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Part II

Environmental Protection Agency

40 CFR Chapter I

Approach to Reinventing Regulations of
Storing Mixed Low-Level Radioactive
Waste; Proposed Rule

ENVIRONMENTAL PROTECTION AGENCY

40 CFR Chapter I

[F-99-MLLP-FFFFF; FRL-6305-1]

RIN 2050-AE45

Approach to Reinventing Regulations on Storing Mixed Low-Level Radioactive Waste

AGENCY: Environmental Protection Agency (EPA).

ACTION: Advance notice of proposed rulemaking (ANPR).

SUMMARY: This ANPR describes several options EPA is considering to make our regulations more flexible for generators of mixed low-level radioactive waste (MLLW) who are storing wastes that we and the Nuclear Regulatory Commission (NRC or Commission) oversee. In this ANPR, we are requesting: comments on options for storing mixed waste; other suggestions on providing regulatory flexibility to manage mixed waste; and from generators of MLLW, information about generating such wastes and your operating procedures and costs for storing, treating, and disposing of these wastes.

DATES: To make sure we consider your comments they must be received by April 15, 1999.

ADDRESSES: You can send an original and two copies of your comments referencing Docket Number F-99-MLLP-FFFFF to (1) if using regular US Postal Service mail: RCRA Docket Information Center, Office of Solid Waste (5305W), U.S. Environmental Protection Agency Headquarters (EPA, HQ), 401 M Street, SW., Washington, DC 20460, or (2) if using special delivery, such as overnight express service: RCRA Docket Information Center (RIC), Crystal Gateway One, 1235 Jefferson Davis Highway, First Floor, Arlington, VA 22202. To reduce paper, we are asking you to send one paper copy, and an electronic copy by diskette or Internet email. In this case, send your comments to the RCRA Information Center on labeled personal computer diskettes in ASCII (TEXT) format or a word processing format we can convert to ASCII (TEXT). Please include on the disk label the name, version, and edition of your word processing software as well as your name. Protect your diskette by putting it in a protective mailing envelope. To send a copy by Internet email, address it to: rcra-docket@epamail.epa.gov. Make sure this copy is in ASCII format that doesn't use special characters on

encryption. Cite the docket number F-99-MLLP-FFFFF in your electronic file.

The RCRA Information Center is at Crystal Gateway One, 1235 Jefferson Davis Highway, First Floor, Arlington Virginia. You may look at and copy supporting information for RCRA rules from 9 AM to 4 PM Monday through Friday, except for Federal holidays. But you must make an appointment to review docket materials by calling (703) 603-9230. You may copy up to 100 pages from any regulatory document at no cost. Additional copies cost \$0.15 per page.

FOR FURTHER INFORMATION CONTACT: For general information, call the RCRA Hotline at 1-800-424-9346 or TDD 1-800-553-7672 (hearing impaired). Callers within the Washington Metropolitan Area must dial 703-412-9810 or TDD 703-412-3323 (hearing impaired). The RCRA Hotline is open Monday-Friday, 9 a.m. to 6 p.m., Eastern Standard Time. For more information on specific aspects of this ANPR, telephone Nancy Hunt at (703) 308-8762, or Chris Rhyne at (703) 308-8658, or write them at the Office of Solid Waste (5303W), U.S. Environmental Protection Agency, 401 M Street, SW, Washington, DC 20460.

SUPPLEMENTARY INFORMATION: The index and electronically obtainable supporting materials are available on the Internet. Follow these instructions to access the information electronically:

WWW: <http://www.epa.gov/epaoswer/hazwaste/radio>.
FTP: <ftp://ftp.epa.gov>
Login: anonymous
Password: your Internet address
Files are located in /pub/epasower

The official record for the action will be kept in the paper form. Accordingly, EPA will transfer all comments received electronically into paper form and place them in the official record which will also include all comments submitted directly in writing. The official record is the paper record maintained at the **ADDRESSES** at the beginning of this document.

EPA responses to comments, whether the comments are written or electronic, will be placed in the official record, EPA will not immediately reply to commenters electronically other than to seek clarification of electronic comments that may be garbled in transmission or during conversion to paper form, as discussed above.

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I. Why Are We Publishing Today's ANPR?

Today's ANPR introduces strategies we're considering to make regulations more flexible for commercial generators of Mixed Low-Level Radioactive Waste (MLLW), for storage and treatment of mixed waste. We are doing this in response to EPA's long-held view that the joint regulation of mixed waste under the Resource Conservation and Recovery Act and the Atomic Energy Act creates compliance difficulties and may be, at times, redundant. We are also responding to the regulated community's concerns regarding the inefficiencies of dual regulation of mixed waste, the perceived mismatch of

the two regulatory systems, and concern for radiation exposure of workers. This ANPR focuses on facilities regulated by the NRC or NRC Agreement States, and on strategies for reducing or eliminating the burden of dual regulation. These facilities include nuclear power plants, fuel cycle facilities, pharmaceutical companies, medical/research laboratories, universities and academic institutions, and others.

Our ANPR requests comments on ways for EPA to address the issue of dual regulation of mixed waste storage and treatment. We're also asking generators of MLLW to tell us the volumes and nature (waste codes, radionuclides present, and curie level) of mixed wastes you generate and your legacy¹ wastes in storage.

II. What Approaches Can Simplify Dual Regulation?

A. Conditional Exemption for Storage

EPA is exploring options for providing regulatory flexibility in mixed waste management to the regulated community that generates, stores, and conducts on-site treatment of mixed low-level radioactive waste (MLLW) which is subject to NRC and EPA oversight. We are exploring an option modeled on the conditional exemption developed for non-chemical waste military munitions in the Military Munitions Rule (40 CFR part 266). (As discussed later in this ANPR, EPA is also developing approaches to address the disposal of mixed waste, but we are not soliciting comments on this issue in today's ANPR.)

1. Military Munitions Rule Precedent for Conditional Exemptions

The Military Munitions Rule identifies when conventional and chemical military munitions become a hazardous waste subject to RCRA Subtitle C. In the case of the Military Munitions Rule, EPA developed a conditional exemption approach for providing regulatory flexibility to the military for storing and transporting non-chemical waste munitions. Under the conditional exemption, non-chemical waste military munitions that meet the definition of "hazardous waste" are not regulated under RCRA Subtitle C as a hazardous waste so long as the facilities storing or transporting these munitions meet all of the conditions for storing and transporting non-chemical waste munitions listed in the rule. (For a complete discussion of

the Military Munitions Rule, see 62 FR 6621; February 12, 1997.)

2. Court of Appeals Decision

The Court of Appeals upheld all aspects of the rule in *Military Toxics Project v. EPA*, 146 F. 3d 948 (D.C. Cir. 1998). The court agreed 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 a waste as hazardous waste subject to regulation under Subtitle C." Id. at 958. The court agreed that "Congress has not spoken directly to the issue of conditional exemption," and upheld as reasonable EPA's interpretation that Section 3001(a), which requires the Administrator to promulgate criteria for identifying and listing wastes that should be subject to Subtitle C requirements, allows the use of conditional exemptions. Id.

3. Rationale for Conditional Exemption

In the munitions rule, EPA conditionally exempted munitions stored on site and transported off site to DOD or commercial facilities. However, off-site storage and treatment remained subject to RCRA. A comparable approach for commercial MLLW would be for EPA to provide a conditional exemption for commercial generators of MLLW who store mixed waste on site. EPA would base the approach on the NRC or the NRC Agreement State licensing process and regulatory requirements, and their adequacy in addressing risks from RCRA hazardous constituents. By a conditional exemption, EPA could eliminate redundant or dual requirements where: wastes are managed safely and mismanagement is unlikely; appropriate safeguards, recordkeeping, and monitoring are in place; and penalties or other consequences may be imposed if the governing regulatory framework is not followed.

4. Key Factors in Decision

In studying a conditional exemption from RCRA regulation for commercial storage of MLLW, EPA will be evaluating certain key factors. First, EPA will evaluate whether NRC regulation of stored commercial low-level waste (LLW) adequately protects against possible risks from RCRA hazardous constituents in mixed waste. Although NRC regulation and oversight is designed primarily for radiation risks, NRC, the regulated industry, and others have argued that these standards largely duplicate RCRA requirements and thus will protect against chemical risks. In this rulemaking, EPA will review the

licensing requirements and NRC standards for the management of LLW as compared to RCRA standards. EPA will also complete a study comparing NRC and EPA mixed waste storage requirements. This study will independently review the conclusions reached in studies by USWAG, the Electric Power Research Institute, and the Nuclear Management and Resources Council, Inc. (who represent members of the power generation industry) regarding applicable NRC standards. These parties concluded that the technical design and operating standards of the NRC meet or exceed RCRA standards in virtually all respects, though there were differences in certain procedural requirements.

Second, as described below, EPA is reviewing documentation of incidents involving the management and on-site treatment of radioactive wastes at nuclear power facilities. The preliminary information suggests that these facilities generally have an excellent low-level waste management safety record. Thus, regulating mixed wastes stored at these facilities under RCRA Subtitle C may not provide additional protection to human health and the environment.

If these key factors demonstrate that the NRC regulatory and licensing program will adequately control risks from hazardous constituents as well as radioactive material, we might rely on the safeguards of the NRC regulatory framework during MLLW storage via a conditional exemption. We are interested in your suggestions for other key factors needed to evaluate a conditional exemption.

EPA Study of NRC Nuclear Power Licenses

EPA is studying the regulatory and licensing framework under which low-level waste (LLW), and therefore MLLW, is stored by waste generators. EPA is also looking into provisions in low-level waste generator licenses, in particular nuclear power plan licenses, concerning the on-site treatment of LLW prior to shipment off-site for disposal to assess whether these requirements are protective of human health and the environment. Though NRC requirements concerning the generation, storage, and treatment of LLW are more performance based (for example, no releases/leaks), rather than prescriptive as in RCRA (where types of drums and waste management are specified to prevent leaks), the protection from exposure to radioactive waste may serve as well to protect human health and the environment from exposure to hazardous wastes during storage. EPA

¹ Legacy MLLW is stored waste for which no treatment technology or disposal capacity is available.

will also be reviewing the licensing system of NRC and Agreement States for other generators of mixed waste (e.g., hospitals, pharmaceutical companies, and research laboratories).

EPA Compliance Review

EPA is reviewing compliance records related to NRC radiation controls for nuclear power plants and other licensees, to determine if there are releases or mismanagement of LLW. If this review finds that these facilities are managing LLW safely (that is avoiding releases by complying with regulatory, licensing provisions and tie-down conditions²) such findings may support the protective nature of NRC's regulatory and licensing framework concerning the generation, storage, and treatment of LLW. This review will be available in the RCRA docket with the **Federal Register** publication of the proposed rulemaking planned for October 1999.

For further information on applicable NRC regulations refer to 10 CFR part 20 Subpart I. Information regarding NRC's regulations, or guidance documents may be obtained by either contacting the NRC Public Document Room, at 2120 L Street, NW, Lower Level, Washington, DC 20037 (202-634-3273 or 800-397-4209, Monday through Friday, 8:30 am to 4:15 pm) or by visiting NRC's Internet web page at <http://www.nrc.gov>.

5. Possible Conditions

EPA would base any conditional exemption for commercial MLLW on a finding that mismanagement of the hazardous constituents in the waste would be improbable, given compliance with NRC standards. In connection with this finding, EPA might impose specific conditions under RCRA authority to insure protectiveness and enforceability of the exemption. This was the approach EPA took in the military munitions rule. Examples of possible conditions include:

- (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 (discussed later in this ANPR).

(7) The owner/operator reports any violation of the conditions for the exemption (discussed later in this ANPR).

If a facility met these conditions under a conditional exemption approach, the wastes it generated would be exempt from RCRA hazardous waste requirements, such as RCRA permitting and technical storage standards. However, if the facility (or waste it generated) fell out of compliance with one of the exemption conditions, its waste would be regulated as hazardous. (This approach is discussed more fully later in the ANPR.)

The basic conditions for an exemption would presumably apply to all options for regulatory flexibility covered in this ANPR. In other words, the basic conditions would apply to the conditional exemption for stored mixed waste described in section II.A., the approach for decay-in-storage contained in section II.B., and on-site treatment during storage discussed in section II.C. EPA seeks comments on these or other possible conditions. Commenters are encouraged to address the appropriateness of these conditions, and other conditions that might be appropriate. Commenters should also provide their views on whether conditions are needed at this level of specificity, given adequate NRC controls.

6. What Facilities Might Be Eligible?

EPA's focus in preparing this ANPR has been on commercial MLLW generated by the nuclear power industry, based upon the April 1997 consent decree (described under section VI.A.). EPA, however, encourages comment on 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. EPA recognizes that NRC exerts greater direct regulatory control over nuclear power plants than other sources. For example, NRC has a Radiation Safety Officer and on-site Resident Inspector at each operating nuclear power plant. However, it may be appropriate for a conditional exemption to include all mixed low-level waste generators because similar safeguards may be imposed by their NRC or NRC Agreement State licenses. In addition, the decay-in-storage option responds to specific problems encountered by facilities that use short-lived radionuclides and store this waste on-site. (See II.B. below.)

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. Also, should an exemption apply to mixed waste generated at RCRA mixed waste treatment facilities due to maintenance operations or residues from treatment?

In summary, we encourage comment on whether a conditional exemption or similar approach should apply to: (1) the nuclear power industry storing waste on site, (2) other MLLW generators such as hospitals, laboratories, or pharmaceutical companies, (3) off-site facilities storing commercial mixed waste, and (4) mixed wastes generated during treatment or maintenance activities at RCRA TSDFs permitted to treat or dispose of mixed waste. Later in this ANPR, EPA solicits comments on extending RCRA relief to treatment of mixed waste.

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

Today's ANPR addresses only commercial mixed waste regulated by NRC or NRC Agreement states. It does not cover DOE-managed mixed wastes. EPA has limited the ANPR in this way because it responds to a 1997 Consent Decree (discussed later), in which EPA promised to consider relief for facilities managing commercial low-level mixed wastes. DOE wastes lie outside the scope of this decree.

B. Conditional Exemption for Decay-in-Storage

The previous section of this ANPR discussed the possibility of a RCRA conditional exemption for mixed wastes stored at generator sites under NRC controls, including medical, research and other facilities. Another approach for these facilities might be based on NRC's decay-in-storage requirements.

NRC generally allows research, medical and other facilities to store low-level wastes containing radionuclides with half-lives of less than 65 days until 10 half-lives have elapsed and the radiation emitted from the unshielded surface of the waste (as measured with an appropriate survey instrument) is indistinguishable from background levels. This process is known as decay-in-storage. Once the specified decay has occurred, the waste may then be disposed of as non-radioactive waste after ensuring that all radioactive material labels are rendered unrecognizable (see 10 CFR 35.92). Radioactive waste may also be decayed

² Tie-down conditions include guidance documents and policies concerning storage and treatment of LLW which become part of the license by reference.

in storage under certain circumstances in accordance with 10 CFR 20.2001.

Reduced Worker Exposure to Radiation

Decay-in-storage for LLW has a limited storage time frame based on the radionuclides (and half-lives) specified in the facility's NRC license. A RCRA exemption for mixed wastes undergoing decay-in-storage would address a major concern of mixed waste generators regarding overlapping RCRA and AEA requirements for radionuclides of relatively short duration. Such management of LLW reduces or eliminates worker exposures to radionuclides in keeping with NRC's ALARA (as low as reasonably achievable) goal for worker radiation exposures. EPA, at the request of several universities and medical facilities, is looking into decay-in-storage as a way of reducing risk and regulatory inefficiency in the management of MLLW.

Matching License Requirements for Storing Waste with Short Half-Lives

Under current RCRA requirements, persons generating hazardous waste must obtain a RCRA permit if they store wastes on site for more than 90 days. The flexibility EPA is considering may include RCRA requirements governing time in storage and the necessity of having a RCRA storage permit for certain generators. The generators include universities, hospitals, laboratories, and research operations who use short-lived radionuclides and generate MLLW that is subject to NRC and EPA oversight. We may allow these generators to store MLLW on-site in accordance with their NRC licenses, and without a RCRA storage permit, for the purpose of decay-in-storage where this practice is approved for LLW under the facility's NRC or Agreement State license. Such flexibility would allow storage of relative short-lived radionuclides during a decay period currently allowable under NRC regulations (see 10 CFR 35.92 and 10 CFR 20.2001) without a RCRA storage permit.

How Long Might an Exemption Be Valid During Stored Decay?

EPA might allow an exemption for decay-in-storage to be valid as long as the mixed waste: (1) remains on-site and (2) is subject to NRC regulation. EPA notes that, under a decay-in-storage conditional exemption, a MLLW is no longer subject to NRC licensing requirements when the radioactive portion of the waste has decayed to the level described in the NRC or NRC Agreement State license. At that point

the waste no longer needs to be managed as a radioactive waste under the provisions of the license, and would be subject to the applicable provisions of Subtitle C of RCRA. Once the waste is subject only to the RCRA regulations (because the decayed waste still exhibits a RCRA hazardous waste characteristic, or is a listed hazardous waste), then shipment off-site for treatment, if needed, and disposal at a Subtitle C facility would be required. Under this exemption, RCRA time lines and other requirements (found at 40 CFR part 262) would begin when decay requirements in the NRC or Agreement State license are met. We seek general comment on this idea and on how to assure that waste is treated and/or disposed within the time frames required by RCRA following decay.

C. Can I Treat Waste During Storage?

EPA also is considering exempting the on-site treatment of MLLW from Subtitle C regulation under the conditions listed above. An additional condition might be that the waste is treated on-site and is physically/chemically treated in a tank, container, or containment building in accordance with the generator's NRC license requirements. The logic behind this approach would be, in part, that EPA's regulations governing storage and treatment in tanks, containers, and containment buildings are generally the same. Thus, if NRC controls were sufficient for storage, it's likely they would also be sufficient for treatment. On the other hand, more specific control might be appropriate for some forms of treatment, such as thermal treatment, because of concerns for air emissions and the specificity of RCRA requirements in this area.

We request comment on treatment of mixed waste under a conditional exemption, and while the mixed waste is subject to the specific NRC licensing requirements for the management of LLW. EPA requests comment on the degree to which NRC regulation of the treatment of LLW will protect against risks from hazardous waste treatment, and the added necessity of RCRA Subtitle C regulation for treatment of MLLW.

III. Implementation

A. Enforcement and Notification

The NRC has in place a "General Statement of Policy and Procedure for NRC Enforcement Actions" (NUREG-1600) which states the Commission's policy regarding enforcement. This policy provides significant consequences for violating NRC or

license requirements and takes into consideration the specific circumstances of a particular case. If a nuclear power plant is found to have violated the NRC license, or tie-down conditions of the license, the license (and responsible person) may be subject to substantial civil and criminal penalties. Based on these provisions, licensed facilities have incentives to manage stored waste safely.

If we adopt a conditional exemption approach for mixed waste as we did in the Munitions Rule, we might adopt a similar enforcement approach. In this case, we would consider non-compliant facilities to be subject to RCRA Subtitle C from the time of non-compliance. Utilities or other mixed waste generators that claimed the conditional exemption, but failed to store and/or treat the MLLW in compliance with the provisions of the exemption, would no longer be exempt from the applicable provisions of RCRA. The facility could then be subject to enforcement action (or citizen suit) for violations of RCRA storage or treatment requirements. Alternatively, EPA might consider a less detailed approach, which didn't tie the conditional exemption to compliance with NRC standards. Instead, the exemption might be restricted to commercial MLLW regulated by NRC or Agreement States, and managed under basic conditions (e.g., managed in tanks or containers). In this case, releases or storage in non-tanks or containers would be enforceable under RCRA, but EPA would rely on NRC and the Agreement State for direct enforcement of the licenses. This approach would significantly simplify implementation, but would provide less direct EPA enforcement. EPA might choose an approach along these lines if it is convinced that NRC oversight of the low-level radioactive waste is sufficient to ensure against mismanagement of hazardous constituents in mixed wastes, without independent EPA oversight.

We are seeking comment on both of these approaches as well as alternative implementation and enforcement approaches.

Reporting Requirement

To determine if a unit used to store MLLW is in compliance with the terms of the exemption, we are considering including a reporting requirement as a condition of the exemption. If we were to adopt an approach comparable to that in the Military Munitions Rule, we might require the owner or operator to provide oral notice to EPA within 24 hours of the time when he or she 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 that may endanger human health or the environment with respect to the hazardous components of the waste. The owner/operator would provide a written notice of any failure to meet a condition for the exemption within 5 days of such failure. The owner/operator would be required to provide a written report to NRC, with a copy to EPA, pursuant to the reporting requirements outlined in 10 CFR part 20 Subpart M. As in the munitions rule, we could allow the owner or operator to request in writing that EPA reestablish the conditional exemption once the facility's waste management practices return to compliance with all conditions of the exemption. Under the munitions rule, reinstatement is automatic if EPA does not respond negatively. EPA requests comment on this approach, including whether reinstatement should be automatic.

If EPA takes a broad approach to a conditional exemption, as described in II-A, reporting requirements as well as notification requirements discussed below might be simplified.

Notification of Conditional Exemption for a Unit

Finally, to enable us to know which wastes and which storage units are subject to oversight under a conditional exemption, we are considering requiring the owner or operator to notify us within the first 90 days when a storage and/or treatment unit is used to store or treat MLLW and a conditional exemption is claimed for that unit. (See list of conditions under II.A.5.) This notification is similar to the provisions of the munitions rule (see 40 CFR 266.205).

B. Future Amendments to NRC Regulations

NRC has extensive experience regulating radiation safety hazards, which directly affect not only the public but also workers stationed at every nuclear power facility. EPA is working closely with NRC in developing the approaches discussed in today's ANPR. EPA recognizes that NRC license requirements or regulations may change over time. EPA will continue to coordinate with NRC to implement these approaches, and NRC can notify EPA as changes to the storage and treatment requirements are considered, so that the EPA can make any modifications to the conditional exemption necessary to ensure the continued protection of human health and the environment. We are interested in your views on what impacts future amendments to NRC regulations may

have on any conditional exemption EPA may propose.

C. Request for Public Comment

We are requesting public comments regarding the suitability of the above approaches for providing regulatory flexibility under RCRA to the nuclear power industry and other facilities which generate, store, and/or treat MLLW on site in accordance with their NRC licenses. We are also seeking comment regarding the ramifications of the options on (1) the protection of human health and the environment and (2) the degree to which the options are useful to the regulated community. EPA also requests comment on alternative ideas regarding managing mixed waste under RCRA.

IV. Information Needs

In preparation for conducting the technical analyses and associated regulatory analyses (such as the required analyses of economic costs and benefits and of impacts on small businesses and government entities) for the upcoming mixed waste management rule, we are requesting data from NRC Agreement States and licensed commercial mixed waste generators other than nuclear power plants. We are interested in obtaining data on mixed waste generation and management practices for the following:

- Industrial—manufacturing facilities (both small quantity and large quantity generators);
- Industrial—research and development facilities;
- Industrial sealed source users;
- Other industrial facilities;
- Academic institutions (both large and small quantity generators);
- Medical facilities (colleges and hospitals);
- Medical research facilities;
- Federal research and development facilities (other than DOE, which has been providing data as a part of the rulemaking effort); and
- Other non-defense, non-nuclear power plant facilities.

We are requesting data from facilities other than nuclear power plants, in order to address gaps in the available data. However, EPA also encourages nuclear power plants to provide data and comments that will inform the regulatory process.

We have been reviewing information on the generation and management of MLLW in the commercial sector under current regulations using two primary sources of data on commercial generation and management practices. The first is a database developed by the Edison Electric Institute from a survey

of nuclear power plants in 1997. The second is a database developed for the *National Profile on Commercially Generated Low-Level Radioactive Mixed Waste (NUREG/CR 5938)*, a survey of commercial generators jointly sponsored by NRC and EPA that was published in December 1992. Both of these data sources contain valuable information concerning the generation and management of MLLW. They are available in the docket.

To supplement currently available data, we are requesting generators of mixed waste to provide the following types of information:

- **MLLW Generation and Management:** The Agency requests information for individual waste types or categories of waste on current MLLW generation rates and storage, treatment, and disposal practices that can be used to update the data from the 1992 National Profile. Data on types of mixed waste generated, RCRA codes, hazardous constituents and concentrations, storage and treatment techniques, and disposal practices associated with individual waste streams or waste categories would be particularly useful, as would data on waste volumes at the point of generation and after treatment.

- **MLLW Cost Data:** The agency requests information on the costs associated with the management of MLLW, including storage costs; costs of sampling and analysis for compliance with RCRA requirements, including the universal treatment standards (UTS); pre-treatment and treatment costs (by method); packaging and transport costs; disposal costs; and reporting and recordkeeping costs. Because under an RCRA exemption, generators could manage MLLW in the same manner as LLW, the Agency seeks data on LLW management costs as well.

- **Impacts of Exemption:** The Agency requests comments and/or data on the potential effects of RCRA exemptions for MLLW (e.g., impacts on future waste management capacity, waste management practices, and waste minimization) that are important to parties potentially affected by the mixed waste rule.

We request that you indicate the units of reference for all data (including time). We would appreciate the reporting of liquid volume in gallons; the mass of solids in kilograms; the radioactivity of individual radioisotopes in millicuries; the concentration of RCRA hazardous constituents in milligrams/kilogram (for solids) and milligrams/liter (for liquids); and the concentration of radionuclides in picocuries/gram (for solids) and picocuries/liter (for liquids).

Lastly, we request information on the effect of a conditional exemption for commercial MLLW generators who qualify as "small entities" (i.e., businesses, governments, or organizations) for purposes of the Regulatory Flexibility and Small Business Regulatory Enforcement Fairness Acts. The Small Business Administration's definition of small business, which varies by Standard Industrial Classification code, can be found at 13 CFR 121.201 or on the Internet (<http://www.sbaonline.sba.gov/gopher/Financial-Assistance/Size-Standards>). A small government is defined as a government of a city, county, town, school district, or special district with a population of less than 50,000. A small organization is defined as any not-for-profit enterprise which is independently owned and operated and is not dominant in its field. Generators of MLLW are encouraged to comment on potential impacts specific to small entities that may result from increased RCRA flexibility for MLLW management.

V. Facts and Historical Background

A. What Is Mixed Waste?

Mixed waste is radioactive hazardous waste. In 1976, the Resource Conservation and Recovery Act (RCRA) authorized EPA to regulate hazardous waste from "cradle to grave." This includes the minimization, generation, transportation, treatment, storage, and disposal of hazardous waste. The definition of solid waste in the RCRA legislation specifically excludes source, special nuclear, or byproduct material as defined by the Atomic Energy Act of 1954, as amended. In the 1984 Hazardous Solid Waste Amendments to RCRA (HSWA), Congress established land disposal restrictions (LDR) for hazardous waste and directed EPA to establish treatment standards for hazardous waste. Hazardous waste was prohibited from land disposal unless treated to EPA established standards. In 1986, EPA published a notice clarifying RCRA jurisdiction for mixed waste and indicated that States must include mixed waste in RCRA base authorization (51 FR 24504; July 3, 1986). EPA also published a notice (53 FR 37045; September 23, 1988) clarifying that existing facilities that treat, store or dispose of mixed waste had to obtain interim status pursuant to Subtitle C of RCRA and that generators of mixed waste were to notify EPA. Congress provided further clarification of mixed waste in the Federal Facilities

Compliance Act.³ Information on mixed waste can be found at the website address: <http://www.epa.gov/radiation/mixed-waste>.

Mixed waste is regulated under multiple authorities: by RCRA, as implemented by EPA or authorized states for the hazardous waste components; and by the Atomic Energy Act of 1954, as amended (AEA), for radiological components as implemented by either the Department of Energy⁴ (for radioactive waste generated by DOE), or the Nuclear Regulatory Commission (NRC) or its Agreement States (for all other mixed waste).

Commercial mixed waste generators, particularly nuclear power plants, have raised the concern that AEA and RCRA requirements for mixed waste overlap, and compliance with both is overly burdensome. The nuclear power industry has provided information which supports their view that radioactive waste disposal facilities designed and licensed according to the AEA offer human health and environmental protection similar to that required by RCRA.

B. Where Is Mixed Waste Generated?

Mixed low-level radioactive waste (MLLW) is generated in all 50 states and the District of Columbia at nuclear power plants, fuel cycle facilities, pharmaceutical companies, medical and research laboratories, universities and academic institutions, and other facilities. Wastes that are both radioactive and hazardous are generated as a result of a number of processes such as medical diagnostic testing and research, pharmaceutical and biotechnology development, and generation of nuclear power. The *National Profile* indicated approximately 3,950 m³ of MLLW was generated in the U.S. in 1990. Of this amount, approximately 2,840 m³ (nearly 72%) was liquid scintillation counting fluid. Organic solvents,

chlorofluorocarbons, waste oil, and aqueous corrosives, made up 17%, toxic metals made up 3%, and "other" waste made up 8%.

The Edison Electric Institute, based on a 1997 survey of nuclear power plants, reports that the volume of MLLW currently being generated by the nuclear utility industry has been substantially reduced from 1990 levels due to waste minimization practices being followed by the generators. Legacy MLLW has also been reduced due to limited treatment technology development. Based on the *Mixed Waste Treatment Study* prepared for the Electric Power Research Institute (December 1995), EPA understands that for nuclear utilities there are still a few mixed wastes for which treatment technologies or disposal facilities may not be commercially available. Wastes, such as freon still bottoms, lead paint chips and sludge, are being indefinitely stored due to the lack of treatment and disposal facilities. A limited number of EPA site visits to hospitals and universities in 1998 found a small number of mixed wastes that could not be treated with technologies that are commercially available at this time. In addition, industry groups such as the American Chemical Society, and the International Isotope Society, have discussed with EPA representatives on several occasions their continued difficulty finding suitable treatment and/or disposal for some of the mixed wastes they generate despite considerable efforts to minimize waste generation in general and mixed waste generation in particular. They also cite very high costs for the treatment and disposal which is available. (See also the discussion of our policy of lowered enforcement priority for mixed waste later in this ANPR.)

C. Applicability of NRC Regulations

NRC's mission, under the Atomic Energy Act of 1954, as amended (AEA), is to regulate the Nation's civilian use of byproduct, source, and special nuclear materials to ensure adequate protection of public health and safety, to promote the common defense and security, and to protect the environment. The NRC's scope of responsibility includes regulation of commercial nuclear power plants; research, test, and training reactors; fuel cycle facilities; medical, academic, and industrial uses of nuclear materials; and the transport (along with the Department of Transportation), storage, and disposal of nuclear materials and wastes. NRC is authorized by the AEA to issue licenses to commercial users of source, special nuclear and byproduct radioactive

³The Federal Facilities Compliance Act (FFCA) of 1992, defined mixed waste as a waste that contains both hazardous waste subject to the requirements of the RCRA and source, special nuclear, or byproduct material subject to the requirements of the Atomic Energy Act of 1954, as amended. In addition, the FFCA required that for each facility at which DOE generates or stores mixed waste DOE was to develop a plan for developing treatment capacities and technologies to treat all of the facility's mixed wastes. Such plan had to be submitted to and approved by the State or EPA regulator, and incorporated into an order issued by the regulator requiring compliance with the approved plan.

⁴The Department of Energy (DOE) referred to in this ANPR includes DOE facilities and facilities operated by the Naval Nuclear Propulsion Program (NNPP), which is a joint program of DOE and the Department of the Navy.

materials and to regulate federal facilities other than DOE and Naval Nuclear Propulsion Program facilities.

Thirty states have signed agreements with NRC enabling the various Agreement States to regulate source, byproduct, and small quantities of special nuclear material within their boundaries. Facilities located in agreement States are subject to regulatory requirements for radioactive material that are authorized by state law. This applies to all source, special nuclear, and byproduct material except that from utilization facilities and fuel cycle facilities, which are subject to NRC's requirements, and DOE facilities, which are subject to DOE Orders. While Agreement States are required to adopt programs that are adequate to protect public health and safety and compatible with the NRC program, Agreement States may also adopt some requirements that are more stringent than the comparable Federal NRC requirements. NRC conducts periodic reviews of Agreement State programs to assure that those programs remain adequate to protect public health and safety and compatible with NRC's program. NRC retains authority over production and utilization facilities and other activities in Agreement States specified by section 274(c) of the AEA.

A large portion of the radioactive mixed waste generated by medical and biomedical research institutions contains radionuclides with relatively short half-lives. These short-lived radionuclides are especially prevalent in the combustible dry wastes, and aqueous wastes generated by medical and academic institutions. Currently NRC generally allows medical facilities to store for decay. For example, generators may store waste containing radionuclides with half-lives of less than 65 days until the radiation emitted from the unshielded surface of the waste, as measured with an appropriate survey instrument, meets the decay levels described in their NRC license (typically 10 half-lives of decay and radioactivity levels indistinguishable from background levels). The waste may then be disposed as a non-radioactive waste after ensuring that all radioactive material labels are rendered unrecognizable (10 CFR 35.92). Radioactive waste may also be stored for decay under certain other circumstances in accordance with 10 CFR 20.2001. Such management can reduce worker exposure and potential risks to the public during transportation of the waste.

Generators of mixed waste are subject to both RCRA and AEA requirements. Generators of mixed waste must obtain

a license from NRC or an NRC Agreement State for possession and use of radioactive materials, and may need a RCRA permit depending on the time waste is stored and the volume of waste generated. Some of the mixed waste generated by private entities and government—for example, wastes with radionuclide concentrations exceeding the acceptance criteria of commercial sector treatment and disposal facilities—is (and has been) stored on-site indefinitely.

D. EPA Receipt of Rulemaking Petition

Because there is limited treatment technology and disposal capacity for some mixed waste, NRC licensees who generate mixed waste may be forced to store some of their mixed waste on site. On-site storage of mixed waste can subject the NRC licensees to RCRA permit requirements for storage facilities. In response to this, the Utility Solid Waste Activities Group (USWAG), a national organization of power companies, petitioned the U.S. EPA on January 13, 1992. USWAG requested that EPA “(1) amend 40 CFR 261.5 to establish a separate mixed waste small quality generator exemption for Nuclear Regulatory Commission (‘NRC’) licensees, and to make such rule immediately effective as an interim final rule, and (2) amend 40 CFR 262.34 to allow NRC licensees to accumulate such waste on-site in qualified tanks or containers until such time as adequate, fully licensed and permitted off-site treatment, storage or disposal capacity becomes available; to clarify that such on-site storage, which is compelled by the current lack of licensed treatment or disposal capacity, is legitimate storage under the land disposal restriction (‘LDR’) storage prohibition at 40 CFR 268.50; and to make such rule immediately effective as an interim final rule.” While the approach in the petition differs from the approach in this ANPR, EPA seeks comment on the USWAG approach described above.

The Edison Electric Institute also approached EPA requesting relief from permit requirements for the storage of mixed wastes. The nuclear power industry maintains that NRC management requirements for the radioactive component of their mixed waste streams provide complete protection for human health and the environment. NRC requirements for radioactive waste storage areas include security, frequent monitoring, primary containment, secondary containment for liquids, and cover for protection from the elements. EPA is studying NRC requirements for low-level radioactive waste storage to determine whether the

mixed waste storage under NRC (or Agreement State) regulations, license provisions, and guidance may be as protective of human health and the environment as the RCRA requirements for storage of hazardous waste.

E. Policy of Lower Enforcement Priority for Mixed Waste

EPA LDR treatment standards exist for the hazardous components of most mixed wastes. However, adequate treatment technology or disposal capacity does not exist for some mixed waste streams, necessitating storage in violation of land disposal restrictions. Recognizing this difficulty, EPA issued a policy on the lower priority of enforcement of the storage prohibition contained in section 3004(j) of RCRA (see 56 FR 42730; August 29, 1991). Section 3004(j) prohibits storage of a land disposal restricted waste (including mixed waste) except for the purposes of the accumulation of such quantities of hazardous waste as are necessary to facilitate proper recovery, treatment, or disposal. Because treatment technology or disposal capacity was still unavailable for some mixed wastes, EPA extended this policy on October 31, 1998. The policy stated that violators who were faced with an impossibility of complying with the RCRA regulations and were storing their wastes in an environmentally responsible manner would be a low enforcement priority for EPA. The extension of the policy was published in the **Federal Register** on November 6, 1998. (63 FR 59989)

The policy affects only mixed wastes that are prohibited from land disposal under the RCRA Land Disposal Restrictions and for which there are no available options for treatment or disposal. For mixed waste generators who are storing mixed wastes in an environmentally responsible manner, as described in the policy, and where no viable treatment technology or disposal capacity exists, or becomes available during this extension, we consider violations of RCRA section 3004(j) involving relatively small volumes of waste to be a low priority among our potential civil enforcement actions. An enforcement activity arising from violations of section 3004(j) as these facilities will generally focus on determining whether these generators are managing their mixed wastes in an environmentally responsible manner, and whether they are storing wastes for which treatment technology is commercially available. EPA recently extended the policy of lowered enforcement priority to April 30, 2001.

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

We recognize that mixed waste storage and disposal may be significantly affected by other EPA rulemakings, especially the Hazardous Waste Identification Rule (HWIR). These activities will be closely monitored for impacts to a mixed waste storage and disposal rulemaking, for areas of overlapping analysis, and for opportunities to coordinate.

A. April 1997 Consent Decree and Mixed Waste Rulemaking Commitment

Commercial nuclear power plants through their trade organizations (i.e., the Edison Electric Institute, the Utility Solid Waste Activity Group, and the Nuclear Energy Institute) were parties to the settlement discussions regarding the deadline for the final Hazardous Waste Identification Rule (HWIR) Rulemaking, *ETC v. Browner*, CIV, No. 94-2119 (D.D.C.). During negotiations, they expressed their interest in regulatory flexibility to allow the disposal of mixed waste in commercial low-level radioactive waste disposal sites. There discussions resulted in a final consent decree which requires EPA to publish a proposed rule that requests comment on an exemption from hazardous waste disposal regulation for mixed wastes from nuclear power plants. The proposal must also request comment on other regulatory relief for these wastes, if EPA finds that any other relief would be appropriate. EPA is also committed to make "best efforts" to describe the exemptions in enough detail to allow it to promulgate a final rule. The decree requires EPA to issue the proposal by October 31, 1999.

EPA made several commitments to the litigants in a "sidebar" letter which was not submitted to the Court. EPA committed to issue a final rule addressing relief for mixed wastes from nuclear power plants by April 30, 2001. EPA also agreed to recommend in writing to EPA Regions and RCRA authorized States that "they suspend the call-in or processing of final RCRA Part B permits at power plants subject to regulation under the AEA by NRC or NRC Agreement States where the only reason for a Part B permit is the on-site storage of mixed waste..." Such a letter to States and Regions was signed on May 21, 1997. In the letter EPA's Office of Solid Waste (OSW) recommended the temporary suspension of call-in and processing of RCRA Part B applications, and the issuance of RCRA permits for facilities that have *interim status only for the purpose of on-site storage of commercial and mixed wastes*. This

permit suspension applies where the facility is not otherwise subject to RCRA permitting requirements. OSW did not recommend any suspension for facilities where Regions or States find a particular environmental concern that merits the call-in issuance of such a permit.

EPA also committed in the side-bar letter to examining potential regulatory change related to the disposal of mixed waste in radioactive waste disposal facilities subject to NRC regulation. (A summary of disposal issues follows.) EPA is considering regulatory flexibility by examining opportunities related to mixed waste permitting and storage. In today's ANPR we are seeking comment from interested parties on mixed waste storage options. The October 1999 Proposed Rulemaking on mixed waste will address disposal and storage issues.

B. Summary or Approach for Mixed Waste Disposal

We are considering a regulatory exemption from the RCRA hazardous waste disposal requirements for low-level radioactive mixed wastes containing low concentrations of RCRA hazardous constituents which may be disposed at low-level radioactive waste disposal facilities. We will determine whether the disposal of mixed waste in facilities designed to address radiological hazards under the AEA and regulated by NRC will provide adequate protection of human health and the environment from chemical hazards. We may propose that these mixed wastes would not be regulated as hazardous waste if disposed at radioactive waste disposal facilities subject to NRC or NRC Agreement State requirements. We are formulating the scope and form of such a proposal.

C. Hazardous Waste Identification Rulemaking (HWIR)

The goal of HWIR is to develop a set of chemical concentration levels ("exit levels") below which a list waste would no longer be regulated as a hazardous waste. In addition to the proposed exit levels, the HWIR reproposal will seek comment on a variety of implementation requirements, including testing, notification, record keeping and reporting and public participation.

RCRA's hazardous waste program sometimes regulates comparatively low risk waste at the same stringent standards as higher risk waste. This system leaves companies little incentive to detoxify their list hazardous wastes, since the wastes continue to be regulated as hazardous, unless formally delisted. HWIR relies on an innovative risk assessment to identify the levels of hazardous chemicals in waste that can

be safely disposed in a non-hazardous unit. HWIR will propose exit levels which allow waste management based on the risks posed by the waste. Thus the HWIR proposed focuses resources on risk reduction and encourages pollution prevention and development of treatment technologies. HWIR is scheduled to be proposed by October 31, 1999 and finalized by April 30, 2001.

D. Waste Management Proposal by EPA's Office of Radiation and Indoor Air (ORIA)

Under the AEA, EPA has authority to establish generally applicable radiation standards. ORIA is developing a proposal under the AEA that would apply to disposal of mixed wastes with very low concentrations of radionuclides in RCRA Subtitle C hazardous waste landfills. Under this approach, EPA would establish maximum concentration limits for radionuclides in mixed waste allowed for disposal in such facilities. Radionuclides would continue to be regulated under the AEA; EPA would seek to have the Nuclear Regulatory Commission regulate mixed waste in RCRA facilities through a simplified license based on the requirements for low-level radioactive waste disposal facilities in 10 CFR part 61. RCRA disposal facilities that wish to accept mixed waste under this rule would need to obtain such a license from the NRC. This proposed rulemaking is planned for publication in the **Federal Register** in 1999.

VII. Regulatory Assessment Requirements

A. Executive Order (E.O.) 12866

Under Executive Order 12866, [58 FR 51735 (October 4, 1993)] the Agency must determine whether the regulatory action is "significant" and therefore subject to OMB review and the requirements of the Executive Order. The Order defines "significant regulatory action" as one that is likely to result in a rule that may: (1) have an annual effect on the economy of \$100 million or more or adversely affect in a material way the economy, a sector of the economy, productivity, competition, jobs, the environment, public health or safety, or State, local, or tribal governments or communities; (2) create a serious inconsistency or otherwise interfere with an action taken or planned by another agency; (3) materially alter the budgetary impact of entitlements, grants, user fees, or loan programs or the rights and obligations of recipients thereof; or (4) raise novel

legal or policy issues arising out of legal mandates, the President's priorities, or the principles set forth in the Executive Order.

While this advance notice of proposed rulemaking establishes no regulatory requirements it could ultimately result in a rule that would satisfy one or more of the above criteria. Therefore, this action is a "significant regulatory action" under the terms of Executive Order (E.O.) 12866. As such, this action was submitted to OMB for review. Changes made in response to OMB suggestions or recommendations will be documented in the public record.

Under the terms of E.O. 12866, EPA is to prepare for any significant regulatory action an assessment of its potential costs and benefits. If that action satisfies the first of the criteria listed above, this assessment must include, to the extent feasible, a quantification of these costs and benefits, the underlying analyses supporting such quantification, and an assessment of the costs and benefits of reasonably feasible alternatives to the planned regulation. Because the purpose of this ANPR is to initiate a structured national debate on a broad set of issues rather than to proposed specific regulatory changes, it is not feasible to quantify the costs and benefits or any resulting regulations at this time. The Agency is aware, however, that this ANPR could lead to regulatory action for which the preparation of a quantitative assessment of costs and benefits would be appropriate. The Agency is thus requesting comment on the costs and benefits of any of the possible regulatory changes discussed in this ANPR, as well as on appropriate methodologies for assessing them. The Agency would be interested in hearing from States and Tribes. Members of the public and the regulated community are also encouraged to submit any data they may have on the costs and benefits of activities described in this ANPR.

B. Executive Order (E.O.) 12875: Enhancing the Intergovernmental Partnership

Under Executive Order 12875, EPA may not issue a regulation that is not required by statute and that creates a mandate upon a State, local or tribal government, unless the Federal government provides the funds necessary to pay the direct compliance costs incurred by those governments. If EPA complies by consulting, Executive Order 12875 requires EPA to provide to the Office of Management and Budget a description of the extent of EPA's prior consultation with representatives of

affected State, local and tribal governments, the nature of their concerns, copies of any written communications from the governments, and a statement supporting the need to issue the regulation. In addition, Executive Order 12875 requires EPA to develop an effective process permitting elected officials and other representatives of State, local and tribal governments "to provide meaningful and timely input in the development of regulatory proposals containing significant unfunded mandates." Today's ANPR does not create a mandate on State, local or tribal governments. This ANPR does not impose any enforceable duties on these entities. It solicits comments on potential approaches to regulatory flexibility. Accordingly, the requirements of section 1(a) of Executive Order 12875 do not apply to this ANPR.

C. Executive Order (E.O.) 13084: Consultation with Indian Tribal Governments

Under Executive Order 13084, EPA may not issue a regulation that is not required by statute, that significantly or uniquely affects the communities of Indian tribal governments, and that imposes substantial direct compliance costs on those communities, unless the Federal government provides the funds necessary to pay the direct compliance costs incurred by the tribal governments. If EPA complies by consulting, Executive Order 13084 requires EPA to provide to the Office of Management and Budget, in a separately identified section of the preamble to the rule, a description of the extent of EPA's prior consultation with representatives of affected tribal governments, a summary of the nature of their concerns, and a statement supporting the need to issue the regulation. In addition, Executive Order 13084 requires EPA to develop an effective process permitting elected and other representatives of Indian tribal governments "to provide meaningful and timely input in the development of regulatory policies on matters that significantly or uniquely affect their communities." Today's ANPR does not significantly or uniquely affect the communities of Indian tribal governments because it does not impose any enforceable duties on these entities. This ANPR solicits voluntary comments on potential approaches to regulatory flexibility. Accordingly, the requirements of section 3(b) of Executive Order 13084 do not apply to this ANPR.

D. Executive Order (E.O.) 13045: Children's Health Protection

Executive Order 13045 applies to any rule that EPA determines is (1) "economically significant" as defined under Executive Order 12866, and (2) concerns an environmental health or safety risk addressed by the rule has a disproportionate effect on children. If the regulatory action meets both criteria, the Agency must evaluate the environmental health or safety effects of the planned rule on children; and explain why the planned regulation is preferable to other potentially effective and reasonably feasible alternatives considered by the Agency.

E.O. 13045 applies to notices of proposed and final rulemakings, therefore, it does not apply to this advance notice of proposed rulemaking. Should this advance notice of proposed rulemaking result in a rulemaking proposal, the Agency will evaluate the proposal to determine if E.O. 13045 applies.

E. The Regulatory Flexibility Act (RFA) as Amended by the Small Business Regulatory Enforcement Fairness Act (SBREFA) of 1996

Under the RFA, (5 U.S.C. 601 *et seq.*), as amended by SBREFA, whenever an agency is required to publish a notice of rulemaking for any proposed or final rule, it must prepare and make available for public comment a regulatory flexibility analysis (RFA) that describes the effect of the regulatory action on small entities. However, no regulatory flexibility analysis is required if the head of an Agency certifies that the rule will not have a significant economic impact on a substantial number of small entities.

SBREFA amended the RFA to require Federal agencies to provide a statement of the factual bases for certifying that a rule will not have a significant economic impact on a substantial number of small entities. However, since this requirement applies to proposed rules only, and as this Document is an ANPR, these requirements do not apply.

F. Unfunded Mandates Reform Act

Title II of the Unfunded Mandates Reform Act of 1995 (UMRA), Pub.L. 104-4, establishes requirements for Federal agencies to assess the effects of their regulatory actions on State, local, and tribal governments and the private sector. Under section 202 of the UMRA, EPA generally must prepare a written statement, including a cost-benefit analysis, for proposed and final rules with "Federal mandates" that may

result in expenditures to State, local, and tribal governments, in the aggregate, or the private sector, of \$100 million or more in any one year. Before promulgating an EPA rule for which a written statement is needed, section 205 of the UMRA generally requires EPA to identify and consider a reasonable number of regulatory alternatives and adopt the least costly, most cost-effective or least burdensome alternative that achieves the objectives of the rule. The provisions of section 205 do not apply when they are inconsistent with applicable law. Moreover, section 205 allows EPA to adopt an alternative other than the least costly, most cost-effective or least burdensome alternative if the Administrator publishes with the final rule an explanation why that alternative was not adopted. Before EPA establishes any regulatory requirements that may significantly or uniquely affect small governments, including tribal governments, it must have developed under section 203 of the UMRA a small government agency plan. The plan must provide for notifying potentially affected small governments, enabling officials of affected small governments to have meaningful and timely input in the development of EPA regulatory proposals with significant Federal intergovernmental mandates, and informing, educating, and advising small governments on compliance with the regulatory requirements. Today's ANPR contains no Federal mandates (under the regulatory provisions of Title II of UMRA) for State, local, or tribal governments or the private sector. The ANPR also imposes no enforceable duty on any State, local or tribal governments or the private sector.

G. National Technology Transfer and Advancement Act of 1995

Section 12(d) of the National Technology Transfer and Advancement Act of 1995 ("NTTAA"), Pub.L. 104-

113, section 12(d) (15 U.S.C. 272 note) directs EPA to use voluntary consensus standards in its regulatory activities unless to do so would be inconsistent with applicable law or otherwise impractical. Voluntary consensus standards are technical standards (e.g., material specifications, test methods, sampling procedures, and business practices) that are developed or adopted by voluntary consensus standards bodies. The NTTAA directs EPA to provide Congress, through OMB, explanations when the Agency decides not to use available and applicable voluntary consensus standards. This ANPR does not involve technical standards. Therefore, EPA is not considering the use of any voluntary consensus standards.

H. Paperwork Reduction Act

Under the implementing regulations for the Paperwork Reduction Act, an agency is required to certify that any agency-sponsored collection of information from the public is necessary for the proper performance of its functions, has practical utility, is not unnecessarily duplicative of information otherwise reasonably accessible to the agency, and reduces to the extent practicable and appropriate the burden on those required to provide the information (5 CFR 1320.9). Any proposed collection of information must be submitted, along with this certification, to the Office of Management and Budget for approval before it goes into effect.

Some of the approaches for regulatory flexibility discussed in the ANPR could entail new reporting and recordkeeping requirements for States and Tribes and/or members of the regulated public if such change is proposed. EPA is interested in comments on any and all aspects of potential paperwork requirements, and in particular on how they should be structured to fulfill the requirements that they have practical

utility, are not unnecessarily duplicative of other available information, and are the least burdensome necessary to ensure that the storage and treatment of mixed waste is safely managed.

I. Executive Order 12898: Environmental Justice

Under Executive Order 12898, "Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations," as well as through EPA's April 1995, "Environmental Justice Strategy, OSWER Environmental Justice Task Force Action Agenda Report," and National Environmental Justice Advisory Council, EPA has undertaken to incorporate environmental justice into its policies and programs. EPA is committed to addressing environmental justice concerns, and is assuming a leadership role in environmental justice initiatives to enhance environmental quality for all residents of the United States. The Agency's goals are to ensure that no segment of the population, regardless of race, color, national origin, or income, bears disproportionately high and adverse human health and environmental effects as a result of EPA's policies, programs, and activities, and all people live in clean and sustainable communities. To address this goal, EPA considered the impacts of this final rule on low-income populations and minority populations and concluded that this ANPR will have no impact whatsoever on low-income or minority populations because it only solicits voluntary comments on potential approaches to regulatory flexibility.

Dated: February 22, 1999.

Carol M. Browner,

Administrator, Environmental Protection Agency.

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