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June 30, 2003

Ms. Saya Qualls, P.E., Manager Permit Section Division of Water Pollution Control Tennessee Department of Environment and Conservation 6<sup>th</sup> Floor, L&C Annex 401 Church Street Nashville, Tennessee 37243-1534

Dear Ms. Qualls:

TENNESSEE VALLEY AUTHORITY (TVA) – KINGSTON FOSSIL PLANT (KIF) – NPDES PERMIT NO. TN0005452 – COMMENTS ON DRAFT PERMIT

TVA has reviewed the provisions of the draft permit and offers the following comments:

## **Cover Page and Outfall Descriptions**

 TVA requests that the discharge authorization statements on the permit cover page and for the individual outfalls reflect the operations described in the current permit renewal application since some descriptions have been modified. Suggested wording for the permit cover page is shown below; appropriate portions also should be placed in individual outfall descriptions

TVA – Kingston Fossil Plant is authorized to discharge: fly ash and bottom ash sluice water, storm water runoff, fire protection flushes and groundwater, coal yard runoff pond discharges including utility building drainage, coal pile and coal conveyor drainage, red water wetlands discharges, precipitator area washdown and roof drains, station sump discharges including boiler leakage, laboratory and analytical process water, boiler blowdown, miscellaneous equipment cooling and lubricating water, floor washing wastes, air conditioning cooling water, ID fan cooling water, ash system leakage and boiler bottom overflow, water treatment plant wastes, ammonia storage runoff, treated chemical and nonchemical metal cleaning wastes from Internal Monitoring Point 005 and nonchemical metal cleaning wastes from Outfall 001; once through condenser cooling water, storm water runoff, groundwater, raw water leakage and fire protection flushes, intake screen backwash, and boiler blowdown, from Outfall 002; storm water runoff, fire protection flushes,

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raw water leakage and noncontact cooling water from Outfall 006; storm water runoff and abandoned ash pond seepage from Outfall 007; drainage from sluice line trench from Outfall 008.

- 2. The total flows listed in the description of Outfalls 006, 007 and 008 do not match the current permit application and appendices in the permit rationale. The total flow from these outfalls is estimated to be 0.588 MGD which represents approximately 0.045% of the flows used for cooling and other purposes at the facility.
- 3. TVA requests inclusion of a specific monitoring location for pH and toxicity in Part I.B.1 of the renewed permit for Outfall 002. The current monitoring point is at the barge mooring cell downstream on the left bank of the discharge channel. This location is accessible for plant personnel and TVA believes this location to be adequate in obtaining representative samples from all discharging units. This location was previously approved by TDEC personnel.

# Part III.E, Biomonitoring Requirements

- TVA requests that Paragraph 1 be modified to reflect that toxicity monitoring occurs at Outfall 002, consistent with past requirements and Part I and Page R-13 of the permit rationale.
- 2. TVA requests that the reference to survival in the first sentence of Paragraph 2 be removed. The inhibition concentration represents the effluent concentration at which a given percentage reduction occurs in the sublethal endpoint. Reduced survival is accounted for since the mean reproduction or weight is determined using the number of organisms used to initiate the test rather than the number of surviving organisms.

<u>Example language</u>: The measured endpoint for toxicity will be the inhibition concentration causing 25% reduction (IC25) in reproduction or growth of the test organisms.

3. TVA requests that the reference to the days of sample collection in Paragraph 6 be used as an example only since the updated EPA guidance manual allows flexibility as to which sample will be used for three days. This allows more flexibility to resolve logistics issues such as those associated with weekend shipping, as long as holding time requirements are met.

<u>Example language</u>: All tests will be conducted using a minimum of three 24-hour flow-proportionate composite samples of final effluent (e.g., collected on days 1, 3 and 5).



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

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4. TVA requests that a "placeholder" be included in the renewed permit so that the permit will not have to be modified in the event that the Division of Water Pollution Control allows toxicity sample treatment using UV radiation.

<u>Example language</u>: The permittee is allowed to treat samples collected for toxicity testing on *Pimephales promelas* with UV radiation in accordance with written approval from the Division.

#### Permit Rationale

- 1. TVA asks that Linda Campbell, Program Administrator (Environmental) be listed as the primary contact at Kingston. Her number is (865) 717-2157.
- 2. TVA requests that nonchemical metal cleaning wastes be added to the permit rationale on Page R-18 of R-36 in addition to chemical metal cleaning wastes since both types of discharges could be sent to this pond (IMP 005).
- 3. Several statements on Part R-9 of R-36 regarding Ammonia, Nitrogen Total are incorrect. The dates and unit for the testing of the NOx removal system are not correctly identified. The testing was approved in January 2002 by the Division and the initial equipment test was on Unit 9 subsequent to receiving approval. Although TVA believes the action level for ammonia described in the permit is appropriate, the projected worst case concentration was revised to 2.85 mg/l in correspondence sent to your office. In addition, the installation of diffusers for the pipes comprising Outfall 001 was selected as the appropriate mitigation technology and TVA is in the process of installation.

TVA appreciates your consideration of these comments. If you have any questions or need additional information, please call Lindy Printz Johnson at (423) 751-3361 in Chattanooga or email her at <a href="mailto:lipjohnson@tva.gov">lipjohnson@tva.gov</a>.

Sincerely,

Janet K. Watts

Manager

Environmental Affairs

Hordin & Park

5D Lookout Place

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Sincerely,

Janet K. Watts Manager Environmental Affairs 5D Lookout Place

GGP!LPJ/SMF

cc: 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 EDMS, EB 5G-C

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