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U.S. NUCLEAR REGULATORY COMMISSION

10 CFR Parts 2 and 20

Radioactive Waste Below Regulatory Concern; Generic Rulemaking

AGENCY: U.S. Nuclear Regulatory Commission.

ACTION: Advance notice of proposed rulemaking.

SUMMARY: The Nuclear Regulatory Commission (NRC) is considering amending its regulations to address disposal of radioactive wastes that contain sufficiently small quantities or low concentrations of radionuclides that their disposal does not need to be regulated as radioactive. The NRC recently published a policy statement that provides guidance for filing petitions for rulemaking to exempt specific waste streams. Generic rulemaking might provide a more efficient and effective means of dealing with disposal of wastes below NRC regulatory concern. A generic approach could potentially reduce the burdens associated with disposal of radioactive waste by all Commission licensees. For NRC to find that wastes may be disposed of without regard to radioactive content, the disposal must not pose an undue risk to public health and safety or the environment. Generic rulemaking would supplement the earlier policy statement response to a mandate in Section 10 of the Low-Level Radioactive Waste Policy Amendments Act of 1985 (Public Law 99-240).

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Add: Kitty Dragonette, 62355

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DATE: The comment period expires March 2, 1987 . Comments received after this date will be considered if it is practical to do so but assurance of consideration may not be given except as to comments received on or before this date.

ADDRESSES: Mail comments to Secretary, U.S. Nuclear Regulatory Commission, Washington, DC 20555; Attention: Docketing and Service Branch, or deliver comments to the NRC's Public Document Room, 1717 H Street, NW, Washington, DC between 8:15 a.m. and 5:00 p.m. weekdays.

FOR FURTHER INFORMATION CONTACT: Kitty S. Dragonette, Division of Waste Management, Office of Nuclear Material Safety and Safeguards, U.S. Nuclear Regulatory Commission, Washington, DC 20555, Telephone: (301) 427-4300.

SUPPLEMENTARY INFORMATION: On August 29, 1986, the NRC published a policy statement and staff implementation plan regarding how it plans to expedite handling of petitions for rulemaking to exempt specific radioactive waste streams from disposal in a licensed low-level waste disposal facility (51 FR 30839). The policy statement and staff implementation plan were published as Appendix B to 10 CFR Part 2. The policy statement and plan are in the nature of regulatory guidance for implementing existing requirements for rulemaking petitions contained in 10 CFR 2.802. These documents describe the kind of information petitioners should file to allow expedited Commission review of the petition as well as the decision criteria that should enable expedited action on petitions and upon which NRC would base its judgments.

Commenters should consult the August 29, 1986 Federal Register notice for assistance in formulating their comments on this issue. However, the decision criteria listed in the policy statement are repeated here for the reader's convenience.

1. Disposal and treatment of the wastes as specified in the petition will result in no significant impact on the quality of the human environment.
2. The maximum expected effective dose equivalent to an individual member of the public does not exceed a few millirems per year for normal operations and anticipated events.
3. The collective doses to the critical population and general population are small.
4. The potential radiological consequences of accidents or equipment malfunction involving the wastes and intrusion into disposal sites after loss of normal institutional controls are not significant.
5. The exemption will result in a significant reduction in societal costs.
6. The waste is compatible with the proposed treatment and disposal options.

7. The exemption is useful on a national scale, i.e., it is likely to be used by a category of licensees or at least a significant portion of a category.
8. The radiological properties of the waste stream have been characterized on a national basis, the variability has been projected, and the range of variation will not invalidate supporting analyses.
9. The waste characterization is based on data on real wastes.
10. The disposed form of the waste has negligible potential for recycle.
11. Licensees can establish effective, licensable, and inspectable programs for the waste prior to transfer to demonstrate compliance.
12. The offsite treatment or disposal medium (e.g., sanitary landfill) does not need to be controlled or monitored for radiation protection purposes.
13. The methods and procedures used to manage the wastes and to assess the impacts are no different from those that would be applied to the corresponding uncontaminated materials.
14. There are no regulatory or legal obstacles to use of the proposed treatment or disposal methods.

The policy statement and staff implementation plan responded to the six-month mandate in the Low-Level Radioactive Waste Policy Amendments Act of 1985 which required NRC to establish standards and procedures for expedited action on below regulatory concern waste disposal petitions. However, the Commission realizes that a generic rulemaking on the issues associated with findings that certain wastes may be exempted from further NRC control of the radioactive content without posing an undue risk to public health and safety would reduce the issues to be considered in individual rulemakings on specific wastes. Generic rulemaking could also address broader issues associated with the general issue of slightly contaminated radioactive materials. The six-month mandate in the Act effectively precluded rulemaking as an initial approach but the Commission can now consider the matter more carefully. The policy statement and staff implementation plan will be used in the interim while the Commission considers rulemaking in the area. Publication of this notice should in no way discourage petitioners from making use of the option for petitions for expedited rulemaking on specific waste streams.

The NRC requests public comment on the general question of whether and how to proceed on the matter of exempting slightly contaminated radioactive materials from its requirements for disposal. The NRC also seeks public comment with respect to the following issues and questions. (In responding, commenters are encouraged to provide specific suggestions and the basis for suggestions offered.)

(1) In the past, the Commission has concluded that consideration of exempting wastes from regulation on a waste-stream-by-waste-stream basis is the most practical way to proceed and will lead to exemptions most useful for licensees. Assuming this course of action, what type of rulemaking would facilitate exemption of waste streams? For example,

(a) Should the decision criteria listed above from the Commission policy statement be codified as rules instead of guidance?

(b) Should the decision criteria in the Commission policy statement be quantified where possible and then be codified to facilitate processing petitions?

(c) Should additional criteria be added or criteria be deleted before they are quantified and codified?

(2) Should the NRC take an entirely different approach than that reflected in the policy statement? For example,

(a) Should the NRC try to establish concentrations or quantities of radionuclides that are below regulatory concern regardless of the form or disposal circumstances? In the past, the Commission has concluded that such

concentrations or quantities would be so low or small that they would be of no practical value to licensees. Factors such as the uncertainty in potential pathways and further uses or recycle of the contaminated materials and the consequent conservatism that must therefore be considered have contributed to this conclusion. Innovative ideas from commenters on how to deal with these uncertainties would be welcome.

(b) Should NRC develop a risk or dose value that would represent generic regulatory cut-off levels for an individual licensee's waste (e.g., 0.1, 1, or 10 millirems per year)? If so, how would a licensee demonstrate that its disposal practices do not result in members of the public being exposed in excess of the established limit? For example, can computer codes be developed that licensees would have to use to demonstrate compliance with a generic below regulatory concern risk or dose value? What survey, recordkeeping, and reporting requirements should be included in such regulations?

(3) How can NRC most effectively address the potential for exposures of members of the public from multiple disposal practices or sources that are each below NRC regulatory concern? This concern has been addressed internationally and in the staff implementation plan published with the Commission's policy statement by limiting the maximum potential exposures from individual practices. Under this approach inadvertent exposure of a member of the public to five or ten individual disposal practices would still be of no regulatory concern. How can this aspect of below regulatory concern be best addressed in waste-stream-by-waste-stream or more generic approaches?

(4) Should NRC develop additional guidance instead of rulemaking? If so, what guidance would be most helpful?

(5) The Environmental Protection Agency (EPA) has issued notices on two aspects of slightly contaminated radioactive wastes. In its ANPRM on low-level wastes (48 FR 39563; August 31, 1983), EPA asked, "Are there some types or classes of radioactive waste which do not need regulatory control to protect the public?" In its ANPRM published June 18, 1986 (51 FR 22264), EPA requested comments on standards for residual activity in buildings and soils of facilities being decommissioned. Should NRC defer entirely, or only in part, to EPA standards development in this area?

(6) Are there other national or international standards or standards development activities that NRC should encourage or support that could negate or minimize the need for further NRC action?

LIST OF SUBJECTS IN 10 CFR

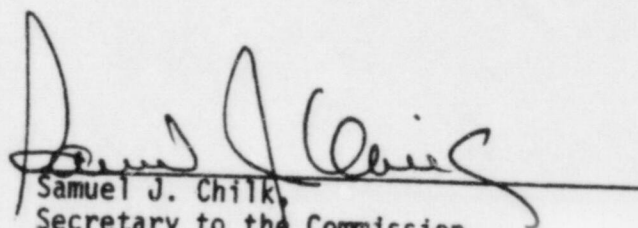
Part 2: Administrative practice and procedure, Antitrust, Byproduct material, Classified information, Environmental protection, Nuclear materials, Nuclear power plants and reactors, Penalty, Sex discrimination, Source material, Special nuclear material, Waste treatment and disposal.

Part 20: Byproduct material, Licensed material, Nuclear materials, Nuclear power plants and reactors, Occupational safety and health, Packaging and containers, Penalty, Radiation protection, Reporting and recordkeeping requirements, Special nuclear material, Source material, Waste treatment and disposal.

The authority citation for this document is: Sec. 161, 68 Stat. 948, as amended (42 U.S.C. 2201); Sec. 201, 88 Stat. 1242, as amended (42 U.S.C. 5841).

Dated at Washington DC, this 26th day of November, 1986.

For the Nuclear Regulatory Commission.


Samuel J. Chilk,
Secretary to the Commission.