



**FLORIDA DEPARTMENT OF
ENVIRONMENTAL PROTECTION**
BOB MARTINEZ CENTER
2600 BLAIRSTONE ROAD
TALLAHASSEE, FLORIDA 32399-2400

RICK SCOTT
GOVERNOR

CARLOS LOPEZ-CANTERA
LT. GOVERNOR

CLIFFORD D. WILSON III
SECRETARY

PERMITTEE

Tampa Electric Company
Post Office Box 111
Tampa, Florida 33601-0111

Air Permit No. 0570039-076-AC
Permit Expires: December 1, 2016
Minor Air Construction Permit

Authorized Representative:
Mr. Ronald D. Bishop, Director

Big Bend Station
Self-Unloader Project

PROJECT

This is the final air construction permit, which authorizes the construction of four new hoppers and the removal on the existing Dravo unloader used to store and transfer solid fuels from ships or barges. The proposed work will be conducted at the existing Big Bend Station, which is an electric power facility categorized under Standard Industrial Classification No. 4911. The existing facility is located in Hillsborough County at 13031 Wyandotte Road in Apollo Beach, Florida. The UTM coordinates are Zone 17, 363.15 kilometers (km) East and 3074.91 km North.

This final permit is organized into the following sections: Section 1 (General Information); Section 2 (Administrative Requirements); Section 3 (Emissions Unit Specific Conditions); and Section 4 (Appendices). Because of the technical nature of the project, the permit contains numerous acronyms and abbreviations, which are defined in Appendix A of Section 4 of this permit.

STATEMENT OF BASIS

This air pollution construction permit is issued under the provisions of: Chapter 403 of the Florida Statutes (F.S.) and Chapters 62-4, 62-204, 62-210, 62-212, 62-296 and 62-297 of the Florida Administrative Code (F.A.C.). The permittee is authorized to conduct the proposed work in accordance with the conditions of this permit. This project is subject to the general preconstruction review requirements in Rule 62-212.300, F.A.C. and is not subject to the preconstruction review requirements for major stationary sources in Rule 62-212.400, F.A.C. for the Prevention of Significant Deterioration (PSD) of Air Quality.

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

Executed in Tallahassee, Florida

for: Jeffrey F. Koerner, Program Administrator
Office of Permitting and Compliance
Division of Air Resource Management

CERTIFICATE OF SERVICE

The undersigned duly designated deputy agency clerk hereby certifies that this air permit package was sent by electronic mail, or a link to these documents made available electronically on a publicly accessible server, with received receipt requested before the close of business on the date indicated below to the following persons.

Mr. Ronald D. Bishop, Director, TEC: rdbishop@tecoenergy.com
Mr. Byron Burrows, P.E., Manager-Air Programs, TEC: btburrows@tecoenergy.com
Mr. Robert Velasco, P.E., Air Programs EHS, TEC: ravelasco@tecoenergy.com
Ms. Diana M. Lee, P.E., EPCHC: lee@epchc.org
Ms. Justin Green, DEP Siting Office: justin.b.green@dep.state.fl.us
Ms. Alisa Coe, Earth Justice: acoe@earthjustice.org
Ms. Lorinda Shepherd, EPA Region 4: shephard.lorinda@epa.gov
Ms. Heather Ceron, US EPA Region 4: ceron.heather@epa.gov
Ms. Lynn Scarce, DEP OPC: lynn.scarce@dep.state.fl.us

Clerk Stamp

FILING AND ACKNOWLEDGMENT FILED, on this date, pursuant to Section 120.52(7), Florida Statutes, with the designated agency clerk, receipt of which is hereby acknowledged.

SECTION 1. GENERAL INFORMATION

FACILITY DESCRIPTION

Tampa Electric Company (TEC), Big Bend Station, is a nominal 1,892 megawatt (MW) electric generation facility. This facility consists of four fossil fuel fired electrical generating units (Units 1 – 4); four steam turbines electrical generators; two simple-cycle combustion turbine 4A and 4B sharing a common electrical generator; solid fuels, fly ash, limestone, gypsum, slag, bottom ash storage and handling facilities; and, fuel oil storage tanks.

The existing facility consists of the following regulated emissions units (EU).

EU No.	Emission Unit Description
<i>Fossil Fuel Fired Steam Generator Units</i>	
001	Fossil Fuel Fired Steam Generator Unit No. 1
002	Fossil Fuel Fired Steam Generator Unit No. 2
003	Fossil Fuel Fired Steam Generator Unit No. 3
004	Fossil Fuel Fired Steam Generator Unit No. 4
<i>Solid Fuel Yard</i>	
010	Fuel Unloading and Handling Operations
029	Fuel Blending Bin Cyclone Collectors (FH-032 through FH-035)
030	Fuel Mill Cyclone Collectors (FH-048 and FH-049)
046	Transloading and Off-site Transfer of Solid Fuels and Slag (by truck, rail and barge)
047	Railcar Unloading and Conveying System
<i>Coal Bunkers with Roto-Clones</i>	
015	Unit No. 1 Coal Bunker with Roto-Clone
016	Unit No. 2 Coal Bunker with Roto-Clone
017	Unit No. 3 Coal Bunker with Roto-Clone
039	Unit No. 4 Coal Bunker with Roto-Clone
<i>Flyash Handling and Storage - Silo Nos. 1 - 2</i>	
008	Fly Ash Silo No. 1 Baghouse
009	Fly Ash Silo No. 2 Baghouse
014	Fly Ash Silo No. 3 Baghouse
<i>Limestone Handling and Storage</i>	
012	Limestone Silo A Baghouses (2)
013	Limestone Silo B Baghouses (2)
023	Limestone Conveyor LB/LC Baghouse
050	Limestone Conveyor LD/LE Baghouse
<i>Limestone Handling for FGD System for Units 1 & 2</i>	
020	Limestone Conveyors LE/LF/LG/Silo C Belt Feeder Baghouse
021	Silo C Baghouse
<i>Wastewater Treatment Plant</i>	
022	Lime Silo for Wastewater Treatment Plant with one Baghouse
<i>Surface Coating Operations</i>	
032	Surface Coating of Miscellaneous Metal Parts

SECTION 1. GENERAL INFORMATION

EU No.	Emission Unit Description
<i>Coal Residual Storage and Transfer from the Polk Power Station</i>	
037	Coal Residual Storage Facility
038	Coal Residual Transfer System
<i>Simple-Cycle Combustion Turbines</i>	
041	SCCT 4A with a common electric generator that it shares with SCCT 4B
042	SCCT 4B with a common electric generator that it shares with SCCT 4A
<i>Engines</i>	
043	SCCT Black Start Diesel Engine, 1,000 kilowatt
044	Coal Field Diesel Generator

PROPOSED PROJECT

TEC is requesting to construct four new hoppers to accommodate three self-unloading vessels (ships or vessels). The new hoppers contain angled chutes that discharge solid fuel immediately above the existing conveyor. In addition, TEC will be removing the existing Dravo unloader.

This project will modify the following emissions unit.

EU No.	Emission Unit Description
010	Fuel Unloading and Handling Operations

FACILITY REGULATORY CLASSIFICATION

- The facility is a major source of hazardous air pollutants (HAP).
- The facility operates units subject to the acid rain provisions of the Clean Air Act.
- The facility is a Title V major source of air pollution in accordance with Chapter 62-213, F.A.C.
- The facility operates units subject to the Clean Air Interstate Rule (CAIR) set forth in Rule 62-296.470, F.A.C.
- The facility is a major stationary source in accordance with Rule 62-212.400, F.A.C. for the Prevention of Significant Deterioration (PSD) of Air Quality.
- The facility does operate units subject to the New Source Performance Standards (NSPS) of 40 CFR 60.
- The facility does operate units subject to the National Emissions Standards for Hazardous Air Pollutants (NESHAP) of 40 CFR 63.

SECTION 2. ADMINISTRATIVE REQUIREMENTS

1. Permitting Authority: The permitting authority for this project is the Office of Permitting and Compliance in the Division of Air Resource Management of the Department of Environmental Protection (Department). The Office of Permitting and Compliance mailing address is 2600 Blair Stone Road (MS #5505), Tallahassee, Florida 32399-2400.
2. Compliance Authority: All documents related to compliance activities such as reports, tests, and notifications shall be submitted to the Environmental Protection Commission of Hillsborough County at: 3629 Queen Palm Drive, Tampa, Florida 33619. Phone: (813) 627-2600.
3. Appendices: The following Appendices are attached as a part of this permit: Appendix A (Citation Formats and Glossary of Common Terms); Appendix B (General Conditions); Appendix C (Common Conditions); Appendix D (Common Testing Requirements); Appendix E (NSPS Subpart A - General Provisions); and Appendix F (NSPS Subpart Y - Standards of Performance for Coal Preparation and Processing Plants).
4. Applicable Regulations, Forms and Application Procedures: Unless otherwise specified in this permit, the construction and operation of the subject emissions units shall be in accordance with the capacities and specifications stated in the application. The facility is subject to all applicable provisions of: Chapter 403, F.S.; and Chapters 62-4, 62-204, 62-210, 62-212, 62-213, 62-296 and 62-297, F.A.C. Issuance of this permit does not relieve the permittee from compliance with any applicable federal, state, or local permitting or regulations.
5. New or Additional Conditions: For good cause shown and after notice and an administrative hearing, if requested, the Department may require the permittee to conform to new or additional conditions. The Department shall allow the permittee a reasonable time to conform to the new or additional conditions, and on application of the permittee, the Department may grant additional time. [Rule 62-4.080, F.A.C.]
6. Modifications: The permittee shall notify the Compliance Authority upon commencement of construction. No new emissions unit shall be constructed and no existing emissions unit shall be modified without obtaining an air construction permit from the Department. Such permit shall be obtained prior to beginning construction or modification. [Rules 62-210.300(1) and 62-212.300(1)(a), F.A.C.]
7. Construction and Expiration. The expiration date shown on the first page of this permit provides time to complete the physical construction activities authorized by this permit, complete any necessary compliance testing, and obtain an operation permit. Notwithstanding this expiration date, all specific emissions limitations and operating requirements established by this permit shall remain in effect until the facility or emissions unit is permanently shut down. For good cause, the permittee may request that that a permit be extended. Pursuant to Rule 62-4.080(3), F.A.C., such a request shall be submitted to the Permitting Authority in writing before the permit expires. [Rules 62-4.070(4), 62-4.080 & 62-210.300(1), F.A.C.]
8. Application for Title V Permit: This permit authorizes construction of the permitted emissions units and initial operation to determine compliance with Department rules. A Title V air operation permit is required for regular operation of the permitted emissions unit. The permittee shall apply for a Title V air operation permit at least 90 days prior to expiration of this permit, but no later than 180 days after commencing operation. To apply for a Title V operation permit, the applicant shall submit the appropriate application form, compliance test results, and such additional information as the Department may by law require. The application shall be submitted to the appropriate Permitting Authority with copies to the Compliance Authority. [Rules 62-4.030, 62-4.050, 62-4.220 and Chapter 62-213, F.A.C.]

SECTION 3. EMISSIONS UNIT SPECIFIC CONDITIONS

A. Fuel Unloading and Handling Operations (EU 010)

This section of the permit addresses the following emissions unit.

EU No.	Emission Unit Description
010	Fuel Unloading and Handling Operations

Solid fuel (consisting of coal and petroleum coke) is unloaded from ships and barges into the solid fuel yard, the blending bins or directly to the tripper room via belt conveyors. Solid fuel may also be received/unloaded by railcar and conveyed to the fuel yard. Solid fuel from the piles is loaded onto belt conveyors using a rail mounted or mobile reclaimer. The solid fuel is then belt conveyed to the blending bins, which consist of six storage bins, where the solid fuel may be blended for use at the plant, or transloaded into trucks for shipment off site.

{Permitting Note: This emission unit is regulated under Rule 62-212.400(5)(BACT), F.A.C., PSD [PSD-FL-040]; Power Plant Siting Certification [PA 79-12]; NSPS Subpart A (General Provisions) and Subpart Y (Standards of Performance for Coal Preparation and Processing Plants) of 40 CFR 60 adopted by reference in Rule 62-204.800(8)(b)33, F.A.C.; and, Chapter 1-3.52, EPCHC.

The emissions unit contained in this subsection is comprised of the following:

Solid Fuel Yard Unloading and Handling Operations (EU 010)		
Point ID	Brief Description	Pollutant
<i>Barge Unloading Operations</i>		
FH-001	Barge Clamshell to Conveyor D1	Fugitive VE
FH-002	Barge Bucket Elevator to Conveyor A1	
FH-003	Conveyor A1 to Conveyor B1	
FH-004	Conveyor B1 to Conveyor D1	
FH-005	Self-Unloading Barge to Conveyor D1	
FH-005A	Self-Unloading to Hopper A	
FH-005B	Self-Unloading to Hopper B	
FH-005C	Self-Unloading to Hopper C	
FH-005D	Self-Unloading to Hopper D	
<i>Coal Conveying Operations</i>		
FH-006	Conveyor D1 to Conveyor E1	---
FH-007	Conveyor E1 to Conveyor Y or Conveyor F1	---
FH-008a	Conveyor Y to Conveyor Z	---
FH-008b	Conveyor Z to West Emergency Pile	Fugitive VE
FH-012	Conveyor Z to Conveyor P	---
FH-013	Conveyor P to Intermediate Conveyor	---
FH-015	North Stacker Conveyor (G2) to North/Center Storage Pile	Fugitive VE
FH-017	North Stacker Conveyor (G2) to Conveyor P	---
FH-022	Conveyor F1 to South Stacker Conveyor (G1)	---
FH-023	South Stacker Conveyor (G1) to South/Center Storage Pile	Fugitive VE
FH-025	South Reclaimer Conveyor (G1) to Conveyor F1	---
FH-028	Conveyor P to Conveyor J2	Fugitive VE
FH-029	Conveyor J2 to Conveyor Q2	---
FH-030	Conveyor F1 to Conveyor J1	---
FH-031	Conveyor J1 to Conveyor Q1	---
FH-052	Conveyor U to East Emergency Storage Pile	Fugitive VE
FH-055	Conveyor W1 to Conveyor L1	---
FH-056	Conveyor W2 to Conveyor L2	---
FH-059 - FH-062	Conveyors L1 & L2 to M1 & M2, and Conveyors M1 & M2 to Coal Bunkers (These enclosed conveyors are located inside an enclosed building and are not subject to emissions limits or testing requirements.)	---

SECTION 3. EMISSIONS UNIT SPECIFIC CONDITIONS

A. Fuel Unloading and Handling Operations (EU 010)

Solid Fuel Yard Unloading and Handling Operations (EU 010)		
Point ID	Brief Description	Pollutant
<i>Coal Equipment & Storage</i>		
FH-009	Dozer Operations on West Emergency Storage Pile	Fugitive VE
FH-010	West Emergency Storage Pile	
FH-011a	Dozer Reclaim from West Emergency Pile to Portable Conveyor	
FH-011b	Portable Conveyor Feeds into Portable Hopper	---
FH-011c	Portable Hopper to Conveyor F	---
FH-018	Dozer Operations on North Storage Pile	Fugitive VE
FH-019	North Storage Pile	
FH-020	Dozer Operations on Middle (Common) Storage Pile	
FH-021	Fuel Storage - Middle (Common) Storage Pile	
FH-024	South Reclaimer to South Reclaimer Conveyor (G1)	
FH-026	Dozer Operations on South Storage Pile	
FH-027	South Storage Pile	
FH-036 - FH-047	Blending Bins to Conveyors T1, T2	
FH-050	Crusher to Conveyor W1	---
FH-051	Crusher to Conveyor W2	---
FH-053	Dozer Operations on East Emergency Storage Pile	Fugitive VE
FH-054	East Emergency Storage Pile	
FH-057	Dozer Reclaim from East Emergency Pile to "K" Feeders	
FH-058	"K" Feeders to Conveyors L1 or L2	---
FH-063	Dozer Operations on Storage Pile	Fugitive VE
FH-064	Dozer Reclaim from Storage Pile to Loadout or Portable Conveyor	
FH-070	Long Term Storage Pile	
FH-071	Dozer Operations on Long Term Storage Pile	
FH-072	Trucks, Full	
FH-073	Trucks, Empty	

PREVIOUS APPLICABLE REQUIREMENTS

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

EQUIPMENT

2. Solid Fuel Hoppers: The permittee is authorized to install four solid fuel hoppers to accommodate three self-unloading vessels. Each hopper shall contain an angled chute that will be used to discharge immediately above the existing conveyor to reduce fugitive emission of particulate matter. [Application No. 0570039-076-AC]
3. Shutdown of existing Dravo Unloader: The permittee is authorized to remove the existing Dravo unloader. The existing Dravo consists of two emission points that will be removed.

PERFORMANCE RESTRICTION

4. Restricted Operation: The hours of operation are not limited (8760 hours per year). [Rules 62-4.070(3) and 62-210.200(PTE), F.A.C.]

CONTROL TECHNOLOGY

5. Dispersant Spray System: Each boom conveyor (FH-004 and FH-005) shall include a dispersant spray system to wet the material prior to discharging into the hoppers.

SECTION 3. EMISSIONS UNIT SPECIFIC CONDITIONS

A. Fuel Unloading and Handling Operations (EU 010)

6. Fugitive Coal Dust Emissions Control Plan: The permittee shall prepare and operate in accordance with a submitted Fugitive Coal Dust Emissions Control Plan that is appropriate for the site conditions. The plan shall identify and describe the control measures used to reduce fugitive coal dust emissions within the fuel yard in accordance with NSPS Subpart Y of 40 CFR 60.254(c). The plan shall include the following: the use of a dispersant spray system to wet the material as needed prior to discharging into the hoppers and the self-unloading operations from the ships or barges; and, the distance between the discharge point of the hopper to the conveyor shall be kept at a minimum. [Rule 62-204.800(8)(b)33, F.A.C.; and, 60.254(c).]

EMISSIONS STANDARD

7. Visible Emissions: Visible emissions from the new solid fuel Hoppers (A – D) shall not exceed 20% opacity for any unconfined emissions in the fuel yard. The general 20% opacity standard does not require regular visible emissions testing. [Rule 62-296.320(4)(b)1, F.A.C.]

{Permitting Note: “Unconfined Emissions” are defined in Rule 62-210.200 as “Emissions which escape and become airborne from unenclosed operations or which are emitted into the atmosphere without being conducted through a stack.” Based on this definition the hoppers on the barge unloading belt are considered unconfined emissions subject only to the general 20% opacity standard and regular VE testing is not required. TEC is able to meet this limit by operating water sprays or applying surfactants as needed.}