

April 17, 2015

Debbie Duren
Natural Resource Trustee Program
Tennessee Department of Environment and Conservation
761 Emory Valley Road
Oak Ridge, TN 37830

Re: TVA KIF Plant Coal Ash Release Natural Resource Damage Assessment
Restoration and Compensation Determination Plan

Dear Ms. Duren:

Please accept these comments from Tennessee Clean Water Network, Southern Alliance for Clean Energy, Environmental Integrity Project, Earthjustice, Sierra Club (Tennessee Chapter), Statewide Organizing for Community eMpowerment, and Southern Environmental Law Center (collectively, "Commenters") regarding the draft Restoration and Compensation Determination Plan ("RCDP") for the Kingston coal ash spill. Overall, Commenters are concerned about the process by which the Natural Resource Damage Assessment ("NRDA") and RCDP were developed and the flawed analysis that underlies the RCDP's conclusions.

1. **TVA Role** – While it is appropriate for TVA to participate in the NRDA and RCDP process as a responsible party,¹ it is a clear conflict of interest for TVA to serve as a Trustee with decisionmaking authority regarding the amount and form of compensation to the public for the natural resource damage it caused. This arrangement is akin to having a defendant in a lawsuit serve on its own jury.

The precedent of federal agencies such as DOD and DOE serving in the dual role of trustee and responsible party does not justify TVA doing the same. TVA is a quasi-federal entity whose negligent actions leading to the nation's largest coal ash spill were taken in its role as a power producer, a capacity comparable that of a private company.

TVA's role as the responsible party in this incident is clear, but its role as a trustee is tangential at best. The RCDP itself acknowledges TVA "*may* also be a co-trustee for some *potentially* injured resources."² The RCDP reports that TVA not only provided

¹ See generally 40 C.F.R. Part 11.

² RCDP at 5 (emphasis added). The report cites 40 C.F.R. § 300.600(a)(4) as justification for TVA's role as trustee. This citation does not exist, and presumably 40 C.F.R. § 300.600(b)(4).

funding and data (which is appropriate in its role as the responsible party), but also participated in the development of the injury assessment and identification and assessment of restoration alternatives. Having TVA play these additional roles is a significant procedural flaw that undermines the integrity of the NRDA and the RCDP.

2. **Alternatives Analysis** – The alternatives analysis in the RCDP was constrained by the minimal number of options considered. In essence, the RCDP listed two alternatives: do nothing, or do the selected option. In particular, no alternatives to the Swan Pond restoration were considered. Moreover, the RCDP did not meaningfully assess the no-action alternative, which would have provided a baseline to which multiple action alternatives could have been compared.
3. **Flawed Public Process** - The current public comment period is somewhat meaningless given that the Swan Pond project is nearly complete. Obviously, the Trustees were committed to that project long before the draft RCDP was presented to the public, and nothing the public could say at this point could affect this predetermined outcome. The Swan Pond project accounts for 85% of the total compensation to the public for natural resource damages. Moreover, the RCDP states that “TVA provided a cash payment of \$750,000 to the Trustees,”³ indicating that the remaining 15% of the total compensation has also been determined prior to public review.
4. **Contaminant-Related Injury** – The RCDP’s conclusion that “there is little evidence of substantial toxicity-derived service loss”⁴ resulting from the Kingston spill is based on a flawed analysis that used overly-generous assumptions and methods to derive artificially low estimates of injury to natural resources from the toxic pollutants TVA released to the environment. This underestimate results from using screening values that are too high, and comparing them to a geometric mean of the observed values, which is too low. As a result, the overall amount of compensation to the public is also too low.⁵
 - a. **Threshold Values** – In general, the screening criteria values used in Exhibits A-1, A-2, and A-3 appear to be artificially high, which has the effect of minimizing the amount of injury that might possibly be identified. The process used to select these criteria is unclear, and many of the values used for fish tissue screening were derived by Industrial Economics, the author of the RCDP.⁶ The report also cites a 1998 DOI report as justification for using a selenium sediment concentration screening criterion of 4 mg/kg, when more recent data indicates that 2 mg/kg is a more appropriate threshold.

³ RCDP at 27 (emphasis added).

⁴ RCDP at 13.

⁵ In addition, although the RCDP acknowledges there may be additional effects due to bioaccumulation of contaminants of concern (“CoCs”), the plan does not provide for monitoring of these potential toxic impacts over time.

⁶ Table A-2 cites Industrial Economics for six of the twelve CoCs evaluated. Table A-3 cites Industrial Economics for seven of thirteen CoCs evaluated.

- b. **Geometric Mean** – The observed concentrations of CoCs were presented as geometric means of all data points, which artificially reduces the observed values used for the analysis. At the public hearing, Industrial Economics explained it had used the geometric mean to account for the observed concentrations that were below the required detection levels, noting these values result in a distribution of values that is not lognormal.⁷

There are other options to address non-detect results that would be more conservative and more accurately reflect the environmental impact of the Kingston spill. For example, EPA suggests using a modified delta lognormal distribution when developing case-by-case effluent limits using data that includes a combination of measured values and values below the detection limits.⁸ As EPA explains, “The modified delta-lognormal distribution assumes that all non-detected results have a value equal to the detection limitations and that the detected values follow a lognormal distribution.”⁹ Using this EPA-recommended methodology would likely have resulted in a finding of more significant natural resource damage from CoCs.

Commenters request the response to comments provide a table of all data points used in the analysis of contaminant-related injury, as well as a calculation of the mean, median, and modified delta-lognormal values for each set of data. Commenters also request that these results be evaluated before making a final determination of the natural resource damage resulting from contaminant-related injury.

5. **Failure to Define Selection Process for Additional Restoration Projects** – The RCDP does not define the selection process or criteria to allocate the cash payment for additional habitat and recreation projects. Instead, the report merely lists examples of possible projects, and does not prioritize or allocate funds between habitat and recreation. These omissions make it difficult to comment on the effectiveness of this element of the proposed cash payment for restoration to offset damages to public trust resources.

⁷ These detection levels are not identified in the RCDP. Because detection levels can vary depending on methodology used, Commenters request this information be provided in the response to comments. A higher detection level is more likely to result in non-detection. Mercury, in particular, can be very toxic even below detection levels for certain methods.

⁸ EPA, NPDES Permit Writers’ Manual, at 5-47.

⁹ *Id.*

We appreciate your consideration of these comments. If you have any questions, please do not hesitate to contact me at 865-522-7007x102 or stephanie@tcwn.org.

Sincerely,



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Southern Alliance for Clean Energy

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