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The contamination with fission products, as the result of the atomic bomb detonations, over, under or near the water at Bikini and Eniwetok atolls, has created very complicated problems of evaluation. Each of the five detonations in these areas pose separate problems, but studies of all five bursts contribute to a better understanding of the problem.

The atolls about Bikini contain only trace quantities of radiation. The great mass of sludge from the target center (approximately 500,000 tons) remains moderately active. From the target area the radiation spreads to the lagoon about the atoll where it is absorbed and retained. Some "migration" of radiation has taken place up onto the islands where it is picked up by the plants. Such translocated fission products onto the land are of a low order of intensity, about three to four times the natural background.

The shot islands at Eniwetok, and the plants and animals on the shot islands contain radioactive fission products. Some identification of the plants is observable. The plants and animals in the lagoon adjacent to the shot islands have absorbed radioactive products. Distribution of the active wastes about the Eniwetok Lagoon is not uniform as is the case at Bikini but concentrated adjacent to the shot islands.

The effect of mixed fission product contamination of biotic systems is being continued both in the test areas and in the laboratories in this country.

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DEPARTMENT OF ENERGY DECLASSIFICATION REVIEW	
SINGLE REVIEW AUTHORIZED BY: <i>A.A. Sinspall 3/2/94</i>	DETERMINATION (CIRCLE NUMBERS) 1. CLASSIFICATION RETAINED 2. CLASSIFICATION CHANGED TO: 3. CONTAINS NO DOE CLASSIFIED INFO 4. COORDINATE WITH: 5. CLASSIFICATION CANCELLED 6. CLASSIFIED INFO BRACKETED
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Preliminary statement of an area of radiobiology study for Entomologists.

1. Following the Greenoughs tour of Britain during 1965, studies were initiated to evaluate the distribution of the Russian products in the biotope system of the area.
2. As the termination of the test program at Salisbury in the Spring of 1968, studies following a pattern similar to the British studies, were expanded to include Entomologists.
3. The radiobiology studies followed in general three (3) main lines of efforts:
  - a. Evaluation of the distribution of Russian products geographically about the biotope.
  - b. The absorption of Russian products by the plants and animals grown in the biotope, weeds and forams.
  - c. The relative concentration of Russian products by the various organs and tissues.
4. The effect of radiation contamination upon the plants and animals, has of necessity, been reserved for future studies in the field and in the State Wide Laboratories.
5. As a part of the continuity of the past studies, and to form a preliminary base of operations for studies following the contemplated working program it is proposed that a limited field party (six(6) men) spend two or three weeks in the field at Salisbury during August of 1969.
6. During the test program of 1969 it is proposed that two (2) radiobiology biologists from the Applied Fisheries Laboratory, University of Washington, be in attendance to act as observers and aid in collecting data on the immediate effects of the decontamination on the local fauna and flora. The data collected would be those of most practical use to the radiobiology program.
7. Immediately following the test program the major programs of the radiobiology study group would be initiated.
8. The immediate radiobiology operations studies are of interest to the Commission to fill in gaps in the information provided by previous testing programs.
9. It is proposed that a group of specialists (SRT) be assigned the responsibility of carrying on this work.
10. To conduct the field work following the studies it would be essential to have available a small wood vessel, preferably the ISI (L) 1091.

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11. Follow up studies at yearly intervals are essential to measure the recovery rate of damaged areas and further distribution of fission products.

12. The active support of the A.E.C. and the Navy is essential to the execution of the program.

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