

specified conditions (e.g., radionuclide concentration limits) to apply for a specific NRC license under NRC regulations, such as 10 CFR part 61. NRC would assess the protections offered by RCRA-C technology on a site-specific basis. NRC would retain its authority to enforce and inspect as in the case of all NRC licensees.

- **General License for RCRA-C Disposal Facility**—In this case NRC would modify its regulations (e.g., 10 CFR part 61) through rulemaking to include RCRA-C disposal facilities as a class of facilities under an NRC general license that enables the facility to accept (“possess”) LAMW for disposal. Disposal facilities would not have to supply applications or paperwork to NRC for specific approval of a license. NRC could choose to place additional conditions or requirements on the disposal facility in granting a general license, or could defer completely to the protection offered by the RCRA-C requirements. An example would be that the facility meets RCRA-C requirements and that the LAMW accepted by the facility meets the concentration limits established in accordance with the approach presented in this ANPR. Under a general license, NRC retains its authority to inspect and enforce its requirements, including issuance of civil penalties where warranted; however, in this case, it may be appropriate for NRC to rely on EPA for facility oversight.

- **Exemption for RCRA-C Disposal Facility**—In this case, NRC would modify its regulations, as appropriate, to exempt RCRA-C disposal facilities that accept LAMW from NRC requirements (including requirements to obtain an NRC or Agreement State license), and modify 10 CFR 20.2001 to allow transfer of waste to exempted facilities. This would essentially be NRC deferring regulatory oversight of licensed material at the disposal site to a regulatory system that already has jurisdiction over the non-AEA portion of the waste and has demonstrated sufficient protectiveness for specified concentrations of radionuclides. Failure of a RCRA-C facility to meet the conditions of the exemption could lead to regulatory action by NRC. NRC would still maintain the ability to conduct inspections; however, in this case, it may be appropriate for NRC to rely on EPA for facility oversight.

2. Regulation of LAMW Generators

NRC could modify its regulations, as appropriate, to allow the LAMW generator to transfer certain material to an approved RCRA-C facility for

disposal under one of the above approaches.

We request comment on these options.

G. How Might DOE Implement a LAMW Standard?

DOE regulates the management of its own LLRW and the radioactive component of its mixed waste under the authority granted to DOE by the AEA. The AEA and principles of sovereign immunity limit the States’ ability to regulate DOE’s management and disposal of its own AEA materials, including the radioactive component of MW. Because DOE is “self-regulating” under the AEA, the low-activity mixed waste disposal approach presented in this ANPR would not be applicable to DOE LAMW unless DOE takes action under its AEA authority to implement it. Several options for implementation are plausible. Most DOE wastes are disposed of in facilities at the generating site. For situations where sufficiently protective on-site disposal is not feasible, costs are excessive, or off-site disposal is otherwise advantageous, other disposal alternatives are considered. DOE could establish some sort of internal authorization process before allowing LAMW to be transported and disposed at a RCRA Subtitle C landfill. Alternatively, DOE could choose to exempt LAMW meeting the radionuclide concentrations derived in this approach from its AEA regulatory purview and send such waste to its own RCRA Subtitle C landfills or commercial Subtitle C landfills accepting such waste. Because of the potentially larger volumes of LAMW generated by DOE, stakeholder interests and concerns should be given consideration by DOE in determining how DOE would implement the approach suggested in this document.

1. DOE’s “Authorized Limits” System

At present, DOE has in place a process to evaluate waste on a “case by case” basis to determine the radiological risk. This “authorized limits” system allows DOE generating sites to provide waste characterization information to support disposal at non-AEA regulated facilities. Approvals for disposal of volumetrically contaminated waste (as opposed to surface contamination) are given by the Assistant Secretary of Environment, Safety and Health. DOE also seeks to ensure that releases are consistent with the receiving facility’s waste acceptance criteria and are coordinated with, and acceptable to, facility operators and Federal, State, and local regulators. DOE’s approach relies on a disposal facility’s existing

procedures to maintain protectiveness, and typically does not place additional radiation protection requirements on the facility operator. The rule could provide a more uniform basis for allowing such disposal. Because DOE is self-regulating under the AEA, the rule would not limit DOE’s ability to dispose, at facilities not regulated by NRC or Agreement States, wastes that have been evaluated on a “case by case” basis pursuant to DOE’s existing “authorized limits” process.

DOE manages its operations through a series of directives, including Orders (which describe basic requirements), Manuals (more detailed procedures), and Guides (recommendations or “best practices”). The “authorized limits” process described above is included in DOE’s Order 5400.5, “Radiation Protection of the Public and the Environment” (note that the “authorized limits” decisions are handled through the radiation protection program, not the waste management program). Adopting the approach presented in this ANPR would probably require DOE to revise one or more of its directives.

2. DOE’s Radiological Control Criteria

For several years, DOE has been developing an approach similar to the disposal concept in today’s action. DOE has been modeling exposures from treatment, transportation, and disposal to assess the feasibility of setting uniform limits that would allow certain mixed waste meeting established activity limits to be handled solely within the RCRA system. DOE believes its analyses show that a significant portion of its mixed waste could be handled without presenting a significant radiological risk, and believes that the approach presented here has the potential to facilitate that process. Throughout the development of this process, DOE has sought advice and review from Federal agencies and State regulators, and kept them apprised of its progress and intent.

H. How Would States Implement the Standard?

1. Would States Be Required To Implement the Standard?

Even if we and NRC both take regulatory action to allow LAMW disposal, it is likely that much of the actual implementation will occur at the State level. Many States are authorized to carry out both AEA regulatory functions and RCRA programs. There are 32 NRC Agreement States and 45 States are authorized under RCRA to carry out a mixed waste program. Under section 274b of the Atomic Energy Act,