



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

February 24, 2012

10 CFR 30.38

Ms. Laurie A. Kauffman
Division of Nuclear Materials Safety
U.S. Nuclear Regulatory Commission, Region I
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Tennessee Valley Authority
Material License No. 01-25284-01
Docket No. 030-33440

Subject: Response to Request for Information Regarding By-Product Material License Amendment Application for Tennessee Valley Authority's Mixed Waste Facility License, Mail Control No. 576543

- References:**
1. Letter from TVA to NRC, "By-Product Material License Amendment Application for Tennessee Valley Authority's Mixed Waste Facility License," dated December 12, 2011
 2. Letter from TVA to NRC, "Response to Request for Additional Information Regarding Decommissioning Funding Plan and Statement of Intent, Mail Control No. 14496," dated November 30, 2010

The purpose of this letter is to respond to your February 17, 2012 e-mail in which you requested additional information regarding the subject license amendment application (Reference 1). In your request, you stated that the Tennessee Valley Authority (TVA) must conduct an evaluation of its Decommissioning Funding Plan (DFP) cost estimate because the amendment request adds Polychlorinated Biphenyls (PCB) as a type of contaminated material to the facility. You requested that TVA provide the results of this evaluation if one had already been completed or perform an evaluation and provide the results of the evaluation and any necessary revision to the DFP by February 24, 2012.

The TVA's DFP for this license was included in a letter to the NRC dated November 30, 2010 (Reference 2). TVA has reviewed the Mixed Waste Storage Facility DFP to determine if the amendment of the authorized use condition of the Mixed Waste Storage Facility license to add chemically hazardous constituents that include materials, such as PCBs, as defined in Subchapter R - Toxic Substances Control Act of 40 CFR, Chapter I - Environmental Protection Agency, will increase the DFP cost estimate by greater than

10%. TVA concluded that the amendment of the Mixed Waste Storage Facility license as requested would not change the current DFP cost estimate and a revision of the DFP is not required. The conditions and assumptions considered in the evaluation and the conclusions are described in the enclosure.

If you have any questions regarding this letter, please contact me at (423) 751-6887.

Respectfully,


For J. W. Shea

cc: (Enclosure)

NRC Document Control Desk
EDMS

LRM

bcc (Enclosure)

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Enclosure

Evaluation of the Impact of the Amendment to NRC License No. 01-25284-01 On the Decommissioning Funding Plan (DFP)

Authorizing Possession and Storage of Low Level Radioactive Waste Mixed With Toxic Substances Control Act Materials at the Mixed Waste Storage Facility (MWSF)

Conditions and Assumptions:

The storage of the low level radioactive waste (LLRW) mixed with Toxic Substances Control Act (TSCA) materials, such as PCBs, will be in the current facilities described in the current DFP enclosed in the TVA letter to the NRC dated November 30, 2010, and no additional facilities will be used for the storage of these materials.

The operations conducted at the MWSF, including the handling and storage procedures for the LLRW/TSCA materials will be the same or very similar to those currently used for the handling and storage of the LLRW and chemically hazardous constituents. These procedures will be amended as needed to ensure the LLRW/TSCA wastes are properly classified, handled, and stored in accordance with NRC and EPA regulations that apply to this mixed waste material. The operations conducted at the MWSF, as described in the current DFP, will essentially be unchanged.

The key assumptions contained in the DFP enclosed in the TVA letter to the NRC dated November 30, 2010, are unchanged and apply to the decommissioning of the facility if LLRW mixed with TSCA material, such as PCBs, is possessed and stored at the facility.

As described in the current DFP, the quantity of LLRW that contains chemically hazardous constituents that may be accumulated before shipment for disposal is estimated to be 3 drums. The addition of LLRW/TSCA wastes to the authorized use condition of the NRC license is not expected to cause the 3 drum estimate to change. The presence of one additional drum (4 drums total), if that were to occur, should not cause a greater than 10% change in the DFP cost estimate (a change of \$4500).

The cost for disposal of a drum of LLRW/TSCA wastes is approximately the same as that for a drum of LLRW that contains chemically hazardous constituents (\$3500 per drum). If conditions change and disposal costs for a drum of LLRW/TSCA wastes exceed the current amount for a drum of LLRW that contains chemically hazardous constituents, then the DFP will be evaluated and updated as needed.

There are currently no mixed waste drums in storage at the MWSF. There is currently one drum of LLRW/TSCA waste (PCBs) that was generated at a TVA facility that will be transferred to the MWSF if the license is amended. There are currently two other drums of LLRW mixed waste awaiting disposal that were generated at a TVA facility and may be transferred to the MWSF.

Evaluation of the impact on those components of the DFP that contribute to the MWSF decommissioning cost estimate of \$45,000:

Planning and Preparation No
change

Planning and preparation work days would be the same.

Decontamination or Dismantling of Radioactive Facility Components No
Change

Key Assumption 1 as described in DFP is unchanged; decontamination or dismantling of radioactive facility components will not be required.

Restoration of Contaminated Areas on Facility Grounds No
Change

Key Assumption 1 as described in DFP is unchanged; restoration of contaminated areas on facility grounds will not be required.

Final Radiation Survey No
Change

Final survey activities and work days unchanged.

Site Stabilization and Long-term Surveillance No
Change

Key Assumption 1 as described in DFP is unchanged; site stabilization and long-term surveillance will not be required.

Packing Material Costs No
Change

Key Assumption 1 as described in DFP is unchanged; when mixed waste is received, it is packaged in a form ready for transport and disposal. Packing material costs are not applicable.

Shipping Costs No
Change

Shipping cost for potential LLRW/TSCA waste is the same as current mixed wastes. Increase in amount of waste accumulated for disposal is not expected.

Waste Disposal Costs No
Change

Disposal costs for potential LLRW/TSCA waste is the same as current mixed wastes. Increase in amount of waste accumulated for disposal is not expected.

Equipment/supply Costs (Excluding Containers) No
Change

Needed equipment and supplies are the same (survey equipment).

Laboratory Costs No
Change

Laboratory costs are the same (counting of contamination smears).

Miscellaneous Costs No
Change

There are no estimated miscellaneous costs.

25% Contingency No
Change

There were no changes to decommissioning costs so the 25% contingency is the same.

Total Decommissioning Cost Estimate No
Change

There were no changes to decommissioning costs so the total decommissioning cost is the same.