



R. L. Doan

H. J. Curtis

Biology

COPY

There has been considerable speculation here as to the condition of the fish living in the waters receiving the waste from the separation plant. I feel that you should be advised of the facts insofar as we know them at the present time, so I will summarize some recent results obtained by J. Tereci, G. W. Parker and J. Kym. We have moderately complete analyses on five fish and one crayfish.

1. Clinch River Drum Fish - caught 5/1/44 in the White Oak Creek as it enters the Clinch. Control fish - all organs had zero activity.
2. White Perch - caught in stream above plant. Control fish - all organs had zero activity. 4/29/44.
3. Crayfish - caught 4/27/44 in stream just below plant. Total activity was 7.3×10^{-3} uC or 7.3×10^{-4} uC/g. of fish.
4. Catfish - caught 5/3/44 in White Oak Lake. The total activity was 0.59 uC or 6×10^{-3} uC/g. of fish. The highest specific activity was found in the heart, but all organs were active.
5. White Perch - caught 6/9/44 in White Oak Lake. The activity is 4.9×10^{-5} uC/g. of fish, with the heart having the highest specific activity.
6. Catfish - caught 6/9/44 in White Oak Lake. The activity is 5.1×10^{-5} uC/g. of fish.

I should like to emphasize that these results are very preliminary, and that more data is being accumulated. Tolerance doses of these elements for fish are not known, but making certain guesses one might conclude that one of these fish was receiving somewhat more than a tolerance dose of radiation while the rest were receiving less than tolerance.

This document has been approved for release to the public by:

lJC:mms

David A. Hamrin 5/26/95
Technical Information Officer Date
ORNL Site

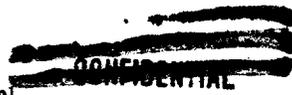
H. J. Curtis

CLASSIFICATION CANCELLED

DATE OCT 18 1963

for The Atomic Energy Commission

H. R. Canale
Chief, Declassification Branch



Information affecting the national defense of the United States within the meaning of the Espionage Laws, Title 18, U.S.C., Sections 793 and 794, and the transmission or revelation of its contents in any manner to an unauthorized person is prohibited by law.

ChemRisk Document No. 1682