



Department of Energy
Washington, DC 20585
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RCRA Docket Information Center
Office of Solid Waste (5305W)
U.S. Environmental Protection Agency
Headquarters (EPA, HQ)
401 M Street, S.W.
Washington, D.C. 20460

Docket Number F-99-MLLP-FFFFF

Dear Sir or Madam:

Re: 64 FR 10064, "Approach to Reinventing Regulations on Storing Mixed Low-Level Radioactive Waste"

On March 1, 1999, the Environmental Protection Agency (EPA) published an advance notice of proposed rulemaking (ANPRM) describing several options EPA is considering to make regulations more flexible for generators of mixed low-level radioactive waste (MLLW) who store or treat such waste pursuant to regulations implementing the Atomic Energy Act (AEA) and the Resource Conservation and Recovery Act (RCRA). The ANPRM focuses primarily on options for establishing conditional exemptions from RCRA hazardous waste requirements for MLLW generated, stored and treated on-site at facilities regulated by the Nuclear Regulatory Commission (NRC) or NRC Agreement States. Among other things, the ANPRM requests comments on possible conditions for such exemptions and on what facilities should be eligible for the exemptions. Regarding the scope of eligible facilities, the ANPRM encourages comment on: (1) whether a conditional exemption or similar approach should apply to all generators of mixed waste, or be limited to specific industries, such as nuclear power plants; and (2) whether a conditional exemption or other relief should apply to commercial mixed wastes stored at facilities that provide storage services to mixed waste generators with whom they contract and by whom they are paid.

The Department of Energy (DOE) appreciates the opportunity to provide comments in response to this mixed waste-related ANPRM. The enclosed comments have been divided into two sections: general and specific. The general comments provide overarching positions and requests. The specific comments relate directly to potential regulatory approaches and issues raised in particular sections of the ANPRM. For clarity, each specific comment is preceded by a reference to the section of the ANPRM to which it applies, and a brief description is given in boldface type of the issue within that section to which DOE's comment is directed.

The Department of Energy (DOE) commends EPA for exploring options to increase the flexibility of requirements applicable to the regulated community that generates, stores, and treats MLLW. DOE agrees that requirements imposed by RCRA may duplicate NRC regulation and oversight of MLLW management activities. With this in mind, DOE's comments generally support the concept of avoiding unneeded dual regulation by establishing conditional exemptions from RCRA

hazardous waste requirements for MLLW managed at a facility holding a license issued by the NRC or an Agreement State and meeting other appropriate limitations. DOE's support of this concept is based primarily on the Department's opinion that, at facilities to which they apply, NRC and Agreement State licensing programs already protectively address MLLW management scenarios that might otherwise warrant regulation under RCRA in order to prevent hazardous waste constituent releases.

Notwithstanding the Department's general support of the ANPRM, DOE's enclosed comments encourage EPA to not limit the scope of any proposed conditional exemption for MLLW storage or treatment to just MLLW generated by commercial nuclear power plants, or to just MLLW stored or treated on-site by the generator. Consistent with this, DOE's comments suggest a modified list of possible conditions to define an exemption from RCRA hazardous waste requirements for stored MLLW. The comments also explain why DOE believes that EPA would be justified in extending the scope of a conditional exemption for storage or treatment to include any qualifying MLLW, regardless of the industry, company, or facility that generated the waste, and regardless of whether the licensed storage or treatment unit in which the waste is managed is located on-site or off-site. Finally, DOE's comments encourage EPA not to include language in its October 1999 Notice of Proposed Rulemaking that would prohibit commercial facilities holding valid NRC or Agreement State licenses from accepting DOE-generated MLLW for storage or treatment in any unit that would otherwise qualify for a conditional exemption.

DOE supports EPA's effort to address the inefficiencies resulting from dual regulation of mixed waste *storage* and *treatment* (as covered by the subject ANPRM), and the Agency's plans to issue a future proposal for a regulatory exemption from RCRA hazardous waste *disposal* requirements for MLLW containing low concentrations of hazardous constituents. The Department is eager to continue working with EPA in regard to this mixed waste rulemaking effort, and is willing to provide additional DOE data and information available that the Agency may need in the development of the rule. If you have any questions or need further clarification of our comments, please contact Bill Fortune of my staff at (202) 586-7302.

Sincerely,

Raymond P. Berube
Acting Director
Office of Environmental Policy and Assistance

Enclosure

cc: N. Hunt, EPA, Office of Solid Waste (5303W)
C. Rhyne, EPA, Office of Solid Waste (5303W)

**UNITED STATES DEPARTMENT OF ENERGY
COMMENTS ON APPROACH TO REINVENTING REGULATIONS
ON STORING MIXED LOW-LEVEL RADIOACTIVE WASTE**

**ADVANCE NOTICE OF PROPOSED RULEMAKING
(64 FR 10064 – 10073; March 1, 1999)**

GENERAL COMMENTS

- 1. The Department of Energy (DOE) commends the Environmental Protection Agency (EPA) for its effort to develop regulations that would be more flexible for generators of mixed low-level wastes (MLLW) and that would reduce or eliminate inefficiencies caused by dual regulation of these wastes.**

DOE commends EPA for exploring options to increase the flexibility of requirements applicable to the regulated community that generates, stores, and treats MLLW. DOE agrees that requirements imposed by the Resource Conservation and Recovery Act (RCRA) may duplicate Nuclear Regulatory Commission (NRC) regulation and oversight of MLLW management activities. With this in mind, DOE generally supports the concept of establishing conditional exemptions from RCRA hazardous waste requirements for MLLW managed at a facility holding a license issued by the NRC or an Agreement State and meeting other appropriate limitations as a mechanism for avoiding unneeded dual regulation.

Notwithstanding, DOE is concerned with the scope that EPA has suggested in the advance notice of proposed rulemaking (ANPRM) for proposed conditional exemptions from RCRA requirements for storage and treatment of MLLW. DOE believes EPA would be justified in establishing conditions for the exemptions such that MLLW subject to a NRC or Agreement State license could qualify, regardless of the industry, company, or facility that generated it, and regardless of whether the licensed storage or treatment unit (used for managing the MLLW) is located on- or off-site. This belief is based primarily on DOE's opinion that, at facilities to which they apply, NRC and Agreement State licensing programs already protectively address MLLW management scenarios that might otherwise produce risks to human health or the environment warranting regulation of the MLLW as hazardous waste under RCRA. The reasons for DOE's opinion are further discussed in the specific comments below in response to sections II.A.6, II.A.7, and II.C of the preamble.

Because DOE believes EPA would be justified in doing so, DOE encourages EPA to not limit the scope of any proposed conditional exemption for MLLW storage or treatment to just MLLW generated by commercial nuclear power plants, or to just MLLW stored or treated on-site by the generator. Instead, the scope should cover any qualifying MLLW. Hospitals, laboratories, pharmaceutical companies, and off-site facilities that provide licensed storage services for MLLW may generate qualifying MLLW. Treatment or maintenance activities at facilities holding RCRA permits to treat, store, or dispose of mixed waste (as discussed in section II.A.6 of the preamble) also may generate qualifying MLLW. Furthermore, as discussed in greater detail in the specific comments that follow, DOE believes that the Department may generate some qualifying MLLW. This would occur if MLLW generated by DOE is stored or treated at a commercial facility meeting all the conditions for exemption established under the rule.

2. DOE acknowledges that EPA did not intend for the scope of the ANPRM to cover MLLW generated by DOE activities.

DOE acknowledges that EPA has excluded DOE-generated MLLW from the scope of the conditional exemption described in the ANPRM (p. 10066, col. 3). Nevertheless, as explained in General Comment 1 above, DOE believes an exemption would be justified for any MLLW stored or treated subject to a NRC or Agreement State license, provided that all the conditions of the exemption were met, regardless of the industry, company, or facility that generates the MLLW. Accordingly, DOE encourages EPA to consider omitting from the October 1999 notice of proposed rulemaking (NPRM) any language that would prohibit commercial facilities that hold valid NRC or Agreement State licenses from accepting DOE-generated MLLW for storage or treatment in units that would otherwise qualify for a conditional exemption.

SPECIFIC COMMENTS

II. What Approaches Can Simplify Dual Regulation?

II.A. Conditional Exemption for Storage

II.A.5 Possible Conditions

1. p. 10066, cols. 1 & 2 – Seven examples of possible conditions that, if met, would qualify commercial MLLW for exemption from RCRA hazardous waste regulations are listed.

The ANPRM suggests the following seven examples of conditions that could be imposed on *commercial MLLW* in order to qualify it during storage for an exemption from RCRA hazardous waste requirements.

- 1) The facility generating MLLW has a valid NRC or NRC Agreement State license.
- 2) The waste is stored in a tank, container, or containment building.
- 3) The facility stores its MLLW on-site in accordance with the NRC license requirements.
- 4) The facility is subject to periodic NRC or NRC Agreement State inspections.
- 5) Chemically incompatible wastes are not stored near each other.
- 6) The facility notifies EPA of any storage unit for which it claims a conditional exemption.
- 7) The owner/operator reports any violation of the conditions for the exemption.

Example conditions 1) and 3), above, would restrict the availability of the conditional exemption to MLLW generated and stored at a facility that itself holds a NRC license. As is discussed in detail in item 1 of comment II.A.6, below, DOE advocates creating an exemption having conditions such that *any stored MLLW* could qualify for the exemption, *regardless of its source*. DOE recognizes that to implement this suggestion EPA would need to revise its list of conditions for the exemption. The revised conditions must protect human health and the environment from releases in a manner equivalent to otherwise applicable RCRA hazardous waste regulations. DOE suggests that the conditions listed below would provide such protection. DOE requests that EPA consider advancing these conditions in the October 1999 NPRM to define a proposed conditional exemption from RCRA hazardous waste regulation for MLLW in storage.

- 1) The MLLW is in storage at a facility that holds a valid NRC or Agreement State license covering the MLLW storage unit.
- 2) The unit in which the MLLW is stored is a tank, container, or containment building (as defined by 40 CFR Part 260, “Hazardous Waste Management System: General”).

- 3) The facility stores the MLLW in accordance with its NRC or Agreement State license requirements, as enforced by the NRC or responsible Agreement State.
- 4) The facility at which the MLLW is stored is subject to periodic NRC or Agreement State inspections (see comment III.A, item 1).
- 5) Chemically incompatible wastes are not stored near each other.
- 6) The facility notifies EPA and the NRC or Agreement State of any storage unit for which it claims a conditional exemption.
- 7) The owner/operator reports to EPA any violation of the conditions for the exemption which results in an actual release into the environment of MLLW from the MLLW storage unit, or creates a substantial threat of such release (see comment III.A, item 2.a).

The conditions that DOE suggests above for defining a MLLW storage exemption modify several of the conditions for a storage exemption that the preamble of the ANPRM indicates EPA is considering. For example, DOE changed the conditions so that a storage exemption for MLLW would not be limited to MLLW that is generated at a facility that itself holds a NRC license, and then stored at the same facility. Additionally, DOE modified the condition requiring that the facility store MLLW in accordance with its NRC or Agreement State license. DOE modified this latter condition in order to be consistent with the enforcement and notification scheme that the Department puts forward in comment III.A, item 1, below. As comment III.A, item 1 explains, DOE supports an enforcement scheme in which EPA would rely on the NRC or the responsible Agreement State to enforce compliance with the specific provisions of the valid license.

II.A.6 What Facilities Might Be Eligible?

1. **p. 10066, col. 2 – EPA encourages comment on whether a conditional exemption or similar approach for MLLW storage should apply to all *generators* of mixed waste or be limited to specific industries, such as nuclear power plants.**

As indicated above (see General Comments 1 and 2), DOE does not consider the type of generator (e.g., commercial nuclear power plant, hospital, Federal Facility) and the location of the storage unit (on-site versus off-site) to be appropriate criteria for determining whether stored MLLW qualifies for a conditional exemption from RCRA hazardous waste requirements. DOE suggests that it is unnecessary for the conditional exemption to be limited based on the nature of the mixed waste generator's business activities, or the distinction that the MLLW is stored at its site of generation.

As the ANPRM explains (p. 10065, col.2), the court held in *Military Toxics Project v. EPA*, 146 F. 3rd 948 (D.C. Cir. 1998), that where a waste might pose a hazard only under limited management scenarios, and other regulatory programs already address such scenarios, EPA is not required to classify that waste as hazardous waste subject to regulation under RCRA Subtitle C. MLLW in storage poses a hazard only under management scenarios in which releases of the MLLW from the storage unit would be likely. Therefore, if EPA determines that a non-RCRA regulatory program (e.g., NRC or Agreement State licensing program), either alone or in combination with other legally imposed requirements, addresses such scenarios for MLLW in storage, then EPA is not required to classify the stored MLLW as hazardous waste.

DOE believes that, when MLLW is stored subject to a NRC or Agreement State license, the management scenarios under which the stored MLLW might be released to the environment may be addressed in the manner suggested by the court in *Military Toxics Project v. EPA* (without imposing requirements that restrict the industry, company, or facility that generates such MLLW or that limit the eligible storage units to those located on-site). DOE suggests that EPA would be justified in allowing MLLW to qualify for an exemption from regulation as hazardous waste under RCRA Subtitle C, provided that it is stored in a unit

covered by a valid NRC or Agreement State license, and provided that other conditions, which protect against releases (see Specific Comment II.A.5, item 1, above), are met.

2. **p. 10066, col. 2 -- The ANPRM explains that NRC regulations assert more direct control over commercial nuclear power plants than over other MLLW generators because the regulations applicable to nuclear power plants require a Radiation Safety Officer and on-site Resident Inspector to be present at each operating nuclear power plant site.**

This discussion in the ANPRM implies that, unless a MLLW storage unit is located at a facility required by its NRC or Agreement State license to have a Radiation Safety Officer and on-site Resident Inspector, the unit is somehow not deserving of regulatory flexibility. DOE questions whether this allegation is supported. As previously stated, DOE believes the requirements of a NRC or Agreement State license in conjunction with certain other legally imposed requirements (see Specific Comment II.A.5, item 1, above) would adequately address management scenarios in which releases of the MLLW from a storage facility would be likely to occur, whether or not the license required a Radiation Safety Officer and on-site Resident Inspector. Hence, DOE does not believe it is necessary for EPA to restrict applicability of a conditional exemption from RCRA hazardous waste requirements for MLLW storage solely to MLLW in on-site storage at commercial nuclear power plants. Instead, as stated in the preceding comments, DOE urges EPA to develop a conditional exemption applicable to MLLW being stored under provisions of a license issued by the NRC or an Agreement State, regardless of who generates the waste, or whether the waste is stored on-site or off-site.

3. **p. 10066, col. 3 – EPA seeks comment on whether a conditional exemption or other relief should apply to commercial mixed wastes stored at facilities that provide storage services to mixed waste generators with whom they contract and by whom they are paid.**

DOE believes facilities that provide storage services to mixed waste generators should be allowed to qualify for a conditional exemption or other relief, if such facilities are licensed by the NRC or an Agreement State and meet all other conditions of exemption. As previously stated, DOE believes that EPA would be justified in allowing MLLW to qualify for an exemption from regulation as hazardous waste under RCRA Subtitle C, provided that it is stored in a unit covered by a valid NRC or Agreement State license, and provided that other conditions, which protect against releases are met. It should not matter whether the licensed storage unit is located at a facility that provides storage services to mixed waste generators with whom they contract and by whom they are paid, unless EPA has evidence that the likelihood of MLLW releases from licensed storage units at such facilities is greater than from other licensed storage units.

II.A.7 Would DOE Mixed Waste Be Eligible for a Conditional Exemption?

1. **p. 10066, col. 3 – The ANPRM states that it “addresses only commercial mixed waste regulated by NRC or NRC Agreement states. It does not cover DOE-managed mixed wastes.”**
 - a. As was explained in comment II.A.6, item 1, above, DOE believes that, when MLLW is stored in a unit covered by a valid NRC or Agreement State license, and other conditions which protect against releases are met, the MLLW should be eligible for a conditional exemption from RCRA hazardous waste requirements while it is being stored. Some DOE activities generate MLLW that is, or may in the future be sent to off-site commercial facilities for management, including storage. DOE requires the off-site commercial facilities that receive or may receive DOE MLLW to hold all necessary federal, state, and local permits, licenses, and approvals, including NRC or Agreement State licenses. DOE encourages EPA to consider expanding the scope of its October 1999 NPRM to provide for a

conditional exemption from RCRA hazardous waste requirements for MLLW in storage at off-site commercial waste management facilities that are licensed by the NRC or an Agreement State. As long as MLLW storage units at such facilities are subject to applicable provisions in their NRC or Agreement State licenses and all other specified conditions of exemption are met, the MLLW stored should be eligible for the conditional exemption, regardless of where or at what type of facility the waste was generated.

- b. As mentioned in General Comment 2, above, DOE encourages EPA to consider omitting from the October 1999 NPRM any language that would prohibit NRC- or Agreement State-licensed facilities from accepting DOE-generated MLLW for storage in an otherwise conditionally exempt unit.

II.B Conditional Exemption for Decay-in-Storage

1. **p. 10067, col. 2 – EPA plans to propose a conditional exemption from RCRA hazardous waste requirements for decay-in-storage which would be valid as long as MLLW: (1) remains on-site and (2) is subject to NRC regulation. EPA suggests that RCRA time lines and other RCRA requirements should begin at the point when the waste no longer requires management as a radioactive waste under the decay-in-storage provisions in the NRC or Agreement State license.**

DOE agrees with the general concept of a conditional exemption from RCRA hazardous waste requirements for MLLW during the time needed for short-lived radionuclides to decay to levels no longer requiring regulation. This approach would implement RCRA without placing undue impediments on safe management of the radioactive component of the MLLW. Allowing short-lived radionuclides in MLLW to decay in storage would make subsequent treatment of the hazardous constituents safer because workers handling the waste would receive lower radiation doses. Similarly, transportation of the waste after decay would also be safer. Hence, as long as EPA structures an exemption for decay-in-storage so that the chance of MLLW releases is not increased, DOE supports the exemption and believes it would appropriately protect human health and the environment.

II.C Can I Treat Waste During Storage?

1. **p. 10067, col. 2 – EPA is considering exempting the on-site treatment of MLLW from Subtitle C regulation because the Agency believes that if NRC controls (implemented by way of a facility's NRC license) are sufficient to protect the public and environment from risks associated with hazardous waste storage, it's likely they would also provide adequate protection from the risks associated with treatment in tanks, containers, or containment buildings.**

DOE supports a conditional exemption from RCRA hazardous waste requirements for MLLW treatment when the treatment is conducted in tanks, containers, or containment buildings under the provisions of a NRC or Agreement State license. However, as with the proposed conditional exemption for storage, DOE encourages EPA not to limit a conditional exemption for MLLW treatment to treatment of MLLW generated on-site. Any MLLW treatment facility that holds a license from the NRC or an Agreement State and meets other conditions of the exemption should qualify for the exemption, regardless of whether the MLLW being treated is generated on-site.

III. Implementation

III.A Enforcement and Notification

1. p. 10067, col. 3 – EPA requests comment on two implementation and enforcement approaches, and asks for suggestions for additional alternatives.

DOE encourages EPA to consider the following issues in deciding which implementation and enforcement approach to include in the October 1999 NPRM:

- 1) DOE believes it would be appropriate for conditionally exempt treatment or storage facilities to lose the conditional exemption (i.e., become subject to applicable requirements of RCRA Subtitle C) upon failure to comply with any condition of the exemption.
- 2) However, DOE suggests that loss of the conditional exemption seems like too severe a penalty for noncompliance with provisions of the NRC or Agreement State license that are unrelated to reducing the likelihood of hazardous constituent releases to the environment, or that are merely administrative in nature.
- 3) Instead, DOE suggests that a designated condition of the exemption be that the facility holds a valid NRC or Agreement State license. Then, EPA should rely on the NRC or the responsible Agreement State to enforce the specific provisions of the valid license (see Specific Comment II.A.5, item 1).
- 4) In this way, noncompliance with NRC standards and license requirements that are unrelated to reducing the likelihood of hazardous constituent releases to the environment, or that are merely administrative in nature, would not result in loss of the conditional exemption.
- 5) Notwithstanding, DOE agrees that reporting to EPA of any violation of NRC standards and NRC or Agreement State license provisions that results in an actual release to the environment of MLLW, or that creates a substantial threat of such release should also be designated as a condition of the exemption (see Specific Comment III.A, item 3, below).
- 6) Hence, even though a violation of NRC standards and NRC or Agreement State license provisions would not itself result in loss of the conditional exemption, failure to report such a violation might, if the violation were to cause an actual release of MLLW to the environment, or create a substantial threat that such release might occur.

2. p. 10067, col. 3 – EPA indicates that an enforcement approach is being considered whereby noncompliance with a provision of the exemption would cause a conditionally exempt facility to be subject to RCRA Subtitle C from the time of noncompliance.

DOE recommends that a facility that self-discloses its noncompliance be allowed to:

- 1) Propose a compliance schedule during which time (if it is less than a specified maximum length of time, such as 90 days) the RCRA exemption would remain in effect provided that the facility demonstrates that a release of MLLW is unlikely during the time it will take for the facility to return to compliance; or
- 2) Request in writing, once the facility has returned to compliance with all conditions, that EPA reestablish the conditional exemption after considering appropriate factors.

DOE further recommends that, if EPA decides to propose that a facility be allowed to apply for reinstatement of the conditional exemption based on its return to compliance, EPA also propose that reinstatement be automatically granted retroactive to the date of the application for reinstatement if the responsible agency does not take action within a specified time after it receives the application. This

would be consistent with the reinstatement provisions of the Munitions Rule storage conditional exemption in 40 CFR 266.205(c).

3. p. 10067, col. 3 – 10068, col. 1 – EPA is considering including a reporting requirement as a condition of the exemption.

- a. The ANPRM indicates that EPA is considering including a reporting requirement as a condition of exemption that would mandate reporting of all violations of the conditions of exemption. Oral notice to EPA would be required within 24 hours of the time when the facility becomes aware of a failure to meet a condition of the NRC license as it relates to the on-site storage and/or treatment of MLLW (i.e., when the failure may endanger human health or the environment with respect to the hazardous components of the waste). Written notice to NRC (pursuant to 10 CFR part 20, subpart M), with a copy to EPA, would be required within 5 days of any failure to meet a condition for the exemption, regardless of the nature of the failure.

DOE agrees that reporting should be a condition of exemption. However, assuming that full compliance with NRC standards and the NRC or Agreement State license is not a condition of exemption (see Specific Comment III.A, item 1, above), DOE suggests that the reporting condition have two parts, structured as follows:

- 1) First, as was suggested above (see Specific Comment III.A, item 1), DOE agrees that a report to EPA should be made of any violation of NRC standards and NRC or Agreement State license provisions that results in an actual release to the environment of MLLW, or that creates a substantial threat of such release. Such reports to EPA should be required to be made at the same time they must be made to the NRC or Agreement State (pursuant to the facility's NRC or Agreement State license).
 - 2) Next, regarding reports of failures to comply with conditions of the exemption, DOE suggests that an oral report to EPA be required within 24 hours of the time the owner/operator of a conditionally exempt facility becomes aware of any violation of the conditions for the exemption which results in an actual release to the environment of MLLW from a conditionally exempt MLLW storage or treatment unit. In addition, a written report to EPA, with a copy to the NRC, should be required within 5 days of the time the owner/operator becomes aware of any violation of the conditions for the exemption which either results in an actual release to the environment of MLLW from the MLLW storage unit, or creates a substantial threat of such release. DOE suggests these reporting criteria because it is the actual or threatened release of non-radioactive hazardous constituents that defines a management scenario under which the stored MLLW might pose a risk resulting from the hazardous components in the waste. As such, only a violation of those conditions of the exemption that causes such actual or threatened releases should be of concern.
- b. DOE suggests that any written reporting requirement that is a condition for an exemption from RCRA hazardous waste regulations not contain a general reference to NRC reporting requirements in 10 CFR part 20, subpart M. The NRC reporting requirements in 10 CFR part 20, subpart M define not only the content of written reports, but also types of events requiring both oral and written reports. They also contain the timing of such reports following each type of event (which is often different than the 24-hour and 5-day schedules mentioned in the ANPRM). The types of events designated in 10 CFR part 20, subpart M as requiring reports generally involve loss or theft of licensed material, and radiation exposure to workers or members of the public. DOE believes that generally referencing these NRC reporting requirements could be confusing. Therefore, DOE suggests that EPA specify the content of written reports that will be required as a condition for exemption more precisely. This could be accomplished by either

referencing specific sections in 10 CFR part 20, subpart M, or by specifying the required contents of written reports without referencing any section in 10 CFR part 20, subpart M.

IV. Information Needs

1. **p. 10068, col. 2 – EPA requests data on mixed waste generation and management practices for certain facilities other than DOE. The preamble acknowledges that DOE has been providing data as a part of the rulemaking effort.**

DOE is willing to provide any additional available information that EPA believes may be helpful. Previously, DOE submitted the documents listed in Attachment 1 to EPA regarding DOE's MLLW and low-level waste management practices. Those documents contain the following types of information:

- 1) Quantities of MLLW, both currently in storage and expected generation;
- 2) Management practices for MLLW and low-level waste;
- 3) Cost data for MLLW, including the costs of MLLW and hazardous waste sampling and analysis for compliance with RCRA requirements;
- 4) Cost data for MLLW and low-level waste disposal; and
- 5) Potential impacts of a conditional exemption for mixed waste disposal.

VI. What Regulatory Efforts Affecting Mixed Waste Are Underway at EPA?

VI.A April 1997 Consent Decree and Mixed Waste Rulemaking Commitment

1. **p. 10071, cols. 1 & 2 – In 1997, EPA signed a final consent decree in the litigation surrounding issuance of the final Hazardous Waste Identification Rule (HWIR) [*ETC v. Browner*, CIV, No. 94-2119 (D.D.C.) (April 1997)]. The final consent decree requires EPA to publish a proposed rule by October 31, 1999 that requests comment on an exemption from hazardous waste disposal regulation for mixed wastes from nuclear power plants. The final consent decree further requires EPA to propose by October 31, 1999 such other regulatory relief for mixed wastes as the Agency finds to be appropriate. EPA plans to address both mixed waste disposal issues and mixed waste storage issues in the October 1999 proposed rule.**

DOE acknowledges EPA's commitment in the 1997 HWIR Consent Decree to consider relief for facilities managing commercial MLLW. However, DOE questions whether this commitment should restrict the scope of a proposed conditional exemption to **only** MLLW *generated by nuclear power plants and stored on-site*. As was discussed in comment II.A.6, item 1, above, DOE believes that a conditional exemption would be justified for any MLLW stored in a unit which is covered by a valid NRC or Agreement State license and which complies with all other conditions of exemption established by EPA to protect against releases of MLLW. DOE submits that such a conditional exemption is justified regardless of who generates the MLLW being stored, or whether the storage facility subject to a conditional exemption is located off-site from the facility that generated the waste. Based on these beliefs, DOE encourages EPA to expand its October 1999 NPRM to provide an exemption from RCRA hazardous waste regulations for any MLLW meeting the conditions suggested by comment II.A.5, item 1, above.

VI.B Summary or Approach for Mixed Waste Disposal

- 1. p. 10071, col. 2 – The ANPRM explains that EPA is formulating the scope and form of a proposal for a regulatory exemption from the RCRA hazardous waste disposal requirements for MLLW containing low concentrations of RCRA hazardous constituents which may be disposed at LLW disposal facilities.**

DOE fully supports EPA's effort to develop a rulemaking that would conditionally exempt certain MLLW containing low concentrations of RCRA hazardous constituents from RCRA hazardous waste disposal requirements. Further, DOE believes this type of conditional exemption for disposal could also be applied to other types of mixed waste, specifically high-level mixed waste. DOE believes that a geologic repository (which is where the Nuclear Waste Policy Act of 1982 [Pub. L. 97-425; 42 U.S.C. 10101 et seq.] requires that high-level waste be disposed) will more than adequately protect against possible risks from RCRA hazardous constituents in high-level mixed waste. Reasons for this belief include: (1) the characteristics of the treated form for high-level waste (i.e., vitrified waste form); and (2) the requirements in 10 CFR part 60, "Disposal of High-Level Radioactive Wastes in Geologic Repositories," which include, but are not limited to the following:

- 1) the requirement to obtain a NRC license;
- 2) the requirement to keep records and make reports in connection with licensed activities;
- 3) the requirement to allow NRC to inspect the premises;
- 4) the requirement to design and construct according to specified technical criteria
- 5) the requirement for a continuing program of surveillance, measurement, testing, and geologic mapping during construction and operation; and
- 6) the requirement for personnel training and certification.

ATTACHMENT 1

List of Documents Previously Provided to EPA Regarding DOE MLLW and LLW Management Practices

The following is a list of documents previously provided to EPA regarding DOE's MLLW and low-level waste management practices. This list is organized to reflect the five types of information identified in comment IV, item 1.

1) *Quantities of MLLW, both currently in storage and expected generation*

DOE's 1995 Mixed Waste Inventory Report (MWIR).

2) *Management practices for MLLW and low-level waste*

Letter to EPA (R. Joglekar) from DOE (W. Black), July 17, 1997, forwarding the following documents:

- "Performance Assessment for the Disposal of Low-level Waste in the Hanford 200 West Area Burial Grounds," WHC-EPA-0645, (June 1995)
- "Addendum to Performance Assessment for the Disposal of Low-Level Waste in the 200 West Area Burial Grounds" (December 1996).

Letter to EPA (R. Joglekar) from DOE (W. Black), October 16, 1997, forwarding the following documents:

- "Performance Assessment for the Disposal of Low-level Waste in the Hanford 200 East Area Burial Grounds," WHC-SD-WM-TI-730, Rev. 0 (August 1996)
- "Radioactive Waste Management Complex Low-Level Waste Radiological Performance Assessment," EGG-WM-8773 (May 1994)
- "Addendum to Radioactive Waste Management Complex Low-Level Waste Radiological Performance Assessment" -- April 1997 (INEL/EXT-97-00462, formerly EGG-WM-8773)
- "Performance Assessment and Composite Analysis for Los Alamos National Laboratory Material Disposal Area G," LA-UR-97-85 [site characterization sections only] (March 1997)
- "Performance Assessment for the Area 5 Radioactive Waste Management Site at the Nevada Test Site, Nye County, Nevada," Revision 2.1 (February 1997)
- "Radiological Performance Assessment for the Savannah River Site E-Area Vaults Disposal Facility (U)," WSRC-RP-94-218 (April 1994)
- "Radiological Performance Assessment for the E-Area Vaults Disposal Facility (U) -- Addendum 1," WSRC-RP-94-218, Addendum 1 (March 1995)
- "Addendum to Radiological Performance Assessment for the E-Area Vaults Disposal Facility (U)," WSRC-RP-94-218 (November 1995).
- "Hanford Site Solid Waste Acceptance Criteria," WHC-EP-0063-3 (September 1991)
- "Idaho National Engineering and Environmental Laboratory Waste Acceptance Criteria" (provided on diskette)
- "Nevada Test Site Waste Acceptance Criteria," NTSWAC, Rev. 0 (September 1996)
- "Savannah River Site Waste Acceptance Criteria Manual (U)," Rev. 2 (May 1994)
- Internal Review Draft of DOE's proposed Order 435.1 (February 28, 1997).

Letter to EPA (A. Klinger) from DOE (W. Black), July 17, 1997, forwarding the following documents:

- “The Current and Planned Low-Level Waste Disposal Capacity Report” (July 1996)
- “Final Waste Management Programmatic Impact Statement for Managing Treatment, Storage, and Disposal of Radioactive and Hazardous Waste,” DOE/EIS-0200-F (May 1997).

Letter to EPA (R. Joglekar) from DOE (W. Black), September 2, 1997, forwarding the following document:

- “Framework for DOE Low-Level and Mixed Low-Level Waste Disposal: Current Overview” (June 1994).

3) *Cost data for MLLW, including the costs of MLLW and hazardous waste sampling and analysis for compliance with RCRA requirements*

Letter to EPA (R. Joglekar) from DOE (J. Antizzo), November 12, 1998, transmitting information on DOE’s Mixed Waste and Hazardous Waste Sampling and Analysis Cost.

4) *Cost data for MLLW and low-level waste disposal*

Letter to EPA (E. Laws) from DOE (A. Alm), July 9, 1996, forwarding the following document:

- “Cost Savings Information for the U.S. Department of Energy’s Regulatory Reform Activities (Immobilized Mixed Low-Level Debris and Vitrified Mixed Waste Proposals)” (May 1996).

Letter to EPA (R. Joglekar) from DOE (J. Antizzo), May 23, 1997, transmitting information on responses to questions raised during a conference call held March 11, 1997 regarding the May 1996 Cost Savings Analysis.

5) *Potential impacts of a conditional exemption for mixed waste disposal*

Letter to EPA (E. Laws) from DOE (A. Alm), July 9, 1996, forwarding the following document:

- “Cost Savings Information for the U.S. Department of Energy’s Regulatory Reform Activities (Immobilized Mixed Low-Level Debris and Vitrified Mixed Waste Proposals)” (May 1996).