Tennessee Valley Authority
Regulatory Submittal for Kingston Fossil Plant

Documents submitted:
Addendum to the Aquarius Debris Removal Demobilization Plan Decontamination of AM501 and AM 504 (Rev 2)

Date Submitted:
09/9/2010

Submitted to whom
Leo Francendese

Concurrence

Received	Not Applicable	TVA
☐	☒	Steve McCracken
☒	☐	Michelle Cagley
☒	☐	Kathryn Nash
☒	☐	Tim Russ
☒	☐	Tom Heffernan

Received	Not Applicable	Jacobs
☒	☐	Steve Richardson
☒	☐	Butch Parton
☐	☐	_____
☐	☐	_____
☐	☐	_____
☐	☐	_____

Approvals

TVA Kathryn Nash Date 9/9/11

EPA Leo Francendese Date 9/10/10

pls see attached comments concerning approval.

cc:

- ☒ Anda Ray, TVA
- ☒ Barbara Scott, TDEC
- ☒ Leo Francendese, EPA
- ☒ Craig Zeller, EPA
- ☒ 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
- ☒ Brenda Brickhouse, TVA
- ☒ John Dizer, TVA

Cagley, April M

From: Francendese.Leo@epamail.epa.gov
Sent: Friday, September 10, 2010 11:53 AM
To: Cagley, April M
Cc: dbowman@otie.com
Subject: Re: Transmittal Cover for Regulatory Submittal - Addendum to the Aquarius Debris Removal Demobilization Plan Decontamination of AM501 and AM504 (Rev 2).pdf - Adobe Acrobat Professional
Attachments: Transmittal Cover for Regulatory Submittal - Addendum to the Aquarius Debris Removal Demobilization Plan Decontaminaton of AM501 and AM504 (Rev 2).pdf

Please include this explaination as part of the documentation for approval.

Ideally, the proposed decon work within the turbidity curtains should use the 2x background trigger for reevalution of debris removal processes that was used during the skimmer wall debris removal and decon.

It is my understanding that this environmental monitoring resource is not available and that TVA proposes instead to use as identified preexisitng hydrolabs. TVA proposes to use the turbidity readings much in the same way that it was used during the dredging operations.
As listed above, this is not ideal because dredging is completed and standards should be more restrictive for operations, not less.

I am willing to approve this workplan because historical data generated during the more invasive and aggressive skimmer wall debris removal and decon operation did not indicate exceedances of the 2X background trigger. In other words, turbidity was not an operational restriction during a more robust operation. It is reasonable to assume that
the relatively limited time of operation and less robust operations will also not generate excessive turbidty.

-----"Cagley, April M" <amcagley@tva.gov> wrote: -----

To: "Anderson, Cynthia M" <cmanderson@tva.gov>, "Barbara Scott" <Barbara.Scott@tn.gov>, "Brickhouse, Brenda Etheridge" <bebrickhouse@tva.gov>, <DBowman@otiesolutions.com>, Debbie Jourdan/R4/USEPA/US@EPA, "Dizer, John E Jr" <jedizer@tva.gov>, "Gary, Jeff" <jgary@tva.gov>, "Haas, Bruce J" <bjhaas@tva.gov>, "Hastings, D Mark" <dmhastings@tva.gov>, "Incident.Documentation" <Incident.Documentation@tva.gov>, "Kline, Katherine B" <kpbell@tva.gov>, Leo Francendese/R4/USEPA/US@EPA, "McCracken, Stephen Howard" <shmccracken@tva.gov>, "Nash, Kathryn Amanda" <kncopela@tva.gov>, "Pfeffer, Julie" <jpfeffer@tva.gov>, "Pullen, Robert P" <rppullen@tva.gov>, "Ray, Anda Andrews" <aaray@tva.gov>, "Richardson, Steven D" <sdrichardson1@tva.gov>, "Rogers, William J" <wjrogers@tva.gov>, "Russ, Timothy A" <taruss@tva.gov>, "Signer, Gregory R" <grsigner@tva.gov>, "Vitale, Rock" <rvitale@envstd.com>, "Yankee, Dennis Hunter" <dhyankee@tva.gov>
From: "Cagley, April M" <amcagley@tva.gov>
Date: 09/09/2010 04:37PM
cc: "Bousquet, Jude" <jbousquet@tva.gov>, "Crabtree-Hagemann, Terry L" <tlcrabtreehagemann@tva.gov>, "McDermott, Mary F" <mfmcdermott@tva.gov>, "Odom, Diane" <dodom@tva.gov>, "Poe, Katherine J" <kjpoe@tva.gov>, "Shepard, Diane B" <dbshepard@tva.gov>, "Whitehorse, Lori A" <lawhitehorse@tva.gov>, "Wood, Jamie J" <jjwood@tva.gov>
Subject: Transmittal Cover for Regulatory Submittal - Addendum to the Aquarius Debris Removal Demobilization Plan Decontamination of AM501 and AM504 (Rev 2).pdf - Adobe Acrobat Professional

Attached for EPA review and approval is the Addendum to the Aquarius Debris Removal Demobilization Plan Decontamination of AM501 and AM504.

Thank you,

MIchelle Cagley

Regulatory Interface Specialist

TVA

865-717-1636

RAWP-074A

Kingston Ash Recovery Project
Time-Critical Removal Action

Addendum to the
Aquarius Debris Removal Demobilization Plan
Decontamination of AM501 and AM504

Prepared by:
Jacobs

for the Tennessee Valley Authority

Revision	Description	Date
0	Work Plan Addendum for TVA Review	August 12, 2010
1	Work Plan Addendum for TVA Review	August 30, 2010
2	Work Plan Addendum for TVA Review	September 9, 2010

Addendum to the Aquarius Debris Removal Demobilization Plan Decontamination of AM501 and AM504

1 Assumptions

- The steps listed will be repeated for each barge.
- These items may be in progress on each barge or on both barges in different states of progression.
- Work is anticipated to begin August 30, 2010.

2 Unloading

- The barges will be unloaded of ash and other materials. This will take place with the crane/clamshell bucket and a skid steer loader. These items have an approved step text in place.
- The barges will be washed with fire hose inside of hopper and outside of barge.
- The wash water will be discharged into the hopper waiting for cleaning. The process will be reversed after the first hopper is complete.

3 Onsite Void Decontamination and Repair

- In the contaminated voids the downhill side with the ash contamination will have the hopper side cut out from floor/wall transition (corner) to the 2-foot mark just below the lowest horizontal frame member. This will open up the void area for ash removal.
- Precast concrete ballast blocks will be set on downhill side of barge on hopper floor to maintain the side to side list for slurry creation.
- The ash will be converted to slurry with fire hoses and the slurry will be pumped into the other hopper barge for overnight decanting. The decant water will be overboard discharged into the KIF Intake Channel/Emory River. The remaining solidified ash will be scrapped up with the skid steer and/or shovels and brooms (depending on the level) and removed from the barge with the crane. A clam bucket or a "skip pan" will be used for this process.
- All overboard discharge and swing radius for the crane will be contained with the use of a turbidity curtain.
- Water will be overboard discharged with a pump that will only pump water with a very low concentration of solids to ensure that ash will not be discharged overboard.
- Turbidity will be monitored using the same technology and acceptance criteria established in the Sampling Plan for Phase I Dredging Operations dated March 2009. Key elements of the monitoring include:
    - Floating turbidity monitoring systems exist upstream and downstream of the decanting operation. The upstream monitor is located at ERM 2.0, approximately 300 feet north and slightly east of the old Skimmer Wall. The downstream monitor is inside the KIF Intake Channel, approximately 200 feet west of the old Skimmer Wall.
    - When the delta between instantaneous readings (readings are collected every 15 minutes) for the upstream and downstream turbidity monitors exceeds 200 NTU an alarm will be issued

and work will stop until the delta for instantaneous readings drops below 150 NTU. An additional turbidity curtain may be installed at the discretion of the work crew to prevent recurrence.

- In the event the delta between the 24 hour rolling average for turbidity between the upstream and downstream monitors exceeds 200 NTU, another alarm will be issued and work must stop until the data is evaluated and the work practices and BMPs are evaluated by Environmental Compliance staff. For example, the turbidity may be high due to high flow conditions in the river, in which case no BMPs are likely to suffice and decanting operations should be discontinued until river conditions improve.

- When the ash is removed from the void areas the openings will have a 30 inch by one-quarter inch by required length plate placed over the hole and welded 100%.

- When hopper is repaired, the repaired barge will act as the slurry holding area for the second barge.

- Upon completion of each barge, an independent third party survey will be brought onsite for a survey to determine poundage for repair in a shipyard.

- The barges will be inspected and released from the Kingston Ash Recovery Project site for repair at the (lowest bidder) shipyard.