



UNITED STATES  
NUCLEAR REGULATORY COMMISSION  
WASHINGTON, D. C. 20555

JUN 10 1979

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40-1341

Tennessee Valley Authority  
ATTN: Mr. J. E. Gilleland  
Assistant Manager of Power  
500 C Chestnut Street, Tower II  
Chattanooga, Tennessee 37401

Gentlemen:

We have received and reviewed your Conceptual Decommissioning Plan and supporting Environmental Report (ER), dated February 26, 1979, associated with your Source Material License SUA-816. The purpose of this letter is to inform you of our concerns in two areas which are of paramount importance. These areas are (1) the evaluation of alternative tailings disposal sites and (2) the required offsite remedial action program.

Tailings Disposal Siting Alternatives

We are in full agreement that the tailings should be removed to and reclaimed at a more remote location. However, on the basis of information provided in the TVA ER, it is not possible to determine whether a sufficient range of tailings management alternatives and sites have been evaluated.

TVA has proposed relocating the tailings to an impoundment approximately two miles further southeast from Edgemont, South Dakota. We feel that additional information concerning alternative sites is needed to determine whether other sites exist which would better meet the objective of ensuring isolation of tailings remote from people. Since handling costs are a major component in the transportation costs, it is not clear from information provided in the TVA ER, that a small increase in haulage distance would result in a significant increase in total cost. For example, thorough consideration should be given to removal of tailings to an open pit mine(s) (Site 8, Alternative VI of the Phase II-type study of the Edgemont site, dated May, 1978) and to sites located further to the southeast or east (which could be reached by off-road large vehicles similar to those which would be used in the proposed plan).

We propose meeting with the TVA and appropriate federal, state, and local government personnel in Edgemont sometime in July to inspect and agree upon candidate sites. Such a technical information meeting would help to ensure that a full range of sites has been examined. After this

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inspection and a review of all available data on the sites, a better informed evaluation of alternative sites will be possible. A decision concerning site suitability must be made promptly to help ensure decommissioning work can proceed by next construction season.

In a meeting on June 26, 1979, between TVA and NRC staffs, TVA staff indicated that a broader range of sites than is discussed in the ER was evaluated. On the basis of information available to TVA on these sites, the range of candidate sites was narrowed to those covered in the TVA ER. To facilitate discussions at the proposed meeting in Edgemont, TVA is requested to provide information describing the full range of sites that have been evaluated and the criteria employed in evaluating them. In addition to the concern for placing tailings remote from people, these criteria should include the fundamental concerns of: (1) providing long-term stability of the impoundment system [i.e., the degree to which the alternative meets the criteria in Section 12.2.1 of the draft Generic Environmental Impact Statement on Uranium Milling (NUREG-0511)], (2) minimizing or eliminating impacts to groundwater, and (3) minimizing impacts of transportation. Any other criteria or considerations used, such as cost and technical difficulties associated with a particular site could also be identified.

#### Offsite Remedial Action

In the Conceptual Decommissioning Plan, TVA takes the position that the decommissioning plan should not provide for the cleanup of tailings which were blown or hauled offsite. Although we recognize that the legal responsibility may not be clear in this case, it is clear that offsite contamination exists and that remedial action will be necessary. It was for this reason that the NRC informed the TVA by letter dated July 6, 1979, that the decommissioning plan for the mill should include the cleanup of offsite structures and open lands, and the staff's Technical Position for Interim Land Cleanup Criteria was referred to for guidance.

The required remedial action should not be extensive. Data from gamma surveys conducted by the EPA in Edgemont in 1971-72 and in 1978 indicate that approximately 56 properties in Edgemont, excluding Cottonwood Community, are contaminated with tailings. The contamination has resulted from windblown tailings and from the use of tailings as fill material. Only one residential structure has been located in which tailings were used as fill under the slab and around the basement walls; the remaining contaminated locations do not directly involve structures. In addition, the entire Cottonwood Community (with approximately 25 structures) has been contaminated with windblown tailings.

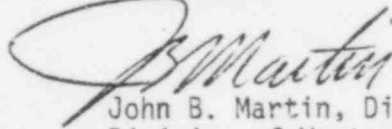
The next step is development of a cleanup program consisting of step-by-step procedures for screening locations and for completing appropriate corrective action. This would include a more comprehensive and systematic

survey and measurement program (including gamma surveying, radon daughter concentration measurements and analyses of selected soil samples) to define more precisely the scope of the cleanup required.

We plan to work closely with TVA and appropriate federal and state personnel in developing the required remedial action program and feel that with an appropriate amount of management attention remedial action can be initiated this summer. We would like to meet at an early date to discuss this in more detail and will be contacting you to arrange a mutually acceptable time and place.

It is imperative that the scope of the decommissioning be defined at the outset, and in no way is anything in this letter meant to imply a decrease in our sense of urgency in this matter.

Sincerely,



John B. Martin, Director  
Division of Waste Management

cc: The Honorable William J. Janklow  
Governor of South Dakota

Mr. Richard Howard, Acting Secretary  
South Dakota Dept. of Environmental Protection