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MEMORANDUM FOR: AL ALM  
ASSISTANT SECRETARY  
FOR ENVIRONMENTAL MANAGEMENT

GEORGE DIALS  
MANAGER  
CARLSBAD AREA OFFICE

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FROM: ROBERT R. NORDHAUS  
GENERAL COUNSEL

SUBJECT: Interpretation of the Term "Atomic Energy Defense  
Activities" As Used In the Waste Isolation Pilot  
Plant Land Withdrawal Act

**INTRODUCTION**

The Department of Energy (DOE) is proposing to begin the disposal phase at the Waste Isolation Pilot Plant (WIPP), the nation's first deep-geologic nuclear waste repository, in 1998. A question has arisen concerning the meaning of the term "atomic energy defense activities" as that term is used in the Waste Isolation Pilot Plant Land Withdrawal Act (LWA), Pub. L. No. 102-579, 106 Stat. 477 (1992), to define the source of waste that may be disposed at WIPP. The purpose of this memorandum is to determine the scope of that term so that the Office of Environmental Management and the Carlsbad Area Office can provide technical guidance to the sites around the complex as to what transuranic (TRU) waste qualifies for disposal at WIPP.

**FACTUAL BACKGROUND**

In 1979, Congress authorized WIPP as a "research and development facility to demonstrate the safe disposal of radioactive waste resulting from defense activities and programs of the United States." Department of Energy National Security and Military Applications of Nuclear Energy Authorization Act (DOE National Security Act), Pub. L. No. 96-164, § 213 (emphasis added). On July 1, 1981, DOE agreed with the State of New Mexico to limit WIPP to the disposal of defense transuranic waste.<sup>1</sup>

<sup>1</sup> The Agreement for Consultation and Cooperation between DOE and New Mexico settled the litigation known as State of New Mexico v. Dep't of Energy, Civil Action No. 81-0363 JB. Among other things, the Agreement excludes "any radioactive waste generated by the commercial nuclear power industry" from its definition of WIPP eligible "defense waste." Article II - Definitions at E.



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# memorandum

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DATE: October 17, 1996

REPLY TO  
ATTN OF: EM-36SUBJECT: Implementation Guidance Concerning "Atomic Energy Defense Activities" as  
Used in the Waste Isolation Pilot Plant Land Withdrawal Act

TO: Distribution

The purpose of this memorandum is to provide guidance concerning the meaning of the term "atomic energy defense activities" as used in the Waste Isolation Pilot Plant (WIPP) Land Withdrawal Act (LWA). Under the LWA, WIPP is authorized to receive for disposal only materials generated by atomic energy defense activities. After reviewing the relevant statutes and legislative history, the Office of General Counsel (GC) has concluded in the attached memorandum that the term "atomic energy defense activities" as used in the LWA has the same meaning as provided in section 2 of the Nuclear Waste Policy Act of 1982 (NWPAA) (42 U.S.C. §10101). Under the NWPAA definition, atomic energy defense activities cover defense activities and related cleanup activities, performed in whole or in part, in carrying out the following functions:

- naval reactors development;
- weapons activities including defense inertial confinement fusion;
- verification and control technology;
- defense nuclear materials production;
- defense nuclear waste and materials by-products management;
- defense nuclear materials security and safeguards and security investigations; and
- defense research and development.

This definition does not extend to materials generated by DOE's purely civilian atomic energy activities and programs.

At sites where civilian and defense TRU waste, generated in the past, has been commingled for storage and the defense portion cannot be separated out for disposal, the commingled waste can be disposed of at WIPP because the storage activities at these sites historically have been performed in part to carry out defense nuclear waste management and, therefore, fall within the NWPAA definition. For the future, however, to remain faithful to the congressional intent, TRU waste generated in defense nuclear activities should be segregated from TRU waste generated in civilian nuclear activities, and only the defense portion should be shipped to WIPP.

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The attached interpretation of the term "atomic energy defense activities" represents the Department's position on TRU waste disposal at WIPP. DOE sites preparing TRU wastes for disposal at WIPP shall carry out their activities in accordance with this guidance and the attached interpretation.



Stephen P. Cowan  
Deputy Assistant Secretary  
for Waste Management  
Environmental Management

Attachment

On October 30, 1992, Congress enacted the LWA, withdrawing the land surrounding WIPP for exclusive use by DOE and expressly defining WIPP's mission as the disposal of transuranic waste generated by "atomic energy defense activities:"

The term "WIPP" means the Waste Isolation Pilot Plant project authorized under section 213 of the Department of Energy National Security and Military Applications of Nuclear Energy Authorization Act of 1980 (Pub. L. 96-164; 93 St. 1259, 1265) to demonstrate the safe disposal of radioactive waste materials generated by atomic energy defense activities.

Pub. L. No. 102-579, § 2(21) (emphasis added).<sup>2</sup>

DOE has historically defined the TRU waste eligible for WIPP as follows:

Defense waste

Nuclear waste deriving from the manufacture of nuclear weapons and operation of naval reactors. Associated activities such as the research in the weapons laboratories also produce defense waste.<sup>3</sup>

Recently, the Carlsbad Area Office has suggested, based upon its reading of the Atomic Energy Act of 1954 (AEA), 42 U.S.C. §§ 2011, *et seq.*, that for purposes of determining what waste qualifies for WIPP, the term "atomic energy defense activities" as used in § 2(21) of the LWA could be interpreted to include (any) transuranic waste generated by (any) DOE atomic energy activity. Under the suggested interpretation, only TRU waste generated by the commercial nuclear power industry would be barred from WIPP, and that by operation of the 1988 Agreement between DOE and New Mexico, not by the definition in § 2(21). This suggestion is derived from a portion of the Congressional declaration of policy in the AEA at 42 U.S.C. § 2011(a) ("...the development, use and control of atomic energy shall be directed so as to make the

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<sup>2</sup> TRU waste is waste that contains alpha particle emitting radionuclides with atomic numbers greater than that of uranium (92), and half lives greater than 20 years, in concentrations greater than 100 nanocuries per gram of waste. TRU waste is primarily generated by research and development activities, plutonium recovery, weapons manufacturing, environmental restoration, and decontamination and decommissioning projects.

<sup>3</sup> See, e.g., First Supplement to the WIPP Environmental Impact Statement (SEIS I) (1990) Glossary at 5. The SEIS I also recognized that "[t]he post-1970 generated TRU waste proposed to be disposed of at the WIPP results primarily from defense-related plutonium reprocessing and fabrication as well as defense-related research activities at DOE facilities." SEIS at GLO-5 and 1-1, 2-8. Most recently, the February 1996 Implementation Plan of the WIPP Disposal Phase Supplemental Environmental Impact Statement (SEIS II) defined defense waste identically to SEIS I. SEIS II, Glossary at vii.

maximum contribution to the general welfare, subject at all times to the paramount objective of making the maximum contribution to the common defense and security") and 42 U.S.C. § 2102(a) ("the development, utilization and control of atomic energy for military and for all other purposes are vital to the common defense and security").

The suggested interpretation would define WIPP-eligible waste broadly enough to make all TRU waste generated by DOE eligible for disposal and thereby free WIPP and the generator sites from the need to determine the origin of their TRU waste:

### CONCLUSION

The term "atomic energy defense activities" permits WIPP to dispose of defense TRU waste resulting from all of the noncivilian activities and programs of DOE, including weapons production, naval reactors, defense research and development, associated defense environmental restoration and waste management, and other defense-related activities, as defined more specifically in the Nuclear Waste Policy Act, from which the term was borrowed. The information available to the Office of General Counsel indicates that, as so understood, "atomic energy defense" TRU waste represents the overwhelming majority of the Department's TRU waste. On the other hand, neither the applicable statutory provisions, the legislative history or the Department's own historic interpretations of the term permit an interpretation of "atomic energy defense activities" that would extend WIPP's mission to the disposal of waste from DOE's purely civilian atomic energy activities and programs.

### ANALYSIS

The express terms of § 2(21) of the LWA indicate that Congress intended WIPP to provide for the disposal of waste from "defense" activities. If Congress intended that all TRU waste -- from both the civilian and defense programs and activities of the Department -- be eligible for WIPP, it could (and presumably would) have said had so. Indeed, in § 7(b)(5) of the LWA, Congress directed the Secretary to submit "recommendations for the disposal of all transuranic waste under the control of the Secretary..." (emphasis added). Application of the principle of statutory construction known by the maxim "*expressio unius est exclusio alterius*" suggests that where Congress uses a general term in one provision, here by providing for a report addressing "all" waste under the Secretary's control in § 7(b)(5), and limits another provision, here by restricting WIPP to waste from defense activities in § 2(21), Congress is deemed to have intended the limitation it expressed. On the other hand, Congress appears to have intended TRU waste from all of the Department's defense-related activities to qualify for disposal at WIPP.

The legislative history of both the LWA and the DOE National Security Act supports the conclusion that Congress did not intend to permit disposal of all of the Department's TRU waste at WIPP, but instead specifically intended WIPP to handle the Department's defense TRU waste.

A. The DOE National Security Act

Since the passage of the DOE National Security Act in 1979, WIPP's mission has been described as the disposal of "defense waste:"

The Secretary of Energy shall proceed with the Waste Isolation Pilot Plant construction project authorized to be carried out in the Delaware Basin of Southeast New Mexico (project 77-13-f) in accordance with the authorization of such project as modified by this section. Notwithstanding any other provision of law, the Waste Isolation Pilot Plant is authorized as a defense activity of the Department of Energy, administered by the Assistant Secretary of Energy for Defense Programs, for the express purpose of providing a research and development facility to demonstrate the safe disposal of radioactive wastes resulting from the defense activities and programs of the United States exempted from regulation by the Nuclear Regulatory Commission.

Pub. L. No. 96-164, § 213 (emphasis added).

In the Conference Report accompanying the DOE National Security Act, the joint conferees indicated that they understood "defense waste" to include waste from the production of nuclear weapons:

The process of producing nuclear weapons yields byproducts, customarily referred to as nuclear wastes, that are hazardous in certain regimes and which should be isolated from the biosphere on a permanent basis. Defense nuclear wastes have been accumulating and safely stored at temporary storage sites over the past 35 years. The issue of the ultimate disposal of nuclear waste is one of the most troublesome challenges of our time. The United States has not yet decided the issue of how to permanently store nuclear wastes resulting from various national defense programs. The right combination of public concern, technology and resource application is needed in order to produce a decision. Such a decision will not be simple, and the WIPP will contribute but one small piece to that decision.

H. R. Rep. No. 702, 96th Cong., 1st Sess., at 18 (1979).

The conferees also expressly rejected the Administration's proposal to dispose of commercial waste at WIPP:

The WIPP, originally authorized in 1976, was conceived as a research, development and demonstration project for the storage of defense waste. Since that time, the Administration has proposed changes to the mission of the WIPP regularly, first to include the storage of 1,000 spent fuel assemblies from commercial reactors, and later a commercial type "intermediate scale facility"

where defense nuclear wastes would be stored for the payment of a "fee." This constant attempt to change the purpose of WIPP has resulted in delay and confusion.

Id.

B. The Land Withdrawal Act

On October 30, 1992, Congress reaffirmed the nature of WIPP's mission as a repository for defense waste when it passed the LWA:

The term "WIPP" means the Waste Isolation Pilot Plant project authorized under section 213 of the Department of Energy National Security and Military Applications of Nuclear Energy Authorization Act of 1980 (Pub. L. 96-164; 93 Stat. 1259, 1265) to demonstrate the safe disposal of radioactive waste materials generated by atomic energy defense activities.

Pub. L. No. 102-579, § 2(21) (emphasis added).

The history of the LWA indicates that Congress intended the term "atomic energy defense activities" to distinguish defense activities from civilian atomic energy activities. Both the Senate version of the LWA, S. 1671, and the version of H.R. 2637 offered by the House Armed Services Committee proposed to expressly define "atomic energy defense activity" as having "the same meaning as is provided in section 2 of the Nuclear Waste Policy Act of 1982 (NWPA) (42 U.S.C. 10101)."<sup>4</sup> The NWPA defines the term "atomic energy defense activity" to cover a broad range of defense activities:

(3) The term "atomic energy defense activity" means any activity of the Secretary [of Energy] performed in whole or in part in carrying out any of the following functions:

- (A) naval reactors development;
- (B) weapons activities including defense inertial confinement fusion;
- (C) verification and control technology;
- (D) defense nuclear materials production;

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<sup>4</sup> As originally introduced in the House on June 13, 1991, H.R. 2637 defined WIPP at § 2(17) as a "project ... to demonstrate the safe disposal of radioactive waste materials generated by defense programs."

(E) defense nuclear waste and materials by-products management;

(F) defense nuclear materials security and safeguards and security investigations; and

(G) defense research and development.

42 U.S.C. § 10101(3) (emphasis added). At the same time, however, the NWPA clearly distinguishes between civilian and defense nuclear activities. Specifically, the NWPA defines "civilian nuclear activity" as any atomic energy activity other than a defense activity. 42 U.S.C. § 10101(5).<sup>5</sup>

While the express reference to the NWPA definition was not included in the final text of the LWA, it appears from the history of the Senate and House proceedings that Congress adopted the term "atomic energy defense activities," the same term Congress had used in the NWPA, in order to limit waste that could be disposed of at WIPP to waste from "defense activities" as that term has been traditionally understood. For example, the Senate Report describes WIPP's mission and scope as follows:

The Waste Isolation Pilot Plant is a research and development facility of the Department of Energy authorized by Public Law 96-164 for the purpose of demonstration of the safe disposal of radioactive waste generated by DOE's nuclear weapons production activities.

The United States has been generating radioactive waste in its national defense programs since the 1940's. . . . The transuranic waste that would be emplaced at WIPP results primarily from plutonium reprocessing and fabrication, as well as from research and development activities at various DOE facilities.

S. Rep. No. 196, 102d Cong., 2d Sess., at 15 (1991) (emphasis added).

The Senate Report includes two letters from Secretary of Energy Watkins, dated October 4 and 15, 1991, respectively. Neither letter raises any issue with respect to the nature of transuranic

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<sup>5</sup> Some of DOE's sites have historically performed both defense and civilian atomic energy activities and have stored their TRU waste from both together. The language in the NWPA, which defines "atomic energy defense activity" to include "any activity . . . performed in whole or in part in carrying out . . . defense nuclear waste and materials by-products management," would allow disposal of such historically co-mingled waste at WIPP because the activity has been "in part" defense nuclear waste management. To avoid any abuse of this provision of the NWPA, however, TRU waste resulting from defense activities should be segregated from TRU waste resulting from civilian nuclear activities where it is feasible to do so, and only the defense waste portion should be shipped to WIPP.

waste that may be emplaced at WIPP. Indeed, both letters appear to proceed from the assumption that the definition of waste in the proposed legislation was acceptable. *Id.* at 34-37.<sup>6</sup>

The full Senate considered the bill on November 5, 1991. In the debate, Senator Bennett Johnston, Chairman of the Committee on Energy and Natural Resources, described WIPP as follows:

The Waste Isolation Pilot Plant is a research and development facility of the Department of Energy that was authorized by Public Law 96-164 for the purpose of demonstrating the safe disposal of radioactive waste generated by DOE's nuclear weapons production activities. . . . The facility is now ready to open to begin the experimental program. During that program, DOE will conduct a series of experiments to evaluate the facility's ability to comply with the environmental laws governing the safe storage and disposal of nuclear waste. . . . The transuranic waste that will be emplaced at WIPP results primarily from plutonium reprocessing and fabrication, as well as from research and development at various DOE facilities. . . . This is a major milestone in the Department's efforts to demonstrate that we have the technology necessary to store and dispose safely the byproducts of our Nation's nuclear weapons.

137 Cong. Rec. S15988 (daily ed. November 5, 1991) (emphasis added).

The House was equally clear in its view of WIPP's role as a repository for waste from defense activities, not simply "any" atomic energy activity. *See, e.g.*, Report of the Committee on Interior and Insular Affairs, H. R. Rep. No. 241, Part I, 2d Cong., 1st Sess., at 12-14 (1991), discussing both the defense waste program and the history of WIPP. There, as in the Senate, the Secretary of Energy lodged DOE's comments on H.R. 2637 and did not dispute the committee's characterization of the defense waste planned for disposal at WIPP. *Id.* at 24-29.

There is no suggestion in the legislative history that, in referring to "atomic energy defense activity," Congress was harkening back to the broad notion of "common defense and security" referenced in the Atomic Energy Act. Rather, the repeated references by Congress to the Department's nuclear weapons production activities in describing WIPP's mission, and the absence of any reference to the Department's civilian nuclear programs throughout this legislative history, reinforce the conclusion that the LWA reference to "atomic energy defense activities" was intended to connote the common "national defense" sense of the phrase rather than a broad notion of "the common defense and security."

Even without the legislative history indicating that Congress borrowed the term directly from the NWPA, principles of *in pari materia* dictate that the same term dealing with the same general

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<sup>6</sup> The same is true for the Statement of Leo P. Duffy, Director of Environmental Restoration and Waste Management. S. Rep. No. 196 at 37.

subject matter be interpreted to have the same meaning, absent an indication that Congress intended otherwise. In this instance, no such intent appears. Thus, the term "atomic energy defense activities" as used in the LWA should be interpreted to cover the same broad array of defense activities and related cleanup activities described in the NWPA as falling within that term.<sup>7</sup> This is entirely consistent with the definition of defense nuclear waste historically used by WIPP, *i.e.*, waste derived "from the manufacture of nuclear weapons and operation of naval reactors" and "[a]ssociated activities such as the research in the weapons laboratories." A broader interpretation that would include waste from DOE's civilian atomic energy activities, based on references in the AEA to the "common defense and security" interests served by the development of peaceful uses of nuclear power, is not supported by the language of the statute, the legislative history, or the Department's own historic interpretation of the term.

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<sup>7</sup> As the legislative history of the NWPA's definition of "atomic energy defense activities" makes clear, TRU waste generated by the DOE Environmental Management program in its cleanup and management of weapons production waste qualifies for disposal at WIPP because it is so "closely intertwined" with defense production activities.

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# TRU WASTE DECISION TREE

