



UNITED STATES  
NUCLEAR REGULATORY COMMISSION  
WASHINGTON, D. C. 20555

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MEMORANDUM FOR: Chairman Palladino  
Commissioner Roberts  
Commissioner Asselstine  
Commissioner Bernthal  
Commissioner Zech

FROM: William J. Dircks  
Executive Director for Operations

SUBJECT: REVISED DRAFT INTERAGENCY PROGRAMMATIC AGREEMENT WITH EPA  
ON MILL TAILINGS AND LOW-LEVEL WASTE REGULATION

Enclosed for your information is the revised (7/25/84) draft of the proposed Programmatic Agreement with the Environmental Protection Agency (EPA) on the regulation of mill tailings and low-level waste, and a letter transmitting the proposed draft Agreement to EPA Assistant Administrators. The revisions to the enclosed draft Agreement are consistent with the discussion of the "NRC/EPA MOU on Mill Tailings" that appeared in the Daily Staff Notes - July 20, 1984.

William J. Dircks  
Executive Director for Operations

Enclosures:

1. Letters to Messrs. Cannon and Thomas, dtd 7/25/84
2. Draft Programmatic Agreement dtd 7/23/84

cc: ~~SECY~~  
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1-26-84

Mr. Joseph Cannon  
Assistant Administrator for Air  
and Radiation

Mr. Lee Thomas  
Assistant Administrator for Solid  
Waste and Emergency Response  
U.S. Environmental Protection Agency  
401 M Street, S.W.  
Washington, D.C. 20460

Dear Messrs. Cannon and Thomas:

Reference is made to my letter of June 21, 1984, to Mr. Cannon which enclosed a draft Interagency Programmatic Agreement concerning uranium mill tailings disposal sites. With this letter I am sending a redraft which includes new provisions on: (1) similar problems concerning low-level radioactive waste (LLW) management and RCRA and (2) language which commits both the NRC and EPA to join in seeking legislative relief if the provisions in the Agreement cannot be satisfactorily achieved or if the Agreement does not serve to resolve the problems relating to the application of RCRA at low-level and mill tailings disposal sites.

The information in Section III of the enclosed draft Agreement related to low-level waste disposal largely incorporates a draft EPA/NRC Low-Level Waste disposal MOU previously discussed by our staffs. We have made only minor modifications to the draft LLW MOU provisions with the exception of adding one new provision relating to development of a data base characterizing hazardous waste components of mixed waste at LLW sites per our April 13, 1984 discussions with you (See Provision 6). The introductory portion of the draft LLW MOU was used to expand the scope of the introduction to the Programmatic Agreement.

Provision 4 of the mill tailings portion of the Agreement which addresses alternate concentration limit (ACL) determinations, has been changed. The provision now states that NRC will make case by case determinations on ACL's, keeping EPA informed, until a methodology is developed which "could be concurred in by both agencies".

I believe this draft Agreement represents positions on the application of RCRA to mill tailings and low-level waste disposal which will allow EPA and NRC to carry out their respective mandates to regulate the protection of the public health and safety and the environment in a reasonable and cooperative manner.

Since resolution of this matter is important to both of our agencies, I would appreciate your agency's written response as soon as possible.

Sincerely,

John G. Davis, Director  
Office of Nuclear Material Safety  
and Safeguards

Enclosure:  
As Stated

Interagency Programmatic Agreement  
Between the U.S. Nuclear Regulatory Commission  
and the Environmental Protection Agency on  
Uranium Mill Tailings and Low Level Radioactive Waste Regulations

I. INTRODUCTION

The U.S. Nuclear Regulatory Commission (NRC) and the U.S. Environmental Protection Agency (EPA) believe it is appropriate to pursue a programmatic agreement to define interagency procedures associated with the regulation of mill tailings disposal pursuant to sections 84 and 275 of the Atomic Energy Act, as amended (AEA) and low level radioactive wastes in relation to the Resource Conservation and Recovery Act (RCRA) of 1976, as amended.

Both the Environmental Protection Agency (EPA) and the Nuclear Regulatory Commission (NRC) have responsibility for protecting public health and the environment from the hazards associated with the disposal of non-defense radioactive wastes and uranium mill tailings. The NRC regulates source, special nuclear, and byproduct material and waste containing these materials under the Atomic Energy Act (AEA) of 1954, as amended. The EPA is responsible for regulating the disposal of hazardous and toxic wastes which could include

certain naturally occurring or accelerator-generated produced radioactive material (NARM), under RCRA.

Section 1004(27) of RCRA exempts "source, special nuclear, or byproduct material as defined by the Atomic Energy Act of 1954 as amended. (68 Stat. 923)." Furthermore, Section 1006(a) of RCRA, specifies that "Nothing in this Act shall be construed to apply to (or authorize any state, interstate, or local authority to regulate) any activity or substance which is subject to the ...Atomic Energy Act of 1954 (42 U.S.C. 2011 and following) except to the extent that such application (or regulation) is not inconsistent with the requirements of such Acts." In general, the AEA and RCRA leave the specifics of regulation of hazardous and radioactive material to the discretion of NRC and EPA.

In the case of uranium mill tailings, Section 275 of the AEA requires EPA to promulgate standards for the regulation of the radioactive hazards associated with mill tailings as well as hazards from substances regulated under the Solid Waste Disposal Act, as amended by the Resource Conservation and Recovery Act (RCRA). EPA promulgated its standards on September 30, 1983 (40 CFR Part 192). Section 84 of the AEA requires the Administrator's concurrence in general requirements established by the Commission for the management of non-radioactive hazardous constituents. NRC must revise its regulations in

order to conform them to the EPA standards. The EPA standards incorporate by reference certain groundwater protection provisions found in 40 CFR Part 264. To meet the UMTRCA mandate, NRC must implement these groundwater provisions through its conformed regulations.

Both the NRC and the NRC Agreement States are legally obligated under Section 275d of the AEA to implement and enforce the EPA standards for mill tailings in 40 CFR 192, Subparts D and E. Since the effective date specified in the EPA standard was December 6, 1983, the Commission believes that the legal obligation for NRC and the Agreement States includes enforcement in the interim while conforming and implementing rule changes are made.

Another area of potential jurisdictional overlap and dual regulation between NRC and EPA is the regulation of disposal of low-level radioactive waste containing both (a) byproduct, source, and/or special nuclear material and (b) chemically hazardous and toxic substances.

The purpose of this Programmatic Agreement is to reduce overlaps, inconsistencies, ambiguities, and dual regulation, and to clarify EPA's and NRC's responsibilities under their respective authorities for both uranium mill tailings and low-level radioactive wastes.

## II. URANIUM MILL TAILINGS

The Programmatic Agreement for uranium mill tailings is based on the following premises:

1. There should be a single comprehensive set of regulations governing the protection of groundwater from contamination by uranium mill tailings, issued by NRC in consultation with the EPA.
2. There should be a single regulatory agency contact for applicants and licensees. That agency should be the NRC or appropriate agency in an NRC Agreement State with authority to regulate uranium mill tailings.
3. There should be established a framework for EPA to fulfill its statutory responsibility under Section 84a(3) of the AEA for concurrence in NRC general requirements for groundwater protection for nonradioactive hazardous materials.

Agreements on Uranium Mill Tailings

1. The NRC will insure through its comprehensive regulations that the management of any byproduct material relating to mill tailings disposal is carried out in a manner that conforms with applicable general standards promulgated by the Administrator of the EPA under section 275 of the AEA, and with general requirements established by the NRC, with the concurrence of the EPA Administrator, which are, to the maximum extent practicable, at least comparable to requirements applicable to the possession, transfer, and disposal of similar hazardous material regulated by the Administrator under the Solid Waste Disposal Act, as amended. NRC may approach rulemaking in steps to reach a final rule that accomplishes all its congressional mandates. Pursuant to Section 84a(3) of the AEA, NRC will submit its general requirements for groundwater protection for nonradiological hazardous materials to EPA, prior to codification in a final rule or to programmatic implementation, for its concurrence.
2. An interim groundwater monitoring and data collection program is needed for existing impoundments of existing licensees while NRC develops and promulgates final comprehensive regulations as discussed in paragraph (1). NRC and EPA agree to the use of present programs in place at every site to the maximum extent possible for this purpose. This approach is



consistent with the approach EPA has taken with hazardous waste disposers under the interim status standards in 40 CFR Part 265.

NRC will evaluate monitoring programs by existing licensees for sample collection, sample analysis, well placement, etc., and will require that the monitoring programs are upgraded as necessary to assure that when NRC final rules are in place, an adequate basis will exist for developing and implementing any needed corrective action programs. In the interim, until NRC rules are in place, NRC will require that mitigative actions continue to be taken on a case-by-case basis, as necessary. Interim corrective actions will be required of a licensee if it is determined by NRC that there are significant health, safety, or environmental problems resulting from existing practices.

3. EPA agrees to participate with NRC during this interim period in the development of a data base for hazardous constituents at mill tailings sites for the purpose of developing final NRC regulations. EPA agrees to furnish NRC its available case-by-case decisions on alternate concentration levels (ACLs) and to provide technical consultation and services.

4. Pursuant to Section 84c of the AEA, NRC will make case specific determinations of alternate concentration limits (ACLs). The NRC will carry out these determinations on a case-by-case basis, keeping EPA informed, until a methodology is developed which could be concurred in by both agencies.
5. Section 84c of the AEA allows applicants for NRC licenses to submit licensing alternatives to NRC for review and approval. NRC and EPA recognize that the flexibility afforded by Section 84c is an important aspect of the licensing and regulatory processes.
6. Agreement State implementation of EPA standards and development of state regulations compatible with NRC final rules may take place pursuant to this programmatic agreement. (Note, however, that Section 274o gives states flexibility in this area.)

### III. LOW-LEVEL RADIOACTIVE WASTES

To clarify their respective responsibilities, to avoid unnecessary duplication, and to promote appropriate cooperation for low-level radioactive waste management, the NRC and EPA agree:

1. The NRC has responsibility for regulating the disposal of low-level radioactive wastes generated in licensed activities, including low-level radioactive wastes containing toxic or hazardous substances. Low-level waste is defined as radioactive material that
  - (A) is not high-level radioactive waste, spent nuclear fuel, transuranic waste, or byproduct material as defined in Section 11e(2) of the Atomic Energy Act of 1954 (42 U.S.C. 2014(e)(2); and
  - (B) is classified by the Commission, consistent with existing law, as low-level radioactive waste.

The NRC is not authorized to license any disposal of hazardous wastes that do not contain source, special nuclear or byproduct material. These wastes remain subject to RCRA or other authorities as applicable if disposal is at a hazardous waste site.

2. Except as provided in paragraph 3 below, EPA shall not exercise its regulatory authority with respect to management and disposal of waste containing byproduct, source, or special nuclear material, whether or not mixed with nonradioactive hazardous substances when the radioactive content indicates a need for special handling for radiation protection.

NRC's regulatory program for the management and disposal of byproduct, source, or special nuclear material wastes containing non-radioactive hazardous waste shall be carried out in such a manner that the public will be protected from the nonradioactive hazardous properties of the waste. The level of protection to the public from the nonradioactive hazardous properties shall be consistent with the level of protection required by EPA's RCRA regulations, but need not be identical in each and every respect. The disposal of wastes packaged and shipped in accordance with the requirements of 10 CFR Parts 20 and 71 and disposed at a facility licensed in accordance with the requirements of 10 CFR Part 61, shall be deemed to be consistent with EPA's RCRA requirements.

3. In case of other waste disposal approved by the Commission under the provisions of Section 20.302 of 10 CFR Part 20, NRC may request EPA to review proposed disposal applications to determine if the proposed procedures for disposal of nonradioactive hazardous properties are consistent with the level of protection required by RCRA, if in NRC's judgement the level of protection may not be adequate.
4. The EPA shall not require RCRA permits for the generation, storage, management, transportation, and disposal of wastes containing source, special nuclear, and byproduct material when such activities are subject

to licensing and regulation by NRC. When NRC decides for any reason to amend its regulations to deregulate a specific waste because its radioactive hazard falls below a threshold of public health and safety concerns, EPA may require the NRC licensee to comply with all RCRA regulations for the generation, storage, management, transportation, and disposal of this waste with respect to its other chemical or toxic properties. Before deciding not to regulate a specific waste, NRC will continue to provide notice of its proposed action to EPA and the public.

5. NRC will not knowingly authorize the willful or deliberate contamination of any waste (not otherwise so contaminated) with source, special nuclear, or byproduct material for the sole and exclusive purpose of evading EPA's authority and regulation under RCRA. Each agency shall provide to the enforcement staff of the other any information that indicates the possible use of source, special nuclear, or byproduct material for the deliberate and willful evasion of EPA's RCRA authority. This agreement shall not limit the beneficial use of hazardous substances by NRC licensees, nor limit the processing, solidification, and disposal of wastes containing source, special nuclear, and byproduct material.
6. NRC will develop a data base characterizing the hazardous waste component of mixed waste at low-level radioactive waste disposal sites. This data

base will be used to determine what changes are necessary, if any, to 10 CFR Part 61 regulation for low-level radioactive waste disposal to ensure RCRA considerations are adequately addressed by the NRC regulations.

7. As requested, the EPA shall provide technical assistance to NRC in assessing the environmental impacts of nonradioactive hazardous constituents in wastes whose disposal is licensed by NRC. Assistance shall also be provided formally through the National Environmental Policy Act (NEPA) process as required by Section 309 of the Clean Air Act, as amended. Additional assistance on an informal basis may be provided by EPA upon request by NRC as the agencies may mutually agree. Such additional assistance may be provided when staff, budget, and other priorities permit.
8. This agreement shall not affect EPA's responsibility for regulating radioactive wastes that are not regulated by NRC.
9. EPA agrees to assist NRC in coordinating activities with Agreement States, under Section 274 of the AEA, with respect to nonradioactive hazardous materials mixed with source, byproduct, or special nuclear material. Since the Agreement States' programs must be compatible with NRC's program, the Agreement States will be subject to the same exemptions from

RCRA regulations as NRC for source, byproduct and special nuclear materials. In accordance with provision 2 of this section, EPA shall not exercise regulatory authority with respect to the management and disposal of waste containing byproduct, source or special nuclear material whether or not it is mixed with nonradioactive hazardous substances in Agreement States.

In accordance with provision 4 of this section, EPA shall not require RCRA permits for the generation, storage, management, transportation, and disposal of wastes containing byproduct, source or special nuclear material whether or not mixed with hazardous nonradioactive substances when such activities are licensed or regulated by Agreement States.

In the case of disposals of waste approved by Agreement States under circumstances similar to that in provision 3 of this section the NRC shall encourage Agreement States to consult with EPA on the same basis as established for NRC consultation.

10. Nothing in this Section on low-level radioactive wastes shall be construed or interpreted to affect the responsibility and authority of EPA under any law or EPA implementation of any law except the Resource Conservation and Recovery Act. This agreement shall not be construed or interpreted to

allow any supervision or enforcement authority over the licensees of NRC or Agreement States except as permitted by law.

#### IV. EPA/NRC MANAGEMENT MEETINGS

1. NRC and EPA agree that appropriate senior management from each agency (Assistant Administrator-EPA/Office Director-NRC) should meet quarterly to coordinate activities of mutual concern and to assess the status and progress of uranium mill tailings and low-level radioactive waste management as laid out in this agreement.
2. At least until the conclusion of the NRC conforming rulemaking for uranium mill tailings, the Commission Chairman and EPA Administrator agree to meet at least annually to approve coordinated regulation plans and discuss any issues from implementation of any of the matters agreed to under the programmatic agreement.



V. CONTINGENCY LEGISLATIVE INITIATIVE

NRC and EPA agree that in the event that the provisions in the above agreements for uranium mill tailings and low-level radioactive waste cannot be satisfactorily implemented, both agencies will together request legislative clarification through amendments to the AEA.

For the United States Environmental Protection Agency.

\_\_\_\_\_, 1984 \_\_\_\_\_

For the United States Nuclear Regulatory Commission

\_\_\_\_\_, 1984 \_\_\_\_\_