A60 050510 500 Env. Document Type: Solid Waste Correspondence

May 10, 2005

Mr. Larry F. Cook, Jr. Environmental Field Office Manager Knoxville Environmental Field Office Division of Solid Waste Management Tennessee Department of Environment and Conservation 2700 Middlebrook Pike, Suite 220 Knoxville, Tennessee 37921-5602

TENNESSEE VALLEY AUTHORITY (TVA) – KINGSTON FOSSIL PLANT (KIF) – HYDROGEOLOGIC EVALUATION OF COAL-COMBUSTION BYPRODUCT DISPOSAL FACILITY EXPANSION (IDL 73-0094) – REQUEST FOR WAIVER

Dear Mr. Cook:

We are in receipt of your letter dated April 26, 2005 concerning review of the KIF Hydrogeologic Evaluation of Coal Combustion Byproduct Disposal Facility Expansion Report. The report contains detailed numeric modeling which demonstrates equivalent environmental protection by use of a 2-foot granular drainage blanket between the existing ash pond surface and the developed dredged cells in lieu of a constructed clay buffer. As part of this design, perimeter drains will be installed to collect and drain infiltration from the stack thereby preventing the development of destabilizing internal pore pressures and will also reduce flux to the upper most aquifer underlying the site.

The modeling effort indicates a very minor improvement in effective reduction of leachate migration to the underlying aquifer with the inclusion of a constructed clay barrier in the design. It is shown that far greater protection of groundwater is gained during the Post Closure Phase of the facility when a low permeable cap will be constructed which will further mitigate potential groundwater impacts across the disposal area.

Given this demonstration, and in accordance with Rule 1200-1-7-.01(5), we are requesting a waiver from Rule 1200-1-7-.04(4)(b) which would require a geologic buffer between the fill material and the existing ash disposal area. We are confident that following review of the technical presentation contained in the hydrogeologic report, you will be in agreement that in the case at KIF, the addition of a soil buffer between the existing ash disposal area and the overlying fill material would add minimal environmental protection to the design and that our request is justified.

Mr. Larry F. Cook, Jr. Page 2 May 10, 2005

If you have any questions, please call Amos Smith at (423) 751-3522 or Linda Campbell at (865) 717-2157.

Gordon G. Park Manager of Permitted Programs Environmental Affairs 5D Lookout Place

ALS:SMF

cc: Mr. Glen Pugh, Manager Division of Solid Waste Management 5th Floor, L&C Tower 401 Church Street Nashville, Tennessee 37243-1535

> L. F. Campbell, KFP 1A-KST E. L. Deskins, KFP 1A-KST J. W. Shipp Jr., MR 2T-C B. B. Walton, ET 11A-K EDM, WT CA-K

U:\media files\sldwaste\general\KIFbuffer2 als 5-05.doc



Tennessee Valley Authority, 1101 Market Street, Chattanooga, Tennessee 37402-2801

Mary 10, 2005

Mr. Larry F. Cook, Jr. Environmental Field Office Manager Knoxville Environmental Field Office Division of Solid Waste Management Tennessee Department of Environment and Conservation 2700 Middlebrook Pike, Suite 220 Knoxville, Tennessee 37921-5602

TENNESSEE VALLEY AUTHORITY (TVA) – KINGSTON FOSSIL PLANT (KIF) – HYDROGEOLOGIC EVALUATION OF COAL-COMBUSTION BYPRODUCT DISPOSAL FACILITY EXPANSION (IDL 73-0094) – REQUEST FOR WAIVER

Dear Mr. Cook:

We are in receipt of your letter dated April 26, 2005 concerning review of the KIF Hydrogeologic Evaluation of Coal Combustion Byproduct Disposal Facility Expansion Report. The report contains detailed numeric modeling which demonstrates equivalent environmental protection by use of a 2-foot granular drainage blanket between the existing ash pond surface and the developed dredged cells in lieu of a constructed clay buffer. As part of this design, perimeter drains will be installed to collect and drain infiltration from the stack thereby preventing the development of destabilizing internal pore pressures and will also reduce flux to the upper most aquifer underlying the site.

The modeling effort indicates a very minor improvement in effective reduction of leachate migration to the underlying aquifer with the inclusion of a constructed clay barrier in the design. It is shown that far greater protection of groundwater is gained during the Post Closure Phase of the facility when a low permeable cap will be constructed which will further mitigate potential groundwater impacts across the disposal area.

Given this demonstration, and in accordance with Rule 1200-1-7-.01(5), we are requesting a waiver from Rule 1200-1-7-.04(4)(b) which would require a geologic buffer between the fill material and the existing ash disposal area. We are confident that following review of the technical presentation contained in the hydrogeologic report, you will be in agreement that in the case at KIF, the addition of a soil buffer between the existing ash disposal area and the overlying fill material would add minimal environmental protection to the design and that our request is justified.

Printed on recycled paper

Mr. Larry F. Cook, Jr. Page 2 May 10, 2005

If you have any questions, please call Amos Smith at (423) 751-3522 or Linda Campbell at (865) 717-2157.

Gordon & Park

Gordon G. Park Manager of Permitted Programs Environmental Affairs 5D Lookout Place

cc: Mr. Glen Pugh, Manager Division of Solid Waste Management 5th Floor, L&C Tower 401 Church Street Nashville, Tennessee 37243-1535