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RG 326 US ATOMIC ENERGY
COMMISSION 10 April 1954

Location LANL
Collection J Div J-41
Folder Ca. 3.1 TU-7
Radiological Safety (J. Service)

TO : Commander, TG 7.3
TERU : Commander, TG 7.1
FROM : Commander, TU-7, TG 7.1
SUBJECT : Reduction in Lagoon Sampling Program

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1. A study of the results from lagoon samples analysed after the Bravo and Romeo events has indicated that a reduction in the lagoon sampling program can be effected. Such a reduction will not reduce the capability of determining the suitability of ship anchorages and will materially aid in reducing the work load for the Radiation Analysis Section of TU-7 which must now expand its activities to operate at both Eniwetok and Bikini Atolls simultaneously.

2. Following Romeo event the lagoon contamination was extensive. Readings from 400-800 mr/hr were obtained over the lagoon water flowing from the detonation site for several days following the event. Such excessive contamination, however, was readily observed due to the murky condition of the water resulting from the sediment deposited in the water. The movement of this highly contaminated water was closely observed by eye and with readings obtained with a PDR/39 survey meter. Detailed analysis by the Radiation Analysis Section of numerous samples taken from this water merely confirmed the high specific activity and contributed little to the known information. The normal flow of water in the lagoon has been the subject of considerable study. Subsequent samples confirmed the fact that the contamination, constantly being diluted and decaying, flowed out the normal outlets to the sea and never presented a hazard to the ships.

3. Protection of the ships from excessively contaminated water is being checked on a daily basis through the analysis of the intake water and drinking water samples for the major ships in the anchorage. It is felt that this program adequately protects the ship from the possibility of remaining at an anchorage which is excessively contaminated.

4. In view of the above facts the following procedure is recommended to insure that ships are not being subjected to hazardous radioactive contamination:

a. As soon as practicable following a detonation obtain a sample of lagoon water from the proposed anchorage sites for the various vessels in the fleet. From the results of these samples determine the advisability of moving the ships into these anchorages.

b. Continue the daily sampling program of intake water and drinking water from Thuzbtack, Iceberg, Intern, and Skidrow Tars. Utilize these samples to study the contamination pattern in the lagoon.

CLASSIFICATION CANCELLED

BY AUTHORITY OF DOE/OC

J. Almas 10/17/83

DATE 3/21/86

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