



STATE OF TENNESSEE
DEPARTMENT OF ENVIRONMENT AND CONSERVATION

6th floor - L&C Tower
401 Church Street
Nashville, Tennessee 37243-0437

January 19, 2010

Ms. Cynthia M. Anderson, Manager of Regulatory Interface
Tennessee Valley Authority
5D Lookout Place, 1101 Market Street
Chattanooga, Tennessee 37402-2801

Subject: **Stormwater Pond Leakage Evaluation and Stormwater Pond Liner Design
NPDES Permit No. TN0080870, TVA Kingston Fossil Plant
Harriman, Roane County, Tennessee**

Dear Ms. Anderson:

TDEC is in receipt of the two above referenced documents that were prepared in response to the November 20, 2009 notice of violation (NOV).

The NOV required TVA to identify the cause of the seepage and to develop appropriate corrective actions. The investigation did not discover any obvious features that would result in the seepage rates observed in the pond. The report concluded, among other things, that an opening as small as 0.34 inches could produce the observed seepage. The report recommended that an impermeable barrier be used to minimize hydraulic loading on the soils beneath the pond. TDEC concurs with this recommendation.

The corrective action proposed by TVA includes installation of a 60-mil thick HDPE geomembrane protected by a 20 oz/yd² geotextile cushion and a 2-ft thick protective layer. The liner will cover the entire bottom and interior side slopes of the pond. Prior to installation, the pond will be drained and excavated to 2 ft below existing grade. TDEC approves the corrective action proposed by TVA.

Please notify TDEC prior to commencement of the corrective action and if during the action, any additional problems are found. To do so, please contact either Barbara Scott at Barbara.Scott@tn.gov or me at Saya.Qualls@tn.gov.

Sincerely,

Saya Ann Qualls, P.E.
Chief Engineer
Division of Water Pollution Control

cc: Division of Solid Waste Management, Central Office
Division of Water Pollution Control, Permit File
Division of Water Pollution Control, Enforcement and Compliance
Division of Water Pollution Control, Knoxville Environmental Field Office