

Status of the Department of Energy Laboratory Accreditation Program for Radiobioassay

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The Department of Energy Office of Worker Protection Programs and Hazards Management has established a formal program for accrediting systems used to assess the internal deposition of radionuclides in radiation workers. DOE staff at the Radiological and Environmental Sciences Laboratory (RESL) administer and conduct the performance testing and on-site assessment aspects of the DOE Laboratory Accreditation Program (DOELAP) for Radiobioassay. The accreditation program consists of a performance testing phase based on ANSI HPS N13.30, "Performance Criteria for Radiobioassay", and an assessment phase based on requirements in DOE Technical Standard, DOE-STD-1112-98, "The Department of Energy Laboratory Accreditation Program for Radiobioassay." Participants in the program may seek accreditation for indirect (*in-vitro*) or direct (*in-vivo*) radiobioassay systems for a variety of nuclides in different matrices. Two technical experts assess the technical and quality assurance aspects of radiobioassay systems at the participating site over a period of two or three days. Presently, four DOE laboratories are accredited for radiobioassay systems. The proposed amendment to 10 CFR 835 would require accreditation for all DOE radiobioassay laboratories. If approved, the laboratories would have 3 years from the effective date in which to become accredited. In the future, the performance testing laboratory plans to maintain a full complement of lung sets, conduct an intercomparison for determining the amount of radioiodine in the thyroid and develop improved methods for test sample validation.