

INFORMATION MEETING ITEM

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CLEANUP OF BIKINI ATOLL

Note by the Secretary

The General Manager has requested that the attached memorandum<sup>†</sup> of June 3, 1971 from the Director of Operational Safety, with the following enclosures, be circulated for consideration by the Commission at the Information Meeting scheduled for Friday, June 4, 1971:

- a. Draft letter from the Director, Operational Safety, to the High Commissioner, Trust Territory of the Pacific Island
- b. "Report of the Radiological Cleanup of Bikini Atoll"
- c. "Radiological Resurvey of Animals, Soils and Groundwater at Bikini Atoll, 1969-1970"

*\* Filed in BP*

W. B. McCool

Secretary of the Commission

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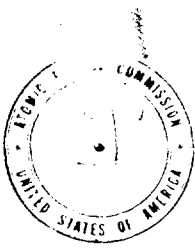
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*H.L. Hoppe* 10/4/85  
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*by: W. Tench* 3/5/87

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*6-3-71*

UNITED STATES  
ATOMIC ENERGY COMMISSION

WASHINGTON, D.C. 20545

JUN 3 1971

Chairman Seaborg  
Commissioner Ramey  
Commissioner Johnson  
Commissioner Larson  
Commissioner

THRU: General Manager

## CLEANUP OF BIKINI ATOLL

By memo of February 24, 1971\* to the Commission through the General Manager, the report entitled, "Summary Report of the 1969 and 1970 Bikini Surveys," NVO-97, February 1971, was provided for your information. This summary report was to be followed by detailed reports by the Southwestern Radiological Health Laboratory (SWRHL), Environmental Protection Agency, and by the Nevada Operations Office. These reports are now provided to the Commission for information prior to their release. They are titled:

1. "Report of the Radiological Cleanup of Bikini Atoll," SWRHL-111r, March 1971.
2. "Radiological Resurvey of Animals, Soils and Groundwater at Bikini Atoll, 1969-1970," NVO-269-8 (Rev.).

The SWRHL-111r report concludes that sampling of food items growing on the atoll in 1969 indicate mean concentrations of  $^{137}\text{Cs}$  and  $^{90}\text{Sr}$ , which are essentially in agreement with those obtained in 1967 (the 1967 data were used in determining that the Bikini people could be returned to their homes). Internal dose estimates have been performed by Gustafson <sup>1/</sup> utilizing the 1967 data and would appear to be valid for the 1969 data as well. Results of the 1970 survey for plutonium in the air are approximately two orders of magnitude below the FRC's guide for an individual in the population and would not significantly affect these estimates. The projected whole-body dose for a person born on Bikini in 1970 and living there for 70 years would be less than 10 Rad.

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<sup>1/</sup> Dr. Philip F. Gustafson, was with the Division of Biology and Medicine. He is now at Argonne National Laboratory, Argonne, Illinois.

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\*Secretariat Note: Noted at Information Meeting 1111 on March 1, 1971 during discussion of SECY-1062

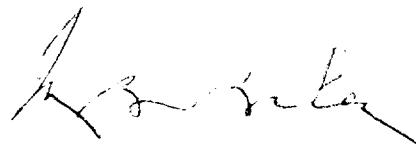
Commissioners

The NVO-269-8 (Rev.) report concludes that there are no striking differences between average values for edible foods of marine origin, including the sea birds, compared with values reported in 1967. Tritium levels in groundwater are within the range of values for continental surface water samples.

For purposes of comparison, the following estimated exposures were presented by Gustafson in his report of May 1968, entitled, "Additions to Radiological Report on Bikini Atoll."

<u>RADIATION EXPOSURE (RADS)</u>					
(Children)					
<u>Years</u>	<u>Bone <sup>90</sup>Sr</u>	<u><sup>137</sup>Cs &amp; <sup>55</sup>Fe</u>	<u>External</u>	<u>Whole-body</u>	<u>Bone</u>
5	0.98	.41	.75	1.16	2.14
30	4.06	1.99	3.33	5.32	9.38
70	6.16	4.00	5.74	9.74	15.90

In addition to the reports, there is attached a draft letter responding to several questions posed by the staff of the Trust Territory and pertaining to their agricultural and home construction programs. The two reports have been reviewed by the staff of DMA, OEA, BM, and OS. Recommendations have been given to the authors for minor changes. The consensus is that the two reports should be published and the letter transmitted to the High Commissioner of the Trust Territory.



Martin B. Biles, Director  
Division of Operational Safety

Enclosures:

1. Attached draft letter.
2. "Report of the Radiological Cleanup of Bikini Atoll."
3. "Radiological Resurvey of Animals, Soils & Groundwater at Bikini Atoll, 1969-1970,"