

**Radiation Reference Guide:
Relevant Organizations and Regulatory Terms**

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EXECUTIVE SUMMARY

This Radiation Reference Guide was written by the Interstate Technology and Regulatory Cooperation (ITRC) Radionuclides Work Team. The purpose of the guide is to provide easy access to information pertinent to organizations, activities and technical terminology related to radioactive contamination. The ITRC Radionuclide Work Team recognizes that State managers and regulators fulfill numerous technical, management and regulatory responsibilities, all driven by the goal of making careful decisions about site response actions. These decisions are particularly challenging when dealing with the complexity of radioactive contamination. Regulators have the responsibility of managing the radioactive waste on their sites, regulating the operations at the sites, selecting efficient technologies, and coordinating with various other agencies, organizations and stakeholder groups. This Radiation Reference Guide is designed to assist ITRC regulators and State managers in familiarizing themselves with other organizations dealing with radionuclide contamination/waste management and understanding the basic terminology used in the radionuclide regulatory arena.

The Radiation Reference Guide is divided into two sections. The first Section is the *Catalog of Radionuclide-Related Organizations* and the second Section is the *Glossary of Basic Radiation Regulatory Terms*.

There are numerous organizations whose activities relate to radionuclide contamination, and radioactive and mixed-waste management. For the specific purpose of forming partnerships, identifying resources increasing stakeholder participation, understanding other organizations with related or similar activities, and sharing innovative technologies, Section 1.0 consolidates relevant information about these organizations. The catalog provides a brief description of the mission, pertinent activities, and contact information for organizations actively involved in radioactive contamination at all levels of government. The catalog is organized into the following subsections:

- *Local Organizations* include groups that are local, independent, and non-partisan, such as the local Citizens Advisory Boards (CAB) and non-profit groups.
- *State Organizations* include radioactive waste regulatory programs run by regional compacts and commissions and individual State governments. These also include State organizations that operate on a nationwide basis.
- *Federal Organizations* include programs or government agencies that provide policy implementation, guidance, technical oversight and regulatory authority on the nation's radioactive waste issues.
- *National Organizations* include national non-profit organizations whose main goal is to raise public consciousness and awareness concerning the environmental impact of radioactive waste, disposal and storage.
- *International Organizations* are those with an international membership. These organizations provide guidance on international radiation issues, or provide expertise and unique insight on the major issues relating to international radioactive waste management. They also disseminate information to their member countries and collaborate with other national and federal organizations.

The purpose of Section 2.0 is to consolidate pertinent regulatory and basic technical terms and acronyms used in the radioactive waste management field to be used as a handy reference tool.

Most of these terms have been extracted from existing glossary sources. For convenience, these terms have been grouped by usage or source into the following subgroups:

- Basic Radionuclide terms - commonly used in the ionizing radiation field and also those used in health physics and exposure/risk assessment;
- NRC/DOE regulatory terms - related to the Atomic Energy Act (AEA) and the Department of Energy;
- EPA regulatory terms - relating to Environmental Protection Agency activities; and,
- DOT regulatory terms - specific to regulations relating to transportation of radioactive materials.

To complement the basic terminology summarized in this Guide, Appendix A includes useful information related to radiological units and their common conversions, Standard International (SI) prefixes, and basic information on some common radionuclides. Appendix B includes a bibliography of pertinent technical and regulatory documents that are referenced in Section 2.0, and are useful for the activities of ITRC Radionuclide Work Team. Appendix C includes additional information about ITRC Work Team Contacts, ITRC Fact Sheet, ITRC Product List, and a Document Evaluation Survey form.