercial, mining, and silvicultural wastewater facilities or activities that discharge into surface waters shall notify the Department as soon as they know or have reason to believe:

a. That any activity has occurred or will occur which would result in the discharge, on a routine or frequent basis, of any toxic pollutant which is not limited in the license, if that discharge will exceed the highest of the following levels;

(1) One hundred micrograms per liter,

(2) Two hundred micrograms per liter for acrolein and acrylonitrile; five hundred micrograms per liter for 2, 4-dinitrophenol and for 2-methyl-4, 6-dinitrophenol; and one milligram per liter for antimony, or

(3) Five times the maximum concentration value reported for that pollutant in the license application; or

b. That any activity has occurred or will occur which would result in any discharge, on a non-routine or infrequent basis, of a toxic pollutant which is not limited in the license, if that discharge will exceed the highest of the following levels;

(1) Five hundred micrograms per liter,

(2) One milligram per liter for antimony, or

(3) Ten times the maximum concentration value reported for that pollutant in the license application.

[Rules 62-620.320(6) and 62-620.625(1), F.A.C.]

15. The licensee shall give the Department written notice at least 60 days before inactivation or abandonment of a wastewater facility or activity and shall specify what steps will be taken to safeguard public health and safety during and following inactivation or abandonment.

[Rule 62-620.610(15), F.A.C.]

16. Bypass Provisions.

a. "Bypass" means the intentional diversion of waste streams from any portion of a treatment works.

b. Bypass is prohibited, and the Department may take enforcement action against a licensee for bypass, unless the licensee affirmatively demonstrates that:

(1) Bypass was unavoidable to prevent loss of life, personal injury, or severe property damage; and

(2) There were no feasible alternatives to the bypass, such as the use of auxiliary treatment facilities, retention of untreated wastes, or maintenance during normal periods of equipment downtime. This condition is not satisfied if adequate back-up equipment should have been installed in the exercise of reasonable engineering judgment to prevent a bypass which occurred during normal periods of equipment downtime or preventive maintenance; and

(3) The license submitted notices as required.

c. If the licensee knows in advance of the need for a bypass, it shall submit prior notice to the Department, if possible at least 10 days before the date of the bypass. The licensee shall submit notice of an unanticipated bypass within 24 hours of learning about the bypass as required in Section A. Condition VII. Notification. A notice shall include a description of the bypass and its cause; the period of the bypass, including exact dates and times; if the bypass has not been corrected, the anticipated time it is expected to continue; and the steps taken or planned to reduce, eliminate, and prevent recurrence of the bypass.

d. The Department shall approve an anticipated bypass, after considering its adverse effect, if the licensee demonstrates that it will meet the three conditions listed in the following “Upset Provisions” paragraphs b. (1) through (3).

e. A licensee may allow any bypass to occur which does not cause reclaimed water or effluent limitations to be exceeded if it is for essential maintenance to assure

efficient operation. These bypasses are not subject to the provisions of the following "Upset Provisions" paragraphs b. through d.

[Rule 62-620.610(22), F.A.C.]

17. Upset Provisions.

a. "Upset" means an exceptional incident in which there is unintentional and temporary noncompliance with technology-based effluent limitations because of factors beyond the reasonable control of the licensee.

(1) An upset does not include noncompliance caused by operational error, improperly designed treatment facilities, inadequate treatment facilities, lack of preventive maintenance, careless or improper operation.

(2) An upset constitutes an affirmative defense to an action brought for noncompliance with technology-based license effluent limitations if the requirements of upset provisions of Rule 62-620.610, F.A.C., are met.

b. A licensee who wishes to establish the affirmative defense of upset shall demonstrate, through properly signed contemporaneous operating logs, or other relevant evidence that:

(1) An upset has occurred, and that the licensee can identify the cause(s) of the upset;

(2) The licensed facility was at the time being properly operated;

(3) The licensee submitted notice of the upset as required in Section A. Condition XV. Regulatory Compliance, of this license; and

(4) The licensee complied with any remedial measures required under Section A. Condition XV. Regulatory Compliance.

c. In any enforcement proceeding, the burden of proof for establishing the occurrence of an upset rests with the licensee.

d. Before an enforcement proceeding is instituted, no representation made during the Department review of a claim that noncompliance was caused by an upset is final agency action subject to judicial review.

[Rule 62-620.610(23), F.A.C.]

18. Best Management Practices

a. BMP Plan: For purposes of this part, the terms "pollutant" or "pollutants" refer to any substance listed as toxic under Section 307(a)(1) of the Clean Water Act (the "Act"), oil, as defined in Section 311(a)(1) of the Act, and any substance listed as hazardous under Section 311 of the Act. The licensee shall develop and implement a Best Management Practices (BMP) plan which prevents, or minimizes, the potential for the release of pollutants from ancillary activities, including material storage areas; plant site runoff; in-plant transfer, process and material handling areas; loading and unloading operations; and sludge and waste disposal areas, to the waters of the State through plant site runoff; spillage or leaks; sludge or waste disposal; or drainage from raw material storage.

b. Implementation: The BMP plan shall be developed and implemented in accordance with the schedule in Attachment F.

c. General Requirements: The BMP Plan shall:

(1) Be documented in narrative form, and shall include any necessary plot plans, drawings or maps.

(2) Establish specific objectives for the control of pollutants.

(a) Each facility component or system shall be examined for its potential for causing a release of significant amounts of pollutants to waters of the State due to equipment failure, improper operation, natural phenomena such as rain or snowfall, etc.

(b) Where experience indicates a reasonable potential for equipment failure (e.g., a tank overflow or leakage), natural conditions (e.g., precipitation), or other circumstances to result in significant amounts of pollutants reaching surface waters, the plan should include a prediction of the direction, rate of flow, and total quantity of pollutants which could be discharged from the facility as a result of each condition or circumstance.

(3) Establish specific best management practices to meet the objectives identified under paragraph (b) of this subsection, addressing each component or system capable of causing a release of significant amounts of pollutants to the waters of the State, and identifying specific preventative or remedial measures to be implemented.

(4) Be reviewed by plant engineering staff and plant manager.

d. Documentation: The licensee shall maintain the BMP plan at the facility and shall make the plan available to the Department upon request.

e. BMP Plan Revision(s): The licensee shall amend the BMP plan whenever there is a change in the facility or change in the operation of the facility that materially increases the potential for the ancillary activities to result in a discharge of significant amounts of pollutants.

f. Revision for Ineffectiveness: If the BMP plan proves to be ineffective in achieving the general objective of preventing the release of significant amounts of pollutants to surface waters and the specific objectives and requirements under paragraphs (b) and (c) of item 3, the Attachment F shall be subject to revision pursuant to rule 62-620.325, F.A.C., to incorporate revised BMP requirements.

[Chapter 62-620, F.A.C.]

19. The Licensee shall notify the Department at least 30 days prior to storing new aggregate or bulk materials by submitting material safety data sheets (MSDS) and Synthetic Precipitation Leaching Procedure (SPLP) test results for each new aggregate or bulk material. The Department will review the submitted information within 30 days and determine if there are any potential new sources of contamination from the new aggregates or bulk materials. If approved, the Department will add new parameters resulting from any new sources of contamination to the existing ground water monitoring plan in Attachment F as necessary.

B. Industrial Wastewater Discharges

1. Plant Effluents and Receiving Body of Water

a. Coal Pile

Coal pile runoff shall be routed to the lined Recycle Pond System and shall not be directly discharged to surface waters. The stormwater pond associated with the coal pile shall be lined no later than December 31, 2020.

b. Gypsum Storage Area

There shall be no direct discharge of contact stormwater runoff to surface waters from the proposed gypsum storage area after the new facility has been placed in service. Discharges in compliance with the provisions of the Big Bend Generic Permit for Stormwater Discharges from Large and Small Construction Activities will be allowed during construction after the timely filing of a Notice of Intent in accordance with the provisions of Chapter 62-621, F.A.C. Groundwater monitoring at the existing gypsum storage area [referred to as the "FGD By-Product Storage Area"] shall comply with the requirements of the Big Bend Remedial Action Plan until closure or lining of the area is approved in accordance with Consent Order No. 00-1275.

c. Storm Water Runoff

During 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/l or less at the point of discharge (POD) during rainfall periods less than the 10-year, 24-hour rainfall, and to prevent an increase in turbidity of more than 50 Nephelometric Turbidity Units above background in waters of the State beyond 150 meters from the POD at Station E 4500 and N 3712.

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 at the POD.

The POD will be determined by the Department to be where the effluent physically enters the waters of the State as defined in NPDES Permit No. FL0000817 at Outfall D-001 at approximate Latitude 27°47'37" North, Longitude 82°24'39" West.

d. Recycle (Water) Pond System Overflow

Discharges from the lined recycle pond system identified in Attachment F, are subject to the bypass conditions and requirements identified in Section B. Condition I. paragraph 16.

C. Sludge/Solids Management Requirements

The Licensee shall submit an updated Coal Combustion Product/Solid Waste Management Manual (Manual) for all solid waste and byproducts that details the unit-specific BMP's and material management practices that will be implemented to assure compliance with 403.7045(1), F.S., and to provide reasonable assurance that environmental standards will not be violated. The final version of the Manual will be contingent on and modified by completion of all corrective actions in accordance with the Big Bend Remedial Action Plan to meet the requirements of Paragraph 20 of CO 00-1275.

1. Disposal of sludge in a solid waste management facility permitted by the Department shall be in accordance with the non-procedural requirements of Chapter 62-701,

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

2. The licensee shall keep records of the amount of sludge disposed, transported, and incinerated. If a person other than the licensee is responsible for sludge transporting, disposal, or incineration, the licensee shall also keep the following records:

a. name, address and telephone number of any transporter, and any manifests or bill of lading used;

b. name and location of the site of disposal, treatment or incineration;

c. name, address, and telephone number of the entity responsible for the disposal, treatment, or incineration site.

3. This license does not authorize the facility to store, process, or dispose of solid waste except at a permitted solid waste management facility or a facility exempt from permitting under Chapter 62-701, F.A.C.

[Rule 62-701.300 (1) (a), F.A.C.]

4. This license does not authorize the facility to store, process, or dispose of solid waste in a manner or location that causes air quality standards to be violated or water quality standards or criteria of receiving waters to be violated.

[Rule 62-701.300 (1) (b), F.A.C.]

5. Storage, process or dispose of solid waste are regulated under Chapter 62-701, except for the activities listed under Chapter 62-701.220 (2) F.A.C. The following exceptions are applicable to this site only.

a. Recovered materials or recovered materials processing facilities, if:

(1) A majority of the recovered materials at a facility are demonstrated to be sold, used, or reused within one year;

(2) The recovered materials or the products or byproducts of operations that process recovered materials are not discharged, deposited, injected, dumped, spilled, leaked, or placed into or upon any land or water that such products or byproducts or any constituent thereof may enter other lands or be emitted into the air or discharged into any waters, including ground water, or otherwise enter the environment such that a threat of contamination in excess of applicable water quality standards and criteria or air quality standards is caused;

(3) The recovered materials are not hazardous wastes; and

(4) The facility is registered as required in Section 403.7046, F.S., and Chapter 62-722, F.A.C.;

b. Industrial byproducts, if

(1) A majority of the industrial byproducts are demonstrated to be sold, used, or reused within one year;

(2) The industrial byproducts are not discharged, deposited, injected, dumped, spilled, leaked, or placed into or upon any land or water so that such industrial

byproducts or any constituent thereof may enter other lands or be emitted into the air or discharged into any waters, including ground water, or otherwise enter the environment such that a threat of contamination in excess of water quality standards and criteria or air quality standards is caused.

6. In the event that Coal Combustion residuals (CCR) are encountered during excavation activities not conducted under an approved closure plan, the licensee shall cease excavation and shall immediately (within 24 hours) notify the Department's Solid Waste Section of such occurrence. Excavated CCR shall be removed from the site and disposed of as Class I waste.

D. Additional Land Application Requirements.

1. Routine aquatic weed control and regular maintenance of storage pond embankments and access areas are required.

2. The bottoms for the settling basins shall be cleaned out periodically, or when necessary, to remove the excess buildup of sediments. Solids and sludges from this system shall be recovered and disposed at a Class I landfill site authorized by the Department to accept solid waste under Chapter 62-701, F.A.C

3. During normal plant operation, the freeboard of the settling basins shall not be less than three feet except after rainfall events exceeding the 25-year, 24-hour storm event.

4. The licensee shall not discharge water from the basins to surface waters of the State.

[Chapter 62-620, F.A.C.]

E. Potable Water Supply System

The potable water supply system shall be designed and operated in conformance with Chapter 62-555, F.A.C. Information as required in Chapter 62-555, F.A.C., shall be submitted to the Department prior to construction and operation. The operator of the potable water supply system shall be certified in accordance with Section 403.067, F.S., and rules promulgated thereunder.

[Chapter 62-555, F.A.C.]

F. Mineral Oil Dielectric Fluid Emergency Response Action Protocol

The foundations for the addition of any new transformers, capacitors, and switching gear necessary to connect Big Bend Station to the existing distribution system shall be constructed of an impervious material and shall be constructed in such a manner as to allow complete collection and recovery of any spills or leakage of oily, toxic, or hazardous substances. Should a spill occur, the following steps shall be taken:

1. The spill will be assessed, and cleanup activities will be initiated;

2. Equipment will be isolated, if necessary, and the source of the spill will be stopped;

3. Gravel and mineral oil will be removed, and clean gravel will be replaced; and

4. Measures will be implemented as necessary in accordance with the Oil Spill Prevention Control and Countermeasures Plan for Big Bend Station and the Mineral Oil Dielectric Fluid Emergency Response Action Protocol revised May 2016 (incorporated hereinto as Attachment D).

[Chapter 62-780, F.A.C.]

F. ERP

The volume and pressure level of bentonite in the drill string will be monitored at all times during the directional drilling operation. Should a drop-in volume and pressure level of bentonite occur, the following measures will be taken:

1. Immediately conduct a visual inspection of the Horizontal Directional Drilling (HDD) corridor and any adjacent areas/communities lying within 500-ft. of the corridor. Notify the DEP-SW District Environmental Resource Compliance Assurance Program Staff at 813-470-5700 if a frac-out is detected.

2. Should the release of drilling materials occur in wetlands, a sediment fence or turbidity barrier shall be installed around the site and the material shall be removed by vacuum truck.

3. Should the release of drilling materials occur on the bay bottom, a cleanup vessel will be dispatched immediately to the frac-out site to vacuum pump the material from the bottom into filter bags for disposal.

[Chapter 62-330, F.A.C.]

II. FLORIDA FISH AND WILDLIFE CONSERVATION COMMISSION

A. Listed Species

The following table contains state and federally listed species that occur in the State of Florida and may occur within the TECO's Big Bend Unit 1 Modernization Project Site. The table contains species that are potentially impacted by the activities proposed on the TECO's Big Bend Unit 1 Modernization Project Site. Therefore, these recommended conditions of certification apply to the species listed in this table:

Table 1

Common Name	Scientific Name	Status
Little blue heron	*Egretta caerulea*	State Threatened
American oystercatcher	*Haematopus palliates*	State Threatened
Roseate spoonbill	*Platalea ajaja*	State Threatened
Tricolored heron	*Egretta tricolor*	State Threatened
Wood stork	*Mycteria Americana*	Federally Threatened
American alligator	*Alligator mississippiensis*	Federally Threatened
Eastern indigo snake	*Drymarchon couperi*	Federally Threatened
Florida manatee	*Trichechus manatus*	Federally Threatened

Gulf sturgeon	*Acipenser oxyrinchus desotoi*	Federally Threatened

[Article IV, Sec. 9, Florida Constitution; Chapters 68A-27 and 68A-16, F.A.C.]

B. General Listed Species Survey

1. The Licensee shall coordinate with the Florida Fish and Wildlife Conservation Commission (FWC) to obtain and follow the current survey protocols for all listed species that may occur within the Big Bend Unit 1 Modernization Project Site and associated supporting facilities, as well as accessible appropriate buffers within the TECO property or rights-of-way as defined by the listed species' survey protocols, prior to conducting detailed surveys. Basic guidance for conducting wildlife surveys may be found within the Imperiled Species Management Plan's species-specific Permitting Guidelines (http://myfwc.com/wildlifehabitats/imperiled/plan/) or in the Florida Wildlife Conservation Guide (http://myfwc.com/conservation/value/fwcg/). Neither of these documents provide survey guidelines for Gulf sturgeon. Appropriate survey methodology for this species and this project will be developed and coordinated between the permit holder, FWC and NOAA's National Marine Fisheries Service.

2. Surveys shall be conducted for the species listed in Table 1 above prior to clearing and construction in accordance with the survey protocols. Surveys may be initiated prior to receiving certification as long as all appropriate survey protocol timing requirements are met. The results of those detailed surveys shall be provided to the FWC in a report, and coordination shall occur within the FWC on appropriate impact avoidance, minimization, or mitigation methodologies. Reports can be sent to ConservationPlanningServices@MyFWC.com.

[Article IV, Sec. 9, Florida Constitution; Sections 379.2291, 403.507, 403.526, and 403.5113(2), F.S.; and Rule 68A-27, F.A.C.]

C. Specific Listed Species Surveys

Before land clearing and construction activities within the TECO Big Bend Unit 1 Modernization Project Site and associated supporting facilities, the Licensee shall conduct an assessment for all terrestrial listed species and shall note all habitat, occurrence or evidence of listed species. Wildlife surveys shall be conducted during the reproductive or "active" season for each species that falls before the projected clearing activity schedule unless otherwise approved by the FWC. For species that are difficult to detect, the Licensee may make the assumption that the species is present and plan appropriate avoidance/mitigation measure for FWC post-certification review and approval at least 60 days prior to commencing clearing or construction activities within the surveyed area. The surveys required by these conditions of certification may be conducted prior to issuance of the final order of certification, in which case this condition would be considered satisfied.

1. These surveys shall be conducted in accordance with the U.S. Fish and Wildlife Service (USFWS) or FWC guidelines and methodologies by a person or firm that is knowledgeable and experienced in conducting flora and fauna surveys for each potentially occurring listed species.

2. These surveys shall identify locations of breeding sites, nest, and burrows for listed wildlife species. Nest and burrows shall be recorded with global positioning system (GPS) coordinates, identified on an aerial photograph, and submitted with the final listed species report. Although nests and burrows may be recorded individually with GPS, the FWC prefers

that any applicable protection radii surrounding groups of nest sites and burrows be included on a site-specific basis, rather than around individual nests and burrows, and be physically marked so that clearing and construction shall avoid impacting them.

3. These surveys shall include an estimate of the acreage and percent cover of each existing vegetation community (Florida Land Use, Cover and Forms Classification System, or FLUCFCS, at the third degree of detail) that is contained within the TECO Big Bend Unit 1 Modernization Project Site prior to land clearing and construction activities using geographic information system (GIS). Examples of such wildlife-based habitat classification schemes include Florida's State Wildlife Action Plan (FWC 2012), Descriptions of Vegetation and Land Cover Types (FWC 2004), or Natural Communities Guide (Florida Natural Areas Inventory 2010)*.

**Florida Fish and Wildlife Conservation Commission. 2012. Florida's State Wildlife Legacy Initiative: Florida's State Wildlife Action Plan. Tallahassee, Florida.;*

Florida Natural Areas Inventory. 2010. Guide to the natural communities of Florida: 2010 edition. Florida Natural Areas Inventory, Tallahassee, Florida.; and

Stys, B., R. Kautz, D. Reed, M. Kertis, R. Kawula, C. Keller, and A. Davis. 2004. Florida vegetation and land cover data derived from 2003 Landsat ETM+ Imagery. Florida Fish and Wildlife Conservation Commission, Tallahassee, Florida.

[Article IV, Sec. 9, Florida Constitution; Sections 379.2291 F.S.; and Rules 68A-27, 68A-4, and 68A-16, F.A.C.]

D. Listed Species Locations

Where any suitable habitat or evidence is found of the presence of listed species, including but not limited to those specified in A above, within the TECO Big Bend Unit 1 Modernization Project Site, the Licensee shall report those location to, and confer with, the FWC to determine whether additional pre-clearing surveys are warranted, and to identify potential mitigation or avoidance recommendations. If additional pre-clearing surveys are required by the FWC as appropriate and as specified in these conditions of certification, they shall occur in the reproductive season prior to the anticipated date for the start of construction within the TECO Big Bend Unit 1 Modernization Project Site. The Licensee shall not construct in areas where evidence of listed species was identified during the initial survey until the particular listed species issues have been resolved as follow:

1. Listed Wildlife Species: If listed wildlife species are found, their presence shall be reported to the DEP Siting Coordination Office, the FWC, and the USFWS.

2. Species Management Plan: If total avoidance of state-listed wildlife species is not feasible, the Licensee shall consult with the FWC to determine the steps appropriate for the species potentially impacted to avoid, minimize, mitigate, or otherwise appropriately address potential impacts. For wildlife species, these steps shall be memorialized in a Species Management Plan and submitted to the FWC for review and approval.

[Article IV, Sec. 9, Florida Constitution; Sections 379.2291 F.S.; and Rule 68A-27, F.A.C.]

E. Florida Manatee

The following conditions are intended to address manatee protection during the winter months while Unit 1 is off-line for construction during its modernization. The following conditions are not intended to affect or replace the conditions of the existing Manatee Protection Plan.

1. Biological Monitoring

The following monitoring requirements for manatee distribution and abundance are applicable during the Big Bend Unit 1 modernization project construction during the winter months of 1 December through 31 March when Unit 1 is offline:

a. The Licensee shall submit to FWC a Biological Monitoring Plan, which shall be reviewed and approved by FWC. The Final Biological Monitoring plan shall be in place a minimum of 3 months prior to Unit 1 going off-line for construction. The Licensee shall submit the final Biological Monitoring Plan to FWC and the DEP Siting Office. The Biological Monitoring Plan shall include at a minimum the following components:

(1) On-site Visual Monitoring of Manatees

(a) The Licensee shall be prepared to provide prior to 1 December of the relevant season(s), one or more manatee observers who have been trained by an approved FWC trainer or by FWC staff, so they can detect indications of cold stress in manatees. The monitoring protocols and information requirements will be described in the Biological Monitoring Plan.

(b) The manatee observer(s) will be required to conduct a visual assessment of the condition and general distribution of manatees using the warm-water refuge during the winter months of 1 December through 31 March. The visual assessment shall be conducted for a sufficient length of time to assess most of the manatees present at the plant and accessible to the observer on that day.

(c) The frequency of visual assessments for distribution and abundance of manatees during the winter months of 1 December through 31 March will be agreed upon during the development of the Biological Monitoring Plan.

(2) Aerial Surveys

(a) Aerial surveys, including photo-documentation, may be required during the winter months of 1 December and 31 March while Unit 1 is off-line for modernization.

(b) Specific aerial survey paths, sampling frequencies, methodologies and criteria that will trigger aerial surveys must be identified and described in the Biological Monitoring Plan.

(c) Aerial survey data shall be analyzed and summarized after each winter season to provide an evaluation of manatee abundance and distributional changes within the survey area.

(3) Temperature Monitoring

(a) FWC requires a temperature monitoring and reporting plan during the modernization. Such a plan will be developed, approved, and implemented prior to the manatee protection season(s) associated with Unit 1 being off-line and will include specific locations for the temperature monitoring station(s), sampling frequencies, station depths, data collection methods, and reporting frequencies.

(b) Temperature monitoring stations within the thermal refuge shall include monitoring of ambient air and water temperatures measured at multiple locations.

(c) The Licensee shall include a plan to convey the data from the temperature monitoring stations to the appropriate agencies on a timely basis to be agreed upon during the development of the Biological Monitoring Plan.

(4) Reporting

The Licensee will prepare a Biological Monitoring Report that includes all data (made available in electronic form) as set forth in the Biological Monitoring Plan. This report will be submitted each year by the date(s) designated in the Biological Monitoring Plan. All annual reports shall be submitted as directed in the Biological Monitoring Plan.

[Section 403.507, F.S.; Section 379.1025, F.S.; Section 379.2291, F.S.; Section 379.2431 (2), F.S.; Section 20.331, F.S.]

2. Standard Biological Monitoring Plan Conditions

a. The Biological Monitoring Plan, including the proposed monitoring techniques and monitoring locations that will be used to assess manatee health, distribution and habitat during the modernization process, shall be approved by FWC.

b. If, in the review of the annual biological monitoring report, FWC, in consultation with the DEP, determines the need to modify the Monitoring Plan, FWC will notify the Licensee to discuss the findings. At that time, FWC, in consultation with the DEP and the Licensee, will determine what, if any, modifications need to be made to the Biological Monitoring Plan.

c. If the Licensee determines the Biological Monitoring Plan is in need of modifications, the Licensee will contact the agencies to discuss the proposed modifications. At that time, FWC, in consultation with the DEP and the Licensee, will determine what if any modifications need to be made.

d. The Licensee will provide personnel from the FWC, USFWS, or a designee of these agencies, access to the Big Bend power station property to conduct manatee monitoring activities. Reasonable notice shall be given to the Licensee by the agencies. Access would be limited to normal weekday business hours (8:00 a.m. - 5:00 p.m.) unless arrangements are made in advance with the Licensee.

e. All FWC and USFWS visitors to TECO's Big Bend power station will be required to comply with TECO's safety and security requirements. Personnel will receive an orientation from TECO or its contractor prior to commencing observations or other activities.

[Section 403.507, F.S.; Section 379.1025, F.S.; Section 379.2291, F.S.; Section 379.2431 (2), F.S.; Section 20.331, F.S.]

3. Contingency Plan

FWC and USFWS' Letter of Authorization (LOA) network responders will be responsible for all efforts related to manatee rescues, rehabilitation activities, and carcass recovery during the Big Bend Unit 1 modernization. In order to effectively implement contingency plans during the plant modernization and to address manatee health-related issues, the following conditions are required:

a. If the observer (pursuant to Biological Monitoring Plan) identifies manatees with apparent signs of cold stress disease, digital photographs should be taken of the animal(s) and the FWC shall be called as soon as possible on the day of the observations through the protocols described in the Biological Monitoring Plan.

b. The Licensee will notify FWC and USFWS immediately if there is an interruption in the generation and thermal discharge of either Unit 3 or 4 during the period when Unit 1 is under construction, or if, for any other reason either Unit 3 or 4 is not operating in a manner that will provide warm-water sufficient to keep the warm- water refuge at a temperature of 68° F or greater.

c. The Licensee shall provide in-kind services and financial assistance, not to exceed $100,000 in total value, to FWC for manatee rescue or recovery in the event that there is a failure to maintain the warm-water refuge at or above 68° F resulting in manatees experiencing cold stress related issues within the refuge. This condition would apply during the winter months of 1 December through 31 March while Unit 1 is off-line for modernization. The in-kind assistance and funds would only be used to address manatee-related cold stress issues in thermal refuge.

[Sections 403.507 F.S., Section 379.1025 F.S., Section 379.2291, F.S., Section 379.2431 (2) F.S., Section 20.331 F.S.]

4. Development of a Long-Term Manatee Strategy

In the future, the warm-water habitat created by TECO's Big Bend Power Station will diminish or be terminated; in that event the FWC and USFWS believes it is in the best interest of the Licensee, FWC, USFWS, DEP, and the Florida manatee population to begin strategic long-term planning to reduce the adverse effects to the Florida manatee population before this occurs. The FWC must be notified, in writing, within 30 days of any sale, conveyance, or other transfer of the facility. Conditions of the current MPP relevant to notifications of pending unit retirement remain in effect.

[Section 403.507, F.S.; Section 379.1025, F.S.; Section 379.2291, F.S.; Section 379.2431 (2), F.S.; Section 20.331, F.S.]

5. Manatee Construction Conditions for In-Water Work and Operations

a. The current Standard Manatee Conditions for In-Water Work are required for all in-water work in or adjacent to waters accessible to manatees. During the facility modernization construction, these waters include the intake canal and barge canal. If the licensee is unsure if a certain activity qualifies as in-water work, it will contact the FWC to discuss and

determine applicability of these conditions for the proposed activity. Blasting or pile hammering activities to break rock shall be prohibited in waters accessible to manatees. If no other alternative exists, a modification of these conservation measures can be requested. An adequate Blast and Protected Species Watch Plan must be submitted to and approved by the Imperiled Species Management Section of the FWC prior to these methodologies being used.

b. To reduce the possibility of injuring or killing a manatee during construction, in-water work shall not be performed between November 15 and March 31 in the TECO Big Bend discharge canal unless essential to support the Big Bend Unit 1 modernization project's schedule or the safety of employees or reliability of the electric power system would be compromised. If in-water work during the winter cannot be avoided, the Licensee will contact the agencies to determine alternative conditions that will be implemented to address the proposed activity. This prohibition against in-water work from November 15 to March 31 does not extend to the intake and barge canals which do not serve as manatee thermal refuges.

c. At least one person shall be designated as a manatee observer when in-water work is being performed. That person shall have experience in manatee observation and be equipped with polarized sunglasses to aid in observation. The manatee observer must be on site during all in-water construction activities and will advise personnel to cease operation upon sighting a manatee within 50 feet of any in-water construction activity. Movement of a work barge, other associated vessels, or any in-water work shall not be performed after sunset, when the possibility of spotting manatees is negligible.

d. The Licensee will include as part of its safety orientation manatee awareness training for full-time permanent construction personnel at the Big Bend Unit 1 modernization Site. This training will be designed to educate the construction work force about the legal requirements to avoid manatees and to provide them with contact information if they should spot an injured manatee.

e. To reduce the risk of entrapment and drowning of manatees, grating shall be installed over any proposed pipes or culverts greater than 8 inches, but smaller than 8 feet in diameter that are submerged or partially submerged and reasonably accessible to manatees. Bars or grates no more than 8 inches apart shall be placed on the accessible end(s) during all phases of the construction process and as a final design element to restrict manatee access.

f. To reduce the risk of a vessel crushing a manatee, the permittee shall install and maintain dock fenders or similar materials to provide sufficient standoff space of at least four feet under maximum designed compression. Fenders or buoys providing a minimum standoff space of at least four feet under maximum designed compression shall also be utilized between two vessels that are moored together such as, but not limited to, the mooring of the scow and dredge barges.

[Section 403.507, F.S.; Section 379.1025, F.S.; Section 379.2291, F.S.; Section 379.2431 (2), F.S.; Section 20.331, F.S.]

6. Force Majeure

If there is an act of God, terrorism, or war that prevents Licensee from providing the requisite warm water conditions, Licensee will notify FWC expeditiously and coordinate efforts to resume compliance with the certification conditions.

[Sections 403.507, F.S.; Article IV, Sec. 9, Fla. Const.; Section 20.331, F.S.]

III. DEPARTMENT OF TRANSPORTATION

A. Access Management to the State Highway System

All access modifications to State roadway facilities will be subject to the access management standards pursuant to Rule Chapters 14-96, State Highway System Connection Permits, and 14-97, State Highway System Access Control Classification System and Access Management Standards, F.A.C., in accordance with Sections 334.044(10)(a), 334.044(14), and 335.18 to 335.188, F.S.

[Sections 334.044(10)(a), 334.044(14), 335.18 - 335.188, F.S.]

B. Overweight or Overdimensional Loads

Operation of overweight or overdimensional loads by the Licensee 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 Rule Chapter 14-26, Safety Regulations and Permit Fees for Overweight and Overdimensional Vehicles, F.A.C.

[Chapter 316, F.S.; Rule 14-26, F.A.C.]

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

All usage of State of Florida right of way will be subject to the applicable non-procedural requirements of: Rule 14-46.001, Utilities Installation or Adjustment, F.A.C.; and Florida Department of Transportation's 2017 Utility Accommodation Manual; Standard Plans for Road and Bridge Construction; Standard Specifications for Road and Bridge Construction; and pertinent sections of the Florida Department of Transportation's Project Development and Environmental Manual.

[Sections 337.403 and 337.404, F.S.; Rules 14-15.002 and 14-46.001, F.A.C.]

D. Standards

The Manual on Uniform Traffic Control Devices; Florida Department of Transportation's Standard Plans for Road and Bridge Construction; Florida Department of Transportation's Standard Specifications for Road and Bridge Construction; Florida Department of Transportation's 2017 Utility Accommodation Manual; Florida Department of Transportation's Plans Preparation Manual; and pertinent sections of the Department of Transportation's Project Development and Environment Manual will be adhered to in all circumstances involving the State Highway System and other State-owned transportation facilities.

[Rule 14-15.010, F.A.C.]

E. Drainage

Any drainage onto State of Florida right of way and transportation facilities will be subject to the applicable non-procedural requirements of Rule Chapter 14-86, Drainage Connection, F.A.C.

[Chapter 14-86, F.A.C.]

F. Use of Airspace

Any proposed construction or the alteration of an existing structure in the application that exceeds the criteria detailed in 14 CFR Part 77 Subpart B will be subject to an aeronautical study by the Federal Aviation Administration (FAA). The FAA has provided a Notice Criteria Tool at https://oeaaa.faa.gov/oeaaa/external/gisTools/gisAction.jsp?action=showNoNoticeRequiredToolForm to simplify compliance with the federal regulation in determining when an aeronautical study is required. An airspace determination is required for all structures that are determined to exceed by the Notice Criteria Tool. Applications for an aeronautical study are made utilizing the electronic FAA Form 7460-1 available at the FAA website https://oeaaa.faa.gov/oeaaa/external/portal.jsp. If the FAA aeronautical study determines that the construction or alteration of a structure "Exceeds But Is Okay" (EBO) or is "Determined Not To Be A Hazard" (DNH), the construction or alteration is subject to the requirements of Chapter 333, Florida Statutes (F.S.) and Rule Chapter14-60, Florida Administrative Code (F.A.C.). If political subdivisions have adopted airport protection zoning regulations, the construction or alteration of a structure requires a permit from the political subdivision pursuant to Section 333.025(4), F.S. If not, and the construction or alteration of a structure is within a 10-nautical mile radius of the airport reference point of a public-use or military airport, the construction or alteration requires a permit from FDOT pursuant to Section 333.025(1), F.S. A permit from FDOT may be obtained using FDOT Form 725-040-11 and following the instructions in Rule 14-60.009, F.A.C. FDOT Form 725-040-11 is available at the FDOT website https://www.florida-aviation-database.com/dotsite/pdfs/725-040-11.pdf.

[Chapter 333, F.S.; Rule 14-60.009, F.A.C.]

G. Traffic Control Plan

A temporary traffic control plan for handling construction related traffic is needed subject to the requirements and standards prior to construction affecting State-owned transportation facilities. The plan will be submitted as a post-certification submittal under Condition of Certification XXI and will need to be approved by Florida Department of Transportation prior to construction affecting State-owned transportation facilities.

H. Best Management Practices

Traffic control during facility construction and maintenance on State-owned transportation facilities will be subject to the standards contained in the US Federal Highway Administration's Manual on Uniform Traffic Control Devices; Florida Department of Transportation's Design Standards for Design, Construction, Maintenance and Utility Operation on the State Highway; Florida Department of Transportation's Standard Specifications for Road and Bridge Construction; and Florida Department of Transportation's Utility Accommodation Manual, whichever is more stringent. It is recommended that the Licensee encourage transportation demand management techniques by doing the following:

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

[Chapter 334, F.S; Rule 14-96, F.A.C.]

IV. DEPARTMENT OF STATE – DIVISION OF HISTORICAL RESOURCES

A. Prior to any new construction involving ground-disturbing activities in areas not previously surveyed, the Licensee shall conduct a survey of any cultural resources, as determined in consultation with the Department of State, Division of Historical Resources (DHR). A qualified cultural resources consultant will identify an appropriate work plan for this project based on a thorough review of the certified facility. Prior to beginning any field work, the work plan will be reviewed in consultation with DHR. Upon completion of the evaluation defined in the work plan, the results will be compiled into a report which shall be submitted to DHR. If feasible, any sites determined to be eligible for listing on the National Register of Historic Places (NRHP) shall be avoided during construction of the project and access roads, and subsequently during maintenance. If avoidance of any discovered NRHP-eligible sites is not feasible, impacts to those sites shall be mitigated through archaeological salvage operations or other methods acceptable to DHR, as appropriate.

B. If historical or archaeological artifacts or features are discovered at any time within the Certified Facility, the Licensee shall notify the appropriate DEP District office(s) and the DHR, R.A. Gray Building, 500 South Bronough Street, Room 423, Tallahassee, Florida 32399-0250, telephone number (850) 245-6333, and the Licensee shall consult with DHR to determine appropriate action.

[Sections 267.061, 403.531, and 872.02, F.S.]

V. DEPARTMENT OF AGRICULTURE AND CONSUMER SERVICES

Only herbicides registered by the U.S. Environmental Protection Agency and the Florida Department of Agriculture and Consumer Services shall be used at certified facilities. Herbicide applications will be in accordance with label directions and will be carried out by a licensed applicator, in compliance with all federal, state, and local regulations. Herbicide applications shall be selectively applied to targeted vegetation. Broadcast application of herbicide shall not be used unless effects on non-targeted vegetation are minimized.

[Chapter 487, F.S.]

VI. SOUTHWEST FLORIDA WATER MANAGEMENT DISTRICT

A. General Conditions

1. Use of Water

The Licensee shall use the lowest quality water which is available and is environmentally, technically, and economically feasible for all or a portion of the proposed use.

[Sections 373.016, 373.219 and 373.223, F.S; Rules 40D-2.091 and 40D-2.301, F.A.C.; Water Use Permit Applicant's Handbook Part B (WUP Applicant's Handbook)]

2. Consumptive Use of Groundwater

a. This certification authorizes standby quantities of 234,000 gallons per day (gpd) of groundwater on a rolling annual average basis and 2,000,000 gpd of groundwater on a peak month basis for Units 1, 3, 4 and 2, until decommissioned, should the supply of reclaimed water provided by Hillsborough County be interrupted, and as specified in the Standby Water Supply Specific Conditions in Attachment A of these Conditions of Certification. In the event fresh groundwater in excess of the quantities permitted by the

SWFWMD should be required for the operation of Big Bend, the Licensee shall demonstrate to the satisfaction of the SWFWMD that such a consumptive use of groundwater will be in compliance with the regulations and policies of the SWFWMD and will have no significant adverse effect on regional water supplies.

[Sections 373.016, 373.219 and 373.223, F.S; Rules 40D-2.091 and 40D-2.301, F.A.C.; WUP Applicant's Handbook]

b. In the event that use of brackish groundwater should become necessary, an intensive investigation and aquifer testing program shall be performed by TECO. The aquifer testing program shall be submitted to the SWFWMD and approved prior to commencement of the investigation. The investigation should include but need not be limited to the following:

(1) The geology encountered while drilling the well, with emphasis placed on the depth, thickness and hydraulic characteristics of formations encountered.

(2) The aquifer systems that are encountered, along with the discussion on water quality and availability.

(3) Performance of a pump test, description of aquifer characteristics and evaluation procedure.

(4) Interpretations of geophysical logs.

(5) Discussion of aquifer recharge and ultimate source.

Upon completion of the investigations, TECO shall submit a report on the feasibility of utilizing brackish groundwater for cooling tower make-up, and at that time the SWFWMD may authorize withdrawals. If SWFWMD should authorize withdrawals of brackish water, TECO shall submit monthly pumpage reports and chlorides, sulfate and TDS analysis on the production well to the SWFWMD.

[Sections 373.016, 373.219 and 373.223, F.S; Rules 40D-2.091 and 40D-2.301, F.A.C.; WUP Applicant's Handbook]

d. All standby groundwater withdrawals associated with Big Bend Units 1, 2, 3 & 4 are intended to be consolidated and authorized under these Conditions of Certification rather than under a separate water use permit. Therefore, within 30 days after the expiration of the time for filing an appeal of the Final Order of Certification for the Big Bend 1 Modernization Project, which includes this Condition of Certification consolidating the facility water use or, if appealed, within 30 days after the final resolution of all appeals, the Licensee shall submit a request to administratively cancel Water Use Permit No. 20006233.007 issued by the SWFWMD pursuant to rule 40D-2.341(3), Florida Administrative Code.

[Sections 373.016, 373.219 and 373.223, F.S; Rule 40D-2.341, F.A.C.; WUP Applicant's Handbook]

B. Standard Conditions

1. With advance notice to the Licensee, SWFWMD staff with proper identification shall have permission to enter, inspect, collect samples, take measurements, observe permitted and related facilities and collect any information deemed necessary to protect the water resources of the area and to determine compliance with the approved plans, specifications and conditions of this certification. The Licensee shall either accompany SWFWMD staff onto the property or make provision for access onto the property. The

SWFWMD may require the Licensee to submit water samples when the SWFWMD determines there is a potential for adverse impacts to water quality.

2. This certification is contingent upon continued ownership or legal control of all property on which pumps, wells, diversions, or other water withdrawal facilities are located.

3. When necessary to analyze impacts to the water resource or existing users, the SWFWMD shall require the Licensee to install flow metering or other measuring devices to record withdrawal quantities and submit the data to the SWFWMD.

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

5. A SWFWMD identification tag shall be prominently displayed at each withdrawal point that is required by the SWFWMD to be metered or for which withdrawal quantities are required to be reported to the SWFWMD, by permanently affixing the tag to the withdrawal facility.

6. The Licensee shall mitigate any adverse impacts to environmental features or offsite land uses as a result of withdrawals. When adverse impacts occur or are imminent, the SWFWMD shall require the Licensee to mitigate the impacts. Examples of adverse impacts include the following:

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

b. Damage to crops and other vegetation causing financial harm to the owner; and

c. Damage to the habitat of endangered or threatened species.

7. The Licensee shall mitigate any adverse impacts to existing legal uses caused by withdrawals. When adverse impacts occur or are imminent, the SWFWMD may require the Licensee to mitigate the impacts. Adverse impacts include:

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

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

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

8. Licensee shall notify the SWFWMD in writing within 30 days of any sale, transfer, or conveyance of ownership or any other loss of permitted legal control of the site and / or related facilities from which the permitted consumptive use is made. Where Licensee's control of the land subject to the certification was demonstrated through a lease, the Licensee must either submit documentation showing that it continues to have legal control or transfer control of the permitted system / project to the new landowner or new lessee. All transfers of ownership are subject to the requirements of Rule 40D-1.6105, F.A.C. Alternatively, the

Licensee may surrender the authorization to the SWFWMD, thereby relinquishing the right to conduct any activities under the authorization.

9. All consumptive uses authorized by the Conditions of Certification shall be implemented as set forth in these conditions, including any documents incorporated by reference in a specific condition. The SWFWMD may request that DEP revoke this certification, in whole or in part, or take enforcement action, pursuant to sections 373.136 or 373.243, F.S., unless a modification has been obtained.

10. Water use authorized under the SWFWMD's conditions do not convey to the Licensee any property rights or privileges other than those specified herein, nor relieve the Licensee from complying with any applicable local government, state, or federal law, rule, or ordinance.

11. The Licensee shall cease or reduce surface water withdrawal as directed by the SWFWMD if water levels in lakes fall below the 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.

12. The Licensee shall cease or reduce withdrawal as directed by the SWFWMD if water levels in aquifers fall below the minimum levels established by the SWFWMD.

13. The Licensee is advised that the substantive provisions of Section 373.239, F.S., and Rule 40D-2.331, F.A.C., are applicable to modifications relating to SWFWMD conditions for water use.

14. The 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 the Licensee's water use classification, these conditions shall be subject to those requirements upon notice and after a reasonable period for compliance.

15. The SWFWMD may establish special regulations for Water-Use Caution Areas. At such time as the SWFWMD adopts such provisions, this certification shall be subject to them upon notice and after a reasonable period for compliance.

16. Nothing in these conditions should be construed to limit the authority of the SWFWMD to declare a water shortage and issue orders pursuant to Chapter 373, F.S. In the event of a declared water shortage, the Licensee must adhere to the water shortage restrictions, as specified by the SWFWMD. The Licensee is advised that during a water shortage, reports shall be submitted as required by SWFWMD rule or order.

17. The SWFWMD-related conditions of certification are based on information provided by the 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 the certification, it is determined by the SWFWMD that a statement in the application and in the supporting data are found to be untrue and inaccurate, 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 of this certification. The Licensee shall immediately notify the SWFWMD in writing of any previously submitted information that is later discovered to be inaccurate.

[Sections 373.016, 373.219 and 373.223, F.S; Rules 40D-2.091, 40D-2.301 and 40D-2.381, F.A.C.; WUP Applicant's Handbook]

C. Specific Conditions

The Licensee is authorized to withdraw up to 234,000 gallons per day (annual average) and 2,000,000 gpd (peak demand) of groundwater from District ID No. 3 on a standby basis for construction, operation, maintenance, decommissioning, and/or demolition of facilities at Big Bend. The groundwater available on standby shall be used in the event of a temporary interruption of reclaimed water supply from Hillsborough County.

1. Withdrawal Quantities and Facilities

				Water Allocation	
District ID/Licensee ID	**Diameter (in)**	**Total Depth (ft. bls)**	**Cased Depth (ft. bls)**	**Annual Average Gallons per Day**	**Peak Month**
3/3 (Standby)	10	250	119	234,000	2,000,000
8/8 (reuse)	10	---	---	3,500,000	3,500,000
Total				234,000*	2,000,000

*Measured on a rolling annual average daily flow (RAADF) basis

[Sections 373.016, 373.219 and 373.223, F.S.; Rules 40D-2.091 and 40D-2.301, F.A.C.; WUP Applicant's Handbook]

2. Submit Reports/Data

All reports and data required by condition(s) shall be submitted to the SWFWMD according to the due date(s) contained in the specific condition. If the condition specifies that a SWFWMD-supplied form is to be used, the Licensee should use that form in order for its submission to be acknowledged in a timely manner. The Licensee may use the SWFWMD Permit Information Center (www.swfwmd.state.fl.us/permits/epermitting/) to submit data, plans or reports online. There are instructions at the SWFWMD website on how to register to set up an account to do so. If the report or data are received on or before the tenth day of the month following data collection, it shall be deemed to be a timely submittal.

All mailed reports and data are to be sent to:

Southwest Florida Water Management District
Tampa Regulation Department, Water Use Permit Bureau
7601 U.S. Hwy. 301 North
Tampa, Florida 33637-6759

Submission of plans and reports: Unless submitted online or otherwise indicated in the Conditions of Certification, the original and two copies of each plan and report, such as conservation plans, environmental analyses, aquifer test results, per capita annual reports, etc. are required.

Submission of data: Unless otherwise indicated in the Conditions of Certification, an original (no copies) is required for data submittals such as crop report forms, meter readings and/or pumpage, rainfall, water level evapotranspiration, or water quality data.

[Sections 373.016, 373.219 and 373.236, F.S; Rules 40D-2.301 and 40D-2.381, F.A.C.; WUP Applicant's Handbook]

3. Implement Leak Detection & Repair Program

The Licensee shall implement a leak detection and repair program as an element of an ongoing system maintenance program. This program shall include a system-wide inspection at least once per year.

[Sections 373.016, 373.219 and 373.223, F.S; Rules 40D-2.091, 40D-2.301 and 40D-2.381, F.A.C.; WUP Applicant's Handbook]

4. Modify Certification Based on Reuse Quantity

Within 90 days of the replacement of any or all withdrawal quantities from ground water or surface water bodies with an Alternative Water Supply, the Licensee shall apply to modify this certification to place equal quantities of permitted withdrawals from the ground and/or surface water resource on standby. The standby quantities can be used in the event that some or all of the alternative source is not available.

[Sections 373.016, 373.219 and 373.223, F.S; Rules 40D-2.091, 40D-2.301 and 40D-2.381, F.A.C.; WUP Applicant's Handbook]

5. Water Conservation Plan

The Licensee shall immediately implement the SWFWMD-approved water conservation plan. Conservation measures that the Licensee has already implemented shall continue, and proposed conservation measures shall be implemented as proposed in the plan. Progress reports on the implementation of water conservation practices indicated as proposed in the plan as well as achievements in water savings that have been realized from each water conservation practice shall be submitted to the SWFWMD by August 1, 2024.

[Sections 373.016, 373.219 and 373.223, F.S; Rules 40D-2.091, 40D-2.301 and 40D-2.381, F.A.C.; WUP Applicant's Handbook]

6. Capping of Wells

Any wells not in use, and in which pumping equipment is not installed, shall be capped or valved in a water tight manner in accordance with Rule 62-532.500, F.A.C.

7. Activation of Standby Quantities

In the event that an alternative water supply (AWS) for which there are standby quantities authorized under this certification become wholly or partially unavailable, insufficient or unsuitable, the Licensee shall access authorized standby quantities as follows, depending upon the length of time the AWS is not available, sufficient or suitable. At no time will the Licensee utilize standby quantities to exceed authorized use or allocations.

Less than 30 days: No SWFWMD notification is required if the AWS is unavailable, insufficient, or unsuitable for the 30-day period or less. The Licensee may access

authorized standby quantities to meet authorized use or an authorized irrigation allocation rate from the date of the first loss up to 30 days.

Greater than 30 days but less than one year: The Licensee shall notify the SWFWMD in writing within 45 days of the first day the AWS became unavailable, insufficient or unsuitable. The notification shall identify the standby withdrawal sources that were or will be activated, and the Licensee shall continue to submit written notification monthly for each subsequent 30-day period where the standby delivery of AWS is unavailable, insufficient or unsuitable, for up to one year from the date of first loss, insufficiency, or unsuitability. The Licensee may access authorized standby quantities to meet authorized use or allocations from the date of the first loss up to one year. If the loss of the AWS exceeds one year, the Licensee shall apply for a modification of the site certification to reinstate the standby quantities as active quantities.

Permanent Loss: Upon verbal or written notice from an alternative water supply provider that delivery of all or part of the alternative water supply is to permanently cease, the Licensee shall submit information to the SWFWMD explaining the reason(s) for the cessation. If the cessation was not caused by actions of the Licensee and is beyond the control of the Licensee, the Licensee shall apply for a modification of the site certification to reinstate the standby quantities as active quantities.

[Sections 373.016, 373.219 and 373.223, F.S; Rules 40D-2.091 and 40D-2.301, F.A.C.; WUP Applicant's Handbook]

8. Southern Water Use Caution Area Recovery Strategy

The certified facilities are located within the Southern Water Use Caution Area (SWUCA). Pursuant to Section 373.0421, Florida Statutes, the SWUCA is subject to a minimum flows and levels recovery strategy, which became effective on January 1, 2007. The Governing Board may amend the recovery strategy, including amending applicable water use permitting rules based on an annual assessment of water resource criteria, cumulative water withdrawal impacts, and on a recurring five-year evaluation of the status of the recovery strategy up to the year 2025, as described in Chapter 40D-80, Florida Administrative Code. This certification is subject to modification to comply with new rules.

9. Metering of Withdrawals

a. The Licensee shall continue to record and report monthly meter readings and pumpage from SWFWMD ID No. 8, Licensee ID No. 8.

[Sections 373.016, 373.219 and 373.223, F.S; Rules 40D-2.301 and 40D-2.381, F.A.C.; WUP Applicant's Handbook]

b. The following existing standby withdrawal facility (those that provide back-up water for an alternative water supply in the event the alternative water supply becomes unavailable or unusable) shall continue to be metered: SWFWMD ID No. 3, Licensee ID No. 3. Meter reading and reporting, as well as meter accuracy checks every five years shall be in accordance with the instructions in Attachment E, incorporated herein.

[Sections 373.016, 373.219 and 373.223, F.S; Rules 40D-2.301 and 40D-2.381, F.A.C.; WUP Applicant's Handbook]

VII. HILLSBOROUGH COUNTY

A. Screening

The Licensee shall comply with applicable local government requirements concerning the screening of the Certified Facility.

[Article VI, Part 6.11.71, Hillsborough County Land Development Code]

B. Flood Control Protection

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

[Article V, Hillsborough County Land Development Code]

C. Access Management

TECO shall contact and coordinate with the departments within the County that are responsible for managing the planning, design and construction of Capital Improvement Programs, infrastructure projects, and resurfacing programs. At a minimum, the following departments should be contacted: Public Utilities and Public Works (within Public Works – Engineering; Transportation Maintenance; Resurfacing; Road and Bridge Maintenance; Storm Water Management; Right-of-Way Management; Design Engineering Services; and Traffic).

[Hillsborough County Code of Ordinances and Laws, Part A, Chapter 42, Section 42. 62; Hillsborough County's Land Development Code, Part 6.04 et seq., and Hillsborough County's Utility Accommodation Guide and Rights-of-Way Use Procedures Manual Section 2.1 and Section 3.6]

D. Traffic and Road Use

1. TECO shall utilize and adhere to the applicable non-procedural standards referenced in the County's Utility Accommodation Guide, Rights-of-Way Use Procedure Manuals, Transportation Technical Manual, Hillsborough County Ordinances 3-29 and 4-36, including but not limited to, the provisions relating to County design and construction standards, protection of existing traffic controls, overhead and underground power lines installations procedures, permanent restorations for areas, beyond the edge of pavement, and permanent pavement restorations.

[Hillsborough County Code of Ordinances and Laws, Part A, Chapter 42, Section 42. 62 and Hillsborough County's Land Development Code Sections 5. 02. 00 and 10.01.06]

2. Truck drivers transporting equipment and materials for the project shall be respectful of residential neighborhoods and surrounding land uses when traveling to and from the construction site. Construction vehicles must adhere to weight requirements provided in the applicable the County's ordinance. A truck may leave a designated truck route and drive on a County road that is restricted to truck traffic, only if the truck can reach its destination without crossing another truck route. Truck routes can be found on the Truck Route Plan Map and in County Resolution R05-022. Copies of both are available on the 20th floor of the County Center at 601 East Kennedy Blvd., Tampa, FL 33601.

[Hillsborough County Resolution R05-022]

3. In the event that TECO anticipates closing any public road during the project, TECO shall contact the County's Right-of-Way Management office to coordinate the work and, if applicable, obtain approval whenever TECO plans to impede traffic in any manner whatsoever and/or when TECO is working within 15 feet of the edge of the pavement. TECO may also need to submit a signed, sealed, site specific Maintenance of Traffic (MOT) plan to the County for review and approval. Additionally, TECO will provide County with a MOT plan for the construction of entrances and exits. This process will also apply to all lane or road closures requests from TECO. Notwithstanding the foregoing, TECO shall refrain from closing any lanes or roads in the traffic patterns of schools (while in session), hospitals, emergency facilities, and fire stations.

[Hillsborough County's Utility Accommodation Guide and Rights-of Way Use Procedures Manual, Section 5.3.1 and Section 5.3.2: Hillsborough County Public Works Standard Specifications for Construction Section 01500-1.03-1.05]

E. Greater Tampa Utilities Group (GTUG)

TECO shall coordinate the design and construction of the proposed natural gas lines with the Greater Tampa Utilities Group (GTUG) as well as individual private and public utilities located within the County's right-of-way. TECO shall provide the County's Right-of-Way Management office with dates of attendance to the GTUG meetings and coordination efforts with GTUG. TECO shall resolve any and all conflicts with the afore-mentioned departments and sections for both existing and future infrastructure and utilities.

[Administrative Directive #CS-04: Utility Coordination Procedures for Hillsborough County Construction Projects Within County Rights-of-Way: Hillsborough County's Utility Accommodation Guide and Rights-of-Way Use Procedures Manual Section 5. 0 et. seq. and Section 5. 2]

F. Professional Certification

When performing engineering work such as civil, structural, mechanical, and soil for the various aspects of the projects including, but not limited to, roadway design and construction, structural design and construction, and drainage systems in the County's rights-of-way, TECO shall employ and/or utilize the services of professional engineers certified or registered by the Construction Industry Licensing Board in the State of Florida.

[Section 471. 003, F.S.]

G. Rights-of-Way

1. If TECO anticipates clearing in unused County rights-of-way, TECO must comply with the applicable non-procedural requirements of the County's Tree Protection Regulations in Section 4.01.06 of the County's Land Development Code.

2. Any drainage onto County's right-of-way and roads will be subject to the applicable non-procedural provisions of the County's Land Development Code.

[Section 4.01.06, Article IV. Natural Resources and Adequate Public Facilities, Hillsborough County Code of Ordinances; Hillsborough County's Utility Accommodation Guide and Rights-of-Way Use Procedures Manual Section 2.8.1]

H. Underground Utilities and Natural Gas Pipeline

1. TECO shall contact Sunshine One Call and obtain a listing (design and construction tickets) of all of the existing underground utilities within the proposed Right-of-Way in the County. TECO shall provide the County with a copy of the utility companies with facilities located within the County's right-of-way. TECO shall follow safe digging practices and the Underground Facility Damage Prevention and Safety Act, Chapter 556, Florida Statutes.

[Hillsborough County Utility Accommodation Guide Section 2.2]

2. When constructing the natural gas pipeline, TECO shall coordinate with the Florida Department of Transportation (FDOT) and the County regarding a bridge culvert replacement project that is being undertaken by FDOT/County approximately 750 feet west of Wyandotte Road within the next two years. TECO shall ensure that the pressure gas and fuel pipelines conform to the current applicable sections of "ANSI Standard Code for Pressure Piping" of the American National Standards Institute, the Code of Federal Regulations, Parts 192, 193 and 195, and all other applicable industrial codes.

[Hillsborough County Utility Accommodation Guide Section and Rights-of Way Use Procedures Manual, Section 3.1.1 and Section 5.2.2.3]

I. Final Design Plan Submittal

TECO shall provide the County with a final design plan, in accordance with Section A. Condition XX. Procedures for Post-Certification Submittals, showing the following:

1. The type, size, and location of its natural gas pipelines to be placed within County right-of-way and that TECO complied with FDOT's Title 48 requirements.

[Hillsborough County's Utility Accommodation Guide and Rights-of-Way Use Procedures Manual, Section 5.1.2.4]

2. Construction time-tables, phasing, and construction traffic to be generated by the project.

[Hillsborough County's Utility Accommodation Guide and Rights-of Way Use Procedures Manual, Section 5.3]

VIII. ENVIRONMENTAL PROTECTION COMMISSION OF HILLSBOROUGH COUNTY

A. Wetland Integrity

Any activity interfering with the integrity of a wetland, such as clearing, excavating, draining or filling, without prior authorization from the Executive Director of the Environmental Protection Commission (EPC) or authorized agent, pursuant to Section 1-11.07, Rules of the EPC, will be considered a violation of Section 17 of the Environmental Protection Act of Hillsborough County, Chapter 84-446, Laws of Florida, as amended, and Chapter 1-11, Rules of the EPC.

[Section 17, Environmental Protection Act of Hillsborough County; Chapters 84-446, Laws of Florida, as amended, and Chapter 1-11, Rules of the EPC]

B. Noise

Pursuant to Chapter 1-10, Rules of the Environmental Protection Commission (EPC), Noise Rule "Exceptions" exempts construction activity for which the County or municipality has issued all applicable permits, or which is exempt from County or municipality permits, provided such activity occurs between 6:00 a.m. and 8:30 p.m. and reasonable precautions are taken to abate the noise pollution generated from those activities. Reasonable precautions shall include but not be limited to noise pollution abatement measures such as enclosure of the noise pollution source, use of acoustical blankets, and change in work practice.

[Chapter 1-10, Rules of the EPC]

C. Open Burning

Open burning in connection with initial land clearing shall be conducted in accordance with the non-procedural requirements of Chapter 1-4, Rules of the EPC, specifically with the requirements of Section 1-4.06, which pertain both to pile burning or burning by air curtain incinerator for initial land clearing. TECO shall not burn any materials specifically prohibited by Section 1-4.03. TECO shall provide notice to EPC prior to commencing open burning for initial land clearing and shall indicate in the notice how it intends to comply with the provisions of Chapter 1-4. Burning shall not occur if not approved by the EPC or if the Division of Forestry has issued a ban on burning due to air pollution conditions or due to fire safety.

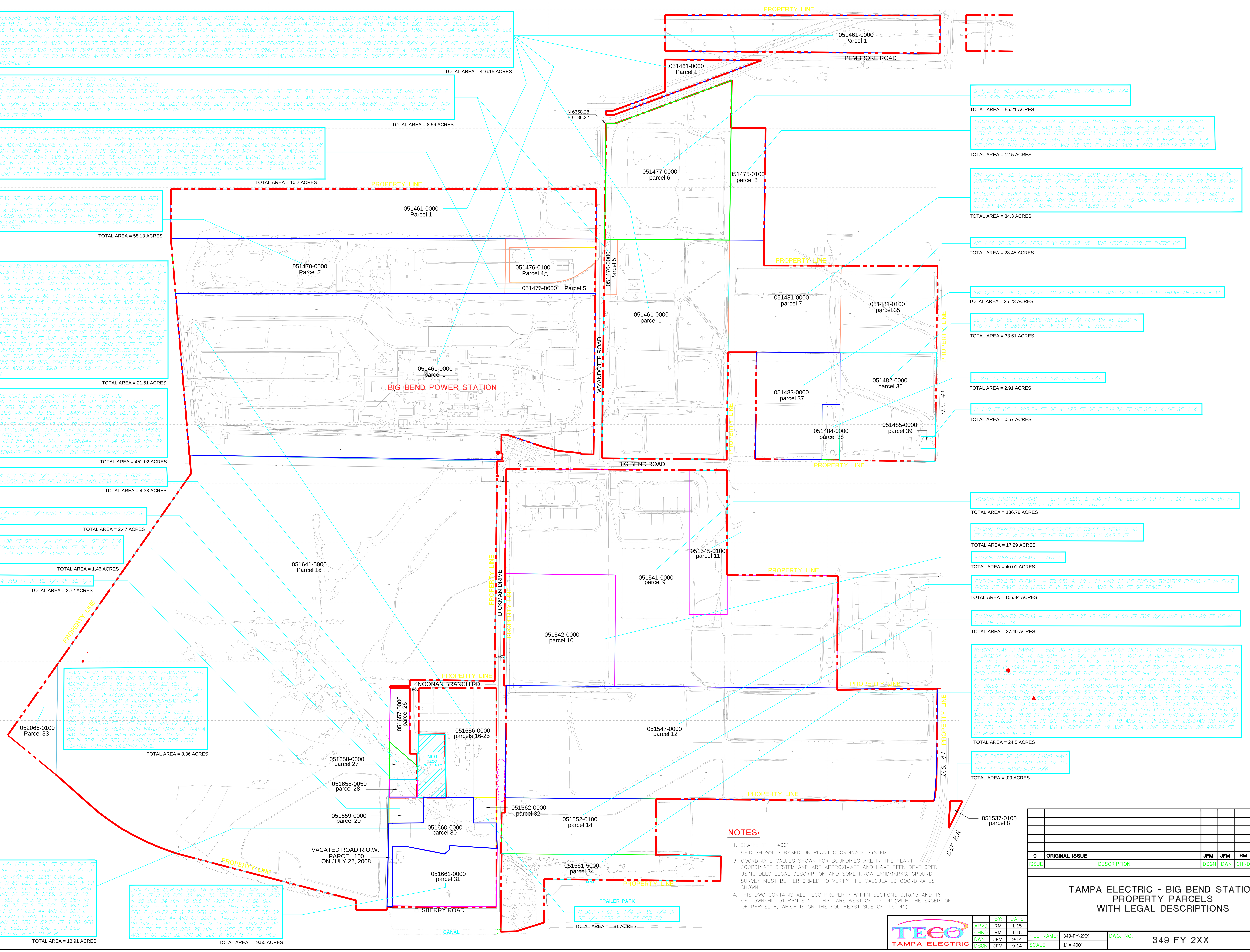
[Chapter 1-4, Rules of the EPC]

IX. HISTORY

Certification issued 08/17/81; signed by Governor Graham
Modified 09/17/81; signed by Secretary Tschinkel
Modified 11/18/82; signed by Governor Graham
Modified 03/19/84; signed by Governor Graham
Modified 03/16/87; signed by Secretary Twachtmann
Modified 10/12/87; signed by Governor Martinez
Modified 06/06/90; signed by Secretary Twachtmann
Modified 04/06/94; signed by Secretary Wetherell
Modified 06/19/95; signed by Secretary Wetherell
Modified 09/18/95; signed by Secretary Wetherell
Modified 02/07/00, signed by Secretary Struhs
Modified 05/17/01; signed by Deputy Secretary Green
Modified 07/29/03, signed by Program Administrator Oven
Modified 09/13/05, signed by Program Administrator Oven
Modified 12/23/08; signed by Program Administrator Halpin
Modified 01/28/09; signed by Program Administrator Halpin
Modified 07/22/12; signed by Program Administrator Mulkey
Modified 3/27/18; signed by Program Administrator Mulkey
Certification Units 1-3 & Modernization 07/29/19; signed by Governor DeSantis
Modified 1/28/2020; signed by Program Administrator Mulkey
Modified 04/23/2024; signed by Deputy Director Mulkey

Attachment A

Maps



9 and 10 of Township 31 Range 19. FRAC N 1/2 SEC 9 AND WLY THERE OF DESC AS BEG AT INTERS OF E AND W 1/4 LINE WITH E SEC BDRY AND RUN W ALONG 1/4 SEC LINE AND IT'S WLY EXT 3960 FT N 2636.19 FT TO PT ON WLY PROJECTION OF N BDRY OF SEC 9 E 3960 FT TO NE SEC COR AND S TO BEG AND THAT PART OF SEC'S 9 AND 10 AND WLY EXT THERE OF DESC AS BEG AT SW COR OF SEC 10 AND RUN N 88 DEG 56 MIN 28 SEC W ALONG S LINE OF SEC 9 AND WLY EXT 3698.63 FT TO A PT ON COUNTY BULKHEAD LINE OF MARCH 23 1960 RUN N 04 DEG 44 MIN 18 SEC TO 1919.77 FT ALONG BULKHEAD LINE TO PT 650 FT S OF N BDRY OF S 1/2 OF SEC 9 ELY 5217.16 FT TO PT ON E BDRY OF W 1/2 OF SW 1/4 OF SEC 10 650 FT S OF NE COR S 1972 FT TO S BDRY OF SEC 10 AND WLY 1326.07 FT TO BEG LESS N 1/4 OF NE 1/4 OF SEC 10 LYNG S OF PEMBROKE RN AND W OF HWY 41 AND LESS ROAD R/W N 1/4 OF NE 1/4 AND 1/2 OF NW 1/4 LESS RDS SEC 10 AND LESS THAT PART DESC AS BEG AT NE COR SEC 9 AND RUN E 1883.76 FT S 894.13 FT S 69 DEG 41 MIN 30 SEC W 655.77 FT W 199.42 FT S 932.7 FT ALONG W R/W OF WYANDOTTE RD W 4728.96 FT TO MEAN HIGH WATER LINE W 303.25 FT TO COUNTY BULKHEAD LINE N 2070.93 FT ALONG BULKHEAD LINE TO THE N BDRY OF SEC 9 AND E 3960 FT TO POB AND LESS R/W FOR PEMBROOKED RD.

TOTAL AREA = 416.15 ACRES

COMM AT SW COR OF SEC 10 RUN THN S 89 DEG 14 MIN 31 SEC E ALONG S BDRY OF SEC 10 1129.34 FT TO PT ON CENTERLINE OF PUBLIC ROAD R/W DEED RECORDED IN OR 2296 PG 629 THN N 00 DEG 53 MIN 29.5 SEC E ALONG CENTERLINE OF SAID 100 FT RD R/W 2577.12 FT THN N 00 DEG 53 MIN 49.5 SEC E ALONG SAID C/L 15.78 FT THN N 89 DEG 56 MIN 45 SEC W 50.01 FT TO PT ON W R/W LINE OF SAID RD THN S 00 DEG 53 MIN 49.5 SEC W ALONG SAID R/W 25.05 FT THN CONT ALONG SAID R/W S 00 DEG 53 MIN 29.5 SEC W 170.67 FT THN S 52 DEG 03 MIN 00 SEC W 153.81 FT THN S 58 DEG 28 MIN 37 SEC W 163.88 FT THN S 70 DEG 37 MIN 03 SEC W 113.42 FT THN S 80 DEG 49 MIN 42 SEC W 113.64 FT THN N 89 DEG 56 MIN 45 SEC W 538.05 FT THN N 00 DEG 03 MIN 15 SEC E 407.22 THN S 89 DEG 56 MIN 45 SEC E 1020.43 FT TO POB.

TOTAL AREA = 8.56 ACRES

N 650 FT OF W 1/2 OF SW 1/4 LESS RD AND LESS COMM AT SW COR OF SEC 10 RUN THN S 89 DEG 14 MIN 31 SEC E ALONG S BDRY OF SEC 10 1129.34 FT TO PT ON CENTERLINE OF PUBLIC ROAD R/W DEED RECORDED IN OR 2296 PG 629 THN N 00 DEB 53 MIN 29.5 SEC E ALONG CENTERLINE OF SAID 100 FT RD R/W 2577.12 FT THN N 00 DEG 53 MIN 49.5 SEC E ALONG SAID C/L 15.78 FT THN N 89 DEG 56 MIN 45 SEC W 50.01 FT TO PT ON W R/W LINE OF SIAD RD THN S 00 DEG 53 MIN 49.5 SEC W ALONG SAID R/W 25.05 FT THN CONT ALONG SAID R/W S 00 DEG 53 MIN 29.5 SEC W 44.96 FT TO POB THN CONT ALONG SAID R/W S 00 DEG 53 MIN 29.5 SEC W 170.67 FT THN S 52 DEG 03 MIN 00 SEC W 153.81 FT THN S 58 DEG 26 MIN 37 SEC W 163.88 FT THN S 70 DEG 37 MIN 03 SEC W 113.42 FT THN S 80 DWG 49 MIN 42 SEC W 113.64 FT THN N 89 DWG 56 MIN 45 SEC W 538.05 FT THN N 00 DWG 03 MIN 15 SEC E 407.22 FT THN S 89 DEG 56 MIN 45 SEC E 1020.43 FT TO POB.

TOTAL AREA = 10.2 ACRES

N 650 FT OF FRAC SE 1/4 SEC 9 AND WLY EXT THERE OF DESC AS BEG AT NW CORR OF W 1/4 OF SW 1/4 SEC 10-29-19 AND RUN N 89 DEG 48 MIN 37 SEC W 3960 FT TO BULKHEAD LINE S 4 DEG 44 MIN 18 SEC E 2572.12 FT ALONG BULKHEAD LINE TO INTER WITH WLY EXT OF S LINE OF SEC 9, S 88 DEG 56 MIN 28 SEC E TO SE COR OF SEC 9 AND NLY ALONG E BDRY TO BEG.

TOTAL AREA = 58.13 ACRES

TRACT BEG 990 FT W & 205 FT S OF NE COR OF SE 1/4 RUN E 183.75 FT S 120 FT W 183.75 FT & N 120 FT TO POB....E 1/4 OF NE 1/4 OF SE 1/4 LESS TRACT BEG 25 FT S OF NE COR AND RUN W 2329.99 FT S 150 FT E 329.9 FT AND N 150 FT TO BEG AND LESS E 60 FT FOR RD...TRACT BEG 25 FT S OF NE COR OF SE 1/4 AND RUN W 329.99 FT S 150 FT E 329.9 FT AND N 150 FT TO BEG LESS E 60 FT FOR RD... W 2/3 OF E 3/4 OF NE 1/4 LESS W 342.4 FT OF S 745.4 FT AND LESS N 424.8 FT AND LESS W 10 FT FOR R/W...TRACK BEG 990 FT W OF NE COR OF SE 1/4 AND RUN S 205 FT E 183.75 FT N 205 FT AND W 183.75 FT TO BEG LESS W 10 FT AND N 25 FT FOR RDS...TRACT BEG 647.5 FT W OF NE COR OF SE 1/4 AND RUN S 325 FT E 158.75 FT N 325 FT & W 158.75 FT TO BEG LESS N 25 FT FOR RD...TRACT BEG 990 FT W AND 325 FT S OF NE COR OF SE 1/4 AND RUN E 342.5 FT S 99.8 FT W 342.5 FT AND N 99.8 FT TO BEG LESS W 10 FT FOR RD...TRACT BEG 806.25 FT W OF NE COR OF SE 1/4 RUN 325 FT E 158.75 FT N 325 FT & W158.75 FT TO BEG LESS N 25 FT FOR RD...TRACT BEG 488.75 FT W OF NE COR OF SE 1/4 AND RUN S 325 FT E 158.75 FT N 325 FT AND W 158.75 FT TO BEG...TRACT BEG 330 FT W AND 325 FT S OF NE COR OF SE 1/4 AND RUN S 99.8 FT W 317.5 FT N 99.8 FT AND E 317.5 FT TO BEG.

TOTAL AREA = 21.51 ACRES

TRACT BEG AT NE COR OF SEC AND RUN W 75 FT FOR POB S 0 DEG 39 MIN 44 SEC W 2594.64 FT N 89 DEG 24 MIN 26 SEC W 1005 FT S 0 DEG 39 MIN 44 SEC W 75 FT N 89 DEG 24 MIN 26 SEC W 230 FT S 0 DEG 46 MIN 02 SEC W 2648.799 FT N 89 DEG 29 MIN 3 SEC W 369.9 FT N 1 DEG 17 MIN 24 SEC E 109.54 FT N 75 DEG 23 MIN ~~12 SEC W 118.81 FT N 75 DEG 18 MIN 30 SEC W 958.41 FT N 61 DEG~~ 25 MIN 15 SEC W ALONG ARC 1362.35 FT RAD 2793.82 FT CORD 1348.89 FT CONT N 47 DEG 26 MIN 5 SEC W 50 FT N 48 DEG 29 MIN 06 SEC W 359.46 FT N 0 DEG 55 MIN 02 SEC E 1308.644 FT N 34 DEG 59 MIN 22 SEC E 2796.929 FT N 4 DEG 44 MIN 18 SEC W 201 FT TO PT ON N SEC BNDRY AND E 3798.63 FT MOL TO BEG. BIG BEND COOLING POND

TOTAL AREA = 452.02 ACRES

THAT PART OF W 1/4 OF NE 1/4 OF SE 1/4 100 FT N OF S BDR OF NOONAN BRANCH LESS E 90 FT OF N 800 FT AND LESS N 25 FT FOR RDS.

TOTAL AREA = 4.38 ACRES

W 1/4 OF NE 1/4 OF SE 1/4LYING S OF NOONAN BRANCH LESS S 188 FT THERE OF

TOTAL AREA = 2.47 ACRES

N 94 FT OF S 188 FT OF W 1/4 OF NE 1/4 OF SE 1/4 LYING S OF NOONAN BRANCH AND S 94 FT OF W 1/4 OF NE 1/4 OF SE 1/4 OF SE 1/4 LYING S OF NOONAN BRANCH

TOTAL AREA = 1.46 ACRES

N 300 FT OF W 393 FT OF SE 1/4 OF SE 1/4

TOTAL AREA = 2.72 ACRES

TRACT DESC AS FROM NE COR OF FRACTIONAL SEC 16 RUN S 1 DEG 03 MIN 32 SEC W 200 FT ALONG E BDRY S 88 DEG 56 MIN 22 SEC W 3478.32 FT TO BULKHEAD LINE AND S 34 DEG 59 MIN 22 SEC W ALONG BULKHEAD LINE AND S 34 DEG 59 MIN 22 SEC W ALONG BULKHEAD LINE TO INTER WITH NL EXT OF W BDRY OF SEC 21-31-19 FOR POB THEN CONT S 34 DEG 59 MIN 22 SEC W 800 FT MOL S 45 DEG 37 MIN 51 SEC W 1283.18 FT S 47 DEG 22 MIN 09 SEC E 900 FT MOL TO MEAN HIGH WATER MARK OF TAMPA BAY NELY ALONG HIGH WATER MARK TO NLY EXT OF W BDRY OF SEC 21 AND NLY TO BEG LESS PLATTED PORTION DOLPHIN COVE.

TOTAL AREA = 8.36 ACRES

SE 1/4 OF SE 1/4 LESS N 300 FT OF W 393 FT OF SE 1/4 OF SE... LESS N 300FT OF E 1/4 OF SE 1/4....LESS RD R/W AND LESS COM AR SE COR OF SEC 16 N 89 DEG 24 MIN 10 SEC W 50 FT N 00 DEG 32 MIN 38 SEC E 30 FT FOR POB N 89 DEG 24 MIN 10 SEC W 1235.13 FT N 00 DEG 45 MIN 35 SEC E 702.42 FT N 88 DEG 48 MIN 46 SEC E 140.72 FT S 79 DEG 25 MIN 19 SEC E 331.02 FT S 77 DEG 44 MIN 00 SEC E 147.21 FT N 48 DEG 09 MIN 32 SEC E 70.91 FT N 11 DEG 48 MIN 58 SEC E 52.76 FT S 86 DEG 29 MIN 14 SEC E 559.79 FT AND S 00 DEG 32MIN 38 SEC W 690.78 FT TO POB.

TOTAL AREA = 13.91 ACRES

COM AT SE COR OF SEC 16 N 89 DEG 24 MIN 10 SEC W 50 FT N 00 DEG 32 MIN 38 SEC E 30 FT FOR POB N 89 DEG 24 MIN 10 SEC W 1235.13 FT N 00 DEG 45 MIN 35 SEC E 702.42 FT N 88 DEG 48 MIN 46 SEC E 140.72 FT S 79 DEG 25 MIN 19 SEC E 331.02 FT S 77 DEG 44 MIN 00 SEC E 147.21 FT N 48 DEG 09 MIN 32 SEC E 70.91 FT N 11 DEG 48 MIN 58 SEC E 52.76 FT S 86 DEG 29 MIN 14 SEC E 559.79 FT AND S 00 DEG 32 MIN 38 SEC W 690.78 FT TO POB.

TOTAL AREA = 19.50 ACRES

N 300 FT OF E 1/4 OF SE 1/4 OF SE 1/4 LESS E 60 FT FOR RD.

TOTAL AREA = 1.81 ACRES

S 1/2 OF NE 1/4 OF NW 1/4 AND SE 1/4 OF NW 1/4 LESS R/W FOR PEMBROKE RD.

TOTAL AREA = 55.21 ACRES

COMM AT NW COR OF NE 1/4 OF SEC 10 THN S 00 DEG 46 MIN 23 SEC W ALONG W BDRY OF NE 1/4 OF SAID SEC 10 1328.12 FT TO POB THN S 89 DEG 47 MN 15 SEC E 408.27 FT THN S 00 DEG 46 MIN 23 SEC W 1327.64 FT TO S BDRY OF NE 1/4 OF SEC 10 THN N 89 DWG 51 MIN 16 SEC W 408.27 FT TO W BDRY OF NE 1/4 OF SEC 10 THN N 00 DEG 46 MIN 23 SEC E ALONG SAID W BDR 1328.12 FT TO POB.

TOTAL AREA = 12.5 ACRES

NW 1/4 OF SE 1/4 LESS A PORTION OF LOTS 13,137, 138 AND PORTION OF 30 FT WIDE R/W ABUTTING ON N LYING IN SE 1/4 DESC AS COMM AT NE COR OF SE 1/4 THN N 89 DEG 51 MIN 16 SEC W ALONG N BDRY OF SAID SE 1/4 1324.97 FT TO POB THN S 00 DEG 47 MIN 26 SEC W ALONG W BDRY OF NE 1/4 OF SAID SE 1/4 300.02 FT THN N 89 DEG 51 MIN 16 SEC W 916.59 FT THN N 00 DEG 46 MIN 23 SEC E 300.02 FT TO SAID N BDRY OF SE 1/4 THN S 89 DEG 51 MIN 16 SEC E ALONG N BDRY 916.69 FT TO POB.

TOTAL AREA = 34.3 ACRES

NE 1/4 OF SE 1/4 LESS R/W FOR SR 45 AND LESS N 300 FT THERE OF

TOTAL AREA = 28.45 ACRES

SW 1/4 OF SE 1/4 LESS 210 FT OF S 650 FT AND LESS W 337 FT THERE OF LESS R/W

TOTAL AREA = 25.23 ACRES

SE 1/4 OF SE 1/4 LESS RD LESS R/W FOR SR 45 LESS N 140 FT OF S 28539 FT OF W 175 FT OF E 309.79 FT.

TOTAL AREA = 33.61 ACRES

E 210 FT OF S 650 FT OF SW 1/4 OFSE 1/4

TOTAL AREA = 2.91 ACRES

N 140 FT OF S 285.39 FT OF W 175 FT OF E 309.79 FT OF SE 1/4 OF SE 1/4.

TOTAL AREA = 0.57 ACRES

RUSKIN TOMATO FARMS - LOT 3 LESS E 450 FT AND LESS N 90 FT ... LOT 4 LESS N 90 FT .... Lot 6 LESS N 450 FT OF E 450 FT....LOT 7

TOTAL AREA = 136.78 ACRES

RUSKIN TOMATO FARMS - E 450 FT OF TRACT 3 LESS N 90 FT FOR RE R/W E 450 FT OF TRACT 6 LESS S 845.5 FT

TOTAL AREA = 17.29 ACRES

RUSKIN TOMATO FARMS - LOT 5

TOTAL AREA = 40.01 ACRES

RUSKIN TOMATO FARMS - TRACTS 9, 10 , 11 AND 12 OF RUSKIN TOMATOR FARMS AS IN PLAT BOOK 27 PAGE 110 (LESS R/W FOR US 41 AND W 60 FT OF TRACT 12)

TOTAL AREA = 155.84 ACRES

RUSKIN TOMATO FARMS - N 1/2 OF LOT 13 LESS W 60 FT FOR R/W AND W 524.90 FT OF N 1/2 OF LOT 14

TOTAL AREA = 27.49 ACRES

RUSKIN TOMATO FARMS - BEG 30 FT E OF SW COR OF TRACT 13 IN SEC 15 RUN N 662.76 FT E 2612.94 FT MOL TO NE COR OF S 1/2 OF TR 14 S 300 FT W ALG N LINE OF S 1/2 OF TRACTS 13 & 14 2083.55 FT S 1325.12 FT W 30 FT S 87.28 FT W 29.80 FT S 135 FT W 469.84 FT MOL TO A PT 30 FT E OF WLY BDRY OF TRACT 19 THN N 1184.90 FT TO POB LESS THAT PART DESC AS COM AT THE NW COR OF THE NW 1/4 SEC 22 TWP 31 S RGE 19 E PROCEED S 89 DEG 59 MIN 07 SEC E ALG THE N BDRY OF THE NW 1/4 OF SEC 22 A DIST OF 30.00 FT TO NW COR OF TR 19 OF RUSHIN TOMATO FARM SAID PT LYING ON THE R/W LINE OF DICKMAN RD THN S 00 DEG 44 MIN 53 SEC W ALG W BDRY OF SAID TR 19 AND THE E R/W LINE OF DICKMAN RD 265.00 FT FOR A POB THN N 89 DEG 00 MIN 26 SEC E 203.00 FT THN N 72 DEG 28 MIN 45 SEC E 343.78 FT THN S 00 DEG 42 MIN 37 SEC W 811.08 FT THN N 89 DEG 13 MIN 06 SEC W 29.95 FT THN S 00 DEG 37 MIN 18 SEC W 87.06 FT THN N 89 DEG 43 MIN 24 SEC W 29.80 FT THN S 00 DEG 38 MIN 41 SEC W 135.04 FT THN N 89 DEG 21 MIN 02 SEC W 470.59 FT TO A PT ON THE W BDRY OF TR 19 AND E R/W LINE OF DICKMAN RD THN N 00 DEG 44 MIN 53 SEC E ALG W BDRY OF TR 19 AND 3 R/W LINE OF DICKMAN RD 920.29 FT TO POB LESS RD R/W.

TOTAL AREA = 24.5 ACRES

THAT PART OF SE 1/4 LYING NWLY OF SCL RR R/W AND SELY OF US HWY 41 TRANSMISSION R/W.

TOTAL AREA = .09 ACRES

NOTES:

1. SCALE: 1" = 400'
2. GRID SHOWN IS BASED ON PLANT COORDINATE SYSTEM
3. COORDINATE VALUES SHOWN FOR BOUNDRIES ARE IN THE PLANT COORDINATE SYSTEM AND ARE APPROXIMATE AND HAVE BEEN DEVELOPED USING DEED LEGAL DESCRIPTION AND SOME KNOWN LANDMARKS. GROUND SURVEY MUST BE PERFORMED TO VERIFY THE CALCULATED COORDINATES SHOWN.
4. THIS DWG CONTAINS ALL TECO PROPERTY WITHIN SECTIONS 9,10,15 AND 16 OF TOWNSHIP 31 RANGE 19 THAT ARE WEST OF U.S. 41.(WITH THE EXCEPTION OF PARCEL 8, WHICH IS ON THE SOUTHEAST SIDE OF U.S. 41)

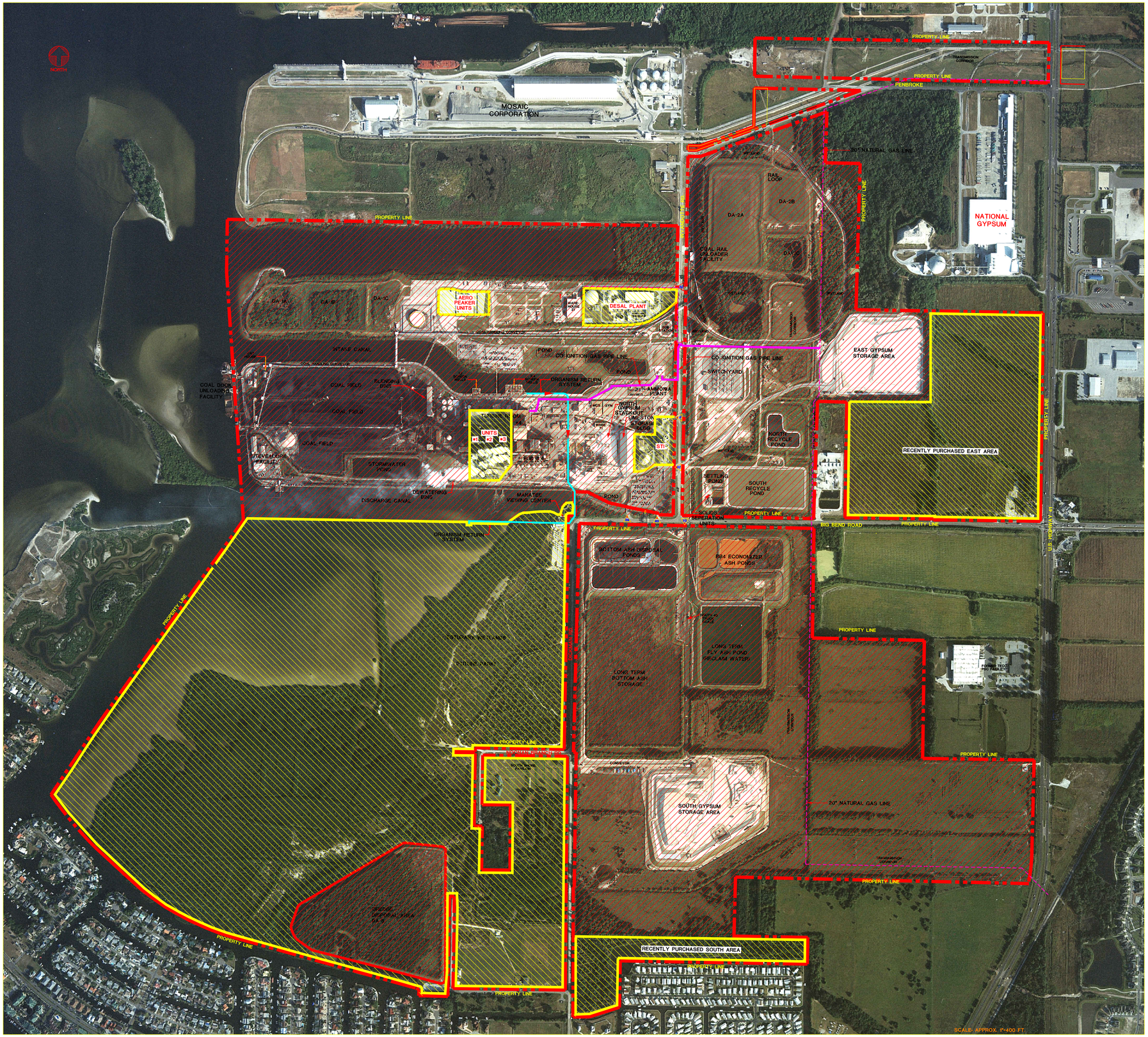
ISSUE	DESCRIPTION	DSGN	DWN	CHKD	APVD	DATE
0	ORIGINAL ISSUE	JFM	JFM	RM	RM	1-18-2015

TECO TAMPA ELECTRIC

	BY:	DATE
APVD	RM	1-15
CHKD	RM	1-15
DWN	JFM	9-14
DSGN	JFM	9-14

TAMPA ELECTRIC - BIG BEND STATION PROPERTY PARCELS WITH LEGAL DESCRIPTIONS

FILE NAME: 349-FY-2XX
SCALE: 1" = 400'
DWG. NO. 349-FY-2XX
REV. NO. 0



LEGEND

CERTIFIED AREAS

Includes:

- Solid fuel yard and coal handling facilities,
- Coal combustion products handling and storage systems,
- Limestone handling and storage,
- Condenser cooling water intake and discharge systems,
- Water Settling Recycle System,
- FGD wastewater treatment facilities,
- Limestone Storage Building,
- Two emergency diesel engine generators,
- Black Start diesel generator,
- Big Bend Station dock, coal unloading and gypsum loading facilities,
- Rail loop, spur, coal unloading and gypsum rail loading facilities,
- No. 2 fuel oil bulk storage and transfer facilities,
- Big Bend Station substation/switchyard,
- Dredge disposal areas DA-1 and DA-5,
- Big Bend Units 3 and 4 Organism Return System.
- Gas Pipeline (Units 1-4)

NON CERTIFIED AREAS

Includes:

- Units 1-3 and Associated Equipment.
- Separation Technologies Ash Beneficiation Plant.
- Manatee Viewing Center
- Big Bend Peakers.
- Desalinization Facility.
- Recently Acquired Property (East and South)

ISSUE	DESCRIPTION	DSGN	DWN	CHKD	APVD	DATE
0	ORIGINAL ISSUE	RM	JFM	RM	RM	2/3/2015

TAMPA ELECTRIC CO. - BIG BEND STATION
PPSA CERTIFIED VS NON CERTIFIED AREAS - PA 79-12R

	BY:	DATE:
APVD	RM	2/2015
CHKD	RM	2/2015
DWN	JFM	2/2015
DSGN	RM	2/2015

TECO TAMPA ELECTRIC

FILE NAME:	349-FY-53A	DWG. NO.	349-FY-53A	REV. NO.	0
SCALE:	1" = 400'				

ATTACHMENT B

Stormwater/Drainage Operation and MaintenanceSurface Water Management System Plan

DRAINAGE FACILITIES

All surface water management system pipes, trench drains, inlets, catch basins, manholes, flumes, pond inflow and outfall structures (including oil skimmers), and discharge pipes should be inspected on a regular basis (monthly or quarterly) and following significant storm events. They should be maintained by removing built- up debris and vegetation and repairing deteriorating structures.

Ditches will be checked as required for erosion, scour, sediment deposits, and other impediments to ensure proper drainage. If ditches require cleaning, this will be performed with small equipment such as bobcats and pickups. Culverts will also be cleaned of sediment as needed. This will be accomplished by vacuum or water-jet trucks.

TEMPORARY EROSION CONTROL FACILITIES

Silt fencing will be inspected after rainfalls greater than 0.5 inch, or at a minimum frequency of once per week during the construction phase. Ditch checks will be inspected at the same frequency as silt fencing. Sediment deposits greater than 4-inches deep will be removed. Broken ditch checks or torn silt fencing will be replaced as needed until final surface stabilization is achieved for the site. Sediment tracking prevention devices such as rock-surfaced construction entrances will be inspected daily for sediment depth, and replaced if needed to prevent sediment from leaving the site. Sediment deposits greater than 4-inch deep will be removed from temporary sediment ponds.

TEMPORARY LAYDOWN/STAGING AREA

The following construction sequence and reporting requirements shall be followed for temporary placement of fill in laydown areas or other stockpile areas:

a. Prior to the placement of fill material for temporary access, the Licensee shall flag and stake the areas to be filled and photograph the areas to show the pre-construction conditions. Photograph locations shall be identified on a drawing. The photographs and location drawing shall be submitted to the Department prior to placement of fill in these areas.

b. Prior to placement of the temporary fill, best management practices (i.e., hay bales, silt fences, etc.) shall be installed along the perimeter of the fill area to prevent erosion of the material into surface waters or wetlands.

c. Within 14 days of the completion of construction, the temporary fill shall be removed, and the ground elevation contours shall be restored to pre-existing elevations to promote natural re-vegetation of the area.

d. Photographs of the area shall be taken from the same locations as required in (a) within 72 hours of grading of the fill area. These photographs shall be combined with the photographs required in (a) and the location map required in (a) and shall be submitted to the Department within 14 days of the completion of the regrading.

Photographs of the area shall be taken from the same locations as required in (a), to show the condition of vegetation and substrate within the temporary fill areas one year after grading has been completed. The photographs and a map showing the photograph locations shall be submitted to the Department within 14 days of being taken.

STORMWATER

1. Littoral Zone

The littoral zones of the wet detention ponds shall be constructed according to the following criteria:

a. The littoral zones shall be gently sloped (6:1 Horizontal: Vertical or flatter).
b. The littoral zones shall be planted with aquatic and wetland vegetation suitable for the specific anticipated hydroperiod of the pond.
c. Within 24 months of completion of the system, the littoral zones shall consist of 80% coverage with suitable aquatic and wetland vegetation.
d. The littoral zones shall be stabilized by either mulching or other means to ensure the stability of the native plants and soils.

The littoral zones shall be inspected to ensure that the 80% coverage of suitable aquatic and wetland vegetation within 24 months of system completion criteria is met. If necessary, additional planting shall be conducted to meet success criteria.

If utilizing wetland topsoil as an alternative to planting portions of the littoral zone, the wetland topsoil shall be at least four inches in depth.

If utilizing wetland topsoil as an alternative to planting portions of the littoral zone, the portion of the littoral zone within 25 feet of the inlet and outlet structures shall be planted with suitable aquatic and wetland vegetation.

The licensee shall notify the Department of any sinkhole development in the SWMS within 24 hours after discovery and must submit a detailed sinkhole evaluation and repair plan for Department approval within 30 days of discovery.

2. Operation and Maintenance

The approved SWMS shall only be used for the purpose of controlling surface water runoff from the site and shall not be used to dispose of or store any solid/liquid waste or products generated or used during operation or construction of the facility.

The SWMS shall be inspected by a registered professional to evaluate whether the system is functioning as designed. Percolation performance should specifically be addressed. The registered professional may record his or her inspection on Form No. 62-330.311(1), Operation and Maintenance Inspection Certification or may provide his evaluation in any other format; however, any report must be signed and sealed by the registered professional. Submittal of the inspection report to the Department is not required; but the report shall be made available to the Department upon request. Inspections shall be made by the registered professional in accordance with this schedule:

a. On the first anniversary of the date of conversion to Operation and Maintenance Phase.

b. Every fifth year on the anniversary of conversion to Operation and Maintenance phase, after the first year of successful operation.

Within 30 days of any failure of a SWMS or deviation from the approved design, a report shall be submitted to the Department on Form 62-330.311(1), Operation and Maintenance Inspection Certification, describing the remedial actions taken to resolve the failure of deviation. This report shall be signed and sealed by a registered professional.

Once project construction has been deemed complete, including the re-stabilization of all side slopes, embankments, and other disturbed areas, and before the transfer to the Operation and Maintenance phase, all obsolete erosion control materials shall be removed.

The Licensee shall be responsible for keeping records documenting that relevant conditions are met. This documentation shall include, at a minimum, the date of each inspection, the name and qualifications of the inspector, any maintenance actions taken, and a determination by the inspector as to whether the system is operating as intended. Inspection documentation must be readily available and shall be provided at the Department's request. Submittal of the inspection documentation to the Department is not required.

Attachment C

Wetland Mitigation Plan

To mitigate for impacts to 0.34 acres of disturbed, freshwater herbaceous (marsh) wetlands (FLUCCS Code 641 with inclusions of 511 and 619), the Licensee shall purchase 0.13 oligohalene/freshwater herbaceous (marsh) credits from the Tampa Bay Mitigation Bank. Prior to any construction or impacts authorized by this permit, the Licensee shall provide the Department with documentation that 0.13 oligohalene/freshwater herbaceous (marsh) credits have been deducted from the credit ledger of the Tampa Bay Mitigation Bank Southwest Florida Water Management District permit number 43020546.000.

History and Project Description

Tampa Electric Company (TEC) operates a nominal 1,892 MW facility consisting of four solid fuel-fired steam boiler/steam turbine generator units and two simple cycle combustion turbines A and B. Unit 1 is being modernized and repowered by replacing the conventional fossil fuel-fired steam unit with a natural gas-fired combined cycle generating unit with a nominal generating capacity of 1,090 MW. Unit 2, which will be retired by 2023, is currently a 445 MW coal- or natural-gas fired unit, as is Unit 3. Unit 4 operates as a 486 MW coal-or natural-gas fired unit. The combined electrical generation output for the facility will be approximately 2,021MW. These units/lines are located on a 1,188-acre Site which is located in Hillsborough County, Florida.

TEC shall comply with the following conditions prior to commencement of any construction activities:

1. Submittals required herein shall include the Licensee's name and Siting Certification Number PA79-12 and shall be directed by e-mail to SW_ERP@dep.state.fl.us with a subject line of permitting/compliance PA No. 79-12/SWD 29-0126191, or by mail to:

Department of Environmental Protection
Southwest District
Submerged Lands and Environmental Resource Program
13051 North Telecom Parkway
Temple Terrace, FL 33637-0926

2. Wetland Impacts and Mitigation

Project Phase	Date	SWD Tracking #	Wetland Impacts	Mitigation	Completed

Mod R-Gypsum Storage Area	FO issued 7/22/2013	29-0126191-006	0.34 acres of disturbed, freshwater herbaceous (marsh) wetlands (FLUCCS Code 641 with inclusions of 511 and 619)	Purchase 0.13 oligohaline/freshwater herbaceous (marsh) credits from the Tampa Bay Mitigation Bank. Prior to any construction or impacts authorized by this permit, the Licensee shall provide the Department with documentation that 0.13 oligohaline/freshwater herbaceous (marsh) credits have been deducted from the credit ledger of the Tampa Bay Mitigation Bank Southwest Florida Water Management District permit number 43020546.000.	
AM16-119 Solar Facility (20MW)	Approval issued 5/9/16	29-0126191-010	0.444 acre and 7.31 acres of permanent fill and shading impacts to nonforested freshwater wetlands	Purchase of 0.86 freshwater herbaceous mitigation credits from Tampa Bay Mitigation Bank	

ATTACHMENT D

GUIDANCE FOR
MINERAL OIL DIELECTRIC FLUID
EMERGENCY RESPONSE ACTION PROTOCOL

Florida Department of Environmental Protection (FDEP)
Division of Waste Management
Tallahassee, FL

May 2016

Introduction

This guidance document outlines emergency response actions that may be followed to respond to highly/severely refined mineral oil dielectric fluid (MODEF) (e.g., CAS Nos. 64742-53-6, 64742-46-7, 64742-54-7, and 64741-88-4) discharges from transformers and other MODEF filled electrical equipment. The protocol is founded on certain of the requirements of 40 CFR Section 761.125(b), which applies to cleanup of spills from equipment containing concentrations of PCBs ranging from 50 to 499 parts per million (ppm), (however this protocol is only to be used for spills where the concentration of PCBs is less than 50 ppm). The proposed protocol is also based on the toxicological profile of MODEF, provided in Attachments "A" and "B", which concludes that MODEF used in transformers and other electrical equipment exhibit a negligible degree of toxic potential. This protocol adequately protects human health and the environment while allowing operational flexibility to utilities as necessary. This document provides guidance on complying with the de minimis discharge provisions of Chapter 62-780, F.A.C. In responding to MODEF discharges, including those into or near waters of the state, responders should also comply with all other applicable laws and regulations, including applicable notification requirements.

Emergency response to electric equipment outages consists of mobilization of utility company personnel and/or its contractors to assist with the immediate restoration of electrical service including remediation of any newly released MODEF to the environment that may have occurred during the equipment failure. During emergency response, remediation of newly released MODEF typically occurs during the time period in which the failed electrical equipment is being replaced. This activity is normally initiated no later than 48 hours from the time the failed electrical equipment is discovered or reported and is completed within 30 days.

Non-emergency response to MODEF discharges is a planned process that may require an electrical outage so that the electrical equipment may be removed or safely worked around (i.e., in substations) so that remediation of the MODEF discharge may be completed. Non-emergency response actions may take longer than 48 hours to initiate but are completed within 30 days of discovery. Non-emergency response activities may include newly released MODEF discharges as well as any older MODEF discharges that are identified.

Responses should only be made after a determination regarding whether the MODEF release is believed to have resulted from a PCB transformer or other PCB-contaminated electrical equipment as defined in 40 CFR part 761, based on company knowledge, records search, screening (e.g., Clor-N-Oil), etc. MODEF releases containing PCB concentrations of 50 ppm or greater should be remediated in accordance with all applicable sections of the U.S. Environmental Protection Agency regulations contained in 40 CFR Part 761. MODEF releases containing PCB concentrations greater than 0 and less than 50 ppm may be remediated according to this protocol and disposed of in accordance with applicable solid waste laws and regulations.

The MODEF discharge response process under an "emergency" response scenario should

consist of the following:

(1) Removal of all soil contaminated with freshly released MODEF within the spill area (i.e., visible traces of oily soil and a buffer of 1 lateral foot around the visible traces) and the ground restored to its original configuration; and

(2) Physically removing all visible traces of oil/oil sheen observed in the groundwater with oil absorbent pads/material or via vacuum assisted equipment.

(3) Solid surfaces should be washed and rinsed and the rinse water collected, or such surfaces should be cleaned using appropriate chemical, sorbent or absorbent materials;

(4) These emergency response actions are initiated within 48 hours after the Florida electric utility is notified or becomes aware of the electrical outage, unless such actions are delayed in case of circumstances including but not limited to civil emergency, adverse weather conditions, lack of access to the site, or emergency operating conditions.

The MODEF discharge response process under a "non-emergency" response scenario consists of the following:

(A) If the MODEF spill is 25 gallons or less and not resulted in contact with groundwater, follow items (1), (2) and (3) above.
(B) If the MODEF spill is greater than 25 gallons, or (regardless of quantity discharged) if MODEF is found to be in groundwater or a sheen is removed from groundwater, follow (1), (2) and (3) above. Confirmatory field screening should be conducted via approved field test kits to ensure/verify that impacted soil has been removed. Verification (e.g., Petroflag) may be confirmed by ensuring the TRPH levels remaining in the soil are below the lower of the direct exposure or leachability soil cleanup target level for TRPH. For MODEF found to be in groundwater or where a sheen is removed from groundwater, confirmatory laboratory analysis should be conducted to ensure that TRPH levels are below the groundwater cleanup target level stated in Chapter 62-777, F.A.C., or an alternative number agreed to with the Department. Removal should continue until TRPH levels are below the aforementioned concentrations, unless prevented by a physical obstacle such as a tree, building, etc. To the extent such removal cannot take place within 30 days, then the responder should contact the relevant Department district office to develop an appropriate discharge response in accordance with Chapter 62-780, F.A.C.
(C) Non-emergency response actions may be initiated more than 48 hours after the utility is notified or becomes aware of the MODEF discharge.

(5) Upon completion of response action activities, the following records should be maintained for a period of at least 5 years constituting adherence to the Interim Source Removal Report requirement found in Rule 62-780.525(7), F.A.C.:
    (a) Date of discharge or date of discovery of discharge;

(b) Location of discharge (e.g., street address of discharge, if known).
(c) A statement regarding whether the MODEF release is believed to have resulted from a PCB transformer or other PCB-contaminated electrical equipment as defined in 40 CFR Part 761, based on company knowledge, records search, screening, etc.
(d) Estimate of quantity of MODEF released;
(e) Estimate of free MODEF collected, if any;
(f) Estimate of volume of impacted soil excavated or groundwater recovered; and
(g) Name and address of facility where free MODEF, impacted soil or groundwater was disposed or treated, including disposal and/or treatment manifests or certifications.
(h) For non-emergency cleanups greater than 25 gallons,
    (1) Narrative description or illustration indicating where discharge occurred;
    (2) Narrative description or illustration indicating where samples were taken;
    (3) Screening method used;
    (4) TRPH information and a description of any physical obstacles, if applicable, preventing removal to levels below the lower of the direct exposure or leachability soil cleanup target level for TRPH (or the groundwater cleanup target level for TRPH stated in Chapter 62-777, F.A.C.), or an alternative number agreed to with the Department;
    (5) Narrative description or illustration of the limits of the excavation.

Toxicological Synopsis for Mineral-based Transformer Oils (CAS#64742-53-6)

(November, 2004)

Technical Evaluation

Mineral oils, specifically those defined as "hydrotreated light naphthenic petroleum distillates" and assigned Chemical Abstract Service Number (CAS#) 64742-53-6 (also known as transformer oil or mineral oil dielectric fluid (MODEF)) commonly are used as lubricants and heat transfer agents in transformer applications. A mineral oil of this CAS # complies with ASTM specifications for mineral insulating oil used in electrical apparatus (ASTM, 2001). As a result of widespread transformer applications, there are potential environmental issues related to the release of these transformer oils to soils following damage to, or a malfunction of, in-service equipment. This synopsis reviews relevant toxicological information for this class of mineral oils, as distinguished by CAS # 64742-53-6 including a Texaco Material Safety Data Sheet (MSDS; Texaco, 1999) on transformer oils, prepared by Equilon Enterprises and dated 01/04/99, as well as additional references from the toxicological literature. The Texaco MSDS, which was essentially unchanged from the 1993 version (Texaco, 1993), concluded that the transformer oil was "practically non-toxic" for oral and dermal exposures, was "slightly irritating" following dermal application, and exhibited "no appreciable effect" following application to the eyes. Similar MSDS documents from other petroleum manufacturers draw essentially equivalent conclusions regarding this product (e.g., Chevron MSDS for Texaco Transformer Oils, no date).

When evaluating the toxicological profile of mineral transformer oils, it is useful to consider why this product should be viewed differently from other petroleum distillates, and why it should be considered in a separate category. As a practical

matter, the literature is clouded by use of the term "mineral oil" in a way that includes products ranging from used vehicle lubricating oils to industrial cutting oils (NTP, 2002). In contrast, the transformer oil used by most electric utility companies is required to conform to carefully articulated ASTM specifications that are in place to ensure the oil's stability to oxidation, good electrical insulating properties, and ability to maintain low-temperature fluidity (ASTM, 2001).

The refining process for transformer oils typically includes hydrogenation of the distillate under pressure and in the presence of a catalyst, followed by steam stripping, and may include final treatment with Fuller's earth. Recent alternative treatment methods use a combination process with an initial solvent extraction to remove aromatics, resins and sulfur compounds, that is then followed by hydrogenation. This specifically removes undesirable constituents including nitrogen and oxygen compounds, most sulfur compounds, tars and unsaturated hydrocarbons, as well as solid hydrocarbons, particularly amorphous and crystalline waxes. The product resulting from these specifications is a highly refined mineral oil with properties and toxicity potential that distinguish it from other petroleum distillates. The high level of refining may account for the U.S. Food and Drug Administration (FDA) approval of mineral oil for certain common medicinal purposes, such as laxatives and as a delivery vehicle for application of drugs to nasal mucous membranes (HSDB, 2004), and for "contact uses" as food additives (Klaassen, 2001). As a point of interest, it has been estimated that an average person in a developed country ingests approximately 50 grams per year of mineral oil from food products (Heimbach et al., 2002).

Three studies published prior to 1993 that were not referenced in the Texaco MSDS contain important relevant information. Evans et al. (1989) tested mineral oil used in a large manufacturing facility. Samples taken at yearly intervals over five years

were independently tested for skin irritation in New Zealand rabbits, sensitizing potential in guinea pigs, and carcinogenic potential in the mouse. No evidence of skin irritancy, sensitizing potential or carcinogenicity was observed in any of the samples.

Leighton (1990) tested the effects of ingestion of up to 16 ml/kg per day of several types of petroleum oils, including mineral oil, on laboratory mice. Liver enlargement was pronounced in the test animals, along with atrophy of thymus and spleen, following ingestion of all petroleum oils except mineral oil. No adverse effects were reported for mineral oil except for a small reduction in thymus weight. The authors concluded that the thymus reduction was a non-specific response to stress imposed by the forced ingestion of the treatment oils. Neither of these references would result in a conclusion different from that presented in the Texaco MSDS documents.

A topical 90-day study conducted by the National Toxicology Program (NTP, 1992), exposed male and female F344/N rats and C3H mice to "Mineral Oil, USP." The NTP concluded that the only treatment-related dermal effect was cutaneous irritation in the mouse. An increase in liver and kidney weights was observed in the male and female F344/N rats and liver weights were increased in both sexes of C3H mice treated topically with mineral oil. These effects were not reported consistently in other published studies.

Several relevant studies have been published subsequent to the development of the original toxicological information section of the 1993 MSDS on Texaco transformer oils. Using C3H mice in a 2-year study, Freeman et al. (1993) investigated the influence of chronic skin irritation on the tumorigenic potential of several middle distillate petroleum products with and without use of a highly refined mineral oil as a diluent and control. A few of the animals (e.g., 2 to 22%) that were treated with mineral oil

evidenced some skin irritation (e.g., rated "minimal to moderate"); however, none of the mineral oil treated mice developed tumors or any other reported effects in what was essentially a lifetime duration study.

Nash et al. (1996), published a toxicological review regarding topical exposure to white mineral oils, that were described by those authors as "highly refined", being produced by processes similar to those defined earlier as hydrotreatment and hydrogenation in the formation of transformer oils. Those processes are designed to remove the PAH components that have been implicated in toxic effects of other types of mineral oils. Those authors concluded that "there is no evidence of any hazard identified for topical exposure to white mineral oils at any dose in multiple species." They pointed out that oral studies of white mineral oils in rats have suggested toxicity (Firriolo et al., 1995), including microgranulomata in the liver and histiocytosis in the mesenteric lymph nodes. No tumors were noted in the latter study. It should be noted that the material tested in that latter study was a paraffinic, hydrotreated mineral oil, not a naphthenic, hydrotreated mineral oil. Two other oral studies in F344 rats cited by Nash et al. (1996), that implicate mineral oils in toxic responses, have shown a much less significant effect for the white mineral oil (transformer-oil-like) product as opposed to a different mineral oil product (Baldwin et al., 1992; BIBRA, 1992). Of equal importance is the fact that, in contrast to the F344 rats, adverse effects were not observed in dogs or in two other strains of rats (Nash et al., 1996). The strain-specific nature of the effect lessens its importance.

Smith et al. (1995) studied the effects of four different highly refined mineral oils on Long-Evans rats and beagle dogs. The oils were administered at levels ranging from 300 to 1500 parts per million (ppm) in the diet for 90 days. No adverse treatment-related effects were reported from any of the mineral oils tested on mortality rate,

physical appearance, behavior, organ weights or histopathology of tissues in the rats. In dogs, other than a slight laxative effect, no adverse effects were observed in the analyses of body weights, hematology, clinical chemistry, red/white blood cell counts and histopathology of the tissues. The authors concluded that "repeated exposure to relatively high levels of white mineral oil in the diets does not produce significant subchronic toxicity" in dogs or rats.

Chronic dermal studies in mice, performed by Broddle et al. (1996) with various petroleum streams, included hydrotreated light naphthenic petroleum distillate (CAS No. 64742-53-6). These authors reported that this hydrotreated light naphthenic distillate caused low levels of alopecia (hair loss), erythema (inflammatory reddening of the skin) and scabbing after approximately one year of repetitive exposure, and was a "dermal carcinogen of low potency." The number of mice with tumors (e.g., incidence was 15% with a mean latency of 94 weeks) was relatively low, but statistically significant when compared to the sham-treated controls. The authors attributed the carcinogenic potential to the presence of polynuclear aromatic hydrocarbons (PNAs) in the product. Hydrotreatment is intended to reduce or eliminate unsaturation and aromaticity of PNAs and to cleave heterocyclic compounds with consequent reduction or elimination of carcinogenicity. However, the authors state that the degree of hydrotreatment of the stream used in this study was undetermined. Therefore, it is possible that the carcinogenicity was a result of inadequate hydrotreatment of the stream which would otherwise have eliminated the PNAs.

More recently, NTP listed mineral oils (untreated and mildly treated) in the category of "known human carcinogens" in the 10th Report on Carcinogens (NTP, 2002). The determination was based on the occurrence of squamous cell carcinoma of the skin and scrotum, sinonasal cancers, and possibly lung cancer among workers in a

variety of occupations. Experimental studies with these mineral oils in animals have shown variable results (NTP, 2002). While this NTP classification shouldn't be ignored, there are two reasons why it doesn't apply strictly to the case of transformer oils in soil. First, the NTP classification [and the IARC (1984) and IARC (1987) which it cites in support] addresses primarily occupational circumstances where inhalation, ingestion and dermal exposure to mineral oil mists and concentrated liquids were the medium of direct exposure. That circumstance is quite different from the conditions encountered with soils that may be impacted by what typically are small volume releases from transformer equipment. Second, the term "mineral oils" in that document is used to describe a much broader category of oils, many of which are much less refined than the highly refined naphthenic transformer oils.

Although most mineral oils are generally considered nontoxic, it should be noted that some authors have demonstrated immune system effects from mineral oil components (e.g., pristane; Shaheen et al., 1999). Such demonstrations of immunotoxicity from hydrotreated, light naphthenic mineral transformer oils are lacking. The specific mineral oil identified as Bayol F (also known as Incomplete Freund's Adjuvant), and certain mineral oil components (e.g., squalene and η-hexadecane), have been reported to induce lupus-related autoantibodies in nonautoimmune mice (Kuroda et al., 2004). All hydrocarbons tested in that study, including medicinal mineral oils, induced hypergammaglobulinemia, as well as autoantibodies. The data of these authors suggest that the induction of autoantibodies correlated with the amount of C15 - C25 hydrocarbons present in an oil. The significance of these findings for pathogenesis of human disease is unclear, and the authors correctly note that hydrocarbon exposure via the intraperitoneal route may be

different from other routes of exposure, and thus may pose less risk (Kuroda et al., 2004).

Another condition that reportedly was associated with mineral oil exposure is exogenous lipoid pneumonia. This pneumonia is an uncommon condition resulting from aspirating or inhaling fatlike material, such as mineral oil found in laxatives and various aerosolized industrial materials. Acute toxicity of this type can occur, but the disease is usually slow to develop (Spickard and Hirschmann, 1994). While there may be some occupational application for that information, the significance to environmental exposures (e.g., soil) is negligible.

Peristianis (1989) reported on an unconventional assay for possible carcinogenic activity of mineral oils, termed the short-term "sebaceous gland suppression" (SGS) test. The cutaneous carcinogenic activity of mineral oils reportedly could be estimated effectively by the SGS test. However, the test has not been routinely reported in the literature as a validated methodology in the 15 years since this paper was published. Thus, its applicability and predictive relevance are not clear.

Summary and Conclusions

As judged from the body of available toxicological data from standard tests, the hydrotreated, light naphthenic mineral oils, such as those typically used in utility transformer applications, exhibit a negligible degree of toxic potential. The only reproducible effect appears to be slight irritation following repetitive dermal application. The existing classification of "mineral oils" as carcinogens by NTP and IARC appears to be based upon inhalation, ingestion and dermal exposure under occupational scenarios to mists and liquids of a wide variety of refined and unrefined oil products, and is not directly applicable to the subset of mineral oils represented by

the electric utility transformer oils. U.S. EPA does not presently classify "mineral oils" as carcinogens.

References Cited

ASTM. 2001. D3487-00. Standard Specification for Mineral Insulating Oil Used in Electric Apparatus. Approved November 10, 2000. Published January 2001.

Baldwin, M.K. et al. 1992. Feeding studies in rats with mineral hydrocarbon food grade white oils. Toxicol. Pathol. 20:426-435; as cited in Nash et al., 1996.

BIBRA. 1992. A 90-day feeding study in the rat with six different white mineral oils (N15(H), N70(H), N70(H), P15(H), N10(A), and P100(H), three different mineral waxes (a low melting point wax, a high melting point wax and a high sulfur wax) and coconut oil. Project no. 3.1010, BIBRA Toxicology International. Carshalton, Surrey; as cited in Nash et al., 1996.

Broddle, W.D. et al. 1996. Chronic dermal studies of petroleum streams in mice. Fund. Appl. Toxicol. 30:47-54.

Chevron. No date given. Material Safety Data Sheet. TEXACO Transformer Oils.

Evans, M.J. et al. 1989. The chemical, physical and biological properties of a neat cutting oil during prolonged use in a large manufacturing facility. Ann. Occup. Hyg. 33(4):537-553.

Firriolo, J.M. et al. 1995. Comparative 90-day feeding study with low viscosity white mineral oil in Fischer-344 and Sprague-Dawley derived CRL:CD rats. Toxicol. Pathol. 23:26-33; as cited in Nash et al., 1996.

Freeman, J.J. et al. 1993. Evaluation of the contribution of chronic skin irritation and selected compositional parameters to the tumorigenicity of petroleum middle distillates in mouse skin. Toxicol. 81:103-112.

Heimbach, J.T. et al. 2002. Dietary exposures to mineral hydrocarbons from food-use applications in the United States. Food Chem. Toxicol. 40:555-571; as cited in Kuroda et al., 2004.

HSDB (Hazardous Substance Database). 2004. On-line chemical database.

IARC (International Agency for Research on Cancer). 1984. IARC Monographs on the Evaluation of the Carcinogenic Risk of Chemicals to Humans. Polynuclear Aromatic Compounds. Part 2. Carbon Blacks, Mineral Oils, and Some Nitroarenes. Vol. 33. 245 pp. Lyon, France.

IARC (International Agency for Research on Cancer). 1987. IARC Monographs on the Evaluation of the Carcinogenic Risk of Chemicals to Humans. Overall Evaluations of Carcinogenicity. Supplement 7. 440 pp. Lyon, France.

Klaassen, C.D. 2001. Casarett and Doull's Toxicology. The Basic Science of Poisons, Sixth Edition. McGraw-Hill. New York, NY.

Kuroda, Y. et al. 2004. Distinctive patterns of autoimmune response induced by different types of mineral oil. Toxicol. Sci. 78:222-228.

Leighton, F.A. 1990. The systemic toxicity of Prudhoe Bay Crude and other petroleum oils to CD-1 mice. Arch. Environ. Contam. Toxicol. 19:257-262.

Nash, J.F. et al. 1996. A toxicological review of topical exposure to white mineral oils. Food Chem. Toxicol. 34(2):213-225.

NTP (National Toxicology Program). 1992. NTP Technical Report on Toxicity Studies of Black Newsprint Inks Administered Topically to F344/N Rats and C3H Mice. NIH Publication 92-3340; as cited in Nash et al., 1996.

NTP (National Toxicology Program). 2002. 10th Report on Carcinogens. U.S. Department of Health and Human Services. Public Health Service. National Toxicology Program. December, 2002.

Peristianis, G.C. 1989. Sebaceous gland suppression as a short-term test of the cutaneous carcinogenic activity of mineral oils. J. Appl. Toxicol. 9(4):245-254.

Shaheen, V.M. et al. 1999. Immunopathogenesis of environmentally induced lupus in mice. Environ. Health Perspect. 107(Suppl. 5):723-727.

Smith, J.H. et al. 1995. Subchronic feeding study of four white mineral oils in dogs and rats. Drug Chem. Toxicol. 18:83-103.

Spickard III, A. and J.V. Hirschmann. 1994. Exogenous lipoid pneumonia. Arch. Intern. Med. 154:686-692.

Texaco. 1993. Material Safety Data Sheet. Equilon MSDS: 01515ET. Transformer Oil Inhibited.

Texaco, 1999. Material Safety Data Sheet. Equilon MSDS: 01515ET. Transformer Oil Inhibited. Updated 01/04/99.

Hopping Green & Sams

Attorneys and Counselors

December 14, 2006

By Electronic Mail

Doug Jones
Chief, Bureau of Waste Cleanup
Florida Department of Environmental Protection
Twin Towers Office Building
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Tallahassee, FL 32399-2400

Re: Mineral Oil Dielectric Fluid (MODEF)
Emergency Response Action Protocol

Dear Doug:

As we previously discussed by telephone, I am enclosing the response of Dr. Christopher Teaf of Hazardous Substance and Waste Management Research (HSWMR) to the August 7, 2006, letter from the University of Florida's Drs. Stephen Roberts and Leah Stuchal. The letter from Drs. Roberts and Stuchal addressed HSWMR's July 19, 2006 toxicological evaluation of additional mineral oil products that may be used in transformers and other oil-filled electrical equipment. I am also enclosing those letters for your ease of reference.

As you know, the FCG tasked HSWMR's evaluation to determine whether the use of the existing Department-approved MODEF protocol might be appropriate for the additional mineral oil products that were evaluated. As was the case in HSWMR's original 2004 toxicological evaluation of mineral oil products similar to those products having Chemical Abstract Service (CAS) number 6474253-6, the most recent HSWMR investigation concludes that the additional mineral oil products evaluated do not pose a significant degree of toxic potential. That conclusion was concurred in by Drs. Roberts and Stuchal.

As a result of the foregoing and consistent with its original request of July 27, 2006, the FCG respectfully requests that the Department provide its written concurrence that FCG member use of the existing MODEF protocol is appropriate for the general category of "highly/severely refined mineral oils" (e.g., CAS # 64742-46-7, CAS #

64742-54-7, and CAS # 64741-88-4). Thank you in advance for your prompt consideration of this request.

Sincerely,

Hopping Green & Sams, P.A.

Michael P. Petrovich

MPP/rlh

cc: Dr. Christopher Teaf, HSWMR
Tanya Portillo, FCG

HSWMR

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December 7, 2006

Dr. Stephen M. Roberts, Director
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University of Florida
P.O. Box 110855
Gainesville, FL 32611-0885

Re: Comment Letter to Florida Department of Environmental Protection (FDEP) on Mineral Oil Dielectric Fluid (MODEF) Emergency Response Action Protocol

Dear Steve:

I have reviewed your letter to Ligia Mora-Applegate dated August 7, 2006, regarding the "Mineral Oil Dielectric Fluid (MODEF) Emergency Response Action Protocol". I appreciate the comments that you and Dr. Stuchal presented, and your concurrence with our human-health-based conclusion that "highly/severely refined" mineral oils are non-carcinogenic and essentially "non-toxic".

In response to your comment regarding potential effects that might be relevant if a MODEF spill occurred in or near surface water, I would acknowledge that those considerations may apply in some cases; however the protocol is focused exclusively on MODEF releases to soil or groundwater "on residential, commercial, and industrial properties". While the letter does not specifically address MODEF releases in or near surface water, if a MODEF release occurred in such a situation, the MODEF protocol already provides that "FCG members will also comply with all other applicable laws and regulations, including applicable notification requirements." On balance, that latter provision may adequately address the concern such that if a release occurred in or near surface water, then "all other applicable laws and regulations", including relevant technical elements, would apply.

As always, thanks for taking the time to review the protocol letter, and I look forward to talking with you soon.

Regards,

Christopher M. Teaf, Ph.D.
President & Drector of Toxicology

cc: *Doug Jones, FDEP*
Ligia Mora-Applegate, FDEP
Tanya Portilla, FCG
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August 7, 2006

Ligia Mora-Applegate
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Florida Department of Environmental Protection
2600 Blair Stone Road
Tallahassee, FL 32399-2400

Re: Mineral Oil Dielectric Fluid (MODEF) Emergency Response Action Protocol

Dear Ms. Mora-Applegate:

We have reviewed at your request the letter from Hazardous Substance & Waste Management Research, Inc. (HSWMR) dated July 19, 2006 for the Florida Electric Power Coordinating Group, Inc. (FCG). The letter is a supplement to the HSWMR November 2004 report entitled *Toxicological Synopsis for Mineral-based Transformer Oils (CAS# 64742-53-6)*. In that report, HSWMR concluded that hydrotreated, light naphthenic mineral oils exhibit a negligible degree of toxic potential. We concurred with this conclusion in a review letter dated January 11, 2005, and provided some additional literature citations. In our review letter, we cautioned that the toxicological review was directed to human health, and that it is conceivable that mineral oil dielectric fluids might have effects in aquatic ecosystems that would be relevant if a spill were to occur in or near surface water.

The current letter requests that other "highly/severely refined" mineral oils (CAS# 64742-46-7, CAS# 64742-54-7, and CAS# 64741-88-4) be added to the substances that can be safely addressed by the provisions contained in the existing MODEF Protocol dated February 25, 2005. As the letter points out, current literature has concluded that "severely" refined minerals oils are non-carcinogenic and are essentially nontoxic pertaining to human health. The only reproducible effect of "severely" refined mineral oils appears to be skin irritation following repeated dermal application, and the toxic potential appears to be negligible. We agree with this assessment of the human toxicology of severely refined mineral oils.

The issue of potential effects on aquatic ecosystems from a spill near surface water remains. We recommend revision of the MODEF Emergency Response Action Protocol to address explicitly this possible scenario. If sufficient data on aquatic toxicity of these mineral oils are available, risk-based criteria to evaluate surface water impacts could be developed and included in the emergency response action protocol. We suspect, however, that the ecotoxicology literature on this class of compounds may be too limited to develop sound risk-based criteria. In this situation, part of the emergency response when a spill occurs in or near a surface water body should include empirical testing using standard aquatic toxicity bioassays. The results of these bioassays could be used to show compliance with Chapter 62-302.500(4) and 62-302.530(62), F.A.C.

Sincerely,

Stephen M. Roberts, Ph.D.

Leah D. Stuchal, Ph.D.

An Equal Opportunity Institution

HSWMR

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July 19, 2006

Mr. Michael Petrovich, Esq.
Hopping Green & Sams
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Dear Mike:

As we discussed recently with Florida Electric Power Coordinating Group (FCG) representatives, this letter report is presented as a supplement to our November 2004 report (HSWMR, 2004) entitled *Toxicological Synopsis for Mineral-based Transformer Oils (CAS#64742-53-6)*. In that report, we concluded that:

> *"As judged from the body of available toxicological data from standard tests, the hydrotreated, light naphthenic mineral oils, such as those typically used in utility transformer applications, exhibit a negligible degree of toxic potential."*

In that original evaluation, we narrowly addressed the Chemical Abstract Service Number (CAS#) 64742-53-6 ("hydrotreated light naphthenic petroleum distillates") as an appropriate representative for the mineral-based transformer oils. The Florida Department of Environmental Protection (FDEP) concurred with the conclusion of the November, 2004 report, as indicated by agency approval in February, 2005 of the Mineral Oil Dielectric Fluid Emergency Response Action Protocol ("MODEF Protocol") that was proposed by FCG. More recently, the FCG has expressed an interest in including additional similar mineral oils in the MODEF Protocol. The FCG wishes to ensure that these other materials that are used in some transformers and other electrical equipment also "... exhibit a negligible degree of toxic potential." Toward that end, we have reviewed many material safety data sheets (MSDS) that were submitted by FCG members and have conducted literature reviews on mineral oil components of those products.

The MSDSs identify by CAS# several individual or, in other cases, multiple chemical compounds grouped generally as either "lubricant base oils" or "petroleum distillates." Of the many CAS #s presented for these groups, three of them (CAS# 64742-46-7, CAS#64742-54-7, and CAS# 64741-88-4) appear repeatedly and also have sufficient toxicological information on which to base an opinion that may be applicable to the mineral oil group as a whole.

Although the compounds present in commercial products identified in the MSDSs vary in such characteristics as carbon chain length, viscosity, and refinement method, they are all classified as "highly/severely refined mineral oils", a definition with distinct toxicological significance. As demonstrated by the following literature synopses, mineral oil products of the "highly/severely refined" type are essentially nontoxic.

Kane et al. (1984) demonstrated that, although unprocessed petroleum refinery distillates have the capacity to cause tumors, conventional solvent refining is a sufficient process to remove the tumorigenic components as verified by their mouse skin painting bioassay. In another study using the standard mouse skin painting bioassay on C3H/HeJ mice, the authors concluded that the refining processes commonly used to produce lubricating oils with viscosity indexes (VIs) of 85-100 (which are levels normally used in commercial operations), were sufficient to effectively eliminate dermal carcinogenic activity in mice (Halder et al, 1984). It also was reported that severe hydroprocessing alone can be used to reduce or eliminate many of the troublesome aromatic compounds and the associated carcinogenic potential.

In a review by Mackerer et al. (2003) the authors concluded that it is appropriate to consider a non-carcinogenic base oil to be one that is "severely" refined. Beck et al. (1984) tested the acute toxicity of nineteen untreated petroleum hydrocarbons and found that the paraffinic and naphthenic oils were the least toxicologically reactive of all materials tested. The middle distillates did not produce a sensitization reaction in guinea pigs, did not exhibit acute dermal toxicity, nor did they produce serious ocular lesions even upon direct instillation to the eye.

Dalbey et al. (1991) studied the effects of three lubricant base oils on Sprague-Dawley rats. The rats were exposed to varying concentrations of either a solvent refined oil, a white oil or a hydrotreated base oil (CAS # 64742-54-7) for 6 hours/day, 5 days/week, for a total of 4 weeks. Based on laboratory findings, the authors concluded that, aside from ambiguous accumulation of "free cells" in the lung, exposure to high concentrations of aerosols of severely treated oils resulted in a low degree of toxicity.

The solvent extraction process for petroleum distillates selectively removes undesirable compounds, solubilizing first the aromatics, then olefins, naphthenes, and (least soluble) the paraffins. In the 1980's, approximately 74% of lubricant base oils produced in the US and Canada were "highly refined" (IARC, 1984). Kane et al. (1984) performed skin tumorigenicity studies on male C3H mice and found CAS # 64741-88-4 followed by dewaxing to be noncarcinogenic. Gerhart et al. (1988) demonstrated that, comparing lifetime skin-painting assays lasting 2-2.5 years and initiation/promotion assays in male CD-1 mice, the solvent-extracted lubricant base oil having the CAS# 64741-88-4 exhibited no carcinogenic activity, tumor initiator activity or tumor promoter activity.

Long-term topical application studies using female CF1 mice concluded that hydrotreatment or solvent extraction methods can yield oils with no carcinogenic potential (Doak et al., 1983).

With respect to the classification of "highly/severely refined" mineral oils (e.g., CAS# 64742-46-7, CAS# 64742-54-7, and CAS# 64741-88-4) that are the focus of this letter and the subject of the cited literature, one can conclude that they are of limited toxicological significance. The same conclusion was reached for the original "severely refined" substance of interest (CAS# 64742-53-6). In that light, it would be reasonable to include "highly/severely refined" mineral oils as substances which can be safely addressed by the provisions contained in the existing MODEF Protocol dated February 25, 2005.

A list of cited technical references is included as an Attachment to this letter.

Please call Doug Covert or me at (850) 681-6894 when you have had an opportunity to review these materials, so that we can decide how best to proceed.

Regards,

Christopher M. Teaf, Ph.D.
President & Director of Toxicology

Attachment

REFERENCES CITED

Beck, L.S. et al. 1984. The acute toxicology of selected petroleum hydrocarbons. In: McFarland, H.N. et al. (Eds.) Applied Toxicology of Petroleum Hydrocarbons. Princeton Scientific Press. pp. 1-16.

Dalbey, W. et al. 1991. Four-week inhalation exposures of rats to aerosols of three lubricant base oils. J. Appl. Toxicol. 11(4):297-302.

Doak, S.M.A. et al. 1983. The carcinogenic potential of twelve refined mineral oils following long-term topical application. Brit. J. Cancer 48(3):429-436.

Gerhart, J.M. et al. 1988. Tumor initiation and promotion effects of petroleum streams in mouse skin. Fund. Appl. Toxicol. 11:76-90.

Halder, C.A. et al. 1984. Carcinogenicity of petroleum lubricating oil distillates: Effects of solvent refining, hydroprocessing, and blending. Am. J. Indust. Med. 5(4):265-274.

HSWMR. 2004. Toxicological Synopsis for Mineral-Based Transformer Oils. (CAS #64742-53-6). Hazardous Substance & Waste Management Research, Inc. Tallahassee, FL.

IARC. 1984. IARC monographs on the evaluation of the carcinogenic risk of chemicals in humans: Polynuclear aromatic compounds; Part 3, Industrial exposures in aluminum production, coal gasification, coke production, and iron and steel founding. Vol 34, Lyon, France. As cited in Rothman and Emmett, 1988.

Kane, M.L. et al. 1984. Toxicological characteristics of refinery streams used to manufacture lubricating oils. Am. J. Indust. Med. 5(3):183-200.

Mackerer, C.R. et al. 2003. Petroleum mineral oil refining and evaluation of cancer hazard. Appl. Occup. Environ. Hyg. 18(11):890-901.

Rothman, M. and E.A. Emmett. 1988. The carcinogenic potential of selected petroleum-derived products. Occupational Med. 3(3):475-494.

Metering Instructions

The Licensee shall meter withdrawals from surface waters and/or the ground water resources, and meter readings from each withdrawal facility shall be recorded on a monthly basis within the last week of the month. The meter reading(s) shall be reported to the SWFWMD Water Use Permit Bureau on or before the tenth day of the following month for monthly reporting frequencies. For bi-annual reporting, the data shall be recorded on a monthly basis and reported on or before the tenth day of the month following the sixth month of recorded data. The Licensee shall submit meter readings online using the Permit Information Center at http://www.swfwmd.state.fl.us/permits/ or on SWFWMD-supplied scanning forms unless another arrangement for submission of this data has been approved by the SWFWMD. Submission of such data by any other unauthorized form or mechanism may result in loss of data and subsequent delinquency notifications. Call the Water Use Permit Bureau in Tampa at (813) 985-7481 if difficulty is encountered.

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

1. The meter(s) shall be non-resettable, totalizing flow meter(s) that have a totalizer of sufficient magnitude to retain total gallon data for a minimum of the three highest consecutive months permitted quantities. If other measuring device(s) are proposed, prior to installation, approval shall be obtained in writing from the Water Use Permit Bureau Chief.

2. The Licensee shall report non-use on all metered standby withdrawal facilities on the scanning form or approved alternative reporting method.

3. If a metered withdrawal facility is not used during any given month, the meter report shall be submitted to the SWFWMD indicating the same meter reading as was submitted the previous month.

4. The flow meter(s) or other approved device(s) shall have and maintain an accuracy within five percent of the actual flow as installed.

5. Meter accuracy testing requirements:
A. For newly metered withdrawal points, the flow meter installation shall be designed for inline field access for meter accuracy testing.
B. The meter shall be tested for accuracy on-site, as installed according to the Flow Meter Accuracy Test Instructions in this Exhibit, every five years in the assigned month for the county, beginning from the date of its installation for new meters or from the date of initial issuance of this certification containing the metering condition with an accuracy test requirement for existing meters.
C. The testing frequency will be decreased if the Licensee demonstrates to the satisfaction of the SWFWMD that a longer period of time for testing is warranted.
D. The test will be accepted by the SWFWMD only if performed by a person knowledgeable in the testing equipment used.
E. If the actual flow is found to be greater than 5% different from the measured flow, within 30 days, the Licensee shall have the meter re-calibrated, repaired, or replaced, whichever is necessary. Documentation of the test and a certificate of re-calibration, if applicable, shall be submitted within 30 days of each test or re-calibration.

6. 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 where there is at least an upstream length equal to ten (10) times the outside pipe diameter and a downstream length equal to two (2) times the outside pipe diameter. Where there is not at least a length of ten diameters upstream available, flow straightening vanes shall be used in the upstream line.

7. Broken or malfunctioning meter:
A. If the meter or other flow measuring device malfunctions or breaks, the Licensee shall notify the SWFWMD within 15 days of discovering the malfunction or breakage.

B. The meter must be replaced with a repaired or new meter, subject to the same specifications given above, within 30 days of the discovery.
C. If the meter is removed from the withdrawal point 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 from the withdrawal. In either event, a fully functioning meter shall not be off the withdrawal point for more than 60 consecutive days.

8. While the meter is not functioning correctly, the Licensee shall keep track of the total amount of time the withdrawal point was used for each month and multiply those minutes times the pump capacity (in gallons per minute) for total gallons. The estimate of the number of gallons used each month during that period shall be submitted on SWFWMD scanning forms and noted as estimated per instructions on the form. If the data is submitted by another approved method, the fact that it is estimated must be indicated. The reason for the necessity to estimate pumpage shall be reported with the estimate.

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

FLOW METER ACCURACY TEST INSTRUCTIONS
1. Accuracy Test Due Dates - The Licensee is to schedule their accuracy test according to the following schedule:
A. For existing metered withdrawal points, add five years to the previous test year, and make the test in the month assigned to your county.
B. For withdrawal points for which metering is added for the first time, the test is to be scheduled five years from the issue year in the month assigned to your county.
C. For proposed withdrawal points, the test date is five years from the completion date of the withdrawal point in the month assigned to your county.
D. For the Licensee's convenience, if there are multiple due-years for meter accuracy testing because of the timing of the installation and/or previous accuracy tests of meters, the Licensee can submit a request in writing to the Water Use Permit Bureau Chief for one specific year to be assigned as the due date year for meter testing. If Licensee has many meters to test it may also request the tests to be grouped into one year or spread out evenly over two to three years.
E. The months for accuracy testing of meters are assigned by county. The Licensee is requested but not required to have their testing done in the month assigned to their county. This is to have sufficient SWFWMD staff available for assistance.

January	Hillsborough
February	Manatee, Pasco
March	Polk (for odd numbered permits)*
April	Polk (for even numbered permits)*
May	Highlands
June	Hardee, Charlotte
July	None or Special Request
August	None or Special Request
September	DeSoto, Sarasota
October	Citrus, Levy, Lake
November	Hernando, Sumter, Marion
December	Pinellas

* The Permittee or Licensee may request their multiple permits be tested in the same month.

2. Accuracy Test Requirements: The Licensee shall test the accuracy of flow meters on permitted withdrawal points as follows:
A. The equipment water temperature shall be set to 72 degrees Fahrenheit for ground water, and to the measured water temperature for other water sources.

B. A minimum of two separate timed tests shall be performed for each meter. Each timed test shall consist of measuring flow using the test meter and the installed meter for a minimum of four minutes duration. If the two tests do not yield consistent results, additional tests shall be performed for a minimum of eight minutes or longer per test until consistent results are obtained.
C. If the installed meter has a rate of flow, or large multiplier that does not allow for consistent results to be obtained with four- or eight-minute tests, the duration of the test shall be increased as necessary to obtain accurate and consistent results with respect to the type of flow meter installed.
D. The results of two consistent tests shall be averaged, and the result will be considered the test result for the meter being tested. This result shall be expressed as a plus or minus percent (rounded to the nearest one-tenth percent) accuracy of the installed meter relative to the test meter. The percent accuracy indicates the deviation (if any), of the meter being tested from the test meter.

3. Accuracy Test Report: The Licensee shall demonstrate that the results of the meter test(s) are accurate by submitting the following information within 30 days of the test:
A. A completed Flow Meter Accuracy Verification Form, Form LEG-R.014.00 for each flow meter tested. This form can be obtained from the SWFWMD's website (http://www.swfwmd.state.fl.us/) under "Permits and Rules" for Water Use Permits.
B. A printout of data that was input into the test equipment if the test equipment is capable of creating such a printout;
C. A statement attesting that the manufacturer of the test equipment, or an entity approved or authorized by the manufacturer, has trained the operator to use the specific model test equipment used for testing;
D. The date of the test equipment's most recent calibration that demonstrates that it was calibrated within the previous twelve months, and the test lab's National Institute of Standards and Testing (N.I.S.T.) traceability reference number.
E. A diagram showing the precise location on the pipe where the testing equipment was mounted shall be supplied with the form. This diagram shall also show the pump, installed meter, the configuration (with all valves, tees, elbows, and any other possible flow disturbing devices) that exists between the pump and the test location clearly noted with measurements. If flow straightening vanes are utilized, their location(s) shall also be included in the diagram.
F. A picture of the test location, including the pump, installed flow meter, and the measuring device, or for sites where the picture does not include all of the items listed above, a picture of the test site with a notation of distances to these items.

ATTACHMENT F

GROUNDWATER MONITORING, OPERATION AND MAINTENANCE REQUIREMENTS

Tampa Electric Company - Big Bend Station
13031 Wyandotte Road
Apollo Beach, FL 33572
Hillsborough County
Latitude: 27°47' 41.3827" N Longitude: 82°24' 3.5451" W

These Groundwater Monitoring, Operation and Maintenance Requirements (GWMOMR) were developed by the Licensee, Tampa Electric Company, in conjunction with the Florida Department of Environmental Protection Southwest District's Industrial Wastewater (IWW) program to incorporate the groundwater (GW) monitoring requirements into the Licensee's Conditions of Certification (COC or License). The GWMOMR incorporates Units 1, 2, 3 and 4 as well as 7 active IWW lined ponds, the concrete settling basins and a stormwater pond at the coal field . The GWMOMR will also continue to include 3 out of service CCR Impoundments, which will be monitored until completion of the closure project for these ponds under the provisions of 40 CFR Part 257 (the "CCR Rule"). The Department's Southwest District IWW program is responsible for reviewing and approving all revisions to this document in accordance with Section A, Condition XXI. Procedures for Post-Certification Submittals and Section B.I.A Industrial Wastewater Ground Water Monitoring.

New major sources or deletion of existing major sources of wastewater; improvements made to existing or new wastewater treatment facilities including those which provide for a new or expanded land with increase in the permitted capacity; pollutants not addressed in this Attachment or the Conditions of Certification; and, other projects that cause or may cause changes to the quantity and/or quality of discharges to groundwater as a result of industrial wastewater treatment or solid waste disposal are considered modifications to the existing license. The licensee shall submit a petition for modification to the Conditions of Certification to the Department for review and approval in accordance with Section 403.516, F.S. and 62-17.211, F.A.C., as outlined in Section A. XXIV. Modification of Certification, of the Conditions of Certification.

WASTEWATER TREATMENT:

Industrial wastewater (IWW) generated at the facility is composed of contact storm water including coal pile runoff, plant floor drain water, reverse osmosis reject water, demineralizer wastes, boiler blowdown and chemical cleaning wastewater, coal unloading hopper wash water, turbine compressor wash water, equipment wash water, ash and slag sluice water and cooling tower blowdown. The industrial wastewater is routed to the lined wastewater settling and recycle pond system. Recycled wastewater is then utilized throughout the plant for equipment wash down, in the FGD system, slag and ash sluicing, and to prewash gypsum. The FGD process wastewater is treated separately and discharged either with the once-though cooling water (NPDES discharge) or to the IWW pond system. Reclaimed water provided by Hillsborough County is treated by reverse osmosis and/or demineralizer systems prior to use in critical plant processes. Wastes from these treatment systems are sent the recycle pond system. Treatment of the recycled water includes settling, pH adjustment and disinfection. Storm water or wastewater that has the potential to come into contact with oil, grease, or similar materials is sent to an oil/water separator before being sent to the recycle water system.

The IWW pond system includes the following ponds and basins:

1. Long Term Fly Ash/Reclaimed Water Pond (lined)
2. South Bottom Ash Pond (lined)
3. North Bottom Ash Pond (lined)
4. Bottom Ash Suction Pond (lined)

5. Settling Basins (concrete)
6. Settling Pond (lined)
7. South Recycle Pond (lined)
8. North Recycle Pond (lined)
9. Storm Water Pond (to be lined - at the coal field)

Out of Service (Under Closure per 40 CFR Part 257)
10. South Economizer Ash Pond (lined, solids storage area for combustion residuals)
11. North Economizer Ash Pond (lined)
12. Economizer Suction Pond (lined)

Wastewater from the Culbreath Bayside Station, permit FLA184713 may be discharged to the recycle pond system, provided all conditions and requirements of this license are satisfied.

I. SITE GROUNDWATER MONITORING

A. Construction Requirements

1. New monitoring well. If a new monitoring well approved by the Department is constructed, a revision of this attachment will then be prepared to incorporate the well with proper well designation. *[62-4.070]*

2. The licensee shall give at least 72-hour notice to the Department's Southwest District Office, prior to the installation of any monitoring wells detailed in this license including the GWMOMR. *[62-520.600(6)(h)]*

3. All field work done in connection with this GWMOMR regarding the collection of ground water samples shall be conducted in accordance with the Standard Operating Procedures (SOPs) (http://www.dep.state.fl.us/water/sas/sop/sops.htm). All laboratory analyses done in connection with this GWMOMR shall be conducted by firms that hold certification from the Department of Health, Environmental Laboratory Certification Program under Chapter 64E-1, F.A.C. *[Rule 62-160.300(1), F.A.C.]*.

4. Before construction of new groundwater monitoring wells, a soil boring shall be made at each new monitoring well location to properly determine monitoring well specifications such as well depth, screen interval, screen slot, and filter pack. *[62-520.600(6)(g)]*

5. Location Requirements. Within 60 days after completion of construction of new IWW ground water monitoring wells, the following information shall be submitted.

a. A properly scaled figure depicting monitor well locations (active and abandoned) with identification numbers shall be submitted to the Southwest District IWW Section. The figure shall also include (or attach) the monitoring well, top of casing, and ground surface elevations referenced to National Geodetic Vertical Datum (NGVD) of 1929 to the nearest 0.01 foot, along with monitor well location latitude and longitude to the nearest 0.1 second. *[62-520.600(6) (i)]*

6. Well Construction Detail Requirements. Within 30 days after completion of construction or abandonment of ground water monitoring wells, the following information shall be submitted.

a. For both IWW and SW wells, a copy of the Southwest Florida Water Management District (SWFWMD) State of Florida Permit Application to Construct, Repair, Modify, or Abandon a Well (LEGR.040.01 (June 2010) 40D-3.101(1), F.A.C.) and

b. IWW Wells, the Department's Southwest District Office well completion reports and soil boring/lithologic log on DEP Form 62-520.900(3), Monitor Well Completion Report, for each well. The DEP form can be accessed at 62-532.410 and 62-520.900(2)

7. Initial Sampling Requirements. Within 30 days of installation of a new IWW well (other than a replacement for the wells listed in Table B.2. below), the licensee shall conduct initial ground water sampling events as follows:

Sample the new well for the Primary and Secondary Drinking Water parameters included in Rule 62-550, Florida Administrative Code, Public Drinking Water Systems (excluding asbestos, acrylamide, Dioxin, butachlor, epichlorohydrin, pesticides, and PCBs, unless reasonably expected to be a constituent of the discharge or an artifact of the site). In addition, volatile organics and extractable semivolatile organics shall be analyzed. Results of this initial

sampling shall be submitted to the Southwest District IWW Section and the SCO within 60 days after sampling. *[62-520.600(5)(a)2]*

B. Operational Requirements

1. During the period of operation authorized by this Certification the licensee shall continue to sample ground water at the existing monitoring wells identified in item.I.B.2 below, in accordance with the COC and GWMOMR prepared in accordance with Rule 62-520.600, F.A.C. *[62-520.600]*

2. The following monitoring wells shall be sampled for Groundwater Monitoring requirements for the lined settling and recycle pond system:

Monitoring Well ID	Alternate Well Name and/or Description of Monitoring Location	Latitude			Longitude			Aquifer Monitored	New or Existing
		º	'	"	º	'	"		
MWB-4R	Background	27	47	2	82	23	7	Surficial	Existing
MWB-56UF	Background	27	48	22	82	23	1	Floridian	Existing
MWC-16R**	Coal Stockpile Compliance Well	27	47	51	82	24	31	Surficial	Existing
MWC-31UF	Recycle Pond Compliance well	27	47	40	82	23	38	Floridian	Existing
MWC-45***	Recycle Pond Compliance well	27	47	34	82	23	40	Surficial	Existing
MWC-46***	Recycle Pond Compliance well	27	47	37	82	23	47	Surficial	Existing
MWC-47***	Recycle Pond Compliance well	27	47	38	82	23	33	Surficial	Existing
MWC-55**	Coal Stockpile Compliance Well	27	47	40	82	24	43	Surficial	Existing
MWC-9***	Recycle Pond Compliance well	27	47	34	82	23	33	Surficial	Existing

MWC = Compliance; MWB = Background; MWI = Intermediate; MWP =Piezometer

[62-520.600]

3. The monitor wells specified in I.B.2 above, shall be sampled for the parameters listed below except for wells MWB-56UF and MWC-31UF:

Parameter	Compliance Well Limit	Units	Sample Type	Monitoring Frequency
Chloride (as Cl)	Report	mg/L	Grab	Semi-Annually; twice per year
pH*	Report	s.u.	In Situ	Semi-Annually; twice per year
Radium 226 + Radium 228, Total**	5	pCi/L	Grab	Semi-Annually; twice per year
Specific Conductance*	Report	umhos/cm	In Situ	Semi-Annually; twice per year
Turbidity*	Report	NTU	In Situ	Semi-Annually; twice per year
Water Level Relative to NGVD	Report	ft	In Situ	Semi-Annually; twice per year
Arsenic, Total Recoverable	0.010	mg/L	Grab	Semi-Annually; twice per year

ATTACHMENT F

Parameter	Compliance Well Limit	Units	Sample Type	Monitoring Frequency
Alpha, Gross Particle Activity	15	pCi/L	Grab	Semi-Annually; twice per year
Fluoride, Total (as F)	4.0	mg/L	Grab	Semi-Annually; twice per year
Iron, Total Recoverable	Report	mg/L	Grab	Semi-Annually; twice per year
Temperature (C), Water*	Report	Deg C	In Situ	Semi-Annually; twice per year
Boron, Total Recoverable	Report	mg/L	Grab	Semi-Annually; twice per year
Oxygen, Dissolved (DO) *	Report	mg/L	In Situ	Semi-Annually; twice per year
Sulfate, Total	Report	mg/L	Grab	Semi-Annually; twice per year

*The field parameters shall be sampled per DEP–SOP-001/01, FS 2200 Ground Water Sampling, Figure FS 2200-2 Ground Water Purging Procedure (http://www.dep.state.fl.us/water/sas/sop/sops.htm) and recorded on Form FD 9000-24, Ground Water Sampling Log (http://www.dep.state.fl.us/water/sas/qa/forms.htm). The sampling logs shall be submitted with each ground water Part D DMR. The field parameters to be reported on Part D of GW DMR shall be the last sample recorded on FD 9000-24. *[62-520.600(11)(b)]*

** MWC-16R and MWC-55 at the coal stockpile area have a limit of Report Only for Radium 226 + Radium 228, Total and Gross Alpha.

***Wells MWC-9, MWC-45, MWC-46 and MWC-47 have been incorporated into the Consent Order Remedial Action Plan (RAP) and have a limit of Report Only for all parameters.

4. The following parameters shall be analyzed for wells MWB-56UF and MWC-31UF identified in I. B.2 above.

Parameter	Compliance Well Limit	Units	Sample Type	Monitoring Frequency
pH*	Report	s.u.	In Situ	Semi-Annually; twice per year
Radium 226 + Radium 228, Total	5	pCi/L	Grab	Semi-Annually; twice per year
Specific Conductance*	Report	umhos/cm	In Situ	Semi-Annually; twice per year
Turbidity*	Report	NTU	In Situ	Semi-Annually; twice per year
Water Level Relative to NGVD	Report	ft	In Situ	Semi-Annually; twice per year
Alpha, Gross Particle Activity	15	pCi/L	Grab	Semi-Annually; twice per year
Temperature (C), Water*	Report	Deg C	In Situ	Semi-Annually; twice per year
Oxygen, Dissolved (DO) *	Report	mg/L	In Situ	Semi-Annually; twice per year

*The field parameters shall be sampled per DEP–SOP-001/01, FS 2200 Ground Water Sampling, Figure FS 2200-2 Ground Water Purging Procedure (http://www.dep.state.fl.us/water/sas/sop/sops.htm) and recorded on Form FD 9000-24, Ground Water Sampling Log (http://www.dep.state.fl.us/water/sas/qa/forms.htm). The sampling logs shall be submitted with each ground water Part D DMR. The field parameters to be reported on Part D of GW DMR shall be the last sample recorded on FD 9000-24. *[62-520.600(11)(b)]*

5. Water levels shall be recorded prior to evacuating the well for sample collection. Elevation references shall include the top of the well casing and land surface at each well site (NGVD allowable) at a precision of plus or minus 0.01 feet. *[62-520.600(11)(c)]*

6. Ground water monitoring wells shall be purged prior to sampling to obtain a representative sample. *[62-160.210]*

7. Analyses shall be conducted on un-filtered samples, unless filtered samples have been approved by the Department as being more representative of ground water conditions. *[62-520.310(5)]*

8. If any monitoring well becomes inoperable or damaged to the extent that sampling or well integrity may be affected, the licensee shall notify the Department's SWD office within two business days from discovery, and a detailed written report shall follow within ten days after notification to the Department. The written report shall detail what problem has occurred and remedial measures that have been taken to prevent recurrence or request approval for replacement of the monitoring well. All monitoring well design and replacement shall be approved by the Department before installation. *[62-520.600 and 62-620.320(6)]*

9. Ground water monitoring test results for the IWW wells shall be submitted on Part D of DEP Form 62-620.910(10) (attached) and shall be submitted as required under Section II C below.

10. All piezometers and monitoring wells not part of the approved ground water monitoring plan is to be plugged and abandoned in accordance with Rule 62-532.500(4), F.A.C., unless future use is intended. *[62-532.500(4)]*

II. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS:

A. REUSE OR DISPOSAL:

Lined Settling and Recycle Pond System: An existing lined recycle pond system is located approximately at latitude 27°47' 43" N, longitude 82°24' 17" W.

1. During the period beginning on the issuance date and lasting through the expiration date of this license, the licensee is authorized to discharge industrial wastewater, such as contact storm water including coal pile and transloading materials runoff, plant floor drain water, reverse osmosis reject water, demineralizer wastes, boiler blowdown and chemical cleaning, coal unloading hopper wash water, turbine compressor wash water, equipment wash water, ash and slag sluice water, and cooling tower blowdown to a lined storage and recycle pond system. Recycled wastewater shall be limited and monitored by the licensee as specified below and reported in accordance with II.C.1 below:

			Effluent Limitations		Monitoring Requirements			
Parameter	Units	Max/Min	Limit	Statistical Basis	Frequency of Analysis	Sample Type	Monitoring Site Number	Notes
pH	s.u.	Max Min	Report Report	Daily Maximum Daily Minimum	Quarterly	In-situ	EFF-1	
Specific Conductance	umhos/cm	Max	Report	Daily Maximum	Quarterly	Grab	EFF-1	
Fluoride, Total (as F)	mg/L	Max	Report	Daily Maximum	Quarterly	Grab	EFF-1	
Boron, Total Recoverable	mg/L	Max	Report	Daily Maximum	Quarterly	Grab	EFF-1	
Arsenic, Total Recoverable	ug/L	Max	Report	Daily Maximum	Quarterly	Grab	EFF-1	
Solids, Total Suspended	mg/L	Max	Report	Daily Maximum	Quarterly	Grab	EFF-1	
Iron, Total Recoverable	mg/L	Max	Report	Daily Maximum	Quarterly	Grab	EFF-1	
Chloride (as Cl)	mg/L	Max	Report	Daily Maximum	Quarterly	Grab	EFF-1	
Radium 226 + Radium 228, Total	pCi/L	Max	Report	Daily Maximum	Quarterly	Grab	EFF-1	
Alpha, Gross Particle Activity	pCi/L	Max	Report	Daily Maximum	Quarterly	Grab	EFF-1	
Sulfate, Total	mg/L	Max	Report	Daily Maximum	Quarterly	Grab	EFF-1	

2. Effluent samples shall be taken at the monitoring site locations listed in II.A.1. above and as described below:

Monitoring Site Number	Description of Monitoring Site
EFF-1	Effluent from the recycle pond return line

3. The following setback distances shall be maintained between the outside toe of the ponds: Potable Water Supply Wells- 500 feet; Property Line 100 feet; Swales, Ditches, Wetlands and other bodies of surface water connected to State waters- 50 feet.

4. The licensee shall continue to monitor flows into and out of the recycle pond system using runtime meters and makes these records available during compliance inspections or upon requests by the Department.

There is no discharge from the IWW system so there are no flow measuring devices.

B. Sampling Methods

1. The sample collection, analytical test methods, and method detection limits (MDLs) applicable to this license shall be conducted using a sufficiently sensitive method to ensure compliance with applicable water quality standards and effluent limitations and shall be in accordance with Rule 62-4.246, Chapters 62-160 and 62-600, F.A.C., and 40 CFR 136, as appropriate. The list of Department established analytical methods, and corresponding MDLs and PQLs (practical quantitation limits), which is titled "FAC 62-4 MDL/PQL Table (April 26, 2006)" is available at https://floridadep.gov/dear/quality-assurance/content/quality-assurance-resources. The MDLs and PQLs as described in this list shall constitute the minimum acceptable MDL/PQL values and the Department shall not accept results for which the laboratory's MDLs or PQLs are greater than those described above unless alternate MDLs and/or PQLs have been specifically approved by the Department for this license. Any method included in the list may be used for reporting as long as it meets the following requirements:

(1) The laboratory's reported MDL and PQL values for the particular method must be equal or less than the corresponding method values specified in the Department's approved MDL and PQL list;

(2) The laboratory reported MDL for the specific parameter is less than or equal to the license limit or the applicable water quality criteria, if any, stated in Chapter 62-302, F.A.C. Parameters that are listed as "report only" in the license shall use methods that provide an MDL, which is equal to or less than the applicable water quality criteria stated in 62-302, F.A.C.; and

(3) If the MDLs for all methods available in the approved list are above the stated license limit or applicable water quality criteria for that parameter, then the method with the lowest stated MDL shall be used.

When the analytical results are below method detection or practical quantitation limits, the licensee shall report the actual laboratory MDL and/or PQL values for the analyses that were performed following the instructions on the applicable discharge monitoring report.

Where necessary, the licensee may request approval of alternate methods or for alternative MDLs or PQLs for any approved analytical method. Approval of alternate laboratory MDLs or PQLs are not necessary if the laboratory reported MDLs and PQLs are less than or equal to the license limit or the applicable water quality criteria, if any, stated in Chapter 62-302, F.A.C. Approval of an analytical method not included in the above-referenced list is not necessary if the analytical method is approved in accordance with 40 CFR 136 or deemed acceptable by the Department. *[62-4.246, 62-160]*

2. The licensee shall provide safe access points for obtaining representative influent and effluent samples which are required by this license. *[62-620.320(6)]*

C Monitoring and Reporting Requirements – Industrial Wastewater Components

ATTACHMENT F

1. During the period of operation authorized by the Condition of Certification, the Licensee shall complete and submit to the Southwest District IWW program Discharge Monitoring Reports (DMRs) in accordance with the frequencies specified by the REPORT type (i.e. monthly, quarterly, semiannual, annual, etc.) indicated on the DMR forms attached to this license. Unless specified otherwise in this license, monitoring results for each monitoring period shall be submitted in accordance with the associated DMR due dates below. DMRs shall be submitted for each required monitoring period including periods of no discharge.

REPORT Type on DMR	Monitoring Period	Submit by
Monthly	first day of month - last day of month	28th day of following month
Quarterly	January 1 - March 31 April 1 - June 30 July 1 - September 30 October 1 - December 31	April 28 July 28 October 28 January 28
Semiannual	January 1 - June 30 July 1 - December 31	July 28 January 28
Annual	January 1 - December 31	January 28

The licensee may submit either paper or electronic DMR forms. If submitting electronic DMR forms, the licensee shall use the electronic DMR system approved by the Department (EzDMR) and shall electronically submit the completed DMR forms using the DEP Business Portal at http://www.fldepportal.com/go/. Reports shall be submitted to the Department by the twenty-eighth (28th) of the month following the month of operation. Data submitted in electronic format is equivalent to data submitted on signed and certified paper DMR forms.

If submitting paper DMR forms, the licensee shall make copies of the attached DMR forms, without altering the original format or content unless approved by the Department and shall mail the completed DMR forms to the Department's Southwest District Office at the address specified below by the twenty-eighth (28th) of the month following the month of operation.

[62-620.610(18)] [62-600.680(1)]

Unless specified otherwise in this GWMOMR, all reports and notifications required by this GWMOMR, including twenty-four-hour notifications, shall be submitted to or reported to the Southwest District Office at the address specified below:

Southwest District Office
13051 North Telecom Parkway
Temple Terrace, FL 33637-0926

Phone Number - (813) 470-5700
FAX Number - (813) 470-5995
Email – swd_iw@floridadep.gov

An Electronic copy of all submittals required by this Plan shall also be sent to the Siting Coordination Office by email to SCO@floridadep.gov . If electronic copies are not available, copies can be mailed to:

Siting Coordination Office
3900 Commonwealth Boulevard
Tallahassee, FL 32399
Phone Number- (850) 245-2002
Fax Number-(850) 245-2020

[62-620.305]

D. Other Limitations

1. All reports and other information shall be signed in accordance with requirements of Rule 62-620.305, F.A.C.

2. The Licensee shall provide safe access points for obtaining representative samples which are required by this attachment.

3. If there is no discharge from the facility on a day scheduled for sampling, the sample shall be collected on the day of the next discharge.

4. Any bypass of the treatment facility which is not included in the monitoring specified in Sections.I.B.3 and II.A. 2 above, is to be monitored for flow and all other required parameters. For parameters other than flow, at least one grab sample per day shall be monitored. Daily flow shall be monitored or estimated, as appropriate, to obtain reportable data. All monitoring results shall be reported on the appropriate DMR.

III. DESIGN, CONSTRUCTION, OPERATION AND MAINTENANCE OF WASTEWATER FACILITIES REQUIREMENTS

A. During the period of operation authorized by this license, the wastewater facilities shall be operated under the supervision of a person who is qualified by formal training and/or practical experience in the field of water pollution control. *[62-620.320(6)]*

B. The licensee is authorized to discharge a solution of ammonia into the recycle pond. The discharge quantity is not to exceed 10 gallons of ammonia during maintenance activities. This procedure is only authorized during maintenance activities or if a leak/release of anhydrous ammonia occurred during the operation of the emergency ammonia unloading station. Notification to the Department is required if the quantity exceeds 10 gallons of anhydrous ammonia. *[62-620.350]*

IV. GENERAL CONDITIONS

1. Sampling and monitoring data shall be collected and analyzed in accordance with Rule 62-4.246 and Chapters 62-160, 62-601, and 62-610, F.A.C., and 40 CFR 136, as appropriate.

a. Monitoring results shall be reported at the intervals specified elsewhere in this license and shall be reported on a Discharge Monitoring Report (DMR), DEP Form 62-620.910(10), or as specified elsewhere in the license.

b. If the licensee monitors any contaminant more frequently than required by the license, using Department approved test procedures, the results of this monitoring shall be included in the calculation and reporting of the data submitted in the Discharge Monitoring Report (DMR), DEP Form 62-620.910(10).

c. Calculations for all limitations which require averaging of measurements shall use an arithmetic mean unless otherwise specified in this license.

d. For domestic wastewater facilities, testing for parameters listed in Rule 62-160.300(4), F.A.C., shall be conducted under the direction of a certified operator.

2. Reports of compliance or noncompliance with, or any progress reports on, interim and final requirements contained in any compliance schedule detailed elsewhere in this license shall be submitted no later than 14 days following each schedule date. *[62-620.610(19)]*