TENNESSEE VALLEY AUTHORITY

KNOXVILLE, TENNESSEE 37902

JUN 13 1988

Mr. Philip L. Stewart, Manager Chattanooga Field Office Division of Water Pollution Control 2501 Milne Street Chattanooga, Tennessee 37406-3399

Dear Mr. Stewart:

SEQUOYAH NUCLEAR PLANT (SQN) - NPDES DERMIT NO. TN0026450 - FISH POPULATION IN THE DIFFUSER POND

During previous years of operation of SQN, fish kills periodically occurred in the diffuser pond in summer months when water temperature in the pond reached lethal levels. The most recent summer fish kill in the diffuser pond was in July 1985 when pond temperatures reached 104° F. Although fish kills have occurred, some fish undoubtedly survived to reproduce in the diffuser pond, especially because SQN was not operational between August 1985 and May 1988. Surveys conducted in 1988 revealed that gizzard and threadfin shad, carp, emerald shiner, spotted sucker, yellow bullhead, channel catfish, yellow bass, largemouth bass, bluegill, and several other sunfish species are now present in the diffuser pond.

With the operation of SQN expected for at least part of this summer, another fish kill is expected to occur in the diffuser pond when water temperatures reach lethal levels. Madonna E. Martin briefly discussed this matter with you in a telephone conversation on May 5, at which time TVA was considering moving fish from the diffuser pond to the reservoir to salvage as much of the desirable resources as possible. Since that time, we have determined that moving the fish to the reservoir is not a viable option in accordance with Nuclear Regulatory Commission approved Technical Specifications for SQN. The Technical Specifications require TVA to limit the radiological dose to bumans based on various pathways. Dose calculations used to demonstrate compliance with these limits do not consider the pathway that would result from consumption of fish reared in the diffuser pond. These fish do not have access to Chickamauga Reservoir, and humans are not allowed to remove or consume these fish. Therefore, TVA is no longer considering relocating fish from the diffuser and to Chickamauga Reservoir.

We regret that it will not be possible to avoid or minimize the kill as we had hoped. We plan to pick up the fish from the diffuser pond and dispose of these fish by burial ensite in the vicinity of the existing demolition landfill. A letter will be sent to the Tennessee Division of Solić Waste Management requesting approval of the burial. We will verbally notify your office when the fish kill begins, in case you wish to send an observer. A follow-up report will be sent to you when the cleanup operations are completed.

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If your staff has any questions or comments regarding our planned course of action, please have them call Ms. Martin at (615) 632-6695 in Knoxville.

Sincerely,

Ralph H. Brooks, Director Environmental Quality

cc: Mr. K. P. Barr, Acting Assistant Director for Inspection Programs
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U.S. Nuclear Regulatory Commission Attention: Document Control Desk Washington, D.C. 20555

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