

US EPA ARCHIVE DOCUMENT



TAMPA ELECTRIC

March 25, 2009

Mr. Richard Kinch  
US Environmental Protection Agency (5306P)  
1200 Pennsylvania Avenue, NW  
Washington, DC 20460

Via FedEx  
Airbill No. 7974 4806 5163

Dear Mr. Kinch:

**Re: Tampa Electric Company (TEC) - Big Bend Power Plant  
Request for Information Under CERCLA Section 104(e)**

In response to the above referenced letter of March 9, 2009 from Acting Assistant Administrator Barry N. Breen, Tampa Electric Company (TEC) submits the enclosed spreadsheet providing the requested information for all covered ponds at Big Bend Generating Station. This submittal is also accompanied by a signed Certification Statement by the Vice President of Energy Supply, who is responsible for this facility. Based on our understanding and discussion with EPA staff, no other TEC facilities are covered under the scope of this request.

TEC has for many years had a successful recycling program for the Coal Combustion Products (CCPs) that are produced at Big Bend. This program has resulted in the beneficial reuse of more than ninety-seven percent of those products. As a result, the necessity for long term storage of CCPs at this facility is relatively minimal when compared to many facilities where recycling programs are not as well developed and materials must be disposed of permanently on site. TEC intends to continue this program.

All of the ash ponds at Big Bend Generating Station have been designed and constructed with compacted structural fill in the pond bottoms and dikes and were installed with substantial HDPE liner systems, virtually eliminating the potential for seepage related structural deterioration. Furthermore, the beneficial reuse of such a high percentage of the CCPs has resulted in minimally sized ash ponds in terms of both areal coverage and dike profile. As illustrated by Attachment 1, the largest of the four ponds which directly receive ash is approximately 7 acres and maximum dike height is twenty-five feet. This compares favorably to many unlined ponds in the industry which are much larger and have heights of up to sixty feet or more.

The safe operation of these ash ponds at Big Bend Generating Station is a top priority for TEC. Inspections by the plant staff are conducted routinely to ensure that adequate freeboard is maintained and that no deterioration of liner systems and dikes has occurred. If the need for repairs is identified during an inspection, these repairs are carried out immediately.

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Based on a review of the National Inventory of Dams Hazard Classification System, and taking into account the factors outlined above, TEC believes a Low Hazard rating is appropriate for these facilities. Nevertheless, TEC remains committed to diligently managing the facilities in a manner that is protective of the public and the environment.

If you have any questions regarding this information, please feel free to contact me or Randy Melton of my staff at (813) 228-4560.

Sincerely,



Paul L. Carpinone  
Director-Environmental Health & Safety  
Tampa Electric Company

EHS/rlk/BRM173

Enclosures

**ATTACHMENT 2  
CERTIFICATION STATEMENT  
TAMPA ELECTRIC COMPANY  
BIG BEND STATION**

I certify that the information contained in this response to EPA's request for information and the accompanying documents is true, accurate, and complete. As to the identified portions of this response for which I cannot personally verify their accuracy, I certify under penalty of law that this response and all attachments were prepared in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fines and imprisonment for knowing violations.

Signature:

Name:

Title:

Thomas L. Hernandez  
Thomas L. Hernandez  
Vice President – Energy Supply

**ATTACHMENT 1**

**EPA COAL ASH INFORMATION REQUEST  
TAMPA ELECTRIC (TECO) BIG BEND STATION DATA**

| EPA Question # | INFORMATION REQUESTED   | BOTTOM ASH PONDS                     |                                      | ECONOMIZER ASH PONDS        |                             |                                | SETTLING-RECYCLE PONDS                   |  |  |
|----------------|---|--------------------------------------|--------------------------------------|-----------------------------|-----------------------------|--------------------------------|--|--|--|
|                |   | N. POND                              | S. POND                              | N. POND                     | S. POND                     | Long Term Flyash Pond          | SETTLING POND                            | N. RECYCLE POND                          | S. RECYCLE POND                          |
| 1              | HAZARD RATING(High-H, Significant-S, Low-L, Less than Low-<L) | L <sup>1</sup>                       | L <sup>1</sup>                       | L <sup>2</sup>              | L <sup>2</sup>              | L <sup>2</sup>                 | L <sup>3</sup>                           | L <sup>3</sup>                           | L <sup>3</sup>                           |
|                | RATING ESTABLISHED BY BASIS                                   | TEC                                  | TEC                                  | TEC                         | TEC                         | TEC                            | TEC                                      | TECO                                     | TECO                                     |
|                | REGULATED BY (AGENCY)   | FDEP/HEPC <sup>4</sup>               | FDEP/HEPC                            | FDEP/HEPC                   | FDEP/HEPC                   | FDEP/HEPC                      | FDEP/HEPC                                | FDEP/HEPC                                | FDEP/HEPC                                |
|                | YEAR UNIT COMMISSIONED/EXPANDED                               | 1984/2001 <sup>5</sup>               | 1984/2001 <sup>5</sup>               | 1984/2001 <sup>6</sup>      | 1984/2001 <sup>6</sup>      | 1984                           | 2009 (New Unit)                          | 2009 (New Unit)                          | 2009 (New Unit)                          |
| 3              | MATERIALS STORED  | BOTTOM ASH                           | BOTTOM ASH                           | FLYASH/PYRITE               | FLYASH/PYRITE               | Ash Residual                   | FGD/ASH Residuals                        | FGD/ASH Residuals                        | FGD/ASH Residuals                        |
| 4              | UNIT DESIGNED BY P.E. ?(Y/N)                                  | Y                                    | Y                                    | Y                           | Y                           | Y                              | Y  | Y  | Y  |
|                | CONSTRUCTION SUPERVISED BY P.E.? (Y/N)                        | Y                                    | Y                                    | Y                           | Y                           | Y                              | Y  | Y  | Y  |
|                | INSPECTIONS UNDER P.E. SUPERVISION? (Y/N)                     | N                                    | N                                    | N                           | N                           | N                              | N/A (Future Operation)                   | N/A (Future Operation)                   | N/A (Future Operation)                   |
| 5              | WHEN STRUCTURAL INTEGRITY LAST DETERMINED                     | 2001                                 | 2001                                 | 2002                        | 2002                        | 2002                           | 2008                                     | 2008                                     | 2009                                     |
|                | CREDENTIALS OF INSPECTOR/ASSESSOR                             | P.E.                                 | P.E.                                 | P.E.                        | P.E.                        | P.E.                           | P.E.                                     | P.E.                                     | P.E.                                     |
|                | CORRECTIVE ACTIONS IDENTIFIED?                                | Dike Repair/ Liner Installation 2001 | Dike Repair/ Liner Installation 2001 | Liner Repaired 2002         | Liner Repaired 2002         | Minor Dike Erosion Repair 2002 | New Dike Construction/Liner Installation | New Dike Construction/Liner Installation | New Dike Construction/Liner Installation |
|                | SCHEDULE FOR FUTURE ASSESSMENTS                               | Monthly Visual Inspection            | Monthly Visual Inspection            | Monthly Visual Inspection   | Monthly Visual Inspection   | Monthly Visual Inspection      | Monthly Visual Inspection                | Monthly Visual Inspection                | Monthly Visual Inspection                |
| 6              | LAST AGENCY INSPECTION  | Jan-09                               | Jan-09                               | Jan-09                      | Jan-09                      | Jan-09                         | Jan-09                                   | Jan-09                                   | Jan-09                                   |
|                | FUTURE INSPECTION SCHEDULED?                                  | None Scheduled <sup>7</sup>          | None Scheduled <sup>7</sup>          | None Scheduled <sup>7</sup> | None Scheduled <sup>7</sup> | None Scheduled <sup>7</sup>    | N  | N  | N  |
|                | INSPECTION REPORT?  | None Issued                          | None Issued                          | None Issued                 | None Issued                 | None Issued                    | N  | N  | N  |
| 7              | SAFETY ISSUES DISCOVERED WITHIN PREVIOUS YEAR?                | None                                 | None                                 | None                        | None                        | None                           | N  | N  | N  |
|                | CORRECTIVE ACTIONS (DESCRIBE OR NONE)                         | None                                 | None                                 | None                        | None                        | None                           | None                                     | None                                     | None                                     |
| 8              | SURFACE AREA OF MANAGEMENT UNIT (Acres)                       | 5.7                                  | 6.0                                  | 5.5                         | 7.4                         | 12.0                           | 1.0                                      | 2.6                                      | 8.6                                      |
|                | VOLUME CCP CURRENTLY STORED (cu. yds.)                        | 7,500 <sup>8</sup>                   | 7,500 <sup>8</sup>                   | 87,000 <sup>9</sup>         | 161,000 <sup>10</sup>       | de minimis                     | Future Use                               | Future Use                               | Future Use                               |
|                | DATE OF VOLUME MEASUREMENT                                    | Mar-09                               | Mar-09                               | Mar-09                      | Oct-07                      | Mar-09                         | Future Use                               | Future Use                               | Future Use                               |
|                | MAXIMUM HEIGHT (Feet above natural grade to dam crest)        | 25                                   | 25                                   | 25                          | 25                          | 9                              | 21                                       | 18                                       | 17 (2009 construction)                   |
| 9              | HISTORY OF SPILLS OR RELEASES                                 | None                                 | None                                 | None                        | None                        | None                           | None                                     | None                                     | None                                     |
| 10             | CURRENT LEGAL OWNER   | TECO                                 | TECO                                 | TECO                        | TECO                        | TECO                           | TECO                                     | TECO                                     | TECO                                     |

**FOOTNOTES**

- 1 - Big Bend's Bottom Ash Ponds are dewatered and all material recovered for reuse on a bi-monthly basis. Constructed with compacted structural fill and 60 mil HDPE liners, factors of safety are expected to be high for these units.
- 2 - The Economizer Flyash Ponds contain a total of approximately 250,000 cu. yds. of material which is continuously dewatered and stored in a relatively dry condition. The Long Term Flyash Pond is used for water overflow from the N. and S. Economizer Ash Ponds and would receive only de minimis amounts of ash in the overflow. All three ponds constructed with compacted structural fill and 60 mil HDPE liners. Factors of safety are expected to be high for these units.
- 3 - The Big Bend Settling Recycle System is currently being replaced by agreement between TECO and the FDEP. System design features compacted structural fill and a composite liner system.
- 4 - FDEP - Florida Department of Environmental Protection HEPC - Hillsborough County Environmental Protection Commission
- 5 - Pond constructed in 1984. Dikes were reconstructed and the ponds were relined in accordance with TEC/FDEP Agreement in 2001.
- 6 - Pond constructed in 1984. Dikes and liner were repaired in accordance with TEC/FDEP Agreement in 2002.
- 7 - No inspection currently scheduled, but routine annual agency inspections are conducted and expected.
- 8 - Estimate of average total storage amount based on constant mining and filling cycle of the two ponds. (See Footnote 1)
- 9 - Current estimate based on Engineer's assessment performed October 2007 plus approximate 2008 production.
- 10 - Engineer's assessment performed October 2007. No further addition of material planned. TEC is also evaluating potential beneficial reuse opportunities for this stored material.