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Authorized Representative:
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Manager – Air Programs

DEP File No. 0570039-057-AC
Supplemental Material Handling J3 Conveyor System
Big Bend Station
Hillsborough County
Expires: December 31, 2014

PROJECT AND LOCATION

This permit authorizes the construction of a supplemental material handling conveyor system (J3 Conveyor System) at the existing Big Bend Station located at 13031 Wyandotte Road, Apollo Beach, Hillsborough County. UTM Coordinates are Zone 17, 361.9 km East and 3075.0 km North; Latitude: 27° 47' 36" North and Longitude: 82° 24' 11" West.

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 and as described in the application, approved drawings, plans, and other documents on file with the Department. This project is not subject to the general preconstruction review requirements in Rule 62-212.300, F.A.C.

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

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Jeffery F. Koerner, Program Administrator
Office of Permitting and Compliance
Division of Air Resource Management

JFK/jkh/th&mc

CERTIFICATE OF SERVICE

The undersigned duly designated deputy agency clerk hereby certifies that this Final Air Permit package (including the Final Determination and Final Permit with Appendices) 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 Big Bend Station: rdbishop@tecoenergy.com
Mr. Byron T. Burrows, P.E., Manager-Air Programs EHS, TEC: btburrows@tecoenergy.com
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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.

FACILITY AND PROJECT DESCRIPTION

This existing facility consists of:

- Four coal and petroleum coke-fueled steam electrical generating units (Units 1, 2, 3 and 4);
- Two simple-cycle combustion turbines (SCCT Nos. 4A and 4B);
- Solid fuels, fly ash, limestone, gypsum, slag, and bottom ash storage and handling facilities;
- A ship surface coating operation; and
- Fuel oil storage tanks.

Project Description

This permit authorizes the construction of a supplemental material handling conveyor system (J3 Conveyor System) within the existing Solid Fuel Handling and Storage Yard.

This permit addresses the following new emissions unit:

E.U. ID No.	Brief Description
-048	Supplemental Material Handling J3 Conveyor System

This emissions unit and associated emissions points (below) will be part of the Solid Fuel Yard handling and storage activities at the Big Bend Station.

Currently, solid fuel (consisting primarily of coal and petcoke) is unloaded from ocean vessels 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 consists of six storage bins, where the solid fuel may be blended for use at the plant, or transloaded into trucks for shipment off site.

The new proposed points of potential emissions for the supplemental material handling conveyor system are identified as follows:

Solid Fuel Yard	
Point ID	**Description of Emissions Point**
Supplemental Material Handling Conveyor System	
FH-100	Dozer Stock Pile Operations (unconfined fugitive emissions)
FH-101	Dozer Operations to Grizzly Hopper (unconfined fugitive emissions)
FH-102	J3 Conveyor System (enclosed static drop point)
FH-103	J3 Conveyor System to “K” Feeders to L1 or L2 (enclosed static drop point)

Description of Operations:

The J3 Conveyor System may be utilized to feed coal, coal blends, and supplemental coal additives. Heavy equipment, such as bull dozers or similar equipment, will advance coal, coal blends or supplemental coal additives to the grizzly in-feed hopper (FH-100 and FH-101, dozer operations and grizzly hopper fugitive emissions) from the south coal pile. The material is fed by the grizzly hopper onto a 72” covered belt conveyor (FH-101) and is then conveyed to a 54” covered belt conveyor (FH-102). Finally, the coal, or supplemental material, will be conveyed to a new enclosed hopper at the existing K feeders (FH-103) (which feed into the existing enclosed L1 and L2 conveyors). The combination of the grizzly hopper, the 72” belt conveyor and the 54” belt conveyor will be collectively referred to as the J3 Conveyors. All drop points within the new conveyor system will be completely enclosed with no regular emissions to the atmosphere.

REGULATORY CLASSIFICATION

The facility is a major source of hazardous air pollutants (HAP).

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

The facility is a major stationary source (PSD-major source) in accordance with Rule 62-212.400, F.A.C.

The facility operates units subject to the Standards of Performance for New Stationary Sources pursuant to 40 Code of Federal Regulations (CFR) Part 60.

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

The facility operates units subject to the Federal Clean Air Interstate Rule (CAIR) in accordance with the Final Department Rules issued pursuant to CAIR as implemented by FDEP in Rule 62-296.470, Florida Administrative Code (F.A.C.).

The facility operates units certified pursuant to the Power Plant Siting provisions of Chapter 62-17, F.A.C.

This facility is located in an area (Hillsborough County) designated "unclassifiable" for SO_2, "maintenance" for Ozone (O_3), and lead (Pb), in the "area of influence" of the PM maintenance area and "attainment" for all the other criteria pollutants, pursuant to Rule 62-204.340, F.A.C.

RELEVANT DOCUMENTS

Several documents shown in the following link are not a part of this permit, but helped form the basis for this permitting action. Documents related to this permitting action are posted under permit No. 0570039-057-AC at the following web site address: http://appprod.dep.state.fl.us/air/emission/apds/default.asp

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 mailing address for the Office of Permitting and Compliance 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 Hillsborough County Environmental Protection Commission (HCEPC), Air Management Division. The mailing address and phone number of the HCEPC are 3629 Queen Palm Drive, Tampa, Florida 33619-1309; (813)627-2600 and (813)627-2620 (fax).

3. Appendices. The following Appendices are attached as part of this permit:
   a. Appendix A. Citation Formats and Glossary Terms;
   b. Appendix B. General Conditions;
   c. Appendix C. Common Conditions; and;
   d. Appendix NSPS, Subpart Y. 40 CFR 60, Subpart Y, Coal Preparation 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, 62-214, 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. [Rule 62-210.300, F.A.C.]

5. New or Additional Conditions. For good cause shown and after notice and an administrative hearing, if requested, the Department may require the permittee to conform to new or additional conditions. The Department shall allow the permittee a reasonable time to conform to the new or additional conditions, and on application of the permittee, the Department may grant additional time. [Rule 62-4.080, F.A.C.]

6. Modifications. No emissions unit shall be constructed or modified without obtaining an air construction permit from the Department. Such permit shall be obtained prior to beginning construction or modification. [Rules 62-210.300(1) & 62-212.300(1)(a), F.A.C.]

7. Construction Period and Expiration Date. The expiration date shown above is established for the purpose of providing sufficient time to complete the physical construction activities authorized by this permit, complete any necessary compliance testing, and obtain an operation permit. Notwithstanding the expiration date of this air construction permit, 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 the construction and testing period specified in this permit be extended beyond the expiration date shown above. Pursuant to Rule 62-4.080(3), F.A.C., such a request shall be submitted to the Department's Office of Permitting and Compliance in writing before the expiration of this permit. [Rules 62-4.070(4), 62-4.080 & 62-210.300(1), F.A.C.]

Emissions Unit 048

This permit addresses the following new emissions unit:

E.U. ID No.	Brief Description
-048	Supplemental Material Handling J3 Conveyor System

This supplemental material handling conveyor system consists of a grizzly in-feed hopper, which feeds material onto a 72" covered belt conveyor, a 54" covered belt conveyor, and an enclosed hopper at the existing K feeders (FH-103) (which feed into the existing L1 and L2 conveyors). The combination of the grizzly feeder, the 72" belt conveyor and the 54" belt conveyor will be collectively referred to as the J3 Conveyor System. All static drop points within the new conveyors will be completely enclosed with no emissions to the atmosphere.

The J3 Conveyor System will serve as a supplemental conveyance system for coal, coal blends and coal supplemental additives (such as limestone, flux, magnesium oxide, petroleum coke, ecotherm) for use with the existing conveyance feed system. In the event the use of an existing back up coal conveyor system or related equipment is warranted, the J3 Conveyor System will be available to operate continuously. The maximum throughput rate is designed for 2,000 TPH of solid materials, which is about half of the feed rate of the primary (existing) conveyor systems.

{Permitting Note: This new emissions unit and associated emissions points are subject to applicable requirements of 40 CFR 60, Subpart Y - Standards of Performance for Coal Preparation Plants, adopted by reference in Rule 62-204.800(8) (b)22., F.A.C.; and, to Rule 62-296.320(4)(c), F.A.C., Unconfined Emissions of Particulate Matter. This emission unit and associated emissions points are also subject to the Hillsborough County Environmental Protection Commission (HCEPC) Rules, Chapter 1-3, Stationary Air Pollution Sources and Ambient Air Quality Standards; specifically Part 5, Rule 1-3.52, Visible Emissions. In addition, this new emission unit and associated emissions points are subject to applicable requirement of Rule 62-296.700 Reasonable Available Control Technology (RACT) and RACT Rule 62-296.711 Materials Handling, Sizing, Screening, Crushing and Grinding Operations; because Rule 1-3.51, Particulate Matter Emissions of the HCEPC requires new emissions units to be subject to the Department RACT rule.}

ADMINISTRATIVE

1. Other Permits. The conditions of this permit are solely for the addition of the new J3 Conveyor System and do not affect or alter any previously established requirements at the facility. The facility remains subject to all of the requirements contained in all previously issued air construction permits for this facility. (Note: These requirements are reflected in each air construction permit and the current Title V Air Operation Permit No. 0570039-045-AV). [Rule 62-4.070, F.A.C.]

EQUIPMENT

2. J3 Conveyor System. The permittee is authorized to install a new supplemental material handling conveyor system within the existing fuel yard, consisting of the following identified potential emissions points:

Supplemental Material Handling J3 Conveyor System	
FH-100	Dozer Stock Pile Operations (unconfined fugitive emissions)
FH-101	Dozer Operations to Grizzly Hopper (unconfined fugitive emissions)
FH-102	J3 Conveyor System (enclosed static drop point)
FH-103	J3 Conveyor System to "K" Feeders to L1 or L2 (enclosed static drop point)

The permittee is also authorized to dismantle the existing K1B and K2B feeders and replace them with a new enclosed hopper to accommodate the full 2,000 tons per hour (TPH) conveying capabilities of the new J3 Conveyor System. [Application No. 0570039-057-AC]

CONTROL TECHNOLOGY

3. Equipment Enclosure. All conveyors and conveyor static drop points shall be enclosed to preclude particulate matter emissions. All covers shall remain in place when the system is in operation and reasonable precautions

shall be followed to assure compliance with the opacity limits specified in Specific Condition 9. [Rule 62.4.070(3), F.A.C.]

4. Water Sprays. Water sprays for storage piles, handling equipment, etc., shall be applied during dry periods and as necessary to all unconfined emissions points to maintain opacity below 20%. [Rules 62-4.160(2), 62.4.070(3) & 62-296.320(4)(c), F.A.C.]

5. Minimizing Wind Erosion - Storage Piles. Best management practices shall be used to minimize unconfined fugitive emissions from coal, coal blends and supplemental coal additives during operation. Best management practices for coal and supplemental material storage piles include (but are not limited to) shaping, compacting and orienting the piles to minimize wind erosion. [Rule 62.4.070(3), F.A.C.]

PERFORMANCE RESTRICTIONS

6. Permitted Capacity. The maximum throughout rate for the J3 Conveyor System shall not exceed 2,000 tons per hour (TPH). [Rules 62-210.200 (Definitions - Potential to Emit (PTE)& 62.4.070(3), F.A.C.; and, Application No. 0570039-057-AC]

7. Methods of Operation – Materials Handling. The materials that are allowed to be handled by this emissions unit are coal, coal blends and supplemental coal additives. [Rule 62.4.070(3), F.A.C.]

{Permitting Note: The materials that have been authorized by prior air construction permits to be handled at the Solid Fuel Yard are coal, petroleum coke, slag, beneficiated flyash, limestone and residual coal (generated at the TEC Polk Power Station).}

8. Hours of Operation. This emissions unit may operate as needed, up to 8,760 hours/year. [Rule 62-210.200 (Definitions - Potential to Emit (PTE), F.A.C. and Application No. 0570039-057-AC]

EMISSIONS STANDARDS

9. VE/Opacity Standards. Visible emissions shall not exceed 20% opacity for the dozer operations on open storage piles (FH-100 and FH-101) and 5% opacity for the enclosed J3 Conveyor System operations (FH-102 and FH 103). [Rules 62.4.070(3) & Rule 62-296.320(4)(b)1., F.A.C.; and, Rules 1-3.52.1 and 1-3.52.2, Visible Emissions, HCEPC.]

{Permitting Note: "Unconfined Emissions" are defined in Rule 62-210.200 F.A.C., and Rule 1.3.12 HCEPC, 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, emissions from operations related to the open storage piles (i.e. dozer operations on the storage piles, the open storage piles themselves, and non-fixed drop points from the dozer into the grizzly hopper) are considered unconfined emissions subject only to the general 20% opacity standard. VE testing is not required for these unconfined fugitive emissions.

The conveyors and static conveyor drop/transfer points are generically subject to 5% opacity. TECO is able to meet this limit by maintaining the required enclosures and by following best operating practices; therefore, additional add-on PM control devices are not needed. Because the J3 Conveyor System is fully enclosed with no emissions to the atmosphere, VE testing is not required.}

RECORDKEEPING AND REPORTING REQUIREMENTS

10. Fugitive Coal Dust Emissions Control Plan. In accordance with 40 CFR 60, Subpart Y - Standards of Performance for Coal Preparation and Processing Plants, the existing fugitive coal dust emissions control plan on file for this facility must be revised as needed to reflect any changes related to the construction or operation of this new emissions unit. The revised plan must be submitted to the compliance authority prior to startup of this new unit. [Rules 62.4.070(3) & 62-204.800, F.A.C.; and, 40 CFR 60.254(c)]