

#### *D. What Should I Consider as I Prepare My Comments for EPA?*

You may find the following suggestions helpful for preparing your comments:

1. Explain your views as clearly as possible.
2. Describe any assumptions that you used.
3. Provide any technical information and/or data you used that support your views.
4. If you estimate potential burden or costs, explain how you arrived at your estimate.
5. Provide specific examples to illustrate your concerns.
6. Offer alternatives.
7. Make sure to submit your comments by the comment period deadline identified.
8. To ensure proper receipt by EPA, identify the appropriate docket identification number in the subject line on the first page of your response. It would also be helpful if you provided the name, date, and **Federal Register** citation related to your comments.

#### **Acronyms and Abbreviations**

We use many acronyms and abbreviations in this preamble. For your convenience and reference, they are:

AEA—The Atomic Energy Act  
 AEC—The Atomic Energy Commission  
 ANPR—Advance notice of proposed rulemaking  
 CED(E)—Committed effective dose (equivalent)  
 CERCLA—Comprehensive Environmental Response, Compensation, and Liability Act (also known as Superfund)  
 CFR—Code of Federal Regulations  
 DOE—The United States Department of Energy  
 EPA—The United States Environmental Protection Agency  
 FR—**Federal Register**  
 FUSRAP—Formerly Utilized Sites Remedial Action Program  
 GTCC—Greater-Than-Class C low-level radioactive waste  
 HWIR—Hazardous Waste Identification Rule  
 LAMW—Low activity mixed waste  
 LARW—Low activity radioactive waste  
 LLRW—Low-level radioactive waste  
 MCL—Maximum Contaminant Level  
 MLLW—Mixed low-level radioactive waste  
 MW—Mixed waste  
 NESHAPS—National emission standards for hazardous air pollutants  
 NRC—The United States Nuclear Regulatory Commission

OMB—The Office of Management and Budget

ORIA—EPA's Office of Radiation and Indoor Air

OSW—EPA's Office of Solid Waste

OSWER—EPA's Office of Solid Waste and Emergency Response

RCRA—The Resource Conservation and Recovery Act

RCRA—C—Subtitle C of RCRA

TEDE—Total effective dose equivalent

TENORM—Technologically Enhanced Naturally Occurring Radioactive Materials

TRU—Transuranic waste

TSCA—Toxic Substance Control Act

UMTRCA—Uranium Mill Tailings

Radiation Control Act

USACE—United States Army Corps of Engineers

UTS—Universal Treatment Standards

#### **What Do We Mean by Certain Terms?**

Throughout this ANPR, we refer to "Low-Level Radioactive Waste," "Mixed Waste," "Low-Activity Low-Level Radioactive Waste," "Low-Activity Mixed Waste," and "Low-Activity Radioactive Waste." Each of these terms has a distinct meaning within the context of this document (though not necessarily a regulatory or statutory definition). We want to avoid confusion wherever possible, so we offer these definitions to help you better understand the discussion.

When we say "Low-Level Radioactive Waste" (or LLRW), we always mean a specific kind of radioactive material defined at section 2(16) of the Nuclear Waste Policy Act as radioactive waste that is not spent nuclear fuel, high-level waste, transuranic waste, or uranium and thorium mill tailings. Under 10 CFR part 61, "Licensing Requirements for Land Disposal of Radioactive Waste," the NRC regulates disposal of LLRW in near-surface disposal facilities. The NRC has defined three classes of LLRW in part 61 (classes A, B, and C) based on their radionuclide content and half-life. Under the part 61 waste classification and disposal site design, siting, and waste acceptance scheme, waste with radionuclide content that exceeds Class C still is regulated as LLRW, but generally is not acceptable for near-surface disposal. The Department of Energy (DOE) regulates LLRW under its own AEA authority (*see* DOE Order 435.1).

When we say "Mixed Waste" (or MW), we always mean waste that is regulated under both the Resource Conservation and Recovery Act (RCRA) as hazardous waste and under the AEA as radioactive material. This document is concerned only with MW containing LLRW, so-called mixed low-level waste

(MLLW). MLLW can include LLRW Classes A, B, and C, and greater-than-class C. Non-AEA radioactive wastes mixed with hazardous waste are not technically MW, although they may be managed in a similar way.

We are introducing today the term "low-activity" to represent the idea that some radioactive wastes may contain radionuclides in small enough concentrations to allow them to be managed in ways that are fully protective of public health and the environment but do not require all of the radiation protection measures necessary to manage higher-activity radioactive material. As used in this document, "low-activity" is a conceptual term that does not have a statutory or regulatory meaning. This document outlines and requests public comment on methods that could be used in future actions to define "low-activity" wastes. "Low-activity" wastes would be subsets of broader waste categories, such as those defined previously. This document discusses several types of "low-activity" waste, including:

- "Low-activity" LLRW;
- "Low-activity" MW (LAMW);
- "Low-activity" radioactive waste (LARW)—this is a broad category that includes low-activity LLRW and LAMW, as well as other wastes such as those primarily regulated at the State level (e.g., TENORM wastes, where the term "technologically enhanced" means that human activity has concentrated the natural radioactivity or increased the potential for human exposure).

Finally, when we say "byproduct material" we are using the definition in section 11e of the AEA. The discussion in section III of this document focuses on "pre-UMTRCA byproduct materials" not regulated by the NRC. ("Pre-UMTRCA byproduct materials" are tailings or wastes produced by the extraction or concentration of uranium or thorium from any ore processed primarily for its source material content that NRC has concluded are outside its jurisdiction under section 11e.(2) of the AEA. This is discussed further in section III.B of this document. The FUSRAP cleanups address much of the pre-UMTRCA byproduct material.)

#### **Questions for Public Comment**

Consistent with the purpose of an Advance Notice of Proposed Rulemaking, we are asking many questions about the concepts described in this document. Because this document covers a broad variety of topics and possibilities, we note throughout the text the issues on which we would like public comment. We