

***Tampa Electric Company
New Gypsum Storage Area
Petition for Modification R of Certification No. PA 79-12
Responses to FDEP Request for Additional Information Dated 11/13/12 and
EPCHC Comments Dated 11/27/12***

WATER FACILITIES PROGRAM COMMENT

FDEP COMMENT 1

The Petition indicates that contact stormwater and equipment wash water from the new gypsum handling and storage facility will be routed to the industrial wastewater management system (recycle pond system). Appendix F: Project Site Runoff Calculations indicates that the pond system will require an additional 4.75 million gallons of capacity to accommodate runoff from the project. How will sufficient capacity be provided in the recycle pond system?

Plan sheet number B2741-YSK-9-1, submitted with TEC's Petition for Modification, shows the pipe network that will be directing the contact stormwater to the pond system. The drawing indicates that the contact stormwater will be initially discharged into the settling pond and then ultimately discharged into the South Recycle Pond (SRP) which is operated in equilibrium with the North Recycle Pond (NRP). Furthermore, as reflected in the recently issued Draft of Big Bend IW Permit FLA017407, TEC has the ability to interchange excess stormwater between the SRP and the Long Term Flyash Pond (LTFAP) utilizing the 5,000 gpm system installed as part of the Settling and Recycle System Improvement Project completed in 2010. Attachment 1-Big Bend Ponds Stormwater Storage Capacities demonstrates that these three ponds provide an excess capacity of approximately 35.75 million gallons with one foot of freeboard, which is much more than adequate to accommodate the runoff from the proposed gypsum facility. However, if necessary, please note that arrangements could also be made to transfer water to the Big Bend Bottom Ash System, which provides an additional 13.86 million gallons of storage capacity.

ENVIRONMENTAL RESOURCE PROGRAM COMMENTS

FDEP COMMENT 2

The Petition states that all stormwater runoff from the proposed gypsum stack will be contained, collected, and piped to the off-site Industrial Wastewater ponds. No drawings or details were provided for such piping. Please provide cross-section drawings and detail drawings which included elevations for all new proposed structures (refer to Chapters 3.1.1, 3.2.1, and 3.2.2.4 of the B.O.R. If agreed, the applicant may also provide this detailed information as part of a post-certification submittal.

Detailed plan and profiles as well as spot elevations for all structures, were provided in Drawings B2741-YSK-9-1 and 9-2 and YSK-5-5 through 5-9, which were submitted with the Petition. Additional information in regard to the collection of contact stormwater/wastewater is being added to the Draft Industrial Wastewater Permit FLA017408 to describe the projected runoff from the new gypsum storage area. If

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necessary, more detailed information can be provided as part of a post-certification submittal.

FDEP COMMENT 3

The SW District ERP Section acknowledges the plan-view and cross-section drawings submitted in this Modification Petition. However, no cross-section drawings were provided for the railroad connection, the gypsum storage area, or the ditch blocks associated with the access roads. Please provide cross-section drawings and detail drawings which included elevations for all new proposed structures (refer to Chapters 3.1.1, 3.2.1, and 3.2.2.4 of the SWFWMD Basis of Review (B.O.R.)). If agreed, the applicant may also provide this detailed information as part of a post-certification submittal.

Cross-section drawings for the gypsum storage area were provided in drawings B2741-YSK-6-1 and B2741-YSK-6-2. Typical cross-section drawings for the ditch blocks were provided in sheet B2741-YSK-11-1. A typical cross-section drawing for the haul road producing the runoff that will be treated by the ditch blocks was included on sheet B2741-YSK-4. Elevations of each particular ditch block will be based on the elevations of the access roadway. These elevations will be based on typical dimensions. If necessary, more detailed information can be provided as part of a post-certification submittal.

FDEP COMMENT 4

The ERP application submitted as part of the Modification Petition states that wetland jurisdictional lines were confirmed by FDEP staff during the site visit on February 1, 2012. The application also states that FDEP staff did not confirm the jurisdictional areas located within the proposed railroad connection Wetland (W1). FDEP ERP Permit No. 29-0291610-002 issued to TECO for the railroad loop at the facility identifies a wetland area south of W1 which was originally labeled Wetland Q. From the information submitted, it appears that a portion of Wetland Q may be impacted by the proposed railroad connection. Please clarify the wetland boundary and subsequent impacts in this area of the project. SW District staff will need to review this wetland area in the field if there are significant changes from the surveyed wetland line confirmed in ERP Permit No. 29-0291610-002. Modification to the UAM score sheets and associated credit purchase may be required based on the above review.

TEC agrees to increase the acreage of wetland impacts along the proposed rail loop connection area identified as Wetland W1 to match the jurisdictional boundaries of the surveyed wetland, known as Wetland Q, already approved by FDEP through the TECO Big Bend Rail Loop Phase II permit (FDEP ERP Permit No. 29-0291610-002). The 0.14 acre increase in wetland impact acreage has been included on revisions to the ERP application plan view drawing (i.e., the color and black and white versions of Figure 7 in

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Attachment 2 of this response letter) and the plan view drawing located in Section 3.3 of the submitted Petition (i.e., Figure 3.3-1 in Attachment 2). Since there now are no significant changes to the formerly FDEP approved jurisdictional boundary because TEC has agreed to change the limits of Wetland W1 to conform with Wetland Q, it is assumed as implied in the above-referenced comment that no further field reviews by SW District staff are necessary. Please refer to the TECO Response to FDEP Comment 5 below for information on the change in mitigation credits associated with the increase in wetland acreage impacts.

FDEP COMMENT 5

The SW District acknowledges the UMAM and WRAP score sheets submitted in the Petition. Tampa Bay Mitigation Bank sells State credits based on UMAM. The final credit amount was produced by WRAP (used by the USACE). Please provide the final functional loss and number of credits to be purchased for State (FDEP) wetland impacts based on UMAM scoring.

The UMAM and E-WRAP scores for both of the wetland assessment areas Wetlands V2 and WQ (i.e., formerly W1) are the same when rounding the decimal to the nearest tenth (i.e., 0.3 and 0.4, respectively). Therefore, the calculation to determine the number of mitigation credits is the same for both the FDEP and U. S. Army Corps of Engineers. However, since the wetland impact acreage for the former Wetland W1 area (now referred to as Wetland Q) has increased (i.e., the acreage has increased from 0.16 to 0.30 acre), the number of mitigation credits required to compensate for wetland impacts will also increase from 0.07 to 0.13 credits:

Jurisdictional ID	FLUCFCS	Impact Acreages	UMAM/E-WRAP SCORES*		Mitigations Credits	
V2	511	0.04	x	0.3	=	0.01
WQ	641/619	0.30	x	0.4	=	0.12
TOTAL		0.34				0.13

*E-WRAP and UMAM impact scores match (see Attachment B).

Therefore, based upon the analyses provided, TECO will assume that purchasing 0.13 of oligohaline or freshwater wetland mitigation credits for FDEP from the Tampa Bay Mitigation Bank (TBMB) will be more than sufficient to offset impacts associated with the proposed project construction. The credits will be purchased from the TBMB by TECO after TECO receives approval from the FDEP. The UMAM and E-WRAP score sheets are included in this response as Attachment 3.

FDEP COMMENT 6

The proposed project will be filling a section of the existing channel (connecting node 824120 and 824100) and replace it with 2-36" culverts (culvert P7 in Figure 7).

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Please include the culverts in the proposed condition model to analyze if/how this modification will impact the adjacent properties, especially the ones upstream of the proposed culverts (Chapter 4.2 of the B.O.R).

The proposed condition model provided a flow rate at the location in question. This flow rate was used to calculate an adequate pipe size to prevent up or downstream impacts using Manning's equation. In the process of addressing this comment, culverts were added to the proposed conditions model. When 2-36" culverts were added to the model, an upstream increase in stage of 0.11' was realized at model junction 824120 during the 100-year event. All other junctions showed no increase in stage. The model was then modified to increase the size of the culverts from 36" to 42." The model was re-run with 2-42" culverts resulting in no upstream change of stage during the 100-year event. The updated model runs and updated model results comparison tables are included as Attachment 4, 5 and 6 of this submittal. A cross section of the revised P7 is included to indicate the change in culvert size as Attachment 7. Additionally, Drawings B2741-YSK-11-2 and YSK-11-3 have been revised to reflect this change in the culvert sizing and are included with Attachment 7.

FDEP COMMENT 7

Eight more sections of the existing ditches will be filled due to the proposed roadway construction and replaced with culverts. Please provide more detailed information about the local drainage pattern and how the conveyance system hydraulics and the water levels in areas that discharge to these systems will be affected (Chapter 4.2 of the B.O.R).

Calculations were completed based on existing structures throughout the system. Any culverts added within the system have been sized to convey the same flow as what was provided for in the existing condition. Figures 1 and 2 of Appendix B (Drainage Report) of the ERP application, and included in this submittal as Attachment 8, show the local drainage pattern of the area. Appendices B, C and D of the Drainage Report, and updated in this submittal as Attachment 4, 5 and 6, detail the conveyance system hydraulics and how the water levels will be affected by the project.

FDEP COMMENT 8

The Drainage Report states that the runoff from the proposed roadway will be collected and treated in the roadside swale. It is not clear if there are off-site discharges designed for these swales. Please provide more information as how and where the stormwater will be discharged after treatment volume is reached within the swales (Chapter 4.2 of the B.O.R).

These swales will be discharging into the existing ditches which already discharge from the project area. The proposed access roadways will not cause an increase in runoff volumes due to the presence of treatment swales and temporary retention of the runoff.

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FDEP COMMENT 9

Please label node #824080 in the Link Node Diagrams.

Node #824080 is labeled in the updated Link Node Diagrams included in this submittal as Attachment 8 (Figures 1 and 2 from the Drainage Report).

FDEP COMMENT 10

The petition includes information regarding Operation and Maintenance of the stormwater components of this project. Please note, a final agreed upon Operation and Maintenance Plan will be required to be attached to the final Conditions of Certification for this Modification.

Comment noted. A final agreed upon O&M Plan will be submitted for Department review prior to placing the new storage area into service.

FDEP COMMENT 11

Provide a wetland line survey for all affected areas of the project.

A wetland survey for all of the affected areas of the project is provided in Attachment D, except for the future rail loop connection. Since FDEP already has an approved copy of the wetland survey associated with Wetland Q along the rail loop connection, another copy will not be provided.

HILLSBOROUGH COUNTY EPC (EPCHC) COMMENTS

EPCHC COMMENT 1

Construction Noise

It should be noted that construction noise is specifically regulated in Section 1-10.04(11), Rules of the EPC, as follows: "Construction activities occurring between the hours of 7 a.m. and 6 pm Monday through Friday, 8 a.m. and 6 p.m. Saturday, and 10 am and 6 pm Sunday are exempt if 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. Construction activities occurring at all other times shall be subject to this Rule." Please provide information to demonstrate intended compliance with this rule.

The nearest residential receptors are over 0.8 miles to the east of the project and are separated from the project area by U.S. Highway 41, which is approximately 0.3 miles from these residences. The initial phase of construction will include construction of a ten foot high berm on the east side of the project which will also serve as a noise barrier for

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the duration of the project. Additionally, the project area is bounded by dense vegetation on the east side, which will serve as a partial sound barrier to abate noise, as well. For these reasons, it is unlikely that construction noise will be distinguishable from highway noise in the vicinity of the residences to the east. However, TEC will monitor noise in the vicinity of the project and, if the above measures do not appear effective, take reasonable precautions to abate noise generated by construction machinery by limiting the number of graders and dozers that are operating at any one time.

EPCHC COMMENT 2

Unconfined Particulate Emissions during Construction

The applicant states "Fugitive dust emissions from the construction area will be minimized using appropriate dust suppression control methods. These standard control methods will include placement of gravel on roads, applying water to roads and other exposed surfaces, or other methods, as needed." However, the applicant does not discuss what monitoring of the construction work will occur to ensure the measures implemented are adequate. Please provide additional more specific information on how unconfined emissions will be monitored to ensure no off-site impacts. We have some sensitive populations in the vicinity of the plant and they have been vocal in the past about dust in the area. We really need to ensure the applicant has a good plan in place.

There will be frequent inspections of project activities by the designated TEC Construction Project Manager, as well as Big Bend Station and Corporate Environmental Health and Safety staff members to ensure that fugitive dust emissions do not become excessive during construction. The initial phase of construction will include paving the haul roads detailed in the project plans so that trucks and construction equipment exiting the project area do not track excessive amounts of soil onto Wyandotte Road. Other Best Management Practices which could be implemented as necessary to reduce fugitive dust emissions include watering or vacuuming haul roads, covering truck beds when hauling fill materials and installation of gravel track-out pads.

EPCHC COMMENT 3

Asbestos - Construction

The applicant should be aware that should their construction activities require the demolition of an existing structure or building, the demolition activity may be subject to the National Emission Standards for Hazardous Air Pollutants (NESHAP), Subpart M, Asbestos. In Hillsborough County, the applicant should contact the EPC Air Management Division staff for more guidance. Please provide assurance that the applicant understands and will comply with these asbestos regulations.

TEC does not expect to demolish any structures with attached ACM as part of this project. However, TEC does have an existing Asbestos Abatement Program and utilizes a licensed contractor for any asbestos removal necessary during demolition of structures.

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If ACM is encountered during any work at the power station, TEC always follows the above requirements.

Open Burning - Construction

The applicant should be aware that pursuant to Chapter 1-4 (Open Burning), Rules of the EPC, the open burning of any vegetative materials generated from the clearing of rights-of-way and access roads must receive prior written EPC authorization. Please provide additional information that the applicant intends to comply with these open burning regulations.

TEC does not plan to conduct open burning as part of this project. However, if that need arises due to unforeseen circumstances, TEC plans to abide by the provisions of Chapter 62-256 FAC Open Burning and Frost Protection, and the non-procedural provisions of Chapter 1-4 (Open Burning). After determining that no open burning prohibitions are in effect at the time, TEC would provide advance notification of its intent to burn land clearing debris to both the Division of Forestry and the EPC and then conduct the activity as authorized by the Conditions of Certification.