### Responses to TDEC Comments Dated October 18, 2006

To facilitate review of our revisions made following receipt of TDEC's comments dated October 18, 2006, we have provided the following responses and revised documents.

#### Comment 1:

Rule 1200-1-7-.04 (9) (b) 1. (ix) requires the applicant to clearly show, in the engineering plans, how run-on will be diverted from, and run-off will be removed from, the work areas, illustrating the locations and slopes of ditches, dikes, etc., to be utilized for such diversion/removal and the direction of flow.

The Plans show the outlet pipes for a stormwater interceptor ditch located above the landfill, for the purpose of collecting the surface runoff from the adjacent hillsides, to pass beneath the sediment pond for the landfill. We do not favor this design because if there is ever a failure of one of these pipes for any reason (and the system must remain in place for a long period of time), it would be likely that this would result in a localized collapse of the pond bottom resulting in a discharge of the pond through the stormwater bypass pipe, directly into the lake rather than through the intended NPDES permit outfall. The stormwater outlet should be routed in a different manner, which bypasses the sediment pond.

## Response 1:

The stormwater outlet referenced in the comment has been routed to bypass the sediment pond. Drawing Nos. 10W427-4, 5, 6, 7, 8, 11, 12, and 13 have been updated to present the revised grading for the stormwater outlet channels. Drawing No. 10W427-23 has been updated to remove Detail C23 for Stormwater Run-on Drop Inlet and Detail D23for Stormwater Culvert Under Pond, as these details are no longer applicable. For completeness, Drawing No. 10W427-13, Surface Water Management Plan, was updated to include names of each ditch segment. Drawing No. 10W427-21 was updated to include a table to present details of each ditch shown on the Surface Water Management Plan. It is noted that this information was previously presented in Appendix B titled "Design and Analysis of the Surface Water management System" but was not shown on the Design Drawings. Surface water calculations have been updated to include the new stormwater outlet channels and are presented in the revised Appendix B.

#### Comment 2:

For the downdrain inlets on final cover benches (as shown in "Details #C, D, E, and F-22" on Drawing #10W427-22 of the construction plans), we recommend that the elevated standpipes shown be replaced with grated inlets at the bench channel grade level, to prevent stormwater from building up over the benches and possibly washing out the

berms. Low check dams may be placed above the grated inlets to prevent clogging with sediment.

## **Response 2:**

Detail Nos. A, B, C, D, E, and F on Drawing No. 10W427-22 have been revised to replace the elevated standpipe inlets with grated inlets. The following note has been added: "Low check dams may be placed above the grated inlets to prevent clogging with sediment".

#### Comment 3:

Rule 1200-1-7-.04 (9) (d) requires the applicant to include, with the "Part 2" permit application, a copy of the closure/post-closure care plan. The plan must include a closure and post-closure cost estimate.

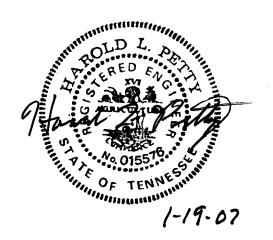
In the post-closure cost estimate (Item #IV-B, "Maintenance of Leachate Collection System"), no cost figures are allocated to "repairs/materials-pumps and cleaning out system". Leachate collected in the underdrain system is removed and pumped to the sediment pond through a lift station. This will have to be maintained through the post-closure period. There is also a possibility that clogging will have to be alleviated in the underdrain and/or slope drain systems. Cost figures need to be provided for these items, as well as for maintaining the lift station that is necessary for maintaining the water level in the sediment pond.

# **Response 3:**

Item #IV-B has been updated to include costs for repairs/materials for pumps and the cleaning out system. Also, the cost for maintaining the lift station is now included. A revised copy of Worksheet B is provided with this submittal.1

Title: OPERATIONS N	MANUAL	DCN#		
COAL COMBUS DISPOSAL FAC		Plant/Unit: KINGSTON FOSSIL PLANT		
Vendor	Contract No	110) 1104115.	Key Nouns: Permit, Closure/Post-Closure Plan KIF450	
Applicable Design Documents  References	REV	RIMS NUMBER	DESCRIPTION	
	R0		June, 2006 GeoSyntec Permit Application to TDEC Gypsum Disposal Area	
	R1		January, 2007 GeoSyntec Revisions in response to TDEC NODs	
	R2			

# TENNESSEE VALLEY AUTHORITY FOSSIL POWER GROUP FOSSIL ENGINEERING SERVICES SITE AND ENVIRONMENTAL ENGINEERING



	Revision 0	R1	R2
Date	June, 2006	Jan, 2007	
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