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Release of RESRAD (V.6.4) and RESRAD-BUILD (V.3.4) Revised Codes: Tools for Evaluating Radiation Doses and Risks



Summary:

In December 2007, new versions of RESRAD (V.6.4) and RESRAD-BUILD (V.3.4) codes were released. RESRAD is a computer model code designed to estimate radiation doses and risks from RESidual RADioactive materials, sponsored by the Office of Health, Safety and Security and the Office of Environmental Management, with support from the U.S. Nuclear Regulatory Commission. This family of codes was developed by Argonne National Laboratory (ANL); code and version control are currently maintained by the Department of Energy (DOE) through ANL.

RESRAD (V.6.4) is the most recent update of the RESRAD family of codes which provides a model for assessing radiation dose and risk from soil containing residual radioactive material.

The RESRAD-BUILD (V.3.4) is a code within the RESRAD family which provides a model for analyzing the radiological doses resulting from the remediation and occupancy of buildings contaminated with radioactive material. Exposure scenarios considered include building occupancy (residential use and office workers) and building remediation (decontamination workers and building renovation workers).

These codes now share the same radionuclide database and include International Commission on Radiological Protection (ICRP) 72 age-dependent dose conversion factors. This will result in consistency across RESRAD codes when multiple codes are used. Both revised codes have been tested successfully on Windows Vista and XP operating systems.

RESRAD codes and information on future RESRAD training sessions can be downloaded from the RESRAD web site (http://www.evs.anl.gov/resrad).

Importance to DOE Operations:

The RESRAD computer codes are important tools that are widely used by the Department, other Federal agencies, and the commercial nuclear industry as well as by international organizations and businesses engaged in the remediation of areas contaminated with radioactive materials.

Contacts for Technical Assistance:

Technical comments and questions about RESRAD codes can be directed to the Environmental Science Division of Argonne National Laboratory (resrad@anl.gov). For general information, please contact Janet Normandy, Office of Environmental Policy and Assistance (HS-22), within the Office of Health, Safety and Security, at janet.normandy@hq.doe.gov, 202-586-7917.