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Abstract

The Marshall Islands environmental program at the Lawrence Livermore National Laboratory (LLNL) is conducted under the auspices and support of the Office of Health Studies in the United States Department of Energy (DOE). The strategic focus of this program is to address the need for long-term radiological surveillance at former U.S. nuclear test sites in the Marshall Islands. Consistent with this focus has been the development of formal agreements between local atoll governments, the DOE, and the Republic of the Marshall Islands to conduct task-oriented programs with shared responsibilities. As part of these activities, LLNL provides environmental measurements and human dosimetric analyses, and performs prospective dose assessments to both characterize current radiological conditions and minimize radiation exposures. Currently, these efforts are directed towards the resettlement of Rongelap Island (Rongelap Atoll) by verifying the environmental, health, and safety objectives of the adopted remediation program, and by developing local expertise in radiological surveillance. For example, individual radiation surveillance programs have been developed for Rongelap resettlement workers using whole-body counting and advanced methods for detection of plutonium in urine samples. The information obtained from this monitoring program is instrumental for helping DOE assist the Rongelap local government in making more informed decisions about resettlement. After nearly 20 years of living in exile, the people of Rongelap Island may soon regain full use of their home atoll, and have confidence that resettlement can be accomplished with minimal environmental and human-health risk.

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