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The Marshall Islands Dose Assessment and Radioecology Program (1974–2003): A Bibliography of Lawrence Livermore National Laboratory Staff Publications

*Compiled by: R.V. Bradsher, W.L. Robison, and
T.F. Hamilton*

March 2004

(Includes a CD with listing and .pdf files)

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Introduction

The United States conducted a total of 67 atmospheric nuclear tests on Bikini and Enewetak Atolls in the northern Marshall Islands between 1945 and 1958. The Marshall Islands Environmental Program was established under the auspices of the United States Department of Energy (DOE) to assess the long-term ecological and human health impacts of the test program. Since the mid-1970s, scientists from the Lawrence Livermore National Laboratory (LLNL) have been conducting studies in the Marshall Islands with emphasis on providing environmental characterization and dose assessments for resettled and resettling populations; identifying the key radionuclide and exposure pathways to residual fallout contamination; and conducting research on assessing the fate and transport, and behaviors of fallout radionuclides in coral atoll ecosystems. These latter studies have provided the fundamental scientific knowledge to enable Livermore scientists to develop remedial strategies to reduce the soil-to-plant uptake of cesium-137 (^{137}Cs) into locally grown foods, lowering the associated ingestion dose that people receive by living on the islands. Increasingly, the Marshall Islands Environmental Program has focused on direct technical support of atoll resettlement. Local atoll governments have developed cooperative programs with DOE to verify the effectiveness of cleanup methods, and to provide long-term environmental and individual radiation protection monitoring programs. Work also continues on examining the rate of the environmental loss and long-term behaviors of key radionuclides in the atoll ecosystem as a whole.

The bibliographic listing and accompanying .pdf files on compact disc (CD) are intended to provide easy access to all available scientific publications originating from scientific studies conducted as part of the Marshall Islands Environmental Program. While program staff are encouraged to publish their findings in peer review scientific journals, there are many internal reports and publications listed here that, copies of which, would otherwise be difficult to obtain. We have also incorporated listings of related publications developed as part of collaborations with other scientists from around the globe.

Terry Hamilton, Ph.D.
Marshall Islands Program Leader.

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