

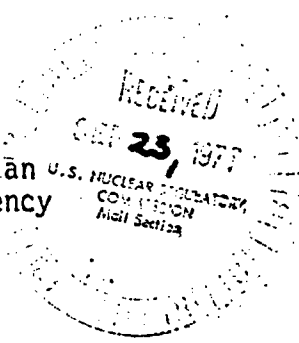


## United States Department of the Interior

## FISH AND WILDLIFE SERVICE

17 EXECUTIVE PARK DRIVE, N. E.  
ATLANTA, GEORGIA 30329

Regional Administrator  
Attention: Mr. Charles Kaplan  
Environmental Protection Agency  
345 Courtland Street, N.E.  
Atlanta, Georgia 30308



SEP 20 1977

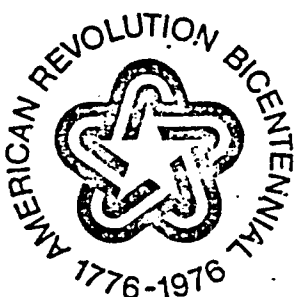
Dear Sir:

This is in response to Mr. Howard D. Zeller's letter dated September 9, 1977, requesting Fish and Wildlife Service comments on Tennessee Valley Authority's submitted biological monitoring program for its Watts Bar Nuclear Plant NPDES Number TN 0020168 which is undergoing construction. Our comments are submitted in accordance with provisions of the Fish and Wildlife Coordination Act (48 Stat. 401, as amended; 16 U.S.C. 661 et. seq.).

In our letter dated August 1, 1977, we recommended that this permit be conditioned with monitoring of the downstream State of Tennessee mussel sanctuary since it harbors at least 13 mussel species including the endangered Lampsilis orbiculata. We also recommended developing 96-hour median tolerance limits data on select indigenous mussel species in the receiving waters. We are well aware that adult specimens can adapt to seasonal perturbations (low flows, turbidity) and can overcome some temporary pollution stresses. Our recommendations are based on limited information concerning the impact of regulated chemical effluents on the sensitive life stages (larvae, glochidia, etc.) during the spawning and development stages of select species. This information is necessary to make an objective evaluation on the impact of this proposed project on State mussel sanctuary and indigenous molluscan species.

The Tennessee Valley Authority's submitted monitoring program did not address this important question, but did incorporate an assessment and evaluation for bioaccumulation of select trace elements by molluscs.

1. C. W. Hart, Jr., et al., Pollution Ecology of Freshwater Invertebrates, Chapter 8, pages 215-273. Academic Press, N.Y., 1974.



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The Service's position is that the permit should be conditioned with a bioassay program. The program should incorporate a 96-hour plus application factor or 6 weeks exposure period which is more relevant to molluscan physiology. From this bioassay program, tolerance data can be developed that will be utilized to make an assessment of the impact of the regulated chemical effluents discharged from this project on the sensitive life stages of select species which inhabit the State mussel sanctuary and nearby receiving waters.

Sincerely yours,

/s/ Harold W. Benson

ENCLOSURE

Regional Director

cc: Mr. O. T. Lynch, Jr., Nuclear Regulatory Commission, Washington, D. C.