

Tennessee Valley Authority  
Regulatory Submittal for Kingston Fossil Plant

Documents submitted:  
Ash Pond Mechanical Dredging Work Plan

Date Submitted:  
02/17/2010

Submitted to whom  
Leo Francendese

Concurrence

Received      Not Applicable

TVA

Mike Scott  
Steve McCracken  
Kathryn Nash  
Dennis Yankee *DM*  
Michelle Cagley *MC*  
Tom Spurlock *TS*  
Tim Russ *TR*

Received      Not Applicable

Jacobs

Steve Richardson  
Julie Pfeffer  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Approvals

TVA Michael J. Scott

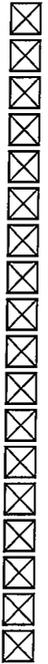
Date 2/17/10

EPA Leo Francendese

Date 2/17/10

*Consulted w/ TDEC*

cc:



- Anda Ray, TVA
- Barbara Scott, TDEC
- Leo Francendese, EPA
- Mike Scott, TVA
- Dennis Yankee, TVA
- Kathryn Nash, TVA
- Cynthia Anderson, TVA
- Steve McCracken, TVA
- EDM
- Julie Pfeffer, Jacobs
- Steve Richardson, Jacobs
- Michelle Cagley, TVA
- Greg Signer, TVA
- KIF Incident Document Control
- Katie Kline, TVA
- Dannena Bowman, EPA
- Jeff Gary, Jacobs
- Robert Pullen, Jacobs

## **Ash Pond Mechanical Dredging Work Plan**

### **1.0 Purpose**

Ash continues to accumulate in the ash pond. Efforts to reroute effluent from the pond dredging to the lateral expansion area and the filter presses have stabilized the free water volume but it is not increasing. Therefore, additional efforts are being proposed to remove solids from the ash pond through mechanical excavation means.

### **2.0 Design**

There are no design efforts. Stantec has been consulted about this effort and agreed there are no concerns associated with dike stability. However, Stantec is requesting the following limitations be put in place during implementation.

- Position trackhoes at least 15 feet from the edge of excavations to avoid undermining the equipment.
- Safety professionals evaluate what demarcations are feasible on the banks of the pond or in the pond to assist the operator in distinguishing 15 feet from the edge.
- Maximum depth of excavation of ash to be 10 feet. Slopes of excavation (where the ash does not fill in the excavation) would be 2.5:1 (horizontal to vertical).
- Do not excavate into the dike material which may consist of compacted ash.

Monitoring of the ash pond will continue for TSS (and pH during lime application) as under current approved plans.

### **3.0 Construction**

Up to two amphibious trackhoes would be placed in areas of the ash pond along the dike with high solids content. They may stack the ash in the pond to provide some limited drainage. They will direct load the ash into articulating trucks for transport to the sluice trench stacking area. Up to 500 cy of day may be removed from the pond. At the sluice trench stacking area, the ash will either be drained or treated with lime.

At no time will the dike itself be excavated. Excavation activities will occur far enough out in the pond to ensure no impact to the dike.

### **4.0 Schedule**

This work will begin upon approval of this plan. It is anticipated that this effort would occur throughout the duration of time critical actions, depending on the need.

### **5.0 Waste Management**

There are no additional wastes generated.

## **6.0 Health and Safety**

The site-wide safety and health plan will be followed.

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**From:** Howard, Jack [mailto:Jack.Howard@jacobs.com]  
**Sent:** Tuesday, February 16, 2010 6:51 AM  
**To:** Pfeffer, Julie  
**Cc:** Denton, Randy; Richardson, Steven D  
**Subject:** FW: ash pond dipping Work plan.doc

Julie: FYI and use.

Jack Howard, Jacobs

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**From:** Fuller, Don [Don.Fuller@stantec.com]  
**Sent:** Monday, February 15, 2010 8:51 PM  
**To:** Denton, Randy  
**Cc:** Howard, Jack; Steele, Mike (Lexington)  
**Subject:** RE: ash pond dipping Work plan.doc

Stantec concurs.

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**From:** Denton, Randy [mailto:rdenton@tva.gov]  
**Sent:** Monday, February 15, 2010 2:31 PM  
**To:** Fuller, Don  
**Cc:** Howard, Jack L.  
**Subject:** FW: ash pond dipping Work plan.doc

Julie concurs in this approach. The added wording in the work plan by you is incorporated, accordingly the plan is going forward for review,  
Do you concur?, any questions, let me know

Randy

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**From:** Fuller, Don [mailto:Don.Fuller@stantec.com]  
**Sent:** Monday, February 15, 2010 11:47 AM  
**To:** Denton, Randy  
**Cc:** Howard, Jack L.  
**Subject:** RE: ash pond dipping Work plan.doc

See attached.

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**From:** Denton, Randy [<mailto:rdenton@tva.gov>]  
**Sent:** Monday, February 15, 2010 7:46 AM  
**To:** Fuller, Don  
**Cc:** Howard, Jack L.  
**Subject:** FW: ash pond dipping Work plan.doc

Please review the work plan for the ash pond excavation, any comments, write in and we'll incorporate.

Thanks Randy

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**From:** Pfeffer, Julie  
**Sent:** Saturday, February 13, 2010 7:49 AM  
**To:** Denton, Randy  
**Subject:** ash pond dipping Work plan.doc

Please coordinate approval with Stantec first thing Monday morning (if not over the weekend). The only thing I am not comfortable with that they suggested are physical barriers in the pond. Neither me nor CP can see how to safely do that. Also, I have not used the word cell but am ok with excavations. I have talked this through with CP.

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