CLF EXHIBIT 08

EPA Letter to Tennessee Dep't of Env't & Conservation regarding TVA Kingston Fossil Plant (Aug. 8, 2011)

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 4
ATLANTA FEDERAL CENTER
61 FORSYTH STREET
ATLANTA, GEORGIA 30303-8960

AUG 8 2011

Mr. Paul E. Davis
Director, Division of Water Pollution Control
Tennessee Department of Environment
and Conservation
6th Floor, L & C Annex
401 Church Street
Nashville, Tennessee 37243-1534

Dear Mr. Davis:

On October 27, 2010, the Environmental Protection Agency received the draft National Pollutant Discharge Elimination System (NPDES) permit for the Tennessee Valley Authority (TVA) Kingston Fossil Plant, NPDES permit number TN0005452, which expired on August 31, 2008, and is being administratively continued. We provided comments to the Tennessee Department of Environment and Conservation (TDEC) in a letter dated October 27, 2010. On June 2, 2011, we received the proposed NPDES permit for the Kingston Plant. Following significant comments TDEC received during the permit's public notice period, a proposed permit was sent to us on June 2, 2011 (via email). In a letter dated June 14, 2011, to you, we requested up to 90 days to review the proposed permit in accordance with Section IV.B.6.c. of the Tennessee/EPA Memorandum of Agreement.

The plant discharges occur at mile 2.9 in the Clinch River. This segment is on Tennessee's Clean Water Act (CWA) Section 303(d) list for mercury, chlordane and polychlorinated biphenyls and has the following uses: Domestic Water Supply, Fish and Wildlife, Recreation, Navigation, Irrigation, and Livestock Watering. There are several drinking water intakes downstream of the Kingston plant; the closest one (Rockwood Water System) is approximately 16 miles downstream. Due to the high public interest regarding the impact of discharges from this facility, the fact that the receiving water body is classified as a source for drinking water and is listed for mercury, the proximity of several downstream drinking water intakes, and because the permit lacks an enforceable schedule of compliance addressing TVA's plans to reduce discharge volumes for both the ash and flue gas desulfurization (FGD) sedimentation ponds, the permit should be more stringent. As outlined below, we recommend the monitoring only requirements for metals discharged from outfalls 001 and 02A (internal outfall formerly permitted under NPDES permit number TN0080870) be replaced with technology-based effluent limits (TBELs), which we anticipate will be more stringent than any water-quality based effluent limits.

The proposed permit allows discharges from five outfalls. However, 99 percent of the discharges from the plant come from Outfall 001 (approximately 40.5 million gallons per day (MGD)) and Outfall 002 (approximately 1296 MGD which includes internal outfall 02A). In addition to fly ash and bottom ash sluice water, Outfall 001 also discharges the following wastewaters, most of which contain metals:

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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, induced draft 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 outfall 005 and nonchemical metal cleaning wastes. Based on TDEC's reasonable potential analysis, the permit contains monthly average monitoring requirments for several metals, including: aluminium, antimony, arsenic, barium, beryllium, cadmium, chromium, copper, iron, lead, mercury, nickel, selenium, silver, thallium and zinc. Outfall 002 discharges stormwater and treated FGD wastewater from internal outfall 02A (approximatley 1 MGD), as well as once through condenser cooling water, storm water runoff, groundwater, raw water leakage and fire protection flushes, intake screen backwash and boiler blowdown. In addition to limits and monitoring requirements for other parameters, the permit requires TVA to report the daily maximum and monthly average values for the following metals: arsenic, cadmium, copper, lead, nickel, selenium, thallium, zinc and mercury.

According to information contained in the permit rationale, TVA has plans to reduce the volume of wastewater (with concurrent metals loadings) from Outfalls 001 and 02A by mid-year 2013. Specifically, current plans call for the ash pond discharge to be reduced from 40.5 to 15.3 MGD by January 2013, which will result in a reduction of approximately 80 percent of the current metals loadings. TVA also plans to dewater the FGD slurry by end-of-year 2012, which should markedly reduce flows and metal loadings from internal outfall 02A. However, TVA is not required to do this under the terms and conditions of the proposed permit.

The NPDES permit must include numeric TBELs for the FGD pond (outfall 02A) as required by the CWA and implementing regulations. CWA Section 301(a)(1) requires that permits include limitations based on the application of statutorily prescribed levels of treatment ("technology-based effluent limitations"). Where the EPA has not promulgated technology-based effluent guidelines for a particular class or category of industrial discharger, or where the technology-based effluent guidelines do not address all waste streams or pollutants discharged by the industrial discharger, the permitting authority must establish TBELs on a case-by-case basis in individual NPDES permits, based on its best professional judgment or "BPJ."

TDEC did not establish TBELs, citing it was infeasible to do so due to limited data, the variability of the discharges, and lack of information in the EPA's 2009 Study. In lieu of establishing TBELs, the Best Management Practices (BMPs) language in Part IV of the permit states that within 60 days of the effective date, TVA "should" establish BMPs based on guidance in Attachment 1 and submit the BMP plan to TDEC for review. There are several elements to this language that present enforcement challenges. First, the word "should" should be replaced with the word "shall." Second, for clarity, the language should read "Attachment 1 to the permit Rationale for this permit, which has been incorporated as part of this permit." Third, the BMP Plan conditions in item F of Attachment 1 do not specifically address how effectiveness of the BMPs will be measured. Moreover, the EPA does not agree with

TDEC's statement regarding the infeasibility of determining numeric TBELs. The EPA believes there is available, existing effluent data in the permit applications for the Kingston plant, as well as other TVA facilities, to make informed judgments regarding appropriate numeric TBELs. Even with limited data, the EPA's view is that it is feasible to calculate TBELs. The EPA's Appeals Board has supported this interpretation in several decisions.

In October 2009, the EPA completed a study of wastewater discharges from both FGD and Coal Combustion Residuals impoundments (i.e., ash ponds). Findings indicate the need for revised effluent guidelines (EGL) for these wastestreams due to the potential for metals to exist in relatively high concentrations. The Agency plans to promulgate a revised EGL in 2013. In order to address these discharges during the interim period, on June 7, 2010, the EPA issued guidance entitled "*National pollutant Discharge Elimination System (NPDES) Permitting of Wastewater Discharges from Flue Gas Desulfurization (FGD) and Coal Combustion Residuals (CCR) Impoundments at Steam Electric Power Plants.*" As described in Appendix A of that guidance, the applicable Steam Electric Power Generating ELG and standards promulgated in 1982 did not consider the FGD wastestream. Thus, TBELs based on BPJ to address FGD wastewater at steam electric power plants are appropriate. To assist in the development of such limits, the guidance mentioned above provides state permitting authorities with information on how to establish TBELs based on BPJ to address FGD wastewater at steam electric power plants.

Additionally, the record for the 1982 ELG indicates that best available technology (BAT) was not established for fly ash or bottom ash transporter water in the final 1982 rule. These wastewaters discharge from CCR impoundments. Thus, BAT-based limits would currently need to be established through BPJ for discharges from CCR impoundments.

Based on our review of the fact sheet, TDEC's BPJ BAT analysis did not consider the economic factors, as required by 40 Code of Federal Regulations (CFR) § 125.3(d)(3)(v), including the comparison and level of reductions of metals from using treatment options other than sedimentation such as chemical precipitation, biological treatment, or zero discharge, which were identified in the EPA June 7, 2010, memorandum. Additionally, the analysis failed to establish appropriate TBELs as required by CWA § 301(a)(1) and applicable federal regulations at 40 CFR § 125.3 (applicable to state NPDES permit programs per 40 CFR § 125.25). Therefore, TDEC should reconsider the guidance and the obligations under CWA § 301 in this permit reissuance by evaluating the costs for TVA to install, at a minimum, chemical precipitation and/or biological treatment for the ash and FGD pond discharges in order to reduce the effluent discharge of metals. If the revised analysis still concludes that the existing ponds are BAT (especially given that TVA's current plans are to reduce wastewater discharges from the ponds within two years), TDEC could establish TBELs that reflect the performance of these ponds using

reported effluent characteristic data for metals contained in the facility's Discharge Monitoring Reports and/or recent permit application. If you have any questions, please contact Ms. Karrie-Jo Shell of my staff at (404) 562-9308.

Sincerely,

Christopher B. Thomas, Chief
Pollution Control and Implementation Branch
Water Protection Division

cc: Ms. Linden P. Johnson
Manager, Water Permitting and Compliance
TVA - Environmental Affairs

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