

April 2, 1997

FOR: The Commissioners

FROM: L. Joseph Callan /s/  
Executive Director for Operations

SUBJECT: COMMENTS ON THE U.S. ENVIRONMENTAL PROTECTION AGENCY'S ADVANCE NOTICE OF PROPOSED RULEMAKING FOR THE DECISION ON WHETHER THE WASTE ISOLATION PILOT PLANT COMPLIES WITH THE 40 CFR PART 191 DISPOSAL REGULATIONS AND THE 40 CFR PART 194 COMPLIANCE CRITERIA

## PURPOSE:

To advise the Commission of the staff's intention to transmit to the U.S. Environmental Protection Agency (EPA [EXIT](#)) the attached letter providing staff comments on the Advance Notice of Proposed Rulemaking (ANPR) for the decision on whether the Waste Isolation Pilot Plant (WIPP) complies with the 40 CFR Part 191 disposal regulations and the 40 CFR Part 194 compliance criteria.

## BACKGROUND:

On October 30, 1992, Congress passed the WIPP Land Withdrawal Act (LWA) (Public Law 102-579). The WIPP LWA altered EPA's authority over the development of high-level waste (HLW) standards in several ways:

- (1) EPA was given certain oversight responsibilities for WIPP;
- (2) EPA's 1985 remanded radiation protection standard (Part 191) was reinstated for disposal sites other than Yucca Mountain (YM), Nevada, except for the individual and groundwater protection criteria that were the subject of the 1987 Federal Court Remand;
- (3) EPA was directed to promulgate final disposal regulations;
- (4) EPA was directed to promulgate compliance criteria for the certification of compliance with the final disposal regulations; and
- (5) EPA was required to certify, by rule, whether the WIPP facility will comply with the final disposal regulations.

CONTACT: James R. Firth, NMSS/DWM  
415-6628

On February 10, 1993, EPA published proposed amendments to the "Environmental Radiation Protection Standards for the Management and Disposal of Spent Nuclear Fuel, High-Level, and Transuranic Radioactive Wastes" (58 FR 7924). These standards apply to HLW and transuranic (TRU) radioactive waste disposal sites not characterized under Section 113(a) of the Nuclear Waste Policy Act (i.e., sites other than YM). Staff comments on the amended standards were provided to the Commission in SECY-93-073, and formal comments were submitted to EPA on April 12, 1993 ([Attachment 1](#)). EPA published final amendments on December 20, 1993 (58 FR 66398).

On February 22, 1994, staff informally provided EPA with comments on the January 28, 1994, working draft of the compliance criteria for WIPP. Subsequently (January 30, 1995), EPA formally published for comment its proposed "Criteria for the Certification and Determination of the Waste Isolation Pilot Plant's Compliance with Environmental Standards for the Management and Disposal of Spent Nuclear Fuel, High-Level, and Transuranic Wastes" at 60 FR 5766. Draft staff comments on the compliance criteria were developed and, with Commission approval, staff briefed EPA on the draft comments on June 14, 1995. These comments were provided to the Commission in SECY-95-217. Subsequent to the development of the comments, but before Commission action on SECY-95-217, the National Academy of Sciences (NAS) published its findings on the technical bases for YM standards, in August 1995, and a bill to amend the Nuclear Waste Policy Act of 1982 (HR 1020) received increased attention in the House of Representatives. These developments caused significant uncertainty in many aspects of HLW disposal. Therefore, the staff believed it appropriate to withdraw its comments and, in October 1995, SECY-95-217 was returned to the staff. EPA published the final compliance criteria on February 9, 1996 (61 FR 5223).

## DISCUSSION:

On November 15, 1996, EPA published for comment the ANPR, "Decision to Certify Whether the Waste Isolation Pilot Plant Complies With the 40 CFR Part 191 Disposal Regulations and the 40 CFR Part 194 Compliance Criteria" at 61 FR 58499 ([Attachment 2](#)). The ANPR addresses the rulemaking process for certifying whether WIPP complies with Parts 191 and 194. The comment period closed on March 17, 1997. After the receipt and evaluation of comments and an evaluation of the compliance certification application, EPA will propose for comment its decision on whether to certify WIPP.

The staff is following EPA certification of WIPP to identify issues of relevance to potential NRC activities. In the context of the WIPP certification and because of continuing NRC concerns related to EPA standards for HLW disposal, the staff has reviewed the ANPR and believes that several comments should be transmitted to EPA ([Attachment 3](#)). The principal staff comment is that EPA's decisions during the certification process do not set a precedent for future NRC licensing activities. This comment is necessary so as to retain NRC regulatory flexibility for potential licensing actions related to HLW or TRU disposal (e.g., YM).

In addition, NRC may have to make determinations of compliance with Part 191 for sites other than WIPP. Therefore, the staff believes that it is both

relevant and important to reiterate earlier comments it made on Part 191 and restate Commission policy on groundwater protection as expressed in the February 7, 1997, letter from Chairman Jackson to Administrator Browner. Therefore, the staff proposes to comment to EPA that:

- The technical community has raised significant concerns regarding the scientific basis for, and the appropriateness of, the Part 191 environmental standards. The NAS recommendations on the technical bases for standards applicable to the proposed repository at YM reiterated some of these concerns. NRC remains concerned about the technical basis of some requirements in Part 191.
- NRC remains concerned about the EPA approach to implementing ground-water protection, including:
  - The need for separate groundwater protection requirements in environmental standards for HLW disposal; and
  - The use of maximum contaminant levels (MCLs) for HLW disposal, as found in 40 CFR Part 141, is fundamentally incompatible with their derivation and a continuation of EPA's practice of using MCLs without appropriate justification.

RESOURCE IMPACTS:

There are no resource impacts associated with the proposed action.

INFORMATION TECHNOLOGY IMPACTS:

There are no information technology impacts associated with the proposed action.

COORDINATION:

The Office of the General Counsel has reviewed this paper and has no legal objection.

RECOMMENDATION:

The staff intends to send the attached letter and comments to EPA within ten working days from the date of this paper, unless instructed otherwise by the Commission.

L. Joseph Callan  
Executive Director for Operations

Attachments:        1. [NRC's letter dated 4/12/93 on ANPR](#)  
                             2. [FR notice dated 11/15/96](#)  
                             3. [Proposed ltr. to R. Trovato from C.J. Paperiello](#)

cc:        SECY  
            OCA  
            OPA  
            OGC

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ATTACHMENT 3

**D R A F T**

Ms. Ramona Trovato, Director  
Office of Radiation and Indoor Air  
U.S. Environmental Protection Agency  
Washington, DC 20460

Dear Ms. Trovato:

I am responding to the November 15, 1996, Advance Notice of Proposed Rulemaking, "Decision to Certify Whether the Waste Isolation Pilot Plant Complies with the 40 CFR Part 191 Disposal Regulations and the 40 CFR Part 194 Compliance Criteria." Part 191 applies to sites not characterized under Section 113(a) of the Nuclear Waste Policy Act, [i.e., geologic disposal of spent nuclear fuel, high-level and transuranic radioactive wastes at sites other than (Yucca Mountain YM)]. Although the U.S. Environmental Protection Agency (EPA) is authorized to certify whether the Waste Isolation Pilot Plant (WIPP) complies with Part 191, under the WIPP Land Withdrawal Act, the U.S. Nuclear Regulatory Commission may eventually need to license other facilities that must comply with 40 CFR Part 191, as well as YM, which may have to comply with requirements similar to those found in Part 191. We recognize that EPA's decision on the certification of the WIPP will reflect the record before EPA and note that the record will be influenced by the contents

of 40 CFR Parts 191 and 197; the Compliance Application Guidance; and the characteristics of both the WIPP site and the waste to be disposed of. These factors necessitate that EPA decisions on specific elements of the U.S. Department of Energy application and the decision on whether to certify WIPP need to be considered as being applicable only to WIPP. Therefore, NRC considers that decisions made by EPA during this rulemaking establish no precedent for NRC licensing actions.

In a related matter, the staff considers it worthwhile to restate concerns previously provided to EPA regarding aspects of the environmental standards with which WIPP must comply. NRC commented extensively during the development of these standards, including its April 12, 1993, comments on the proposed standards published at 58 FR 7824. Specifically, NRC noted that the technical community has raised significant concerns regarding the scientific basis for, and the appropriateness of, EPA's 1985 standards. EPA chose, in its 1993 rulemaking, not to accept comments -- including those from NRC -- on those portions of the standards that were legislatively reinstated. The August 1995 National Academy of Sciences (NAS) recommendations on the technical bases for YM standards reiterated some of these concerns. NRC remains concerned about the technical basis of some requirements in Part 191.

In addition, EPA and NRC have consistently disagreed with respect to the need to include separate groundwater protection criteria in high-level waste (HLW) disposal standards. Separate groundwater protection requirements are a component of Part 191. NRC believes that individual protection criteria, which take into account all pathways, are sufficiently protective of the groundwater pathway, and represent a more uniform and comprehensive approach to protecting public health and safety. Further, NRC continues to believe that the use of maximum contaminant levels (MCLs) in HLW disposal is fundamentally incompatible with the technical basis EPA employed to derive these levels and is a continuation of EPA's practice of applying the MCLs found in 40 CFR Part 141 to other activities (e.g., HLW disposal) without appropriate justification. NRC has raised similar concerns with EPA's application of MCLs in draft standards applicable to HLW disposal at YM.

The staff has been working with EPA to examine implementation issues associated with the NAS recommendations and the draft environmental standards for YM, Nevada. I believe that these discussions have been fruitful, leading to the EPA staff's increased awareness of the NRC concerns related to the implementation of EPA HLW standards. To further this understanding, I would be pleased to meet with you regarding the staff's positions on Part 191 and groundwater protection for HLW facilities.

Sincerely,  
Carl J. Paperiello, Director  
Office of Nuclear Material Safety and Safeguards

cc: Docket No. A-93-02 (two copies)  
Air Docket, Room M-1500 (LE-131)  
U.S. Environmental Protection Agency  
401 M Street, S.W.  
Washington, DC 20460