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Date September 11, 1984
To W. J. Bair
From R. C. Thompson
Subject DRAFT LETTER TO ROGER RAY

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The following scientists met in Richland, WA, on August 28, 1984, to review the current status of predicted and actual exposure of Marshall Islanders, particularly as these might relate to potential resettlement of Eneu Island in the Bikini Atoll.

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Comparisons presented of measured vs predicted levels of ¹³⁷Cs in Marshall Islanders showed very good agreement. Since ¹³⁷Cs is estimated to contribute 85% of the total exposure from fallout radionuclides in the Marshall Islands, this agreement between measured and predicted levels constitutes an important overall validation of models employed in the predictions -- including physical, biological, and cultural aspects of these models. The accumulation of data in recent years would seem to remove any reluctance, as previously expressed by EPA, to apply applicable U.S. limits to the Marshall Islanders.

An area of remaining uncertainty relates to the transuranic elements, principally plutonium and americium, where very limited bioassay data on plutonium excretion are in gross disagreement with model predictions. This is not considered a serious complication because the transuranics are not predicted to contribute importantly to the total radiation dose, and analytical problems seem to offer a plausible explanation of the bioassay problem. This problem is being intensively studied and a resolution may be anticipated within 3 to 6 months -- perhaps sooner.

Based on the best current evidence, it would seem unlikely that an Eneu resident, consuming a mix of local and imported foods (but no significant quantity from the Island of Bikini), would exceed an exposure of 500 mrem per year.

RCT:pmb

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Reviewed by DJ Kusler Date 5/1/97