



**DIRECTIVE NUMBER:** 9541.00-6

**TITLE:** State Program Advisory #2 - RCRA  
Authorization to Regulate Mixed Waste

**APPROVAL DATE:** July 30, 1987

**EFFECTIVE DATE:** July 30, 1987

**ORIGINATING OFFICE:** OSW

☒ **FINAL**

☐ **DRAFT**

**STATUS:**

- [ ] A- Pending OMB approval
- [ ] B- Pending AA-OSWER approval
- [ ] C- For review &/or comment
- [ ] D- In development or circulation

**REFERENCE (other documents):** headquarters

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<div style="display: inline-block; vertical-align: middle; margin-left: 10px;">             United States Environmental Protection Agency              Washington, DC 20460           </div>		<b>1. Directive Number</b>  9541.00-6
OSWER Directive Initiation Request		
2. Originator Information		
<b>Name of Contact Person</b> Betty Shackelford	<b>Mail Code</b> WH-563B	<b>Office</b> OSW
<b>Telephone Code</b> (202) 475-9656		
<b>3. Title</b> State Program Advisory #2 - RCRA Authorization to Regulate Mixed Waste		
<b>4. Summary of Directive (include brief statement of purpose)</b> The directive delineates timeframes for obtaining mixed waste authorization, the authorization requirements, announces the availability of interim status and presents the EPA position on inconsistencies in accordance with section 1006 of RCRA.		
<b>5. Keywords</b> Mixed Waste		
<b>6a. Does This Directive Supersede Previous Directive(s)?</b> <div style="display: inline-block; margin-left: 20px;"> <input checked="" type="checkbox"/> No         </div> <div style="display: inline-block; margin-left: 20px;"> <input type="checkbox"/> Yes         </div> What directive (number, title)		
<b>b. Does It Supplement Previous Directive(s)?</b> <div style="display: inline-block; margin-left: 20px;"> <input checked="" type="checkbox"/> No         </div> <div style="display: inline-block; margin-left: 20px;"> <input type="checkbox"/> Yes         </div> What directive (number, title)		
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This Request Meets OSWER Directives System Format Standards.	
<b>9. Signature of Lead Office Directives Coordinator</b> 	<b>Date</b> 8/20/87
<b>10. Name and Title of Approving Official</b> Bruce Weddle, Director, Permits and State Programs Division	<b>Date</b> July 30, 1987

EPA Form 1315-17 (Rev. 5-87) Previous editions are obsolete.

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UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
WASHINGTON, D.C. 20460

OFFICE OF  
SOLID WASTE AND EMERGENCY RESPONSE

JUL 30 1987

MEMORANDUM

SUBJECT: State Program Advisory #2 -  
RCRA Authorization to Regulate Mixed Wastes

FROM: Bruce Weddle, Director *Susan Blom*  
Permits and State Programs Division  
Office of Solid Waste

TO: RCRA Branch Chiefs  
Regions I - X

The purpose of State Program Advisory (SPA) #2 is fourfold. One, it delineates timeframes by which States must obtain mixed waste authorization. Two, it provides a synopsis of the information needed to demonstrate equivalence with the Federal program in order to obtain mixed waste authorization. Three, it presents information about the availability of interim status for handlers of mixed waste. And four, the SPA presents the Agency's position on inconsistencies as defined by Section 1006 of RCRA.

BACKGROUND

On July 3, 1986, EPA published a notice in the Federal Register (see Attachment 1) announcing that in order to obtain and maintain authorization to administer and enforce a RCRA Subtitle C hazardous waste program, States must apply for authorization to regulate the hazardous components of mixed waste as hazardous waste. Mixed waste is defined as waste that satisfies the definition of radioactive waste subject to the Atomic Energy Act (AEA) and contains hazardous waste that either (1) is listed as a hazardous waste in Subpart D of 40 CFR Part 261 or (2) causes the waste to exhibit any of the hazardous waste characteristics identified in Subpart C of 40 CFR Part 261. The hazardous component of mixed waste is regulated by RCRA. Conversely, the radioactive component of mixed waste is regulated by either the Nuclear Regulatory Commission (NRC) or the Department of Energy (DOE).

In addition, DOE issued an interpretative rule on May 1, 1987 to clarify the definition of "byproduct material" as it applied to DOE-owned wastes. The final notice stipulated "that only the actual radionuclides in DOE waste streams will be considered byproduct material." Thus, a hazardous waste will always be subject to RCRA regulation even if it is contained in a mixture that includes radionuclides subject to the AEA. Clarification of the implications of the byproduct rule was previously transmitted to the Regions (see Attachment 2).

#### MIXED WASTE AUTHORIZATION DEADLINES

States which received final authorization prior to publication of the July 3, 1986 FR notice must revise their programs by July 1, 1988 (or July 1, 1989 if a State statutory amendment is required) to regulate the hazardous components of mixed waste. This schedule is established in the "Cluster Rule" (51 FR 33712). Extensions to these dates may be approved by the Regional Administrator (see 40 CFR 271.21(e)(3)).

States initially applying for final authorization after July 3, 1987 must include mixed waste authority in their application for final authorization (see 40 CFR 271.3(f)). In addition, no State can receive HSWA authorization for corrective action (§3004(u)) unless the State can demonstrate that its definition of solid waste does not exclude the hazardous components of mixed waste. This is because the State must be able to apply its corrective action authorities at mixed waste units.

#### PROGRAM REVISION REQUIREMENTS

Applying for mixed waste authorization is a simple, straightforward process. The application package should include an Attorney General's Statement, the applicable statutes and rules, and a Program Description.

##### 1. Attorney General's Statement

The Attorney General will need to certify in the statement that the State has the necessary authority to regulate the hazardous components of mixed waste as hazardous waste. Copies of the cited statute(s) and rules should be included in the State application. See Item I.G., "Identification and Listing" in the Model AG Statement in Chapter 3.3 of the State Consolidated RCRA Authorization Manual (SCRAM) for additional guidance.

## 2. Program Description

The Program Description should address how the RCRA portion of the mixed waste program will be implemented and enforced, and describe available resources and costs (see 40 CFR §271.6). The State must also demonstrate that staff has necessary health physics and other radiological training and has appropriate security clearances, if needed, or that the State agency has access to such people.

If an agency other than the authorized State agency is implementing the RCRA portion of the mixed waste program, then the application should include a Memorandum of Understanding (MOU) between that agency and the authorized hazardous waste agency describing the roles and responsibilities of each (see 40 CFR §271.6(b)).

Lastly, the Program Description should include a brief description of the types and an estimate of the number of mixed waste activities to be regulated by the State (see 40 CFR §271.6(g) and (h)). Chapter 3.2, Program Description, in the SCRAM provides additional guidance.

### INTERIM STATUS

In authorized States, mixed waste handlers are not subject to RCRA regulation until the State's program is revised and approved by EPA to include this authority. In the interim, however, any applicable State law applies. Treatment, storage and disposal facilities "in existence" on the date of the State's authorization to regulate mixed waste may qualify for interim status under Section 3005(e)(1)(A)(ii) (providing interim status for newly regulated facilities), if they submit a Part A permit application within 6 months of that date. In addition, any such facilities which are land disposal facilities will be subject to loss of interim status, under Section 3005(e)(3), unless these facilities submit their Part B permit application and two required certifications (i.e. groundwater monitoring and financial assurance) within twelve months of the effective date of the State's authorization (i.e., within twelve months of the date facilities are first subject to regulation under RCRA). Note: Federal facilities that handle mixed waste are not required to demonstrate financial assurance.

With respect to facilities treating, storing or disposing of mixed waste in unauthorized States, Headquarters is currently developing a Federal Register notice that will clarify interim status qualification requirements under Section 3005(e) as they apply to affected facilities that have not notified in accordance with Section 3010(a) or submitted Part A and/or B permit applications. We anticipate issuing the FR notice early this Fall.

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INCONSISTENCIES

Section 1006 of RCRA precludes any solid or hazardous waste regulation by EPA or a State that is "inconsistent" with the requirements of the AEA. If an inconsistency is identified, the inconsistent RCRA requirement would be inapplicable. For example, an inconsistency might occur where compliance with a specific RCRA requirement would violate national security interests. In such instances, the AEA would take precedence and the RCRA requirement would be waived.

The EPA and the Nuclear Regulatory Commission conducted a comparison of existing regulations for hazardous waste management and low-level radioactive waste management under 40 CFR Parts 260-266, 268 and 270 and 10 CFR Part 61, respectively, to ascertain the extent of potential inconsistencies. None were identified as a result of that effort. The comparison did indicate that there were differences in regulatory stringency, however. Thus, in issuing permits or otherwise implementing its mixed waste program, States must make every effort to avoid inconsistencies.

If you have any questions please contact Jim Michael, Chief, Implementation Section, State Programs Branch (WH-563B) at FTS/(202) 382-2231 or Betty Shackleford, Mixed Waste Project Manager, State Programs Branch at FTS/(202) 475-9656.

Attachments

cc: Elaine Stanley, OWPE  
Federal Facility Coordinators  
Regions I - X  
Chris Grundler, Federal Facilities Task Force

Thursday  
July 3, 1986

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**Part VI**

**Environmental  
Protection Agency**

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**Hazardous Waste: State Authorization To  
Regulate Hazardous Components of  
Radioactive Mixed Wastes; Notice**



# ENVIRONMENTAL PROTECTION AGENCY

[FRL-3041-3]

## State Authorization To Regulate the Hazardous Components of Radioactive Mixed Wastes Under the Resource Conservation and Recovery Act

AGENCY: Environmental Protection Agency.

ACTION: Notice.

**SUMMARY:** The Environmental Protection Agency (EPA) is today publishing a notice that in order to obtain and maintain authorization to administer and enforce a hazardous waste program pursuant to Subtitle C of the Resource Conservation and Recovery Act (RCRA), States must have authority to regulate the hazardous components of "radioactive mixed wastes". "Radioactive mixed wastes" are wastes that contain hazardous wastes subject to RCRA and radioactive wastes subject to the Atomic Energy Act (AEA).

**DATE:** States which have received EPA authorization prior to the publicity date of this Notice must, within one year of the publication date of this notice (two years if a State statutory amendment is required) (i.e., by July 3, 1987 and July 3, 1988), demonstrate authority to regulate the hazardous components of radioactive mixed wastes. States initially applying for final authorization after July 3, 1987 must incorporate this provision in their application for final authorization.

**FOR FURTHER INFORMATION CONTACT:** Denise Hawkins, Office of Solid Waste (WH-563-B), U.S. Environmental Protection Agency, 401 M Street SW., Washington, DC 20460. (202) 382-2210.

### SUPPLEMENTARY INFORMATION:

#### A. Authorization of State Hazardous Waste Programs

Section 3006(b) of RCRA provides that States may apply to EPA for authorization to administer and enforce a hazardous waste program pursuant to Subtitle C of RCRA. Authorized State programs are carried out in lieu of the Federal program. However, EPA is authorized to implement the Hazardous

and Solid Waste Amendments to RCRA (HSWA) (Pub. L. 98-616) in authorized States until those States revise their programs to incorporate the HSWA requirements and receive EPA authorization to implement HSWA. Requirements for obtaining authorization are set forth in 40 CFR Part 271. To date, 41 States have received final authorization (not including HSWA).

#### B. Regulation of Radioactive Wastes

Section 1004(27) of RCRA excludes from the definition of "solid waste", "source, special nuclear or byproduct material as defined by the Atomic Energy Act of 1954, as amended (AEA) (68 Stat. 923)." Since "hazardous waste" is defined by section 1004(5) as a subset of "solid waste", "source, special nuclear and byproduct material" are exempt from the definition of hazardous waste and thus from the Subtitle C program.

While source, special nuclear and byproduct material are clearly exempt from RCRA, the extent of the statute's applicability to wastes containing both hazardous waste and source, special nuclear or byproduct material has been less evident. The question of which wastes are encompassed by the term "byproduct material" has also been the subject of some controversy. We note that the definition of byproduct material is currently the subject of rulemaking by the Department of Energy (DOE). (50 FR 45736, November 1, 1985).

Given the lack of clarity on this issue, EPA did not previously require as a condition of State authorization that the State have regulatory authority over the hazardous components of radioactive mixed wastes. In authorizing States, EPA did not inquire into State authority over the hazardous components of radioactive mixed wastes and made no determination of whether States had authority over such wastes. Accordingly, the Agency has taken the position that currently authorized State programs do not apply to radioactive mixed wastes.

Thus, radioactive mixed wastes are not currently subject to Subtitle C regulations in authorized States.<sup>1</sup> EPA has now determined that wastes

containing both hazardous waste and radioactive waste are subject to the RCRA regulation.

Today, we are hereby publishing notice that, pursuant to 40 CFR 271.9 (which requires State programs to regulate all wastes controlled under 40 CFR Part 261), radioactive mixed wastes are to be part of authorized State programs. States that already have authorized programs must revise their programs (if necessary) and must apply for authorization for hazardous components of radioactive mixed wastes. States must demonstrate to the appropriate EPA Regional Administrator that their program applies to all hazardous waste even if mixed with radioactive waste. This demonstration must be made within one year of the publication date of this notice.<sup>2</sup> States

<sup>1</sup> The exception to this is in the use of EPA's HSWA authorities in authorized States. EPA can use its HSWA authorities to supplement an authorized State's authority over RCRA-regulated units. Under § 3004(u), EPA can jointly issue a permit with the State and impose corrective action requirements on hazardous waste management units and solid waste management units (swmus) at facilities that contain units subject to RCRA. Although hazardous components of radioactive mixed wastes are not RCRA-regulated under authorized State RCRA programs, radioactive mixed waste will be considered to be a "solid waste" for purposes of corrective action at solid waste management units. The Federal definition of "solid waste" is to be used in determining what units are swmus, because State definitions were not scrutinized. Therefore, in order to obtain authorization for corrective action, States must obtain authorization for their definition of solid waste, which may not exclude hazardous components of radioactive mixed wastes. Because radioactive mixed waste is considered a solid waste under the Federal RCRA program, units containing radioactive mixed wastes are swmus and are subject to corrective action if there is another unit requiring a RCRA permit at the facility. RCRA enforcement activities also apply.

<sup>2</sup> EPA is not promulgating a regulation today. However, in light of the Agency's previous policy we believe it is appropriate to provide the time allowed by 40 CFR 271.21(e)(2) for State program modifications to conform to regulatory changes. Note that EPA has proposed to amend 40 CFR 271.21 to allow States until July 1 of each year to incorporate changes to the Federal program that occurred in the preceding 12 months. Where statutory changes are necessary, an additional year would be allowed (51 FR 496-504, January 6, 1986). EPA will allow States to use this "clustering" approach for radioactive mixed wastes if and when the revisions to § 271.21 are finally promulgated.



initially applying for final authorization one year after the publication date of this notice must make this demonstration in their initial application.

In most cases, this will require only an interpretive statement by the State Attorney General, since most States have the same exception to the definition of "solid waste" as that contained in section 1004(27) of RCRA. Some States, however, may require statutory amendments in order to regulate the hazardous components of radioactive mixed wastes. Such States, if already authorized, must revise their programs within two years of the publication date of this notice. States initially applying that need a statutory amendment will have to obtain the amendment before submitting an application for final authorization.

In order to demonstrate regulation of the hazardous components of radioactive mixed wastes, States should submit to the appropriate Regional Administrator a copy of all applicable

statutory and regulatory provisions, plus a statement by the State Attorney General to the effect that the State's hazardous waste program applies to wastes containing both hazardous waste and radioactive waste as defined by the AEA. If an agency other than the authorized hazardous waste agency will implement the radioactive mixed wastes program, the authorization application must include a description of the agency's functions (see 40 CFR 271.6(b)) and a Memorandum of Understanding between that agency and the authorized hazardous waste agency, describing the roles and responsibilities of each.

The DOE has proposed an interpretive definition of the term "byproduct material" (50 FR 45736, November 1, 1985), and is now evaluating public comment. Pending clarification of this issue, this matter will be addressed on a case-by-case basis.

We also note that section 1006 of RCRA precludes any regulation by EPA or a State which is inconsistent with the requirements of the Atomic Energy Act.

EPA and the State may, therefore, on a case-by-case basis use the authority of § 1006 to modify hazardous waste requirements to address radioactive mixed wastes activities, pending issuance of EPA's regulation which will set forth procedures for addressing the inconsistency issue. In addition, EPA, the Nuclear Regulatory Commission (NRC), and DOE will be working together to develop guidance.

Notwithstanding any other provision of law, all requirements of the AEA and all Executive Orders concerning the handling of restricted data and national security information, including "need-to-know" requirements, shall be applicable to any grant of access to classified information under the provisions of RCRA.

Dated: June 30, 1986

**J. Winston Porter,**

*Assistant Administrator for Solid Waste and Emergency Response.*

[FR Doc. 86-15250 Filed 7-2-86 12:16 pm]

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UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
WASHINGTON, D.C. 20460

JUN 29 1987

OFFICE OF  
SOLID WASTE AND EMERGENCY RESPONSE

MEMORANDUM

SUBJECT: Department of Energy's (DOE) Final Byproduct Rule  
on Mixed Waste Regulation at DOE Facilities

FROM: *[Signature]*  
J. Winston Porter  
Assistant Administrator

TO: Waste Management Division Directors  
Regions I - X

This memorandum is intended to abate any uncertainty surrounding the implications of the Department of Energy's (DOE) final byproduct rule on mixed waste regulation at DOE facilities.

On May 1, 1987 DOE published its final byproduct rule (51 FR 15937, copy attached). In that rule DOE stipulates "that only the actual radionuclides in DOE waste streams will be considered byproduct material." The effect of this interpretative rulemaking is that all DOE waste streams which either contain a listed waste or exhibit a hazardous characteristic will be subject to RCRA regulation. You should note that this interpretation is consistent with the EPA/Nuclear Regulatory Commission (NRC) joint definition of commercial low-level mixed waste issued earlier this year. See OSWER Directive 9432.00-2.

In addition, I would like to update you on the findings and status of the Mixed Energy Waste Study (MEWS) in view of the final byproduct rule. As you know, DOE presented a proposal to EPA for excluding high-level and transuranic mixed wastes from RCRA jurisdiction. The proposed exclusion was predicated on DOE's contention that their waste management practices were equivalent or superior to those mandated by RCRA and required a legal determination that regulatory duplication was inconsistent. Accordingly, the MEWS task force was commissioned in November, 1986 to gather technical information on the merits of DOE's assertion. You should note, however, that past practices were not included in the DOE proposal nor were they reviewed by the task force during subsequent site visits to select DOE facilities.

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In March of this year, the MEWS task force issued its final report which indicated that to a large extent, DOE management of high-level and transuranic mixed wastes were equivalent or superior to RCRA requirements. Certain areas of their waste management operations, however, such as ground-water monitoring and chemical analysis of wastes were clearly deficient. To date, no category of DOE mixed waste has been exempted from RCRA regulation as a result of the findings of the MEWS task force.

Thus, all DOE mixed wastes are subject to RCRA regulations independent of the nature of the radioactive component. Therefore, Regions which are administering RCRA programs in unauthorized States should, in accordance with priorities established in the RCRA Implementation Plan, be implementing the program at DOE facilities. Secondly, those Regions where States have been delegated mixed waste authority should make it clear that their authorization includes all DOE mixed wastes. These mixed wastes may contain high-level, low-level, or transuranic radioactive constituents. Third, you should continue to encourage States to apply for mixed waste authorization especially in those States with major DOE facilities.

Headquarters is committed to providing technical, legal and policy assistance to the States and Regions in support of efforts to effect mixed waste regulation at DOE facilities. Accordingly, I will keep you apprised of any initiatives taken by either DOE and/or EPA Headquarters affecting mixed waste regulation as soon as they develop. Specific questions concerning mixed wastes should be directed to Betty Shackleford, OSW on (FTS) 475-9656.

Attachment

cc: Ken Shuster, OSW  
Chris Grundler, OSWER  
Ray Berube, DOE

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## Rules and Regulations

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Federal Register

Vol. 52, No. 84

Friday, May 1, 1987

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### DEPARTMENT OF ENERGY

#### 10 CFR Part 962

#### Radioactive Waste; Byproduct Material

**AGENCY:** Department of Energy.

**ACTION:** Final rule.

**SUMMARY:** The Department of Energy (DOE) today is issuing a final interpretative rule under section 161p. of the Atomic Energy Act of 1954 (42 U.S.C. 2011 *et seq.*; hereinafter "the AEA") for the purpose of clarifying DOE's obligations under the Resource Conservation and Recovery Act (42 U.S.C. 8901 *et seq.*; hereinafter "RCRA"). The purpose of this final rule is to interpret the AEA definition of the term "byproduct material," set forth in section 11e(1) of that Act (42 U.S.C. 2014(e)(1)), as it applies to DOE owned or produced radioactive waste substances which are also "hazardous waste" within the meaning of RCRA. The effect of this rule is that all DOE radioactive waste which is hazardous under RCRA will be subject to regulation under both RCRA and the AEA. This rule does not affect materials that are defined as byproduct material under section 11e(2) of the Atomic Energy Act.

**EFFECTIVE DATE:** June 1, 1987.

**FOR FURTHER INFORMATION CONTACT:**  
Henry K. Carson, Esq., Assistant

General Counsel for Environment, GC-11, Department of Energy, 1000 Independence Avenue SW., Washington, DC 20585, Telephone (202) 586-6947.

Raymond P. Berube, Acting Director, Office of Environmental Guidance and Compliance, EH-23, Department of Energy, 1000 Independence Avenue SW., Washington DC 20585, Telephone (202) 586-5680.

#### SUPPLEMENTARY INFORMATION:

##### Background

RCRA establishes a comprehensive regulatory scheme, administered by the Environmental Protection Agency (EPA) and EPA-authorized States, governing the generation, transportation, treatment, storage and disposal of hazardous waste. Federal agencies are required by section 6001 of RCRA (42 U.S.C. 6961) to comply with the requirements of that regulatory scheme in the same manner, and to the same extent, as any private person or entity. Under section 1004 of RCRA (42 U.S.C. 6903), the "hazardous waste" governed by RCRA is a subset of the statute's definition of "solid waste." The definition of "solid waste," however, expressly excludes "source, special nuclear, or byproduct material as defined by the Atomic Energy Act." Those materials, instead, continue to be regulated under the AEA either by the Nuclear Regulatory Commission (NRC) or by DOE.

The AEA's definitions of the terms "source material" and "special nuclear material" are specific in nature, and present no particular difficulty of interpretation. The AEA's definition of "byproduct material," in contrast, speaks only generally of "any radioactive material (except special nuclear material) yielded in or made radioactive by exposure to the radiation incident to the process of producing or utilizing special nuclear material." AEA section 11e(1), 42 U.S.C. 2014(e)(1). The lack of specificity in this definition, coupled with RCRA's exclusion of byproduct material from its hazardous waste regulatory scheme, has raised a question concerning which DOE radioactive waste streams, if any, should be considered byproduct material not subject to regulation under RCRA.

##### The Proposed Rule

On November 1, 1985, DOE published a notice of proposed rulemaking (50 FR 45736) in which it proposed to adopt an interpretative rule clarifying RCRA's applicability to DOE radioactive waste. Briefly summarized, that proposed rule would have established a distinction

between "direct process" radioactive waste (i.e. waste directly yielded in, or necessary to, the process of producing and utilizing special nuclear material) and other radioactive waste less proximate to the physical process of producing or utilizing special nuclear material. Under the proposed rule, direct process waste, even if it contained hazardous material, would have been regarded as byproduct material, and thus would be regulated exclusively under the AEA. Any radioactive waste other than direct process waste, if it contained hazardous material, would have been considered "mixed waste" subject to regulation under both RCRA and the AEA.

As DOE noted the *Federal Register* preamble to the proposed rule, the legislative history of the AEA provides little guidance in interpreting the statutory definition of byproduct material, and application of the definition has not been clarified by judicial interpretation. Because the plain words of the definition are keyed to the process for producing and utilizing special nuclear material, however, it seemed that process must be regarded as a critical factor in determining whether particular radioactive materials fell within the definition. Accordingly, one significant feature of the "direct process" approach, as discussed in the preamble to the proposed rule, was its congeniality with the bare text of the statutory definition of byproduct material.

A major consequence of the "direct process" approach was the fact that it would result in the exclusive regulation of all direct process waste under the AEA, just as the legislative history of the AEA provides little help in interpreting the statutory definition of byproduct material, the legislative history of RCRA is silent on the intended effect of RCRA's exclusion from its coverage of source, special nuclear and byproduct material. Nevertheless, DOE assumed that that exclusion was intended by the Congress to be applied to radioactive wastes in their real-world configuration. Virtually all radioactive waste substances are contained, dissolved or suspended in a nonradioactive medium from which their physical separation is impracticable. Accordingly, DOE noted in proposing the "direct process" approach that unless some radioactive waste streams were considered to be byproduct material *in their entirety*, RCRA's exclusion of byproduct material might reasonably be perceived to have little effect, because RCRA's application to a nuclear waste's nonradioactive medium would appear to entail at least

the indirect regulation of the radionuclides dispersed in the medium.

Such a result, in DOE's view, presented substantial legal questions. Previous court decisions had settled the point that the AEA generally vests in DOE and the NRC exclusive regulatory authority over the radiation hazards associated with source, special nuclear and byproduct material, and generally preempts the States from regulating those materials.<sup>1</sup> It had also been held that when the radiation and nonradiation hazards of a waste containing byproduct material are inseparable, regulatory action under the AEA preempts the incompatible exercise of general state nuisance authority over the waste.<sup>2</sup> These decisions, read in conjunction with RCRA's affirmation of state regulation as an acceptable, indeed a favored, alternative to EPA regulation, were viewed by DOE as suggesting that an appropriate interpretation of byproduct material would, like the proposed "direct process" approach, exclude certain radioactive waste streams, in their entirety, from regulation under RCRA.

##### Development of the Final Rule

At the time of its publication of the proposed rule, DOE made available to the public reports provisionally identifying which of the waste streams generated at its facilities would be considered "direct process waste" subject only to AEA regulation under the proposed rule, and which of those waste streams would be considered "mixed waste" subject to regulation under both RCRA and the AEA. DOE sought and received public comments on those reports, and on the proposed rule itself.

During the period since the proposal was made, DOE has had the opportunity further to review the pertinent legal authorities, as well as to consider the comments received, the provisional waste stream identifications, DOE's additional operating experience, and related actions taken by other federal agencies. Based on the review, DOE is today publishing a final rule that adopts a narrower interpretation of byproduct material than the "direct process" approach that was originally proposed. For the reasons set forth below, the final rule provides that only the actual radionuclides in DOE waste streams

<sup>1</sup> See *Northern States Power Co. v. Minnesota*, 447 F.2d 1143 (8th Cir. 1971), *aff'd*, 408 U.S. 1033 (1972). See also *Train v. Colorado Pub. Interest Research Group*, 426 U.S. 1 (1975).

<sup>2</sup> *Brown v. Kerr-McGee Chem. Corp.*, 767 F.2d 1234, 1240 (7th Cir. 1985).

will be considered byproduct material. The nonradioactive components of those waste streams, under the final rule, will be subject to regulation under RCRA to the extent that they contain hazardous components.

#### Discussion

The overriding question raised by the public comments on the proposed rule was whether RCRA's exclusion of source, special nuclear and byproduct material from regulation under that Act was intended by the Congress to exempt entire waste streams, rather than exempting only the radionuclides dispersed or suspended in a waste stream. As discussed above, the proposed rule would have treated any "direct process" waste as byproduct material in its entirety, even if the waste contained a nonradioactive chemically hazardous component that would otherwise have been subject to regulation under RCRA. Thus, the characterization of a waste stream as "direct process" waste would have foreclosed the application of RCRA to that stream irrespective of whether the associated non-radiological environmental hazard was significant. In the opinion of many commenters, this was a significant disadvantage to the "direct process" approach. In view of this concern, some commenters suggested that DOE instead adopt an alternative interpretative approach that would permit the application of each regulatory regime to the type of hazard that it was designed to control, i.e. that would apply the AEA to ensure protection against the radiological hazard of this waste, and apply RCRA to ensure protection against any associated chemical hazard.

DOE's operational experience since the publication of the proposed rule lends support to the concern expressed by these commenters. In its efforts provisionally to apply the "direct process" approach, DOE found a number of instances in which otherwise identical wastes were sometimes found subject to RCRA, and other times were found subject only to the AEA, due solely to the wastes' different proximity to the physical process of producing and utilizing special nuclear material. While distinctions of this type are not entirely incompatible with the process-oriented language employed by the Congress in the AEA to define byproducts material, DOE has concluded after further analysis that the better view of the law is one that avoids such artificial distinctions and that affords the greatest scope to the RCRA regulatory scheme, consistent with the requirements of the AEA. See *Legal Envtl. Assistance Found*

v. *Hodel*, 586 F. Supp. 1163 (E.D. Tenn. 1984).

As noted in the foregoing discussion and in the preamble to the proposed rule, the legislative histories of both RCRA and the AEA provide little assistance in interpreting either the meaning of the term byproduct material or the intended effect of RCRA's exclusion of byproduct material from the hazardous waste regulatory program. The House Committee on Interstate and Foreign Commerce, in reporting its version of the bill that ultimately was enacted as RCRA, alluded to a 1973 leak of radioactive waste from a DOE underground storage tank at Richland, Washington as an "actual instance [ ] of damage caused by current hazardous waste disposal practices." H.R. Rep. No. 1491, 94th Cong., 2d Sess., pt. 1, at 17-19, reprinted in 1976 U.S. Code Cong. & Admin. News 6236, 6254-57. This reference is a less than certain indication that the Congress viewed such radioactive waste as "hazardous waste" subject to RCRA. Unlike RCRA as finally enacted, the bill<sup>3</sup> which this House Report accompanied contained no provision excluding source, special nuclear and byproduct material, thereby minimizing the probative value of the Committee's Richland reference in construing the statute that was ultimately enacted. Nevertheless, the Committee's reference should not be entirely discounted as evidence that the Congress in considering RCRA was concerned with unregulated hazards presented by radioactive waste, even though the AEA already provided sufficient regulatory control over the radiological hazards associated with such waste.

No court has addressed the specific question whether the entirety of a nuclear waste, or only its radioactive component, is byproduct material.<sup>4</sup> The decision in *Brown v. Kerr-McGee Chem. Corp.*, supra note 2, clearly holds that the States cannot employ their general authority to abate nuisances to regulate even the nonradiation hazard of a waste incompatibly with regulation done under the AEA where the radiation and nonradiation hazards are inseparable. Nothing in that decision, however, is incompatible with concurrent regulation.

<sup>3</sup> H.R. 14498, 94th Cong., 2d Sess. (1976).

<sup>4</sup> Two decisions have upheld the authority of the NRC's predecessor agency, the Atomic Energy Commission, to license low level radioactive waste as byproduct material. *Harris County v. United States*, 292 F.2d 370 (5th Cir. 1961); *City of New Britain v. Atomic Energy Comm'n*, 306 F.2d 645 (D.C. Cir. 1962). In neither case, however, did the court reach the specific question whether the entirety of the waste, or only its radioactive component, is byproduct material.

by the States or EPA, of the nonradioactive component of a nuclear waste, subject to paramount requirements of the AEA.<sup>6</sup>

In this context, DOE notes that at the time the Congress was considering RCRA, the Supreme Court very recently had published its decision in *Train v. Colorado Pub. Interest Research Group*, 428 U.S. 1 (1976). That case decided whether the Federal Water Pollution Control Act, as amended in 1972, applied to source, special nuclear and byproduct material discharged into navigable waters by government-owned production facilities and commercial power reactors regulated by the AEA. After concluding that the Federal Water Pollution Control Act, properly construed, did not authorize EPA or the States to regulate source, special nuclear and byproduct material, the Court rejected the contention that the Water Act contemplated joint regulation of source, special nuclear or byproduct material effluents, 428 U.S. at 15. The practical effect of the Court's decision, however, was a regime of concurrent regulation, by different authorities, of effluent streams containing both radioactive and nonradioactive components. Specifically, the decision left EPA and the States free to regulate, under the Water Act, the nonradioactive component of liquid effluents from nuclear facilities, while reserving to the NRC and DOE's predecessor agency all regulatory authority over the source, special nuclear and byproduct materials contained in those same effluent streams.

The legislative history of RCRA contains no mention of the *Train* decision. However, the Congress is presumed to be aware of decisions of the Supreme Court,<sup>6</sup> and in fact employed in RCRA the same AEA terms, including byproduct material, that the Court had extracted from the Water Act's legislative history to emphasize in its analysis in *Train*. Thus it is at least equally logical to infer that the Congress, in selecting the AEA terms emphasized in *Train*, anticipated a similar result under RCRA as it is to posit—as did the proposed rule—that RCRA's exclusion of byproduct material must have been intended to exclude in their entirety some waste streams from regulation under RCRA.

In short, while the specific legal authorities relied upon by DOE in developing the proposed rule appeared consistent with the "direct process"

<sup>6</sup> See discussion of RCRA section 1008(a), U.S.C. 6908(a), *infra*.

<sup>7</sup> *Cary v. Curtis*, 44 U.S. (3 How.) 236, 240 (1845).

approach, those authorities are equally consistent with the narrower interpretation of byproduct material that was suggested by the majority of the commenters on the proposed rule. More importantly, DOE is now persuaded after further analysis that the "direct process" approach does not reflect the better view of the law.

RCRA is a remedial statute, and as such must be liberally construed to effectuate the remedial purpose for which it was enacted.<sup>7</sup> The intended comprehensiveness of RCRA's regulatory scheme is evident from the Act's legislative history. The principal sponsor of the legislation in the Senate emphasized that it represented "a major commitment of federal assistance to state and local government efforts to meet [hazardous and solid waste] problems in a comprehensive and effective manner."<sup>8</sup> The House Committee on Interstate and Foreign Commerce regarded the legislation as closing the "last remaining loophole"<sup>9</sup> in a framework of national environmental laws that already included the Clean Air Amendments of 1970, the Federal Water Pollution Control Act Amendments of 1972, and the Safe Drinking Water Act.

Moreover, interpretation of RCRA's exclusion of byproduct material must not focus solely on that exclusion, read in isolation. Instead, the exclusion can be viewed properly only in the context of the whole statute, as well as its object and policy.<sup>10</sup> In this connection, it seems apparent that RCRA was intended to have some applicability to materials that were already regulated under the AEA. Section 1006(a) of RCRA, 42 U.S.C. 6905(a), specifies that as to "any activity or substance" subject to the AEA, RCRA regulation must yield, but only to the extent of "inconsistent" requirements stemming from the AEA. The archetypal "substances" that can fairly be described as "subject to" the AEA are substances containing source, special nuclear and byproduct material to which the AEA expressly is directed. Thus the language of section 1006(a) seems generally to contemplate complementary regulation under both statutes of substances that under prior law might have been regulated exclusively by the AEA.

Viewed in this light, RCRA's definitional exclusion of source, special nuclear and byproduct material assumes a narrower significance than was suggested in the proposed rule. Instead of referring to any waste stream in its entirety, the exclusion appears directed only to the radioactive component of a nuclear waste. The result, however, is a more harmonious view of the statute as a whole. Read together, DOE believes that the definitional exclusion and the language of section 1006(a) are correctly understood to provide for the regulation under RCRA of all hazardous waste, including waste that is also radioactive. RCRA does not apply to the radioactive component of such a waste, however, if it is source, special nuclear or byproduct material. Instead, the AEA applies to that radioactive component. Finally, if the application of both regulatory regimes proves conflicting in specific instances, RCRA yields to the AEA.

In addition to construing the whole of RCRA in harmony, this interpretation results in according both RCRA and the AEA the greatest capacity to regulate effectively the special type of hazard that each statute was designed to control. Since the two statutes are not in irreconcilable conflict, but are capable of co-existence, they should be interpreted such that the operation and objectives of each are facilitated. See *Radzanower v. Touche Ross & Co.*, 428 U.S. 148, 155 (1976). However, in issuing today's final rule, DOE emphasizes the importance of section 1006(a) in resolving any particular inconsistencies that may occur between the requirements of RCRA and those of the AEA. DOE is the federal agency responsible for authoritatively construing the requirements of the AEA, as that Act applies to DOE activities. While DOE does not anticipate that adoption of today's final rule will lead to frequent cases of "inconsistency," section 1006(a) provides critical assurance that the implementation of the final rule will present no impediment to the maintenance of protection from radiological hazards as well as DOE's accomplishment of its other statutory responsibilities under the AEA.

A final consideration in adopting today's final rule is the rule's consistency with the legal position adopted by EPA and the NRC in resolving questions concerning RCRA's application at NRC-licensed commercial nuclear facilities. In a recent guidance document developed jointly by EPA and the NRC,<sup>11</sup> the two agencies stated that

for commercial low-level radioactive waste containing a hazardous component, they will regard only the actual radionuclides in the waste as being exempt from RCRA. Today's final rule adopts the same approach for all DOE radioactive and chemically hazardous waste.

Accordingly, for purposes of RCRA, DOE interprets the term byproduct material to refer only to the radioactive component of a nuclear waste. The nonradioactive chemically hazardous component of the waste will be subject to regulation under RCRA.

#### Procedural Matters

##### A. Executive Order 12291

This rule has been reviewed in accordance with Executive Order 12291. The rule is not classified as a major rule because it does not meet the criteria for major rules established by that Order.

##### B. National Environmental Policy Act

This rule is an interpretative rule intended only to clarify the meaning of a statutory definition. Issuance of the rule will have no environmental impact.

##### C. Regulatory Flexibility Act Certification

The rule will not have a significant impact on a substantial number of small entities.

##### D. Paperwork Reduction Act of 1980

There are no information collection requirements in the rule.

##### List of Subjects in 16 CFR Part 962

Nuclear materials, Byproduct material.

Issued in Washington, DC, April 27, 1987.

J. Michael Farrell,  
General Counsel

In consideration of the foregoing, Part 962 is added to 16 CFR Chapter III, to read as follows:

#### PART 962—BYPRODUCT MATERIAL

Sec.

962.1 Scope.

962.2 Purpose.

962.3 Byproduct material.

Authority: The Atomic Energy Act of 1954 (42 U.S.C. 2011 *et seq.*); Energy Reorganization Act of 1974 (42 U.S.C. 5801 *et seq.*); Department of Energy Organization Act (42 U.S.C. 7101 *et seq.*); Nuclear Waste Policy Act (Pub. L. 97-425, 96 Stat. 2201).

##### § 962.1 Scope.

This Part applies only to radioactive waste substances which are owned or produced by the Department of Energy at facilities owned or operated by or for

<sup>7</sup> See, e.g., *Westinghouse Elec. Corp. v. Pacific Gas & Elec. Co.*, 326 F.2d 573 (9th Cir. 1964).

<sup>8</sup> 122 Cong. Rec. 21901 (1976) (remarks of Sen. Randolph).

<sup>9</sup> H.R. Rep. No. 94-1403, 96th Cong., 2d Sess., pt. 1, at 4, reprinted in 1976 U.S. Code Cong. & Ad. News 6236, 6241.

<sup>10</sup> See, e.g., *Richards v. United States*, 369 U.S. 1, 11 (1962).

<sup>11</sup> "Guidance on the Definition and Identification of Commercial Mixed Low Level Radioactive and Hazardous Waste," Jan. 5, 1987.



the Department of Energy under the Atomic Energy Act of 1954 (42 U.S.C. 2011 *et seq.*). This Part does not apply to substances which are not owned or produced by the Department of Energy.

#### § 962.2 Purpose.

The purpose of this Part is to clarify the meaning of the term "byproduct material" under section 11e(1) of the Atomic Energy Act of 1954 (42 U.S.C. 2014(e)(1)) for use only in determining the Department of Energy's obligations under the Resource Conservation and Recovery Act (42 U.S.C. 6901 *et seq.*) with regard to radioactive waste substances owned or produced by the Department of Energy pursuant to the exercise of its responsibilities under the Atomic Energy Act of 1954. This Part does not affect materials defined as byproduct material under section 11e(2) of the Atomic Energy Act of 1954 (42 U.S.C. 2014(e)(2)).

#### § 962.3 Byproduct material.

(a) For purposes of this Part, the term "byproduct material" means any radioactive material (except special nuclear material) yielded in or made radioactive by exposure to the radiation incident to the process of producing or utilizing special nuclear material.

(b) For purposes of determining the applicability of the Resource Conservation and Recovery Act (42 U.S.C. 6901 *et seq.*) to any radioactive waste substance owned or produced by the Department of Energy pursuant to the exercise of its atomic energy research, development, testing and production responsibilities under the Atomic Energy Act of 1954 (42 U.S.C. 2011 *et seq.*), the words "any radioactive material," as used in subsection (a), refer only to the actual radionuclides dispersed or suspended in the waste substance. The nonradioactive hazardous component of the waste substance will be subject to regulation under the Resource Conservation and Recovery Act.

[FR Doc. 87-9885 Filed 4-30-87; 8:45 am]

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## FEDERAL RESERVE SYSTEM

### 12 CFR Parts 207, 220, 221 and 224

#### Regulations G, T, U and X; Securities Credit Transactions; List of Marginable OTC Stocks

**AGENCY:** Board of Governors of the Federal Reserve System.

**ACTION:** Final rule; determination of applicability of regulations.

**SUMMARY:** The List of Marginable OTC Stocks is comprised of stocks traded over-the-counter (OTC) that have been determined by the Board of Governors of the Federal Reserve System to be subject to the margin requirements under certain Federal Reserve regulations. The List is published four times a year by the Board as a guide for lenders subject to the regulations and the general public. This document sets forth additions to or deletions from the previously published List effective February 10, 1987 and will serve to give notice to the public about the changed status of certain stocks.

**EFFECTIVE DATE:** May 12, 1987.

**FOR FURTHER INFORMATION CONTACT:** Peggy Wolffrum, Research Assistant, Division of Banking Supervision and Regulation, (202)-452-2781. For the hearing impaired only, Earnestine Hill or Dorothea Thompson, Telecommunications Device for the Deaf (TDD) (202)-452-3544. Board of Governors of the Federal Reserve System, Washington, DC 20551.

**SUPPLEMENTARY INFORMATION:** Set forth below are stocks representing additions to or deletions from the Board's List of Marginable OTC Stocks. A copy of the complete List incorporating these additions and deletions is available from the Federal Reserve Bank. This List supersedes the last complete List which was effective February 10, 1987. (Additions and deletions for that List were published at 52 FR 3217, February 3, 1987). The current List includes those stocks that meet the criteria specified by the Board of Governors in Regulations G, T, U and X (12 CFR Parts 207, 220, 221 and 224, respectively). These stocks have the degree of national investor interest, the depth and breadth of market, and the availability of information respecting the stock and its issuer to warrant regulation in the same fashion as exchange-traded securities. The List also includes any stock designated under an SEC rule as qualified for trading in the national market system (NMS Security). Additional OTC stocks may be designated as NMS securities in the interim between the Board's quarterly publications. They will become automatically marginable at broker-dealers upon the effective date of their NMS designation. The names of these stocks are available at the Board and the Securities and Exchange Commission and will be incorporated into the Board's next quarterly List.

The requirements of 5 U.S.C. 553 with respect to notice and public participation were not followed in connection with the issuance of this

amendment due to the objective character of the criteria for inclusion and continued inclusion on the List specified in 12 CFR 207.8 (a) and (b), 220.17 (a) and (b), and 221.7 (a) and (b). No additional useful information would be gained by public participation. The full requirements of 5 U.S.C. section 553 with respect to deferred effective date have not been followed in connection with the issuance of this amendment because the Board finds that it is in the public interest to facilitate investment and credit decisions based in whole or in part upon the composition of this List as soon as possible. The Board has responded to a request by the public and allowed a two-week delay before the List is effective.

#### List of Subjects

##### 12 CFR Part 207

Banks, Banking, Credit, Federal Reserve System, Margin, Margin requirements, National Market System (NMS Security), Reporting and recordkeeping requirements, Securities.

##### 12 CFR Part 220

Banks, Banking, Brokers, Credit, Federal Reserve System, Margin, Margin requirements, Investments, National Market System (NMS Security), Reporting and recordkeeping requirements, Securities.

##### 12 CFR Part 221

Banks, Banking, Credit, Federal Reserve System, Margin, Margin requirements, Securities, National Market System (NMS Security), Reporting and recordkeeping requirements.

##### 12 CFR Part 224

Banks, Banking, Borrowers, Credit, Federal Reserve System, Margin, Margin requirements, Reporting and recordkeeping requirements, Securities.

Accordingly, pursuant to the authority of sections 7 and 23 of the Securities Exchange Act of 1934, as amended (15 U.S.C. 78g and 78w), and in accordance with 12 CFR 207.2(k) and 207.6(c) (Regulation G), 12 CFR 220.2(s) and 220.17(c) (Regulation T), and 12 CFR 221.2(j) and 221.7(c) (Regulation U), there is set forth below a listing of deletions from and additions to the Board's List:

#### Deletions From List

##### Stocks Removed for Failing Continued Listing Requirements

American Aggregates Corporation  
No par common  
Bio-Medicus, Inc.  
Warrants (expire 08-31-88)