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RCRA Permit Policy Compendium

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DISCLAIMER

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Air Emission Standards For Owners And Operators Of Hazardous Waste TSDFs

State Authorization (Part 271)

9541 – FINAL AUTHORIZATION

Part 271 Subpart A

ATK1/1104/62 kp

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

9534.1991(01)

DEC 3 1991

MEMORANDUM

SUBJECT: RCRA Regulations Applicable to Control Devices Required by the Organic Air Emission Standards (40 CFR Parts 264 and 265 Subparts AA and BB)

FROM: James Michael, Acting Chief
Assistance Branch (OS-343)
Office of Solid Waste

TO: Catherine Massimino
Senior RCRA/Superfund
Technical Specialist
Region 10

In your memorandum of June 19, 1991, you ask for clarification as to the standards that apply to control devices required by the Organic Air Emission Standards for Process Vents and Equipment Leaks, promulgated pursuant to RCRA Section 3004(n) on June 21, 1990 (55 FR 25454). This rule is codified at 40 CFR Parts 264 and 265 Subparts AA and BB. You identify potential ambiguity as to what standards are applicable when the control device meets the definition of a regulated unit under another portion of the regulations. You provide the example of a control device at a permitted facility that fits the definition of an incinerator and ask what standards apply -- the requirements of the organic air emission rule (e.g., to reduce total organic air emissions from all affected process vents at a facility by 95 percent weight or greater), or the Part 264 Subpart O incinerator requirements (e.g., the requirement to achieve a destruction or removal efficiency (DRE) of at least 99.99%). My office, in conjunction with the Office of General Counsel, has concluded that, as a general matter, the Subpart AA and BB standards govern such control devices.[1]

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[1]Of course, the air emission rule does not limit EPA's "omnibus" authority under RCRA Section 3005(c), 40 CFR Section 270.32(b), to impose, on a case-by-case basis, any permit conditions regarding air emissions that are determined to be necessary to protect human health and the environment. In addition, the Subpart AA and BB standards address only the performance that must be achieved by a control device with respect to organic air emissions from process vents and equipment leaks covered by the air emission rule. If the device is a separate unit that is also treating separate hazardous wastestreams, the unit must of course comply with the appropriate Part 264 or 265 unit standards for its treatment of those wastestreams.

The June 21, 1990 organic air emission rule required the use of control devices to reduce emissions from certain types of process vents and equipment leaks and required that the devices meet standards specified in the rule, such as the requirement in 40 CFR Section 264.1033(c) that enclosed combustion devices reduce the organic emissions vented to them by 95 percent or greater by weight. EPA recognized in promulgating the rule that incinerators might be among the devices that would be used to achieve the standards imposed, see, e.g., 55 FR 25455. Nonetheless, the discussion and analyses accompanying the rule -- including, for example, the health impact and cost impact analyses -- are based on the premise that the devices installed pursuant to the rule will achieve the standards established by the rule, not the general Part 264 and 265 standards. See 55 FR 25486-25489, 25462, and 25477 (June 21, 1990).

The conclusion that the organic air emission rule standards govern the performance of the required control devices is consistent with the purpose and context of the rule. A facility that, pursuant to the organic air emission rule, installs a control device that appears to fit the definition of an incinerator is not getting a "break" by being subject to the air emission rule standards rather than the Subpart O standards. On the contrary, the air emission rule for the first time requires the reduction of gaseous emissions from certain equipment leaks and process vents that were previously unregulated (except to the extent they were regulated on a case-by-case basis pursuant to the omnibus authority). The standards imposed by the organic air emission rule are those which EPA determined to be protective. See 55 FR 25486-25488 (June 21, 1990).

There is one caveat to this conclusion. You had expressed concern that there may be instances in which a facility attempts to use the organic air emission rule as a means of subjecting itself to less stringent standards than it would otherwise be subject to -- where, for example, a facility constructs a treatment train in which an incinerator is preceded by a unit with regulated process vents or equipment leaks in an attempt to characterize the incinerator as a Subpart AA or BB control device. In such circumstances, permit writers may conclude that the device is not a bona fide Subpart AA or BB control device and impose the general incinerator standards. These decisions will have to be made on a case-by-case basis. Headquarters will assist permit writers in these decisions upon request.

If you have any questions or concerns, please call me at FTS 260-1206, or Brian Grant of OGC at FTS 260-6512.

cc: Permit Section Chiefs, Regions I-X
Frank McAlister, PB, PSPD, OSW
Brian Grant, OGC

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

OFFICE OF
SOLID WASTE AND EMERGENCY R.

JUL 30 1987

MEMORANDUM

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

FROM: Bruce Weddle, Director Susan Bromm
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 applies 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's 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.

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

ATTACHMENT OSWER DIRECTIVE #9541.00-6

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON D.C. 20460

JUN 29 1987

OFFICE OF
SOLID WASTE AND EMERGENCY

MEMORANDUM

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

FROM: 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.

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

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

9541.1981(01)

SEP 29 1981

OFFICE OF
SOLID WASTE AND EMERGENCY RESPONSE

PIG - 81 - 12

MEMORANDUM

SUBJECT: States' Role in Assigning EPA Identification Numbers

FROM: Christopher J. Capper
Acting Assistant Administrator (WH-562A)

TO: PIGS Addressees

Issue:

EPA requires all hazardous waste 1/ generators and transporters and owners and operators of hazardous waste treatment, storage, and disposal facilities to receive an EPA identification number (ID number) before they handle hazardous waste.2/ Identification numbers are issued by the EPA Regional Offices. What role should the States play in assisting the EPA Regional Offices to assign identification numbers?

Decision:

(1) States with interim authorization and States under Cooperative Arrangements are encouraged to assist EPA in assigning EPA identification numbers. Specifically, EPA would like State assistance in distributing and reviewing RCRA Notification and Part A Permit Application Forms. The responsibility for assigning EPA ID numbers will remain in the Regional Offices.

(2) States with their own system of assigning ID numbers are encouraged to use the EPA ID number as the State ID number.

1/ Hazardous waste means hazardous waste as defined by EPA except where specifically noted in this memorandum.

2/ Sections 262.12, 263.11, 264.11 and 265.11 establish this requirement for persons handling hazardous waste in States where EPA is running the hazardous waste program. Sections 123.34 - 36 require for final authorization that States mandate that persons handling hazardous waste within their borders obtain EPA ID numbers. There is no comparable requirement for interim authorization but to date all States have accepted the use of EPA ID numbers.

Discussion:

EPA assigns an identification number to each generator and transporter of hazardous waste and to owners and operators of hazardous waste treatment, storage, and disposal facilities who notify the Agency. Generators must not offer their hazardous waste for transportation; transporters must not transport hazardous waste; and owners and operators of hazardous waste management facilities must not treat, store, or dispose of hazardous waste without first receiving an EPA identification number.3/ EPA assigns a unique identification number to each single site where hazardous waste is generated, treated, stored, or disposed; or, in the case of a transporter, to his principal place of business. The identification number is used on all manifests, reports, and records that EPA requires. The EPA identification number also serves as the "password" for entering and retrieving data from EPA's Hazardous Waste Data Management ADP System (HWDMS). HWDMS is the Agency's major source of information on hazardous waste handlers across the country and is a critical element in implementing Subtitle C of RCRA. EPA is also in the process of tying together HWDMS with other EPA data management systems using the EPA ID number as the common link.

The scheme EPA uses to assign identification numbers is based on the Data Universal Numbering System (DUNS number) that Dun and Bradstreet Incorporated (D & B) has developed. D & B has assigned approximately three million DUNS numbers to all types of businesses across the nation. EPA also assigned temporary "T" numbers to persons who did not have an existing DUNS number.4/ All persons who have registered with EPA have been assigned an ID number that is their DUNS number, a "T" number, or for some Federal activities, their GSA Real Property Number.

Seven general steps are involved in assigning an EPA ID number. They are (1) answer requests for blank forms (hazardous waste generators and transporters must submit standard EPA form 8700-12, the EPA Notification Form; owners and operators of new hazardous waste management facilities must submit standard EPA forms 3510-1 and 3510-3, the RCRA Part A Permit Application), (2) review the submitted information for completeness and obtain any missing information, (3) review the D & B microfiche list to determine if the site has an existing DUNS number, (4) if the site is not listed on the D&B microfiche, check other files within the Region to determine if EPA has assigned an alternate DUNS number to the site under another program which also can be used as the EPA ID number for the RCRA program, (5) if the site does not have a number under another program, assign one of the numbers from the Region's D & B user block, (6) enter information about the activity into HWDMS, and (7) generate an acknowledgment from HWDMS and issue it to the requestor to inform him of his EPA ID number.

3/ See footnote 2.

4/ EPA is no longer issuing "T" numbers as of August 1, 1981. Instead, EPA purchased from D & B a block of unassigned DUNS numbers and will assign numbers from this block to persons who do not already have a DUNS number. EPA has begun converting existing "T" numbers to DUNS numbers for facilities requiring RCRA permits and for generators and transporters with activities regulated under other EPA programs.

There has been confusion as to what responsibilities the States can assume in assisting EPA to carry out these steps. In order to obtain final authorization a State must require new hazardous waste generators and transporters and owners and operators of hazardous waste treatment, storage, and disposal facilities to obtain EPA ID numbers before conducting hazardous waste activity (§§123.34 (a), 123.35 (a), and 123.37 (b)). Both the "RCRA State Interim Authorization Guidance Manual" (June 25, 1980) and the "Additional Guidance for Cooperative Arrangements under Subtitle C of RCRA" (August 5, 1980) provide for States to assist EPA in assigning identification numbers prior to final authorization .

States with interim authorization and States under Cooperative Arrangements are encouraged to assist EPA in steps number 1 and 2 listed above. For now, EPA will retain full responsibility for steps 3 through 7. Several States have expressed an interest in assisting EPA in steps 3, 4, and 5, and further have requested that EPA provide them with blocks of unassigned ID numbers which the State could assign directly and eliminate delays in getting new numbers one at a time from EPA. EPA prefers not to relinquish the responsibility for steps 3, 4, and 5. The Agency must maintain tight control over the assignment of all new numbers since the EPA identification number is the key means of identifying the activity in the Agency's data management systems (EPA will continue to enter into the Agency's ADP data base the name, address and type of activity for all sites that are assigned an EPA ID number).

Recognizing the need for rapid issuance of new identification numbers, EPA has assigned contractor (Computer Sciences Corporation) personnel in each Regional Office to perform steps 3, 4, and 5. The plan is for the contractor to complete these steps within one day. Steps 6 and 7 involve interacting with EPA's ADP system. Since there is presently no capability for States to enter information into BNDMS, no State can perform these steps.

EPA is aware that several States have systems for assigning State identification numbers to hazardous waste (as defined by the State) handlers. Since the federal regulations require the use of EPA identification numbers, EPA strongly encourages States that issue their own identification numbers to adopt the EPA numbering scheme. State use of the EPA scheme should benefit the State programs and the regulated community by:

- eliminating duplication of effort;
- eliminating confusion from the issuance of multiple numbers;
- providing for rapid issuance of numbers directly from the Regional Offices, and
- reducing costs.

Furthermore, States employing the EPA numbering scheme will be better prepared to use the proposed uniform national manifest form 5/ which will accommodate only EPA issued identification numbers.

5/ EPA plans to publish the uniform national manifest form for public review and comment in October 1981.

In cases where a State has adopted a definition of hazardous waste that is broader than the Federal definition, it may not always be clear if the person requesting an identification number in that State handles "Federally defined" hazardous waste or hazardous waste covered under the broader portion of the State definition. These handlers may be issued an EPA identification number since it is not critical that only "bona fide" handlers of Federally defined hazardous waste receive an EPA identificaion number. However, it would be helpful if States participating in Step 2, above, would point out these cases so that we can make a note in our files that the activity has been issued an EPA ID number but may not be handling Federally defined hazardous waste.

9541.1982(01)

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

PIG-82-3

MAY 17 1982

OFFICE OF
SOLID WASTE AND EMERGENCY RESPONSE

MEMORANDUM

SUBJECT: Assignment of a Memorandum to the Program Implementation Guidance System

FROM: John Skinner, Director
State Programs and Resource Recovery Division (WH-563)

TO: Program Implementation Guidance System Addressees

On March 15, 1982, Enforcement Counsel issued the attached memorandum to Regional Administrators and Regional Counsels. The Memorandum provided valuable information, guidance, etc. on EPA enforcement of RCRA-authorized State hazardous waste laws and regulations. I think that the guidance contained in this memorandum is of such value as to warrant wider distribution and incorporation into our system of Program Implementation Guidance. For future reference and ease in filing, I have designated this memorandum as Program Implementation Guidance number 82-3 .

Attachment

ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

MAR 15 1982

MEMORANDUM

SUBJECT: EPA Enforcement of RCRA-Authorized State Hazardous Waste Laws and Regulations

FROM: William A. Sullivan, Jr.
Enforcement Counsel (EN-329)

TO: Regional Administrators, Regions I - X
Regional Counsels, Regions I - X

In the administration of the hazardous waste program, a state with an authorized RCRA program may, for various reasons, be unable or unwilling to take enforcement action that EPA may deem critical. Several legal and administrative questions which may be presented in such cases include the following:

1. Can EPA take enforcement action in states which have been granted authorization to administer and enforce the RCRA program? What about states with which EPA has Cooperative Arrangements?

2. Assuming EPA can take enforcement action, does it enforce the state laws and regulations, or the Federal RCRA law and regulations?

3. If an enforcement action is necessary, in what court should EPA file the action?

4. If the enforcement action involves administrative proceedings, does EPA follow federal or state procedures?

5. Since the taking of an enforcement action by EPA in an authorized state might, in some cases, endanger or irritate federal-state relationships, what procedures should be developed to insure, to the greatest possible extent, that any federal enforcement actions taken in a RCRA-authorized state are done at such times and in such a manner as to eliminate or minimize any possible impact upon that federal-state relationship?

6. What is the effect, if any, of state authorization upon EPA's ability to take action under Sections 7003 and/or 3013 of RCRA?

This memorandum will attempt to suggest some answers to these questions and procedures which might be employed to avoid

...tion between EPA and the state agency or agencies should it become necessary for EPA to take enforcement action. The questions will be addressed in the order set forth above. The Office of Enforcement Counsel has consulted with the Office of General Counsel in the preparation of this memorandum.

1.

CAN EPA TAKE ENFORCEMENT ACTION IN A RCRA-AUTHORIZED STATE? WHAT ABOUT STATES WITH WHICH EPA HAS COOPERATIVE ARRANGEMENTS?

A. Authorized states:

When a state is authorized to administer the RCRA program in lieu of EPA, EPA has made a determination that the state's program is equivalent (in the case of final authorization), or substantially equivalent (in the case of interim authorization), to the federal program, and that the state hazardous waste program can thereafter be administered by the state under state law, in lieu of the Federal program. (See RCRA, Section 3006(b) and (c)). After authorization, can EPA take enforcement action in such a state, and if so, would it enforce state or federal law and regulations?

The provisions of RCRA Section 3008(a)(1) and (2) are most helpful in answering these questions. These provisions state:

> "Section 3008(a) Compliance Orders.- (1) Except as provided in paragraph (2), whenever on the basis of any information the Administrator determines that any person is in violation of any requirement of this subtitle, the Administrator may issue an order requiring compliance immediately or within a specified time period or the Administrator may commence a civil action in the United States district court in the district in which the violation occurred for appropriate relief, including a temporary or permanent injunction."
>
> "(2) In the case of the violation of any requirement of this subtitle where such violation occurs in a State which is authorized to carry out a hazardous waste program under Section 3006, the Administrator shall give notice to the State in which such violation has occurred prior to issuing an order or commencing a civil action under this section." (emphasis supplied)

Subsection (2) clearly indicates that even though a state has an authorized hazardous waste program, EPA retains the right of federal enforcement, subject to the giving of notice to the State in which the violation occurred prior to taking enforcement action.

The legislative history of Section 3008 supports this interpretation. That history, contained in House Committee on Interstate and Foreign Commerce Report No. 94-1461 (September 9, 1976), at page 31, states:

> "This legislation permits the states to take the lead in the enforcement of the hazardous waste laws. However, there is enough flexibility in the act to permit the Administrator, in situations where a state is not implementing a hazardous waste program, to actually implement and enforce the hazardous waste program against violators in a state that does not meet the federal minimum requirements. Although the Administrator is required to give notice of violations of this title to the states with authorized hazardous waste programs, the Administrator is not prohibited from acting in those cases where the states fail to act, or from withdrawing approval of the state hazardous waste plan and implementing the federal hazardous waste program pursuant to Title III[1] of this act."

The preamble to 40 CFR §123.128(f) and (g) at 45 Fed. Reg. 33394 (May 19, 1980), also briefly sets forth this position regarding EPA's enforcement of hazardous waste laws and regulations in an authorized state.

We can also look to the Clean Water Act (CWA), which is highly analogous to RCRA in this regard, and from which Section 3008 was drawn[2]. Cases involving similar provisions of the CWA (e.g., Sections 309 and 402) support the proposition that while Congress intended that the states have primary authority to administer the the program subject to national guidelines provided by the Act and by the EPA regulations, EPA retained the authority to achieve the purposes and goals of the Act, including the right to take

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[1] The House Bill (H.R. 14496) was amended subsequent to the submission of this report, which changed the references of Title III to Subtitle C of the final Act.

[2] See Report of Senate Committee on Public Works, No. 94-988, p. 17, dated June 25, 1976, which states with reference to what is now Section 3008:

> "In any regulatory program involving Federal and State participation, the allocation or division of enforcement responsibilities is difficult. The Committee drew on the similar provisions of the Clean Air Act of 1970 and the Federal Water Pollution Control Act of 1972."

enforcement action in appropriate cases, even after a state program has been approved. See Cleveland Electric Illuminating Co. v. EPA, 603 F. 2d 1 (6th Cir., 1979); U.S. v. City of Colorado Springs, 455 F. Supp. 1364, (D.C., Colo., 1978); Chesapeake Bay Foundation, Inc. v. Virginia State Water Control Board, 433 F. Supp. 122 (D.C. Va., 1978); U.S. V. Cargill, Inc., Civ. Docket #80-135, (D.C. Del. Feb. 12, 1981); and Shell Oil v. Train, 415 F. Supp. 70, (D.C. Cal. 1976), where the Court, after quoting from legislative history of the CWA, stated:

> "The language suggests that Congress did not intend the environmental effort to be subject to a massive federal bureaucracy; rather, the states were vested with primary responsibility for water quality, triggering the federal enforcement mechanism only where the state defaulted.... The overall structure is designed to give the states the first opportunity to insure its proper implementation. In the event that a state fails to act, federal intervention is a certainty".

B. States With Which EPA Has Cooperative Arrangements:

Regarding states which have entered into Cooperative Arrangements, the federal-state relationship is different from that of interim or final authorization. A Cooperative Arrangement is a device to assist states whose hazardous waste programs are not yet sufficiently developed to qualify for authorization, and to provide financial assistance to those states. (See guidance memorandum on Cooperative Arrangements dated August 5, 1980). There is no authorization by EPA of the state to administer the hazardous waste program in lieu of the federal program. In fact, the model Cooperative Arrangement specifically provides that:

> "EPA retains full and ultimate responsibility for the administration and enforcement of the Federal hazardous waste management program in the state."

The right and obligation of EPA to take enforcement action in a state with which the Agency has a Cooperative Arrangement is, therefore, the same as in a state which has neither interim or final authorization.

Although notice to such states of impending enforcement action is not required by RCRA, for purposes of maintaining harmonious EPA-state relationships, appropriate consultations should precede EPA action, and written notice should be given by EPA to the appropriate agency and the governor of the affected state.

DOES EPA ENFORCE STATE LAW AND REGULATIONS OR FEDERAL LAW AND REGULATIONS IN AN AUTHORIZED STATE?

Having concluded that EPA can enforce hazardous waste laws and regulations in a state with an EPA-approved program, the question then becomes: does EPA enforce RCRA and federal regulations, or the state's statute and regulations? If the latter, can EPA enforce a portion of the state program that goes beyond the scope of coverage of the basic federal program, or state laws and regulations which were adopted after EPA approval of the state program? On the other hand, may EPA enforce a portion of the federal program that is not included in the state program?

These issues may initially seem more academic than real since, in order to gain interim authorization to administer the RCRA program, a state must have a program which is "substantially equivalent" to the Federal program (see RCRA, Section 3006(c)), and a program which is "equivalent" to the federal program in order to gain final authorization (Section 3006(b)). As a result, many authorized states will have provisions which are similar, if not identical, to the federal regulations. However, there will undoubtedly be differences in the federal and state laws and regulations, particularly during interim authorization, and many states will have programs which are, in part, more stringent or broader in scope of coverage than the federal program. Therefore, it is very likely that these issues will be encountered frequently.

As discussed in Part 1 of this memorandum, Section 3008 (a)(2) RCRA authorizes EPA to take enforcement action in an authorized state, after notice to the state, in the case of "a violation of any requirement of this subtitle." When EPA authorizes a hazardous waste management program under Section 3006, the state program becomes the RCRA program in that state, and is a part of the requirements of Subtitle C referred to in Section 3008(a)(2), which EPA is mandated to enforce. Upon development of the state's program and acceptance of that program by EPA, "such state is authorized to carry out such program <u>in lieu of</u> the federal program under this subtitle in such state...." (RCRA Section 3006(b) and (c)). In other words, the only hazardous waste program in effect in that state is the state program, and the state laws and regulations are those which must be enforced by EPA should federal enforcement action be necessary. This, of course, does not limit EPA's right to take action under Sections 7003 or 3013 of RCRA (see Section 6 of this memorandum).

This result is undoubtedly in keeping with the intent of Congress. If the federal hazardous waste regulations were to apply to handlers of hazardous waste in authorized states, those persons would be continously subjected to a dual set of laws and regulations, a situation which presently exists in those states which have not yet received interim authorization. Such dual regulation is presumably what Congress intended to phase out in

an orderly manner when it adopted the provisions of Section 3006 (b) and (c).

Again, an analogy can be drawn to the provisions of the Clean Water Act and the cases decided under it to reinforce this opinion. See United States v. Cargill, Inc., (D.C., Del.) Civil No. 80-135, Slip Op. February 12, 1981; Shell Oil v. Train, supra; United States v. I.T.T. Rayonier, Inc., 627 F.2d 996 (9th Cir., 1980). The problem becomes more complex, however, when the following questions are considered:

(A) If an authorized state program includes regulations or statutory provisions which are greater in scope of coverage than the federal program, can EPA also enforce those additional state requirements?

(B) If the federal regulations contain provisions which are not included in the state program (e.g., by reason of promulgation by EPA subsequent to authorization of the state program by EPA), can EPA enforce the federal regulations which are not a part of the state program? and,

(C) If the state makes modifications in its program after authorization, does EPA enforce the state program as originally approved, or the state program as modified after approval by EPA?

These questions will be of particular significance during interim authorization, when the states are required only to have programs which are "substantially equivalent" to the federal program, and while EPA and the states continue to "fine-tune" their programs.

A. If an authorized state program includes regulations or statutory provisions which are greater in scope of coverage or more stringent than the federal program, can EPA also enforce those additional state requirements?

Individual states will, in addressing industrial, agricultural, geographic, hydrological and other factors which exist within their borders, undoubtedly develop portions of their hazardous waste programs which are greater in scope of coverage than the federal program. Examples of such additional coverage could include the listing of wastes which are not included in the federal universe of hazardous waste; the permitting of generators or transporters; recordkeeping or reporting requirements not included in the federal regulations; and requirements for physical examination of employees and their families. State requirements which are greater in scope of coverage than the federal regulations are generally those for which no counterpart can be found in the federal requirements.

State program requirements that are greater in scope of coverage than the federal program are not a part of the federally-approved program (40 CFR §§123.1(k) and 123.121(g)). Since that portion of the state program does not have a counterpart in the federal program, it does not become a requirement of Subtitle C,

the violation of which EPA is entitled to enforce pursuant to Section 3008(a)(1) and (2). Therefore, EPA may not enforce that portion of a state program which is broader in scope of coverage than the federal program.

It should be made clear, however, that there is a distinction between portions of a state program which are broader in scope of coverage, and those which are "more stringent" than the federal program. Section 3009 of RCRA and 40 CFR §§123.1(k) and 123.121(g) provide that nothing shall prohibit a state from imposing any requirements which are more stringent than those imposed by the federal regulations.

While state provisions which are broader in scope of coverage generally do not have a counterpart in the federal program, the subject matter of the more stringent state provisions is usually covered in similar provisions of the federal program. Examples of more stringent state provisions would include: a requirement that not only a fence be erected and maintained around a facility, but that it be a fence of specific height and of specific material (e.g., a ten-foot, chain-link fence); a requirement that containers for storage of waste be of a specific material and/or color-coded; a lesser amount of waste exempted from regulation under the small quantity generator exemption (40 CFR §261.5); and a requirement that final cover of a land disposal facility be of a particular material or thickness.

Provisions in state programs which are more stringent than their federal counterparts are, nevertheless, a part of the approved state program, and are enforceable by EPA. Congress apparently intended that result when, in Section 3009, it authorized states to develop more stringent programs, and, at the same time, authorized EPA to enforce those programs under Section 3008(a)(2). In addition, more stringent state provisions in an approved program are, unlike those which have no counterpart in the federal program, a part of the requirements of Subtitle C, which EPA is required to enforce.

B. If the state modifies its program after authorization, can EPA enforce the state program as modified, or the state program as approved before the modification?

This issue assumes that, after either interim or final authorization of a state program, the state makes modifications in that program. Such modifications could make the program more stringent, less stringent or enlarge or restrict the scope of the program. In such event, must EPA enforce the program as modified, or the program in existence at the time of authorization?

With regard to modifications made by the states in their programs <u>after final</u> authorization, 40 CFR §123.13 sets forth specific procedures for such revisions by the states and approval thereof by EPA. A state program revision after final authorization must be submitted to EPA for approval, public notice given, and a public hearing held if there is sufficient public interest. The revision to the state

upon approval by the Administrator (40 CFR §123.13(b)(4)). It is, therefore, clear that under present EPA regulations, modifications made to a state program after final authorization require EPA approval for such modifications to be effective, and that the state program which EPA may enforce is that which existed as of the latest EPA approval.[3]

However, the federal regulations relating to Phase I authorization contained in 40 CFR §123.121 through 123.137 do not contain specific provisions comparable to §123.13 with respect to how modifications may be made by a state in its program after interim authorization, or how approval of any such modifications could be made by EPA, short of Phase II or final authorization. This is a significant omission, since it is apparent that many, if not all, states will be making modifications in their programs between the approval for interim authorization and the filing of their applications for final authorization.[4]

In the absence of requirements in RCRA or EPA's regulations for submission of program modifications by a state with interim authorization to EPA for approval, it is presently our opinion that EPA may enforce such modifications made by a state with interim authorization, notwithstanding that EPA may not have approved those modifications.[5]

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[3] Discussions with representatives of the Office of General Counsel and the Office of Solid Waste indicate that 40 CFR §123.13 is under review, and may be amended to eliminate the requirement that EPA approve modifications made after final authorization of state programs before the modifications may be effective. The consequences on enforcement of such an amendment to §123.13 are addressed in the following discussion.

[4] There are, however, stages during interim authorization in which state program changes may be approved by EPA. For example, when the states, having received Phase I authorization, apply to EPA for Phase II interim authorization, they must demonstrate that their programs have been modified, if necessary, since Phase I authorization so as to contain the elements necessary to meet the requirements of one or more of the components of Phase II. Likewise, changes in the state program during interim authorization are submitted to EPA for approval as part of the process for final authorization. There is also a provision in the model Memorandum of Agreement between EPA and the state which requires the state to inform EPA of any program changes which would affect the state's ability to implement the authorized program. Nevertheless, there is no requirement, as in 40 CFR §123.13, which delays the effective date of modifications in a state program during interim authorization until after EPA approval of such modifications.

[5] In the event EPA should eliminate the requirement of 40 CFR §123.13 (see footnote 3), then by much the same reasoning contained herein, EPA could also enforce modifications made in the state program after final authorization, notwithstanding whether EPA had approved the modifications.

We have come to this conclusion for the following reasons:

1. Congress provided in Section 3006 for two types of authorization: interim authorization, to be granted upon a showing by the states of "substantial equivalence" with the federal program; and final authorization, upon a showing by the state of "equivalence" with the federal program. Obviously, in the journey from substantial equivalence to equivalance, some changes must be made, and were undoubtedly contemplated by Congress. Yet, Congress also authorized EPA to enforce the hazardous waste program during this interim period, including the programs in effect in those states to which interim authorization had been granted. It therefore appears that Congress intended that EPA enforce such laws and regulations as were in effect at the time of violation in a state with interim authorization, notwithstanding whether EPA had formally approved each and every one of those laws or regulations.

2. To conclude that EPA could not enforce state laws and regulations adopted after granting of interim authorization, but was, instead, restricted to enforcement of only those which were in existence at time of approval of the state program by EPA, would potentially subject the regulated community to the dilemma of being required to comply with two sets of laws or regulations on the same subject: those which were a part of the EPA-approved state program at the time of granting of interim authorization; and those which the state promulgated after the granting of interim authorization. Such dual regulation defeats the whole purpose of state authorization.6/

We therefore conclude that changes made by a state in its hazardous waste programs after granting of interim authorization, and before granting of final authorization, may be enforced by EPA regardless of whether the changes have been formally approved by EPA. In so doing, we recognize that there are several forceful arguments which can be made on the other side of the issue.7/ Notwithstanding these, we believe the weight of the arguments tilts in favor of the conclusion which we reached herein.

6/This reasoning would not apply with equal force to modifications made in a state program during final authorization because the States presumably will be making many fewer modifications of their programs after final authorization.

7/For example, if a state, after receipt of interim authorization, makes changes in its program which are less stringent, is EPA required to enforce the portions of the state program which are less stringent? The answer must be "yes", and if the state makes many such changes in its program, EPA's only resort may be to revoke the State's authorization.

C. If the federal regulations contain provisions which are not included in an approved state program, can EPA enforce those federal regulations in that state?

The situation presented by this question will most likely occur when EPA modifies its regulations or adopts new regulations, such as the addition of a waste to the universe of federally-regulated waste, after the approval of a state program. This issue is significant because, with approximately one-half of the states having received interim authorization, it is important to know whether changes made in the federal program subsequent to a state having been granted authorization can be enforced in that state.

Under the procedure established by Section 3006 and 40 CFR Part 123, a state, in order to gain interim or final authorization, must submit to EPA its program consisting of, among other things, the state laws and regulations which constitute its program. These are compared to the analogous provisions of the federal program to determine whether the state program meets the necessary standards for interim or final authorization. Approval is granted for the specific state program as submitted, which then becomes the hazardous waste program in effect in that state in lieu of the federal program.[8] The federal program, in effect, ceases to exist in that state, except for the potential of federal enforcement of the state program or the possibility of action under Sections 7003 or 3013.

Since the state hazardous waste laws and regulations are effective in lieu of the federal program after authorization, any changes in the federal program made after the granting of interim authorization to a state do not become a part of the state program unless and until the state adopts such changes.[9] Inasmuch as the state laws and regulations are those which EPA is required to

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[8] As noted earlier, where the state program has a greater scope of coverage than required under the federal program, that part of the state program is not a part of the federally-approved program. 40 C.R §§123.1(k)(2) and 123.121(g)(2). Also as noted earlie during interim authorization, EPA enforces modifications in a state program, notwithstanding that EPA may not have approved those modifications.

[9] For a discussion of the adoption of modifications by a state in its program, and when those modifications become a part of the EPA-authorized program, see Subsection B of this Section, supra.

enforce, EPA is, conversely, not entitled to enforce federal requirements which are not a part of the state program.[10]

With regard to states which have been granted final authorization, there are provisions in the federal regulations which govern the state adoption of modifications in the federal program. Section 123.13 of 40 CFR requires the states, after final authorization, to adopt amendments which are made to the Federal program within one year of the promulgation of the federal regulation, unless the state must adopt or amend a statute, in which case the revision of the state program must take place within two years. However, until the state adopts the Federal amendments, the state program does not include them, and EPA cannot enforce them in that state.

We recognize that this could create a situation in which regulations promulgated by EPA subsequent to authorization of a substantial number of states would not be effective in those states until such time as the states adopted them,[11] while being in effect as part of the federal program in those states which do not yet have interim authorization, and in those states which receive authorization after promulgation of the regulations and have included a counterpart of the regulations as part of their state program.

3.

IF AN ENFORCEMENT ACTION IS NECESSARY, IN WHAT COURT SHOULD EPA FILE THE ACTION?

Section 3008(a)(1) of RCRA provides that whenever the Administrator determines that any person is in violation of any requirement of Subtitle C, "... the Administrator may commence a

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[10] It should be noted here that there are components of the federal program which are not included in Phase I interim authorization or in some phases of Phase II authorization to the states. For example, the granting of Phase I interim authorization to the states does not include the authority to issue RCRA permits to hazardous waste management facilities. Likewise, the granting of Phase II, Component A authorization (covering permitting of storage facilities) does not include authority to issue RCRA permits to hazardous waste land disposal facilities, which will be covered by Component C of Phase II. The portion or portions of the federal program not covered by an authorization to the state continues as a part of the federal program in effect in that state until it is covered by a subsequent authorization. In the meantime, EPA is entitled to enforce those portions of the federal program which the state has not yet been authorized to administer.

[11] For a discussion of the adoption of modifications by a state in its program, see Subsection B of this Section, *supra*.

civil action in the United States District Court in the district in which the violation occurred...."

This statute vests jurisdiction of suits involving violations of the hazardous waste program under Subtitle C in the U.S. District Courts, and the venue of such actions in the U.S. judicial district in which the violation occurred. Therefore, in a suit brought by EPA to enforce a portion of the hazardous waste program of a state which has received interim or final authorization, the suit should be brought in the appropriate U.S. District Court, but the substantive law to be applied to the facts of the case should be the state hazardous waste statutes and regulations which were applicable to those facts.

The state may, of course, file its enforcement actions in the state courts. In this regard, EPA should be aware of the potential which may exist for a final decision in a state court action to act as collateral estoppel to a subsequent action which EPA may bring against the same offender over the same violation. See U.S. v. ITT Rayonier, Inc., 627 F.2d 996 (9th Cir, 1980), for a discussion of state court judgments acting as collateral estoppel against EPA.

4.

IF EPA ENFORCEMENT OF STATE LAWS, REGULATIONS OR PERMITS INVOLVES ADMINISTRATIVE PROCEEDINGS, SHOULD EPA FOLLOW FEDERAL OR STATE PROCEDURES?

Since the bulk of the RCRA enforcement activity of EPA will involve administrative proceedings, particularly with the authority to issue administrative orders under Sections 3008, 3013 and 7003, the question of whether federal or state administrative procedures will be followed in enforcement actions is an important one.

~~There can~~ be little question that Congress provided EPA with the necessary authority to use federal procedures for enforcement of all applicable hazardous waste laws, and that it intended that those procedures be used in the event of federal enforcement of a state's hazardous waste laws or regulations.[12] For example, Section 3008(a)(1) of RCRA authorizes the Administrator, in the event of a violation of any requirement of Subtitle C, to issue an order requiring compliance immediately or within a specified time. Section 3008(a)(2) makes it clear that such orders may be issued in states which are authorized to carry out the hazardous waste program under Section 3006 (after notice to the affected state); and Section 3008(a)(3) provides for a penalty for non-compliance, as well as the authority of the Administrator to revoke

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[12] We interpret RCRA as limiting the use of the administrative orders mentioned herein to EPA, and ~~that they~~ are not available, as such, to the states. The states statutes may, of course, contain authority for state administrative orders.

any permit issued to the violator, whether by EPA or the State. Provisions for public hearings on any order issued under this Section, and authority for the Administrator to issue subpoenas are also included in Section 3008(b). Section 3008(c) specifies the scope and content of the compliance orders which may be issued under this Section.

Congress provided a specific mechanism for federal administrativ enforcement proceedings, to be used in cases of federal enforcement of state programs in lieu of any administrative procedures contained in the laws and regulations of the state in which the violation occurred. Furthermore, it would seem inconceivable as a practical matter that EPA would consider using state administrative procedures even should it legally be possible to do so, since that would, in most cases, necessitate submitting the violation to the state agency whose inability or failure to take enforcement action would have been responsible for bringing about EPA's involvement in the matter.

5.

IN EVENT OF EPA ENFORCEMENT IN AN AUTHORIZED STATE, WHAT STEPS SHOULD BE TAKEN TO MINIMIZE ADVERSE IMPACT UPON FEDERAL-STATE RELATIONSHIPS?

There are several circumstances under which EPA may be required to take enforcement action in a state with an authorized RCRA program, most primarily because of the state's lack of resources to take adequate or timely action. Whatever the reason, EPA should carefully avoid the appearance of being "overbearing" or disregarding the states' role as the primary agency for administration and enforcement of the hazardous waste program.

In some cases, the state will request EPA to take enforcement action. In such cases, few problems are encountered in EPA-state relations. However, a letter confirming the State's request, and the notice provided for in Section 3008(a)(2) should be issued to the state before the action is commenced. On the other hand, when the state is passive or unwilling to initiate a timely, appropriate enforcement action, EPA should take care to handle the matter with diplomacy.

Since it is clear, as outlined above, that Congress intended the states to have the primary enforcement authority of the RCRA program, if it appears that federal enforcement intervention may be required, a letter should be written from EPA to the appropriate state agency administering the program containing the following:

1. A description of the violation, including the name and address of the violator; the date of violation and location of the facility or site at which it occurred; references to the provisions of the state program which are being violated; and any other pertinent details which will aid in the identification and the nature of the violation. Additional information, such as

names of witnesses, laboratory reports, inspection reports, and other evidence in EPA's possession should be offered upon request of the state should the state decide to take enforcement action.

2. A statement that under RCRA and the Memorandum of Agreement between EPA and the state, it is the primary obligation of the state to take necessary and timely actions to enforce the provisions of the state hazardous waste laws and regulations, and that EPA believes it is appropriate that the state take such action. In some cases, it would be appropriate to suggest the type of action to be taken, such as issuance of a compliance order, other administrative orders, revocation of a permit, or filing of an injunctive action.

3. A statement that should the state agency fail to take appropriate and timely action by a date certain stated in the letter, EPA may thereafter exercise its right to initiate enforcement action under Section 3008(a)(2).

The question of what is a "timely" action by the state agency will depend upon a variety of circumstances. If an uncorrected violation could constitute a threat to human health or the environment, a relatively short period of time may be required for either the state or EPA to act. If, through telephone conversations or other communications between EPA and state agency officials, there is already an indication before the letter is mailed to the state that it will probably not take action regardless of the request, then a relatively short period of time (e.g., 10 days) for state response may be allowed before EPA initiates the action. In such case, the letter should also refer to the previous communication with the state which indicated the liklihood of inaction on its part. On the other hand, if there is an indication that the state will or may act, but has failed to do so because of scarce resources or for other clear and understandable reasons, a longer period of time may be allowed to give the state ample opportunity to fulfill its role as the primary enforcement authority.

At the end of the time period stated in the letter, if the state agency has not initiated an enforcement action or indicated its willingness and intent to do so, EPA may proceed to commence action as the enforcing authority without further notification.

6.

EFFECT OF STATE AUTHORIZATION ON SECTION 7003 AND 3013 ACTIONS

Section 7003 of RCRA states, in pertinent part:

> "Notwithstanding any other provision of this Act, upon receipt of evidence that the handling... of any solid waste or hazardous waste may present an imminent and substantial endangerment to health or the environment, the Administrator may bring suit ... to immediately restrain any

person contributing to such handling..., or to take such other action as may be necessary. The Administrator shall provide notice to the affected State of any such suit. The Administrator may also, after notice to the affected State, take other action under this section including, but not limited to, issuing such orders as may be necessary to protect public health and the environment." (emphasis supplied)

The first clause of the section indicates that it was the intent of Congress to allow EPA to take emergency actions to protect human health and the environment in cases of imminent hazard, without regard to any other provisions of the Act. It is not within the scope of this memorandum to review the purposes and uses of Section 7003, but it is clear that EPA is not bound by any of the provisions of an authorized state's laws or regulations which may appear to restrict or limit the use of this Section. Again, however, notice must be given to the state prior to the commencement of such an action.

It is also clear from the express wording of the section that only the Administrator of EPA, or other Agency personnel to whom he has delegated authority, may take the actions authorized by Section 7003, and that therefore a state which has been authorized to administer the hazardous waste program may not employ Section 7003 as a state enforcement mechanism. States are authorized by EPA to administer and enforce the hazardous waste program only under Subtitle C of RCRA, which does not include Section 7003. Use of Section 7003 is within the exclusive province of EPA. This does not, however, prohibit the states from adoption and use of their own form of imminent hazard authority in the state courts.

The ability of EPA to take action under Section 3013 is likewise unaffected by authorization of a state program. By such authorization, EPA does not relinquish the enforcement options which it possesses, but merely agrees to hold them in abeyance to be used in the event the state fails to take appropriate and timely enforcement action.[13] Before issuing a 3013 order to a person in an authorized state, however, notice should be given to the appropriate agency in the affected state in the manner suggested herein, and reference should be made to the guidance on issuance of 3013 orders contained in the Memorandum from Douglas MacMillan, Acting Director of the Office of Waste Programs Enforcement to the Regional Enforcement Directors dated September 11, 1981, entitled, "Issuance of Administrative Orders under Section 3013 of the Resource Conservation and Recovery Act."

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[13] The model Memorandum of Agreement between EPA and the states contained in the RCRA State Interim Guidance Manual, provides:

"Nothing in this Agreement shall be construed to restrict in any way EPA's authority to fulfill its oversight and enforcement responsibilities under RCRA."

If you have any questions or problems relating to the matters contained in this memorandum, please contact Richard E. Mays of my office at FTS 382-3108.

cc: Christopher J. Capper
Acting Assistant Administrator
Office of Solid Waste and Emergency Response

Robert M. Perry
General Counsel
Office of General Counsel

Mr. C. Raymond Marvin
General Counsel
National Association of Attorneys General
444 N. Capitol Street - Room 1777
Washington, D.C. 20001

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

9541.1934(04)

MAY 21 1984

OFFICE OF
SOLID WASTE AND EMERGENCY RESPONSE
PIG-84-1

MEMORANDUM

SUBJECT: Determining Whether State Hazardous Waste Management Requirements are Broader in Scope or More Stringent than the Federal RCRA Program

FROM: Lee M. Thomas
Assistant Administrator for
Solid Waste and Emergency Response (WH-562-A)

TO: PIGs Addresses

Issue

How does EPA determine whether a requirement of an authorized State hazardous waste program is broader in scope or more stringent than the Federal RCRA program?

Discussion

The March 15, 1982 Program Implementation Guidance memorandum from William Sullivan entitled "EPA Enforcement of RCRA-Authorized State Hazardous Waste Laws and Regulations" (PIG-82-3) outlined EPA policy on enforcement of Federal and State hazardous waste management requirements in States with cooperative arrangements or authorized RCRA programs.

The Guidance concluded that State-imposed requirements which are beyond the scope of coverage of the Federal program are not part of the Federally approved program (40 CFR 271.1(i) and 271.121(1)). Consequently, such requirements are not enforceable by EPA. PIG 82-3 also concluded that "provisions in State programs which are more stringent than their federal counterparts are, nevertheless, a part of the approved State program and <u>are</u> enforceable by EPA." [Emphasis added.]

Attempts to distinguish between those State requirements that are broader in scope and those that are more stringent than the Federal RCRA program have led to some confusion. The confusion is partly a result of conflicting information in past PIG's on this issue. PIG 81-4, discussing delisting of wastes, indicates that State regulation of more wastes than are regulated by the Federal program would be viewed as a more stringent aspect of the

authorized State program. Similarly, page 7 of PIG 82-3 indicates that "a lesser amount of waste exempted [by the State] from regulation under the small quantity generator exemption" is an example of a more stringent State program requirement. In contrast, page 6 of PIG 82-3 states that the listing by a State of wastes which are not included in the Federal universe is an example of a provision that is broader in scope.

Decision

To determine whether a particular requirement or provision of a State program is "broader in scope" (and therefore not a part of the authorized program) or more stringent (and therefore a part of the authorized program) the questions discussed below should be answered sequentially.

(1) Does imposition of the State requirement increase the size of the regulated community beyond that of the Federal program?

A State requirement that does increase the size of the regulated community is more "extensive", not more stringent, and is an aspect of the State program which goes beyond the scope of the Federally-approved program. Examples of requirements that are broader in scope include:

- a lesser amount of waste exempted from regulation under the small quantity generation exemption;
- listing of wastes which are not in the Federal universe of wastes.

Thus, the examples discussed in PIG 81-4 and on page 7 of PIG 82-3 should have been interpreted as requirements that were broader in scope and not more stringent. (While this guidance corrects these two examples, it does not change the policies and other examples of PIGs 81-4 and 82-3).

If the requirement does not increase the size of the regulated community, the following question should be asked.

(2) Does the requirement in question have a direct counterpart in the Federal regulatory program?

If the State requirement does not have a direct Federal counterpart, the requirement is also beyond the scope of the Federal regulatory program. Examples of such State requirements are:

- controls on traffic outside of a hazardous waste facility or specification of transport routes to the facility;
- requirements for the preparation of an environmental impact statement or the approval of a siting board as part of the permit issuance process;
- licensing of transporters.

However, if the requirement of the authorized State program does have a direct Federal counterpart, the State requirement is either equivalent to or more stringent than the corresponding Federal regulation. Examples of more stringent State requirements are:

- limited financial assurance options for facility closure;
- submittal of an annual rather than a biennial report for generators;
- expiration of permits after five years instead of ten.

This guidance supports those enforcement policies outlined in PIG 82-3, and should resolve many of the questions concerning the scope of the Federal and RCRA authorized State regulatory programs. We also anticipate that this guidance will be useful in focusing the scope of EPA oversight of State programs. As PIG 82-3 states, EPA enforces the more stringent provisions of RCRA authorized programs; therefore, EPA has a corresponding responsibility to overview implementation of those aspects of State programs which are more stringent.

13 JUN 1984

MEMORANDUM

SUBJECT: Transfer of Federal RCRA Permits to Authorized States and Compliance with 40 CFR §124.10(e)

FROM: Truett V. DeGeare, Chief
State Programs Branch

TO: Hazardous Waste Branch Chiefs, Region I-X

Recently, there has been some confusion over whether Federal RCRA permits continue in States which receive Phase II or final authorization. This policy was explained in PIG-82-5, dated August 5, 1982, with regard to interim authorization (copy attached). The same policy applies to final authorization.

The receipt of final authorization is not contingent upon the State assuming permit responsibility for those RCRA permits issued by EPA; nor is the granting of authorization cause for termination of an EPA-issued permit. EPA-issued permits continue in force until terminated under 40 CFR §270.43 for cause (e.g., noncompliance by the permittee) or transferred by agreement between the permittee and EPA as provided in §271.8(b)(6). (See also §124.5(d).) The State must eventually issue a State RCRA permit or assume responsibility to administer the Federal permit if it has the authority to do so; however, it does not have to do so immediately as a condition of receiving authorization.

Another permit issue which has arisen recently is failure to comply with 40 CFR §124.10(e). That section requires a copy of the fact sheet or statement of basis, the permit application and the draft permit to be mailed to all persons identified in §124.10(c)(1)(i)-(iv). An EPA-issued permit has been challenged for failure to comply with §124.10(e) (RCRA appeal No.83-5 In the Matter of Waste Technologies Industries). In that case, the State of West Virginia claimed that it was unlawfully prevented from filing timely comments on a permit application because the Region failed to give it certain supporting documents. It was entitled to receive those documents (draft permit and permit application) as an

"affected State" under §124.10(c)(1)(iii). The Administrator remanded the matter to the Regional Administrator for the limited purpose of reopening the public comment period.

Please observe this requirement and remind States with Phase II or final authorization to comply with it as well. If you have any questions on these issues, please call Deborah Wolpe at 382-2227.

Attachment

cc: Bruce Weddle
State Programs Branch
Gail Cooper, OGC
Susan Schmedes

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON D.C. 20460

9541.1984(08)

SEP 13 1984

OFFICE OF
SOLID WASTE AND EMERGENCY RESPONSE

MEMORANDUM:

SUBJECT: Radioactive Waste Exemption in North and South Carolina

FROM: Lee M. Thomas
Assistant Administrator

TO: Charles R. Jeter
Regional Adminstrator
Region IV

Thank you for your memorandum of July 11 regarding the exemption of radioactive materials in North and South Carolina's hazardous waste statutes. You asked whether their programs could be authorized with these exemptions. The answer is yes for the reasons described below.

On February 21 I wrote to Regional Administrator Ernesta Barnes on the subject of State regulation of radioactive wastes. In that memorandum I explained that there are three categories of radioactive waste. The first category - source, special nuclear and by-product materials defined by the Atomic Energy Act - is excluded from the definition of solid waste in RCRA; therefore, RCRA does not provide authority for us to regulate these wastes as hazardous waste and we do not require authorized States to do so. The second category is "mixed" waste; i.e., those wastes which consist of source, special nuclear or by-product material and RCRA hazardous waste. At the time of my writing, we had not determined the extent of EPA's authority over such wastes, and therefore did not require States to have jurisdiction over or regulate "mixed" wastes. The final category consists of radioactive wastes outside of the source, special nuclear or by-product universe such as naturally-occurring radionuclides and accelerator-produced radioisotopes. Such wastes are also hazardous if they are listed in 40 CFR Part 261, Subpart D, or when they exhibit any characteristic identified in Part 261, Subpart C.

North and South Carolina's laws do not extend the full range of RCRA controls over this last category of radioactive hazardous wastes. A question has arisen about whether any of these wastes in fact exist. Since no wastes currently listed in Part 261,

Subpart D, are radioactive, we focused on whether there are any naturally-occurring or accelerator-produced wastes that exhibit a Subpart C characteristic. After checking with the Office of Radiation Programs, which has consulted with the regulated community and research organizations, we have determined that no such wastes are known to exist (copy of memorandum attached). From this determination we now conclude that it is inappropriate to require States to demonstrate control over this hypothetical category of wastes to obtain final authorization. Accordingly, North and South Carolina need not amend their statutes to obtain final authorization.

I also wish to apprise you of recent developments in the area of those mixed wastes which consist of source, special nuclear, or by-product material and RCRA hazardous waste. Since issuance of the February 21 memorandum, we have determined that RCRA authority does extend to these mixed wastes. We are now working with the Department of Energy to determine how best, under RCRA and the Atomic Energy Act, to implement this authority. States need not yet revise their programs to regulate mixed wastes since EPA must still resolve some definitional issues. However, you may wish to advise them of this development, should they wish to initiate changes in their programs to obtain legal authority to regulate mixed wastes. At that time we would also advise States to obtain jurisdiction over the third category of non-excluded radioactive and hazardous waste in the future event that a non-excluded radioactive waste is listed or we discover that such a waste exhibits a hazardous characteristic. Once we have defined our implementation program we will work with the Regional Administrators to guide States in revising their programs as required by 40 CFR §271.21. In the meantime, EPA is responsible for implementing the RCRA program with respect to mixed wastes.

I appreciate you bringing this situation to my attention. Please let me know if you have further questions.

Attachment

cc: Regional Administrator, Regions I-III and V-X
Regional Hazardous Waste Division Director, Regions I-X
Regional Counsel, Regions I-X

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

DATE AUG 1 1984

SUBJECT Existence of Hazardous Non-Excluded Radioactive Wastes

FROM Floyd L. Galpin, Chief
Waste Management Standards Branch
Criteria & Standards Division (ANR-460)

TO John H. Skinner, Director
Office of Solid Waste (WH-562B)

THRU: Richard J. Guimond, Director
Criteria and Standards Division (ANR-460)

Glen L. Sjoblom, Director
Office of Radiation Programs (ANR-458)

On February 21, 1984, Assistant Administrator Lee Thomas sent a memo to Regional Administrator Ernesta Barnes, detailing the Agency's position on which radioactive wastes are outside the source, special nuclear, or by-product universe exempted under RCRA. This memo stated that the wastes which could fall under RCRA's authority include naturally-occurring radionuclides and accelerator-produced radioisotopes. The memo went on to say that authorized States must regulate these wastes when they are listed under 40 CFR Part 261, Subpart D, or when they exhibit any characteristics identified in Subpart C.

You have recently asked us to clarify whether any nonexempted wastes exist which are also hazardous because they exhibit a characteristic under 40 CFR Part 261, Subpart C (no nonexempted wastes are currently listed under Subpart D). Georgia, North Carolina, and South Carolina have indicated to you that no such wastes exist in their jurisdictions. Discrete sources of low-level radioactive wastes, such as radium (naturally-occurring) or accelerator-produced wastes are the only wastes which presently fall into the nonexempted category. This does not include mining and beneficiation wastes which we presently do not regulate under RCRA. To our knowledge, none of these wastes are hazardous under Part 261.

I hope the above information is of use. Should you have any further questions, please feel free to contact me.

9541.1984(09)

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

OFFICE OF
GENERAL COUNSEL

APR 4 1984

MEMORANDUM

SUBJECT: Status of Federal Permits in States Which Have Received RCRA Final Authorization

FROM: Gail B. Cooper
Attorney

TO: Bruce Weddle
Director
Permits and State Programs
Division (WH-563)

In August 1982, OSW issued a Program Implementation Guidance memorandum (PIG-82-5) on the status of federal permits after a state receives interim authorization. You have asked us whether the same guidance may legally apply to final authorization. In addition, you requested that we commit to writing the legal advice we gave you orally when PIG-82-5 was being developed.

Background and Conclusion

Under RCRA §3006 and 40 C.F.R. Part 271, a state which has received interim or final authorization operates the RCRA program in lieu of EPA. Among other things, upon approval of a state program, EPA suspends the issuance of Federal permits for those activities included in the authorized state program. 40 C.F.R §§271.1(f) and 271.121(f). The status of existing federal permits after authorization is less clear, however. In 1982, the following question arose: if state RCRA permits comparable to existing federal permits are not issued at the same time the state receives interim authorization, do existing federal RCRA permits remain in effect? We concluded then that the more persuasive interpretation of RCRA was that federal permits remain in effect until terminated in compliance with 40 C.F.R. Parts 270 and 124. Because the

pertinent statutory and regulatory provisions are the same for interim and final authorization, the same conclusion would hold for final authorization.

Discussion

Sections 271.8(b)(6) and 271.126(c)(1) of the RCRA state authorization regulations provide that the Memorandum of Agreement (MOA) between the state and EPA must contain provisions specifying a procedure for transferring the administration of existing federal permits to the state. They further provide that if "a state lacks authority to directly administer permits issued by the Federal government, a procedure may be established to transfer responsibility for these permits." An example of such a procedure is provided in a note to §271.8(b)(6): the state, EPA and the permittee could agree that "the State would issue a permit(s) identical to the outstanding federal permit which would simultaneously be terminated." 1/

This provision clearly provides that EPA-state procedures on the transfer of permits must be established but is silent on whether such transfers must be effective on the date of authorization. This issue was addressed for interim authorization on August 9, 1982 by a Program Implementation Guidance memorandum (PIG-82-5). The memorandum concluded that federal permits remain in effect after Phase II authorization until the state issues a RCRA permit or assumes responsibility for administering the federal permit if it has the authority to do so. According to the memorandum, federal permits do not terminate automatically but must be terminated according to the procedures in §270.43 or by agreement of the permittee and EPA. To avoid the need for EPA administration and enforcement of federal permits in authorized states, the memorandum strongly encouraged the states to issue state RCRA permits or administer federal RCRA permits as soon as possible.

As we indicated to you, it is conceivable that someone could challenge the policy reflected in the memorandum in a permit or enforcement proceeding by arguing that since section 3006 provides that the State carries out the RCRA program "in lieu of the federal program" upon authorization, federal permits terminate automatically upon a state's authorization. Following that interpretation, the state would have to be

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1/ Section 124.5(d) provides that EPA does not have to issue a notice of intent to terminate a permit in this situation.

able to assume or administer the Federal permit (or issue its own RCRA permit) at the time it was authorized in order for the facility to continue to have a RCRA permit.

We do not find that argument persuasive. Many states do not have the statutory or regulatory authority to administer federal permits or to issue their own RCRA permits as of the date of authorization. If federal permits automatically expired upon a state's authorization, a facility could be left without any permit (if there were no state permit for that facility) or could continue to operate under a state permit with less stringent requirements than were contained in the federal RCRA permit. Given Congress' general goal of providing for the effective regulation of hazardous waste and the "no less stringent requirement" in Section 3009 in particular 2/, it is difficult to conceive that Congress would have intended that the transfer of authority from EPA to a state result in a decrease in environmental protection. In our view, PIG-82-5 is a reasonable interpretation of our legal authority, designed to assure that authorization of a state program does not cause a facility to lose its permit or allow a facility to benefit from relaxed permit requirements. 2/

The analysis is supported by a case dealing with the NPDES program under the Clean Water Act (CWA). In Central Hudson Gas and Electric Corporation v. U.S.E.P.A., 587 F.2d 549, 560 (2nd Cir. 1978), EPA had issued a NPDES permit which was partially contested. Before the Part 124 adjudicatory hearings began on the contested provisions, the State NPDES program was approved by EPA. The State and EPA arranged for EPA to continue to handle the adjudicatory hearings and any subsequent litigation. The permittee challenged EPA's authority to do so, pointing to the CWA provision which states that when a state program is

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1/ Section 3007 provides that ... "no state or political subdivision may impose any requirements less stringent than those authorized under [subtitle C] respecting the same matter as governed by such regulations ..."

2/ EPA does not have the same leeway if the federal permit has not yet been issued. 40 C.F.R. 271.1(f) specifically provides that "Upon approval of a State permitting program, the Administrator shall suspend the issuance of Federal permits for those activities subject to the approved State program." Thus, even if EPA has already issued a draft permit and held public hearings, it may not proceed to issue a final RCRA permit. This obviously makes it essential for EPA and the state to allocate permitting resources efficiently in the period before a state receives authorization.

approved by EPA, the EPA must "suspend the issuance of permits." 33 U.S.C. §1342(c)(1). EPA argued that the permit had been issued, so that this provision did not govern.

The court deferred to EPA's position that the permit had been "issued" and did not get into the broader issue of what happens to EPA permits after NPDES approval. To that extent, the decision does not address the same legal issues we might confront. However, the court's reasoning is relevant; it concluded that the statutory policy of having states implement the NPDES permit program was outweighed by the Act's primary objective to restore and maintain water quality. The court was persuaded by EPA's argument that the permittee's interpretation would produce duplication, waste, and delay, and disrupt the state program because the state would not be prepared to bear the sudden transfer of the permit. The Court did not wish to discard the transition mechanism EPA and the state had worked out. While there are differences between the CWA and RCRA, the similar statutory goals and problems of transitions from EPA to state regulation make this case a helpful precedent for PIG-82-5.

WH-563:DFagan:(sed):8243:382-4692:2/27/85:Disk Fagan #3
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Control No. OSW-017
Corrections:Adell/sed:3/1/85

MAR 6 - 1985

MEMORANDUM

SUBJECT: RCRA Permit Reauthorization Issues in Region III

FROM: John H. Skinner, Director
Office of Solid Waste (WH-562)

TO: Steven R. Wassersug, Director
Hazardous Waste Management Division, Region III

This memorandum is in response to the series of questions raised in your memorandum of February 1, 1985, regarding issuance of RCRA permits in authorized States in light of the new reauthorization amendments. Several of the issues you raised have been addressed in the draft guidance on corrective action for continuing releases (dated January 30, 1985) and the draft guidance on joint permitting, which was distributed in early December. We are preparing additional guidance on EPA/State permitting, which should be distributed in draft very shortly.

It should be understood that most of the following responses to the specific questions raised in your memorandum reflect our current thinking, and are based on preliminary policy interpretations which have not completed the Agency's formal review and concurrence process. Our responses are as follows:

A. Aberdeen Proving Grounds. As stated in the 1/30/85 draft guidance on corrective action for continuing releases, the facility is the entire contiguous property under the control of the owner/operator, at which the hazardous waste management units are located. Thus, the entire army base must be taken into account when considering continuing releases for the purposes of this permit action.

A permit issued after November 8, 1984, is not a fully effective RCRA permit unless it addresses all applicable provisions of the reauthorization amendments, as well as the regulations currently in place in the authorized State. However, the State may issue its

"State" permit to the facility, without the new requirements of the amendments having been addressed by EPA. Until the State receives authorization for the new amendments, its permits are State permits, and not RCRA permits. Region III should issue the Federal portion of the permit addressing the provisions of the new amendments as soon as practicable, consistent with the overall program priorities in the Region. When this Federal portion of the permit is issued, it will combine with the State permit to become the RCRA permit. In this situation, provisions of the State permit would be reopened only if provisions of the State permit are affected by the Federal portion of the permit.

B. Spectron. Until the State is authorized for the continuing release provision, implementation of the provision must be done by EPA. We would urge that, if possible, a joint and simultaneous RCRA permit be issued to this facility by EPA and the State. (see the 1/30/85 draft corrective action guidance).

If the Federal portion of the permit cannot be prepared within the State's timetable for the permit, the State may choose to issue the State permit to the facility without the Federal portion. Until the Federal portion is issued, Region III has the option of using an interim status corrective action order [§3008(h)] to require the owner/operator to begin any necessary remedial investigations at the facility.

D. Naval Shipyard. The fact that the facility notified under §103(c) of CERCLA does not affect EPA's ability to issue a RCRA permit to the facility. Any releases that may be at the facility can and should be addressed, either through a RCRA permit, a RCRA interim status corrective action order, or through State enforcement action, as appropriate.

E. Defense General Supply. As you may know, guidance is currently being developed on the Agency's policy toward RCRA facilities that are also listed on the National Priority List (NPL), in light of the new RCRA corrective action authorities. This policy guidance is expected to be issued in the next few months. Until the guidance is issued, we would tentatively advise that if CERCLA remedial measures are already being conducted at a RCRA facility, those activities should continue under CERCLA. If, on the other hand, the CERCLA remedial process is

not yet underway at the facility (i.e., a RI/FS has not yet been done), it would be appropriate to use the RCRA permit or a RCRA §3008(h) order to provide for corrective measures.

E. Allied Bermuda-Hundred. The determination as to whether or not a release that poses a threat to human health and the environment has occurred, or is likely to have occurred, can only be made by EPA (or by the State when it is authorized for the continuing release requirements). This determination is based on information submitted to EPA by the owner/operator regarding the solid waste management units at the facility, and any available information on releases from those units (see Reauthorization Statutory Interpretation #3, February 5, 1985).

F. Dupont Edgemoor. Section 270.10(f)(1) requires that physical construction of a facility cannot begin until the facility has secured a "finally effective RCRA permit." Therefore, before construction of the hazardous waste storage tank can begin, a permit which addresses both the applicable State requirements and the new RCRA §3004(u) requirement must be issued to the facility. As explained in the January 30 guidance on continuing releases, investigations of releases from the solid waste disposal unit at the facility, and development of a program of corrective measures, can take place under a schedule of compliance after the permit is issued. However, the owner/operator cannot begin construction or operation until the Region issues its portion of the permit.

G. In regard to the hypothetical situation posed on page three of your memorandum, the State may issue the State permit to the facility and continue to require cleanup activities under a State compliance order. This will not of itself, however, constitute compliance with the §3004(u) requirements. Only EPA can implement this provision (until such time as the State becomes authorized for it). When EPA issues its portion of the permit, any remaining remedial investigations and corrective measures will be carried out under the permit. If this scenario is followed, we would urge that Region III and the State coordinate to ensure that the investigations and corrective measures imposed under the State enforcement order would be consistent with those which EPA would require under the permit when it is issued.

The answers to your general question on how EPA and a State interact during joint permitting procedures are addressed, in part, in the guidance memoranda already mentioned. We also discussed these issues in some detail at the February 27-28 Division Directors' meeting. We expect to be issuing additional guidance on these various joint permitting issues within the next several weeks. Please let me know if there are any further questions or comments.

cc: B. Weddle
T. DeGeare
P. Guerrero
M. Greenwood
E. Fitzback
Regional Hazardous Waste Branch Chiefs, Regions I-X

9541.1985(05)

May 6, 1985

MEMORANDUM

SUBJECT: Applicable Management Standards for Wastes Newly Regulated Pursuant to HSWA

FROM: Bruce R. Weddle, Director
Permits and State Programs Division (WH-563)

TO: Kenneth Feigner, Chief
Waste Management Branch (M/S 533)
Region X

This is in response to your memorandum of April 4, addressing the question of which standards (EPA's or an authorized State's) apply to the management of wastes which become regulated in authorized States as a result of EPA rulemaking pursuant to HSWA.

We agree with your conclusion that when EPA promulgates additions to Part 261 pursuant to HSWA, it is EPA's standards which are applicable to handlers affected by the new regulations. This situation continues until the State revises its program pursuant to 40 CFR 271.21 to add the wastes to its regulated universe and receives EPA's approval.

You are also correct in that, while States may participate in implementing the Federal requirements through agreements with EPA, EPA retains ultimate responsibility for the Federal program. Only EPA can issue RCRA permits with respect to the new wastes. While EPA may defer to authorized States that are taking timely and appropriate enforcement actions against violations with respect to the new wastes, EPA also retains ultimate enforcement responsibility.

We appreciate your raising this issue, and it will be discussed in the RCRA Reauthorization Statutory Interpretation memorandum (RSI) on joint permitting.

cc: Hazardous Waste Branch Chiefs, Regions I - IX
State Programs Branch
Gail Cooper, OGC

This has been retyped from the original document.

RCRA/SUPERFUND HOTLINE MONTHLY SUMMARY

MAY 85

Manifest Use and State Authorization

3. A spent solvent, which is hazardous by characteristic only (e.g. ignitable-D001), is transported from the generator in Montana, to a reclamation facility in Texas. Both Montana and Texas are states with final authorization for the RCRA program. The transporter will also go through Wyoming which is a non-authorized state (i.e., it is under the Federal RCRA program).

   Pursuant to 40 CFR §261.6(a), characteristic hazardous wastes which are reclaimed are not subject to RCRA regulations. According to §261.2(c) as amended by the January 4, 1985, Federal Register (50 FR 614), however, all spent solvents, characteristic or listed, will be defined as "spent materials" and will be regulated as "solid wastes" prior to reclamation. Thus, per §261.6(b), in the January 4, 1985, rule, generators and transporters of recyclable hazardous materials (e.g., spent solvents) are subject to Parts 262 and 263 (generator and transporter standards, respectively). The complicating factor is that this new definition of solid waste and respective recycling regulations may go into effect at different times throughout the country depending on whether a state is authorized or not.

   The January 4, 1985, rule will be effective in non-authorized states on July 5, 1985. States with final authorization, such as Montana and Texas, may have up to January 4, 1987, to adopt this rule. Therefore, a characteristic ignitable spent solvent will be a regulated hazardous waste prior to reclamation in non-authorized states on July 5, 1985. In the transport situation described above, is the transporter required to carry the Uniform Hazardous Waste Manifest in Wyoming, since the spent solvent is a "hazardous waste" in Wyoming on July 5, 1985?

   If the spent solvent is transported from Montana to Texas (EPA-authorized states) after July 5, 1985, the transporter need not carry the Uniform Hazardous Waste Manifest, even though the spent solvent is transported through Wyoming, which regulates the solvent as a RCRA waste. States through which the waste shipment travels may not dictate manifest requirements per 49 FR 1049 (March 20, 1984). When either the generator state (Montana) or the designated state (Texas) determines that the waste is hazardous, that waste will be subject to the Uniform Manifest requirements.

   Source: Denise Hawkins (202) 382-2231

9541.1985(09)

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

JUL 1 1985

OFFICE OF
SOLID WASTE AND EMERGENCY RESPONSE

MEMORANDUM

SUBJECT: RCRA Reauthorization and Joint Permitting in Authorized States:
RCRA Reauthorization Statutory Interpretation #5

FROM: Jack W. McGraw
Acting Assistant Administrator

TO: Addressees

Section 3006(g) of the Hazardous and Solid Waste Amendments of 1984 (HSWA or the Amendments) provides that hazardous waste requirements and prohibitions promulgated pursuant to the Amendments are applicable in authorized States at the same time they are applicable in unauthorized States. HSWA also mandates incorporation of many of these requirements in all Resource Conservation and Recovery Act (RCRA) permits as of November 8, 1984, in both authorized and unauthorized States. In addition, §3005(c)(3) of the Amendments provides EPA with the authority to incorporate into permits any requirement necessary to protect human health and the environment, even if EPA must go beyond the specific requirements or prohibitions found in the statute or regulations.

A permit cannot be considered a RCRA permit unless it contains all the applicable new requirements of the Amendments. A State must be specifically authorized for provisions of HSWA to issue a RCRA permit. Section 3006(c) of HSWA provides EPA with the authority to issue permits for the new requirements and prohibitions until a State is authorized to do so. That section provides that in an authorized State the Administrator "shall have the authority in such State to issue or deny permits or those portions of permits affected by the requirements and prohibitions established by the Hazardous and Solid Waste Amendments of 1984. The Administrator shall coordinate with States the procedures for issuing such permits." This guidance discusses the implementation of the joint permitting process through which this coordination will occur.[1] Our intent in addressing this issue is to continue the permitting process, in cooperation with the States in as efficient and expeditious a manner as possible.

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[1] Note that there are also requirements of the HSWA which are self-implementing. They take effect regardless of whether a permit is being issued; for example, the ban on disposal of hazardous wastes in salt domes (Section 3004(b)).

JOINT PROCESSING: FORMAT AND TIMING OF THE RCRA PERMIT

The joint permit may be issued in two ways. There can be one complete permit with signatures of both the State Director and the Regional Administrator (RA) on the same document. The other alternative is to issue two incomplete permits, one signed by EPA and one signed by the State. In either situation signatures by EPA and the State are necessary to provide the facility with the authority to operate under a RCRA permit.

If a single complete permit is issued, it is especially important to have a clear identification of which provisions stem from Federal authorities and which stem from State authorities. This identification will clarify enforcement responsibilities and will enable an interested party to determine the appropriate authority to approach when appealing a given permit condition.

Where incomplete permits are issued simultaneously, only those conditions stemming from one authority would be attached to the respective signature. EPA would issue the portion addressing only those HSWA provisions for which the State has not yet received interim or final HSWA authorization. The authorized State would address all other RCRA and State conditions and requirements. The two parts together (whether one document with two portions or two portions put together) would address all the conditions required in a RCRA permit. (See Draft permit section on page 7 for a discussion of how these conditions should be addressed.) This is generally the preferable option as it clearly separates the State and Federal requirements yet it provides the facility with a complete RCRA permit. However, the decision whether to issue one complete or two incomplete permits is ultimately left to the Regions and States; legally, there is no reason to prefer one over the other.

It is EPA policy that State and Federal portions of the RCRA permit be issued simultaneously. However, prior to the date of enactment of the HSWA, States with Phase II or final authorization were processing permit applications toward final determinations. Many of these permits have already been issued as draft permits. States with Phase II or final authorization that issued draft permits prior to April 8, 1985, (the date the RCRA Implementation Policy was signed announcing that joint permits must be issued simultaneously) should proceed as planned to take final action during fiscal year 1985 on these draft permits. The State permits will fulfill State law but they will not be RCRA permits.

EPA will then assign a high priority to these facilities, so that the Federal portion of the permit can be issued as soon as possible, or a rapid determination can be made that a Federal portion is unnecessary. For all other permits,

i.e., those permits which have not reached the draft stage by April 8, 1985, or pre-April 8, 1985, draft permits which are not issued as final permits in fiscal year 1985, States and EPA must plan on simultaneous issuance of the State and Federal portions of the RCRA permit.

A new facility is not allowed to begin construction unless both the State and Federal portions of the permit have been issued, providing the facility with a RCRA permit. If a new facility received only the State's portion of the permit, it may not begin construction since that portion does not, in itself, constitute a RCRA permit. For facilities that want to expand, if the expansion is such that the facility would require a RCRA permit (i.e., it is not an expansion allowable under interim status), then the facility also must receive both the State and Federal portions of the permit prior to expanding.

PROCEDURAL ASPECTS OF ISSUING STATE AND FEDERAL PERMIT PORTIONS

Most RCRA permits will be issued simultaneously by EPA and the States. Procedures to be followed for simultaneous issuance are discussed in the "Implementation Analysis" section. This section discusses those instances, described above, where the State and Federal portions of the permit are not issued simultaneously.

The procedures for issuing a joint RCRA permit in these cases will vary depending upon whether the State has issued a draft or final permit. Where the final State permit has been issued prior to the issuance of the EPA permit, the expiration date will coincide with that established for the original State permit. There are two possible permitting situations:

1. State issued draft permit prior to April 8, 1985, and EPA issues draft permit prior to final State permit; State issues final permit before EPA issues final permit.

Where a State has already issued its draft permit, EPA will make this permit a high priority for action. EPA will determine whether and how the facility is affected by the HSWA requirements since the State is not authorized to make a determination about the applicability of the Amendments. When EPA makes this determination, it will either:

- issue a draft permit containing appropriate conditions addressing HSWA, or

- where EPA finds that the facility is not affected by HSWA, issue a notice explaining our tentative decision. This means that no corrective action will be necessary, no other HSWA requirements apply, and no additional requirements to protect human health and the environment are necessary.

EPA will follow the procedures in 40 CFR Part 124 in issuing the draft permit or notice of our tentative decision that the facility is not affected by HSWA.

EPA's Fact Sheet or Statement of Basis should explain the relationship between the EPA action (draft permit or tentative determination that a HSWA permit is unnecessary) and the previously-issued draft State permit. It should explain that EPA's final determination will be made simultaneously with issuance of the final State permit or that EPA's final action will occur after the State issues its final permit. In the latter event, the notice should explain that the facility will have a RCRA permit only when final permit actions have been taken by both EPA and the State. The State may wish to send a letter to the facility to inform the owner/operator that she/he does not have a RCRA permit until EPA covers the new HSWA requirements in an EPA permit or determines that an EPA permit to address HSWA is unnecessary.

If EPA determines that a permit is necessary to impose HSWA requirements, and that the draft HSWA permit would affect the draft State permit, the State is strongly encouraged to redraft and, if appropriate, renotice its permit at the same time EPA drafts and notices its permit. In some cases there could be a direct conflict between the two permits. If States have the authority to remove permit conditions that conflict with HSWA requirements, removal of such conditions before the permit is issued would avoid the later issuance of two conflicting permits and the need to explain that the HSWA permit supersedes any conflicting State requirements.

In other cases decisions made by EPA concerning HSWA requirements may affect the State portion of the permit even though they do not conflict with the State approach. For example, as a result of EPA technical requirements, it may be necessary to revise the closure plan. It would be preferable for the State to revise the closure plan in its permit, making it unnecessary for both the State and EPA permits to cover the same areas. However, if the State is unwilling or unable to modify its draft permit, both the State's final permit and EPA's draft and final permits must indicate that HSWA requirements in the EPA portion of the permit supersede any inconsistent or less stringent State permit requirement. A Fact Sheet for the final EPA permit must specifically identify the conflicting State provisions which are superseded in order to avoid ambiguity about whether the State or Federal permit condition in a particular area is the operative requirement.

2. State has issued both the draft and final permit before EPA issues its draft permit.

In issuing its portion of the permit in this situation, EPA should proceed as described above, by making a determination about the applicability of the Amendments and issuing either a draft permit or a notice of our tentative decision that the facility is not affected by HSWA.

Where the State does not open its permit, the State is encouraged to issue a notice in conjunction with EPA's final permit which announces that when the State permit was issued it was not a RCRA permit, the State permit does not address the HSWA provisions, and that the State did not reopen its permit. In addition, the State may wish to send a letter to the facility as described above.

The EPA Fact Sheet should explain the relationship between the EPA action and the final State permit. EPA should explain that once EPA makes its final decision, the combination of the State and Federal permits (or decision that a Federal permit is not necessary) will meet the requirements for a RCRA permit.

In the situation described previously -- where the State permit conflicts or overlaps with the HSWA requirements EPA is imposing -- the State is strongly encouraged to modify its permit. If, however, the State is unwilling or unable to reopen its permit (e.g., there is no "cause for modification" under the State regulations to cover the type of change that would be necessary), EPA should proceed to issue its permit, making sure that the EPA permit states that the HSWA requirements supersede any inconsistent or less stringent State permit requirements. As explained before, the Fact Sheet for the RCRA permit must specifically identify whether the State or Federal permit condition in a particular area is the operative requirement. In any of these permitting situations, if a State believes it must follow additional procedures in order to meet the requirements of State law it should do so.

JOINT PERMIT IMPLEMENTATION

The joint permitting relationship must be defined by the Regions and authorized States. The Regions and States will need to:

- establish procedures for coordinating the joint permitting process;
- establish procedures and schedules to obtain additional information from permit applicants;
- notify those facilities who have already submitted applications about the new requirements and their need to address them.

Authorization Memoranda of Agreement (MOA's) need to be amended or other agreements executed to define EPA and State roles in the permit process.

As stated earlier, the Amendments specifically provide that the States may participate in implementing the new provisions. An authorized State would participate in applying the HSWA requirements to the same extent that an unauthorized or Phase I State may currently participate in the Federal permit process. The States can take the lead on the technical review of the application, preparation of the draft and final permit, preparation of the public notice, review of public comments and preparation of the response to comments; but the joint role must be clearly understood. The State is assisting in processing the Federal HSWA portion of the permit, but EPA has the ultimate decision-making authority for those aspects of RCRA permitting for which the State has yet to be authorized.

IMPLEMENTATION ANALYSIS

This section discusses the major steps in the permit process and how each would be affected under joint permitting. The Regions may wish to consider additional changes to MOA's to address the following discussion in greater detail.

1. Permit Application Request - Where possible, there should be one application request issued jointly by EPA and the State. The request should make clear which requirements are State and which are Federal. Duplicates of the same application should be sent to both EPA and the State. Requiring only one application makes it easier for the applicant since she/he need not separate the State and Federal requirements in the application. EPA must receive a copy of the State portion in order to consider whether any additional requirements are necessary to protect public health and the environment, pursuant to §3005(c). The State maintains the overall lead in the process, with EPA responsible for the provisions which stem from Federal requirements for which the State is not authorized.

Where an authorized State has requested a permit application before HSWA, that request will retain its validity for the State's program. However, where information is needed to address the new requirements, EPA must request the additional information if the State does not have the authority to demand such information.

The applicant should be given time to comply with the request for the new HSWA information if necessary; the amount of time granted is subject to the Region's discretion as negotiated with the State. Where the new request creates a burden for the permit applicant, additional time should clearly be granted. The additional time should be granted only to

accommodate the new burden; the State's original time frame for receipt of information from the applicant will apply to the original application request.

2. Completeness Determination - Ideally, the completeness determination should be a joint decision. Since there is only one application, one determination will facilitate the process for the applicant. If one Agency finds the application to be incomplete prior to the other Agency's determination, it can issue a Notice of Deficiency (NOD) or commence an enforcement action, where appropriate. However, the draft permit cannot be issued until both the State and Federal draft permits have been prepared. If one portion of the application is not complete, another completeness determination will be made for that portion only after the date on which the newly requested information becomes due. If both portions of the application are incomplete, a joint completeness determination will be made once the newly requested information is received. In either situation, it is only at that later date that an owner/operator would be subject to enforcement action for an incomplete application based on an NOD for the newly-requested information.

3. Application Deficiencies - Where possible, a joint NOD should be issued with the appropriate enforcing authority issuing the appropriate portion of the NOD. Where deficiencies occur in both the State and Federal portions of the application, the applicant should receive notice simultaneously from both parties to facilitate the applicant's response. Either two NOD's should be issued at the same time, or one document can be issued signed by both parties, so long as it explicitly states which requirements stem from which enforcing authority. If, however, the deficiency relates only to a State provision, the State will issue the NOD with a statement explaining that only the State portion is deficient. Where necessary, separate NOD's for State and Federal deficiencies can be issued at different times.

4. Draft Permit - The draft permit (or intent to deny) will be issued simultaneously by EPA and the State (unless the State draft permit was issued prior to April 8, 1985). The joint draft permit would be physically similar to any other draft permit except that it would contain two parts, specifically identifying which provisions stem from State authorities and which from Federal authorities. As discussed earlier, the two parts may be issued as either one or two draft permits as determined by the Region and the State.

The Fact Sheet or Statement of Basis should be jointly written (as should the public notice) and should include separate discussions of Federal and State issues. An authorized State can enforce its approved analogue to the generally applicable requirements of 40 CFR 270.30. As a result, the State's parallel provisions to 40 CFR 270.30 will

be applicable to both the State and Federal portions of the permit. The Fact Sheet or Statement of Basis should contain an explanation of these requirements.

Where possible, permit writers should avoid putting conflicting requirements into joint permits. This could occur, for example, if a State authorized for the pre-HSWA single liner requirement includes such requirements in its portion of the permit, while EPA includes the HSWA double liner requirement in its portion. Where possible, the State should agree not to include those requirements which are inconsistent or less stringent. There may be situations, however, where a State only has legal authority for single liners and has no discretion to do otherwise. Therefore, where less stringent requirements cannot be eliminated, the Fact Sheet (or Statement of Basis) should state that the more stringent requirements always take precedence and should include a summary of the operative permit conditions. In this way, the facility and the public will know what requirements must be fulfilled and confusion from permits which contain conflicting requirements will be minimized.

5. Permit Procedures and Public Participation - Public participation activities should be conducted jointly. The EPA Region should follow the State's hearing procedures and requirements (adhering to the State's processing deadlines) even where those requirements are more stringent than EPA's. EPA would serve as the hearing officer for purposes of the Federal provisions of the permit.

To the extent that the State desires and EPA resources allow, the Regions should participate in other aspects of the State's public involvement process. However, EPA is not bound to participate in procedures which are not part of the State's authorized program. State imposed requirements which are beyond the scope of coverage of the Federally approved program are not enforceable by EPA, nor is EPA bound by them.[2] Requirements for environmental impact statements (EIS's) and siting boards are specific examples of State requirements which are "broader in scope" than the Federal program and, therefore, although they may be needed as a matter of State law, EPA need not participate with respect to EPA's portion of the permit.

6. Final Decision - As with the draft permit, the EPA and State final permits will be issued simultaneously (except where the State draft permit was issued prior to April 8, 1985, and the final permit was issued before the end of fiscal year 1985). The format of the final permit will be the same as the draft permit. (See discussion on pages 7-8.)

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[2] PIG 84-1, from Lee M. Thomas, May 21, 1984.

7. Appeals - The States will handle appeals relating to State provisions and EPA will handle appeals of the Federal provisions. Each party should notify the other when any appeal action is initiated.

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

9541.1986(04

MAR - 3 1986

Felix A. Dunaway
C-E Power Systems
Combustion Engineering, Inc.
4224 Shackleford Road
Norcross, Georgia 30093

Dear Mr. Dunaway:

As the result of our office's investigation into the current regulatory status of the spent pickle liquor sludge generated at your Norcross facility, we have found that the State of Georgia issued a final exclusion for this waste on May 11, 1984. As a result, Combustion Engineering, Inc. may no longer want to pursue a final exclusion for this waste from EPA. We would like to make you aware, however, of the limited jurisdiction of the State decision, as described below. The Georgia delisting designates your process waste as a non-hazardous waste within the State of Georgia under the authority granted to Georgia for interim authorization by EPA on February 3, 1981.

If the waste continues to be handled entirely within the borders of Georgia, and does not enter interstate commerce, the waste may be disposed as non-hazardous. In the event, however, that this waste enters interstate commerce, e.g., transported by an interstate carrier, even within Georgia, it must be treated as hazardous. Our office will encourage the Georgia Department of Natural Resources to consider additional factors if they reconsider this delisting, but Georgia is not required to readdress this delisting.

If Combustion Engineering, Inc. wishes to pursue a final delisting from EPA, then the previously requested information should be forwarded immediately. If Combustion Engineering, Inc. does not wish to pursue an EPA delisting, then the petition on file with the Agency should be withdrawn. A letter indicating your intent (i.e., whether to proceed with the delisting or withdraw the petition), should be sent to our office within two weeks of the date of receipt of today's correspondence.

If you have any further questions, please contact either Mr. Wendel Miser, of my staff, at (202) 382-7817, or Mr. Steven Hirsch of the Office of General Counsel at (202) 382-7703.

Sincerely,

Eileen Claussen
Director
Characterization and
Assessment Division (WH-562B)

cc: Georgia Department of Natural Resources

31 OCT 86

MEMORANDUM

SUBJECT: RCRA Section 3001(f)(2)(b) and States' Exclusion of Wastes from Regulation as Hazardous

FROM: Marcia E. Williams, Director
Office of Solid Waste

Marcia E.

TO: Hazardous Waste Division Directors
Regions I-X

Since November 8, 1984, EPA has administered all RCRA delisti programs and will continue to do so until States become authorized for delisting under the new provisions of the Hazardous and Solid Waste Amendments of 1984 (HSWA). A State is not required to have a delisting mechanism, and may be authorized under HSWA without one. To receive authorization, a State must conform its delisting program, if any, to the Federal program and apply to the Agency for authorization.

Effective November 8, 1986, temporary exclusions automatically expire. Any temporary exclusion granted by a State before November 8, 1984, should be re-evaluated either by EPA or a State that has been authorized to conduct delisting pursuant to HSWA. If a final decision to grant or deny a petition has not been made by November 8, 1986, the temporary exclusion will cease to be in effect for purposes of RCRA Section 3001(f)(2)(B).

Temporary Exclusions

Temporary exclusions are delisting decisions which exclude a waste from regulation as hazardous, but are not the final delisting action under the regulations of the issuing authority. For example, EPA issued a number of temporary exclusions pursuant to 40 CFR 260.22(m). That provision explicitly stated that these decisions are made "before making a final decision". Similarly, several States have mechanisms for removing a waste from regulation before promulgating a final decision, such as delistings patterned on the Federal temporary exclusion.

These temporary exclusions should be distinguished from grants of enforcement discretion, where a State did not remove a waste from regulation, but stated only that it would not initiate an enforcement action against a person treating this waste as non-hazardous. Enforcement discretion, sometimes called informal exclusions, are not temporary exclusions (nor are they final exclusions).

Final Exclusions

A final exclusion is an agency determination done in accordance with the issuing authority's regulations, e.g., with notice and comment after which no further review of the petition is contemplated. EPA issues final exclusions pursuant to 40 CFR 260.20 and 260.22, which requires publication of a tentative decision in the Federal Register, receipt and evaluation of public comments, and publication of a final decision in the Federal Register. States issue final exclusions in accordance with their State legal authorities.

Any final exclusions that were granted by authorized States before November 8, 1984, are not affected by HSWA (i.e., no additional action is required by the State or by EPA). EPA encourages the States to re-evaluate those decisions if all factors (including additional constituents) which could cause the waste to be hazardous were not considered by the State.

Actions Required

On November 8, 1986, all temporary exclusions will cease to be in effect for purposes of RCRA if a final exclusion has not been granted. States and Regions should plan to verify that the handlers of these previously excluded wastes are complying with applicable requirements after November 8, 1986. To this end, the Regions and States should begin to evaluate all State delistings to:

(1) determine the type of State exclusion (temporary or final) that was granted before November 8, 1984;

(2) determine whether a final exclusion has been granted or denied by EPA; and

(3) take appropriate action to ensure full compliance with RCRA (e.g., prior to 11/8/86, you should send handlers written notification of their regulatory responsibilities.

From a practical standpoint, the expiration of a temporary exclusion will have greatest immediate impact on those who manage their waste in land disposal units. These units may be immediately subject to ground-water monitoring requirements and, on November 8, 1987, may be subject to the "loss of interim status" requirements of Section 3005 (e)(3), depending on whether other hazardous waste management activity is occurring at the facility.

Currently, there are no States authorized for the HSWA delisting authority. Even if a State were to receive the required authorization before November 8, 1986, it is highly unlikely that adequate time exists to collect and evaluate the additional information from petitioners so as to avoid termination of the temporary exclusion.

A "Reference Guide to Delisting Petitions" is compiled at EPA Headquarters and distributed weekly to the Regional delisting contacts. In turn, the Guide is distributed to the States. This reference can be used to determine if EPA is reviewing a particular petition and the status of EPA's review.

Please feel free to contact the delisting staff of the Waste Identification Branch or the Regional Liaisons of the State Programs Branch here in the Office of Solid Waste if you have any questions regarding State delistings.

cc: Matt Straus, OSW
Truett DeGeare, OSW

MAY 1, 1986

MEMORANDUM

SUBJECT: Response to Region III Implementation and Oversight Issues

FROM: Marcia E. Williams, Director
Office of Solid Waste (WH-563)

Gene Lucero, Director
Office of Waste Programs Enforcement (WH-527)

TO: Stephen R. Wassersug, Director
Hazardous Waste Management Division (3HW00)

Thank you for your memorandum of March 5, 1986, in which you asked for clarification on several issues relating to implementation and oversight of the RCRA hazardous waste program in Pennsylvania. This memo addresses your concerns in the same order in which you stated them in your memorandum.

1. Is there still a need to maintain a major handlers list?

Although the major handlers list played a role in the past to establish inspection frequencies and targets and permit oversight priorities, it does not translate to the existing needs of the Agency. You should amend your States' MOAs to use designations which communicate the priorities set in each year's RIP. For example, facilities presenting immediate threats, government facilities, and land disposal facilities, would be appropriate designations for inspections and oversight in FY 86 & FY 87. Because of the recent policy/guidance set forth in the RIP (e.g., inspection targets in FY 86 RIP), PICs 83-1 and 82-2 have been superseded and are presently inoperative with regard to inspections and oversight. As you point out, a major facility designation does need to be maintained to guide the permitting actions of §§124.7 and 124.8.

2. What happens to EPA's oversight responsibility (especially direct enforcement authority) when EPA makes regulatory changes which narrow the "scope" of the original program?

The example you related with this question refers to EPA removing a waste from the lists in Part 261, where an authorized State program continues to include the waste. In this situation, the State requirement would increase the size of the regulated community and would be an aspect of the State program which goes beyond the scope of the Federal program. Therefore, EPA would no longer enforce the hazardous waste activity associated with the Federally deregulated waste. This aspect of the State program would not be subject to EPA oversight.

However, EPA's oversight and enforcement responsibilities are different where EPA reduces the stringency of a requirement (for example, requiring a biennial report instead of an annual report). In that case, the State requirement (i.e., annual report) becomes more stringent than the corresponding Federal requirement. EPA would enforce and otherwise oversee the more stringent State provision, since more stringent provisions are still considered part of the State's authorized program.

3. You asked Headquarters to make a specific determination regarding the "more stringent" or "broader in scope" nature of State standards for managing a material which EPA has determined to not be a hazardous waste.

In the situation you described, the lack of the waste exemption/exclusion in the State's program increases the size of the regulated community beyond that of the Federal program. As you indicated, this part of the Pennsylvania program could be viewed as "broader in scope". We agree with this assessment. Therefore, EPA does not have an oversight responsibility and would not enforce the State's provision.

I hope that the above discussion answers your questions and concerns regarding major facilities and oversight of approved State programs.

cc: Susan Schmedes, OGC
Virginia Steiner, OWPE

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

9541.1986(13)

JUL 24 1986

Richard C. Fortuna
Hazardous Waste Treatment Council
1919 Pennsylvania Avenue, N.W.
Suite 300
Washington, D.C. 20006

Dear Mr. Fortuna:

Thank you for your letter of May 21, 1986, expressing your concerns over the uniform application and enforcement of land disposal restriction regulations. I will answer your specific questions in the order in which they were presented.

- Regarding uniform application of the Federal requirements in States which have established or are establishing their own pre-treatment levels:

As you know, Congress intended that the RCRA program be ultimately implemented at the State level. We have established a very detailed and comprehensive process for delegation of our Federal authority to qualified States. Through that process, States are required to prove their eligibility to receive delegation. Part of that proof involves a showing by the State that its enabling legislation, the rules which are promulgated under that authority, and the programs which are established to implement and enforce those rules are all equivalent to the Federal program. Only after our determination of overall program equivalency will we award the State the authority to operate its program in lieu of the EPA program. State programs may differ from the Federal program in only two respects. They may contain elements which are more rigorous or limiting than the Federal analog (more stringent programs), or they may contain elements of control and regulation which have no Federal counterpart program. As you know, we will be promulgating the land disposal restriction regulations under the authority of the Hazardous and Solid Waste Amendments of 1984 (HSWA). One unique aspect of that statute is that the agency will be responsible for implementing and enforcing its rules on their effective dates in all States, unless and until authority for implementation has been delegated to the States. Once a State program is authorized, EPA will guarantee continued consistent application of Federal requirements through annually negotiated program grants and memoranda of under-

standing with authorized States and also through oversight activities and overfiling when necessary. For your review, I have attached a copy of our Draft State Consolidated RCRA Authorization Manual which discusses the State authorization process in greater detail. Finally, the agency plans to develop guidance manuals for permit writers in the EPA Regional offices and the States and will also be offering training opportunities to those individuals to guarantee universal understanding and consistent interpretation of Federal regulations.

- Regarding a State's ability to establish treatment levels separate and apart from the land disposal restrictions:

Nothing in the Federal program or the delegation process described above prevents a State from establishing its own standards. Indeed, State rulemaking is governed and directed by authorities bestowed on each State agency by its legislature. However, for the State to become federally authorized, those standards must be <u>at least</u> as restrictive as their Federal analogs. Where they are not, authorization will not be granted and, as noted above, the Federal standards will take effect immediately in the State, regardless of any less stringent or absent State requirements and will be implemented by EPA (see 50FR 28729, July 15, 1985).

- Regarding specific steps to be taken to guarantee that Kansas maintains adequate control over hazardous wastes:

Neither EPA Headquarters nor Region VII was aware of Mr. Murphy's letter prior to its being sent. Since then, our Regional Office has had conversations with Kansas officials regarding the letter, and we will have more in-depth discussions in the near future. We will continue to support the State of Kansas in the implementation of their hazardous waste program since no Federal requirements have as yet been promulgated. However, when Federal regulations are effective, either those rules or equivalent rules promulgated by the State will govern hazardous waste activities in Kansas.

- Regarding the criteria which will guide the process of evaluating the volume of waste generated by a small generator:

First, let me note that determinations of what is to be considered to be the volume (or weight) of hazardous waste are the same for <u>any</u> generator and small quantity generator requirements are considered only after the waste generation rate is established. Secondly, let me point out that the final determination of what exactly constitutes the waste is made by that agency operating the Federal program, either the appropriate EPA Regional office or the authorized State wherein the generator is located. Regarding the specific question of cartridge weights, EPA has consistently specified that the weight of the cartridge as well as the weight of the filter be included in the weight of the waste.

- Regarding the effect of Federal land disposal restrictions on generators in States with more stringent or broader in scope programs:

In those instances where a more restrictive or broader in scope State program has received Federal authorization those State requirements will prevail. (Please note that in those situations where EPA finds it necessary to take enforcement actions against generators located in these States, EPA will enforce the more restrictive State requirement.) Where State programs have not been authorized, EPA is required by HSWA to implement and enforce the Federal standards. However, in these instances, nothing precludes the State from imposing its more restrictive requirements as well. Generators should consult their State officials directly to determine if such State standards are additionally in effect. Finally, in those instances where State and Federal requirements are in conflict or mutually exclusive, HSWA dicates that the Federal requirements will prevail.

- Regarding the applicability of the Federal land disposal restrictions to residues from Totally Enclosed Treatment Facilities (TETFs):

Your interpretation is correct. There is no relationship between the source of a waste and that waste's acceptability for land disposal. Acceptable disposition of such residues is determined solely on the basis of that waste's characteristics and chemical composition. Finally, regarding applications for TETF determinations which the agency may have received, I am sorry but we at EPA Headquarters cannot satisfy your request. Such applications are submitted to the appropriate EPA Regional Office or authorized State. I recommend you contact the RCRA Branch Chiefs in our Regional Offices to secure that information. For your convenience, I have included the names, addresses, and telephone numbers of those individuals.

I trust this adequately addresses your concerns. Feel free to contact Mr. Bruce Weddle, Director, Permits and State Programs Division at (202)382-4746 if you have additional questions on the State authorization process or the procedures in place which guarantee consistent application of the Federal program.

Sincerely,

Marcia E. Williams
Director
Office of Solid Waste

Enclosures

cc: Bruce Weddle
Michael Sanderson

9541.1986(14)

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

July 3, 1986

Ms. Carol C. Amick
Senate Chairman
Special Legislative Commission on
Low-Level Radioactive Waste
The Commonwealth of Massachusetts
Boston, Massachusetts 02133

THE ADMINISTRATOR

FILE COPY

Dear Ms. Amick:

This is in response to your June 3, 1986, letter requesting the Environmental Protection Agency's (EPA's) position on the management of "mixed wastes", i.e., wastes that contain hazardous as well as source, special nuclear or byproduct material as those terms are used in the Atomic Energy Act (AEA). In your letter, you raise concerns about the jurisdictional issues of mixed waste management.

I first want to note how pleased I am that your Special Commission is proceeding with identifying the particular low-level mixed waste streams in Massachusetts. This will, of course, facilitate resolution of any technical issues that might arise in the future.

In particular, you asked my views on three areas of concern to the Special Commission: (1) State jurisdiction over mixed wastes; (2) regulation of incineration of mixed waste; and (3) the effect on State compacts if EPA receives sole (federal) jurisdiction over mixed wastes.

EPA considers the hazardous waste component of all mixed waste streams to be subject to the Resource Conservation and Recovery Act (RCRA). However, no States have yet been authorized under RCRA for these mixed wastes. A notice is to be published shortly in the Federal Register advising States, such as Massachusetts, with RCRA final authorization that they have one year from the date of the notice (or two years if a statutory amendment is required) to demonstrate authority to regulate the hazardous components of mixed wastes. In the interim, States which already have existing laws which regulate mixed wastes may enforce those laws under their own authorities.

Incineration of mixed waste must meet applicable requirements under RCRA for the hazardous constituents as well as applicable requirements under the Clean Air Act and the AEA for the radioactive constituents. Current requirements under the AEA consist primarily of NRC licensing requirements; however, EPA's forthcoming low-level waste regulations will likely address incineration as a method of handling wastes containing AEA-regulated radionuclides.

In response to your last question, EPA does not foresee receiving sole jurisdiction over mixed wastes. RCRA facilities are not designed to address radioactive hazards. Thus, any potential for a prohibition on disposal of mixed wastes at NRC facilities or a lack of sufficient disposal capacity at NRC facilities (because of closing of existing sites and failure to identify new sites under State compacts) could affect the safe disposal of mixed wastes.

It is, therefore, EPA's position that it will authorize States pursuant to RCRA to regulate the hazardous components of the mixed waste, while NRC will continue to regulate the low-level radioactive components. In that case, there should be no effect on the already existing State compacts' language.

With regard to the AEA's 1993 deadline requiring States to develop commercial low-level radioactive waste sites, EPA will provide guidance to clarify hydrogeologic characteristics for locating sites. To assist the States in site selection, EPA's location guidance will be available this summer, and final regulations on location standards will be promulgated in 1988.

In summary, EPA is proceeding to authorize States under RCRA to regulate the hazardous components of mixed wastes. If we find the application of the RCRA regulations would increase radiation hazards or otherwise would be inconsistent with AEA requirements, we will modify or waive the RCRA requirements under Section 1006 of RCRA.

If you have further questions, please contact Bruce Weddle, Director, Permits and State Program Division, at (202) 382-4746.

Sincerely,

Lee M. Thomas

cc: Honorable Edward Markey
Michael Deland, EPA, Region 1
Commissioner Silva, Mass. DEQE
Commissioner Walker, Mass. DPH

October 14, 1986

Mr. C. Alan Boright
Legislative Counsel
Vermont Legislative Council
State House
Montpelier, Vermont 05602

Dear Mr. Boright:

Thank you for your letter of September 17, 1986 in which you requested advice on the impact and meaning of certain provisions of the "Low-Level Radioactive Waste Policy Amendments Act of 1985" (LLRWPAA). As you know from earlier discussions with my staff, the final version of the LLRWPAA did not address regulation of components of radioactive mixed waste which would be classified as hazardous under the Resource Conservation and Recovery Act (RCRA), as amended.

On July 3, 1986, however, EPA published a notice in the Federal Register (51 FR 24504) (copy enclosed) which stated that in order for States to obtain and maintain authorization to administer and enforce the hazardous waste program pursuant to Subtitle C of RCRA, States must have authority to regulate the hazardous components of radioactive mixed wastes. As defined by that notice, radioactive mixed wastes are wastes containing hazardous waste subject to RCRA and radioactive wastes subject to the Atomic Energy Act (AEA).

The July 3 notice was prepared with input from both the U.S. Department of Energy (DOE) and the U.S. Nuclear Regulatory Commission (NRC). This cooperative effort is continuing as we move forward in developing guidance for managing radioactive mixed waste. Joint efforts between EPA, DOE and NRC have been extremely productive, and it does not appear that additional legislative intervention will be necessary to effect dual regulation and management of the hazardous components of low-level radioactive mixed wastes.

In regard to your concern about disposal of mixed wastes with differing characteristics, RCRA does not preclude disposal of mixed wastes at facilities that handle other radioactive wastes. At the present time, there are three operating low-level radioactive waste land disposal facilities in the United States. Discussions with States that have low-level waste disposal facilities and States with plans to develop such sites have indicated to us that they do not foresee any problems in meeting

both EPA and NRC regulations in managing radioactive mixed wastes.

Additionally, under the LLRWPAA States may form "compacts", that is, enter into a cooperative agreement with one or more States to provide for the disposal of low-level radioactive waste generated within the State. Compacts and the rules and regulations governing them are under NRC jurisdiction. Therefore, questions regarding compacts as well as questions on liability and/or ownership under the LLRWPAA should be addressed to Mr. Robert Browning, Director, Division of Waste Management, NRC on (301) 427-4069.

Questions regarding State authorization for the hazardous components of radioactive mixed wastes may be addressed to Betty Shackleford of my staff at (202) 475-9656 while questions on health and environmental standards for radioactive materials should be addressed to Mr. Floyd Galpin, Acting Director, Criteria and Standards Division, Office of Radiation Program, U.S. EPA.

Sincerely,

Marcia Williams
Director
Office of Solid Waste (WH 582)

Enclosures

cc: Mr. Robert Browning, NRC
Mr. Floyd Galpin, EPA
Ms. Susan Sawtello, EPA

This has been retyped from the original document.

OCT 20 1986

MEMORANDUM

SUBJECT: State Authorization to Regulate Hazardous Components of Radioactive Mixed Wastes

FROM: J. Winston Porter
Assistant Administrator

TO: Waste Management Division Directors
Regions I-X

On July 3, 1986, EPA published a notice in the Federal Register (51 FR 24504 copy attached) 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 radioactive mixed wastes, i.e., wastes that contain both RCRA waste and radioactive waste subject to the Atomic Energy Act (AEA). You will soon receive a State Programs Advisory (SPA) with more information on format and procedures for State applications. However, in the meantime I urge you to encourage your States to apply for final authorization for radioactive mixed wastes as soon as possible. This is especially important for States with major Department of Energy facilities or major Nuclear Regulatory Commission licensees that manage radioactive mixed wastes.

States which received final authorization prior to the publication date of the notice must revise their programs by July 1, 1988 (or July 1, 1989 if a State statutory amendment is required) to demonstrate authority to regulate the hazardous components of radioactive mixed wastes (see the "Cluster Rule", 51 FR 33712, September 22, 1986). States initially applying for final authorization after July 3, 1987, must incorporate this provision in their application for final authorization. In addition, States applying for HSWA corrective action must concurrently seek authority for radioactive mixed wastes.

Until a State with final authorization is authorized for radioactive mixed wastes, handlers of such wastes are not subject to RCRA regulation. However radioactive mixed wastes are considered "solid waste" for purposes of HSWA corrective action at solid waste management 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 at facilities that contain units subject to RCRA.

Attachment

cc: Marcia Williams
Bruce Weddle
State Programs Branch

RCRA/SUPERFUND HOTLINE MONTHLY SUMMARY

OCTOBER 86

2. Delisting by States

A facility generates a waste that is not hazardous by Federal EPA standards but is listed as a hazardous waste by the state. The state in which the generator is located is authorized to implement the RCRA program, excluding delisting provisions and the Hazardous and Solid Waste Amendments of 1984. According to 40 CFR 271.9(b) (See the September 22, 1986 Federal Register, 51 FR 33721), authorized states are not required to have a delisting mechanism. If the generator wishes to have his state-listed hazardous waste delisted, does he submit the delisting petition to EPA headquarters if the state has no delisting program?

Although EPA has the authority to grant delistings, its authority does not extend to wastes that are listed as hazardous by the state, but not by Federal EPA. According to 40 CFR 271.1(i)(2) and 271.121(i)(2), any state requirement that is greater in scope than the Federal RCRA requirements is not part of the Federally approved program. Program Implementation Guidance (PIG) 84-1 explains further that EPA may not enforce state provisions that are broader in scope than the Federal program. State listing of a waste that is not Federally listed is an example of a provision that is broader in scope because it increases the size of the regulated community. Therefore, EPA would have no authority to grant an exclusion for a waste that is listed only by the state. The state would be responsible for granting any exclusions for a waste not regulated Federally.

Source: Marty Madison (202) 382-2229
Research: Jennifer Brock

9541.1987(01)

JAN 14 1987

MEMORANDUM

SUBJECT: The Role of Authorized States in Dispute Resolution

FROM: Bruce R. Weddle, Director
Permits and State Programs Division

TO: Marcia E. Williams, Director
Office of Solid Waste

You asked about the role of authorized States in the dispute resolution procedures described in the attached DOJ memo. The DOJ memo suggests procedures for resolving RCRA disputes between EPA and Federal agencies. EPA's procedures for Federal facility dispute resolution and the role of an authorized State in dispute resolution are explained in the RCRA Enforcement Response Policy (ERP) and in EPA's Federal Facility Compliance Strategy. The draft DOJ procedures do not appear to affect the role of authorized States in dispute resolution since they are not bound by EPA's dispute resolution procedures.

Under either EPA's current dispute resoluton procedures or DOJ's draft procedures, EPA would encourage the State (whether authorized or not) to participate in the dispute resolution process. It is EPA's policy that an authorized State take the enforcement lead for violations of RCRA. This policy applies to violations at private facilities as well as Federal facilities. Where the State fails to take timely and appropriate action, or where the State requests EPA to take the lead, EPA will pursue an enforcement action in an State. Where EPA takes the lead and pursues a negotiated settlement, it is our policy to encourage the States to participate in the negotiations and sign the compliance agreement. Signing the agreement, however, does not prevent a State from pursuing an independent enforcement action against the Federal facility. Furthermore, the State usually reserves the right to take an enforcement action if the Federal facility does not comply with the agreement. For example, in the Rocky Flats agreement and in the Wright-Patterson AFB agreement, the States reserved the right to take an enforcement action against the Federal facilities. The State's role in dispute resolution is the same under either the draft procedures written by DOJ or under EPA's dispute resolution procedures.

Where EPA takes the enforcement lead, States are often hesitant to join EPA's dispute resolution negotiations because the States would prefer to pursue an enforceable order in court. Under the draft DOJ procedures the States may be even more hesitant to join EPA's dispute resolution negotiations because the draft procedures do not include timeframes for issuing NOV's or for referring disputes to Headquarters as do EPA's current procedures.

Attachment

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

9541.1987

JUN 29 1987

Mr. Steven A. Black
Radiological Services Department
Teledyne Isotopes
50 Van Buren Avenue
Westwood, New Jersey 07675

Dear Mr. Black:

Thank you for your letter of May 29 in which you raised a number of issues regarding the applicability of Resource Conservation and Recovery Act (RCRA) regulations to your radioactive mixed waste brokerage in New Jersey.

Let me begin by providing an overview of how the Federal hazardous waste program would be applicable to your waste management operations. RCRA provides that States may obtain authorization to administer and enforce a hazardous waste program in lieu of EPA. New Jersey and New York have obtained such authorization. However, due to earlier uncertainty about the status of radioactive mixed waste, most States, including New York and New Jersey, have not yet obtained authorization to regulate radioactive mixed waste as part of the authorized State program. This means that radioactive mixed waste is not a "hazardous waste" within the meaning of New Jersey or New York's RCRA authorized State program. However, this does not preclude New Jersey and New York from regulating radioactive mixed waste as a matter of State law, provided that such regulation is not inconsistent with the Federal program.

One of your questions concerned the availability of interim status for "handlers" of radioactive mixed waste. Since neither New York nor New Jersey's RCRA authorized program includes radioactive mixed waste, there is no need yet to obtain interim status with respect to such wastes in those States. However, once States become authorized, facilities handling mixed wastes will need to obtain permits or interim status. The Agency is currently reviewing options for providing interim status to owner/operators of mixed waste treatment, storage and disposal facilities. Once the options have been considered, the Agency's decision will be announced.

Your second question relates to New York's authority to regulate radioactive mixed waste under State law. As I indicated previously, New York can regulate radioactive mixed waste under applicable State law although the State cannot administer the Federal program until it has been authorized to do so by EPA. Determining which State requirements apply to your radioactive mixed waste handling operation is a matter of State law. Questions regarding those requirements should be addressed to appropriate State authorities. For further information contact:

Paul Counterman
Bureau of Hazardous Waste Technology,
New York State Department of Environmental
Conservation (OEC)
50 Wolf Road
ALbany, New York 12233

Third, we are not aware of any inconsistencies between the Nuclear Regulatory Commission (NRC) and EPA storage requirements. EPA regulations do not prohibit storage beyond 90 days. However, EPA does require that a permit be obtained for generators that store hazardous wastes more than 90 days. Of course, a State may require permits even for a lesser holding period.

Lastly, you asked if EPA could issue regulations exempting certain segments of the radioactive mixed waste management operations from RCRA regulations. Any such action on the part of EPA would be inconsistent with the "cradle to grave" management mandate of the hazardous waste program. Consequently, it is unlikely that the Agency will exempt segments of the radioactive mixed waste operations from RCRA unless the subject requirement is inconsistent with the Atomic Energy Act as specified in section 1006(a) of RCRA.

In conclusion, radioactive mixed waste is not yet subject to Federal hazardous waste requirements in New Jersey or New York. Questions about compliance with State requirements should be addressed to those States; questions about the Federal RCRA program may be addressed to Betty Shackleford, Mixed Waste Project Manager at (202) 475-9656.

Sincerely yours,

J. Winston Porter
Assistant Administrator

cc: Marcia Williams, OSW
Bruce Weddle, OSW
Barry Tornick, Region II
Andy Bellina, Region II
Lisa K. Friedman, OGC

RCRA/SUPERFUND HOTLINE MONTHLY SUMMARY

DECEMBER 87

2. Land Disposal Restrictions

In a particular state authorized to implement pre-HSWA regulations, the F005 hazardous waste listing also includes spent solvent mixtures and blends containing less than 10% solvent before use. Due to the state's hazardous waste listing, does this mean the waste (which is not listed under the Federal hazardous waste regulations) is now restricted from land disposal?

No, authorized state regulations which list hazardous waste (not within the Federal hazardous waste universe) are broader in scope than the Federal regulations. According to the May 21, 1984 Program Implementation Guidance Memorandum from Lee Thomas entitled, "Determining Whether State Hazardous Waste Management Requirements are Broader in Scope or More Stringent than the Federal RCRA Program" (PIG-84-1), EPA cannot enforce state regulations which are broader in scope. Therefore, a waste designated by the state as F005 (which does not meet the Federal criteria for listing) would not be subject to Federal land disposal restrictions. However, states are free to impose their own disposal prohibitions if such actions are more stringent or broader in scope than Federal programs (RCRA §3009 and 40 CFR §271.1(i)).

Source: Mitch Kidwell (202) 382-4805
Research: Joe Nixon

4. Federal Authority Over Authorized States

Does the Regional Administrator always retain oversight authority for State permit issuance or may a State become completely autonomous if it has final approval for all phases of its RCRA program?

Section 3006(c)(4) of HSWA provides that in the case of an authorized State program, until such program is amended to reflect the amendments made by the Hazardous and Solid Waste Amendments of 1984 and such program amendments receive interim or final authorization, the Administrator shall have the authority in such States to issue or deny permits or those portions of permits affected by the requirements and prohibitions established by the Hazardous and Solid Waste Amendments of 1984. The Administrator shall coordinate with States the procedures for issuing such permits.

Even if a State has final authorization of all phases for its RCRA program, however, the Administrator always retains a statutory oversight authority for such programs. Section 3006(e) of RCRA authorizes the Administrator to withdraw approval of any State program where, after public hearing, it is determined that the State is not administering and enforcing its program in accordance with the requirements of Section 3006. After notifying the State, the Administrator may withdraw authorization for the State program if corrective action measures are not taken within a reasonable time, not to exceed 90 days. Further, 40 CFR Section 271.8(a) provides that any State seeking to administer a program shall submit a Memorandum of

Agreement (MOA) executed by the State Director and the Regional Administrator. Such Memorandum of Agreement shall not contain provisions which restrict EPA's statutory oversight responsibility. The Administrator may also comment on permits and draft permits pursuant to 40 CFR Section 271.19 and Section 271.8 and Section 3008(a)(3) permits the Administrator to revoke permits. Finally, Section 7003 permits the Administrator to take action in cases of imminent and substantial endangerment notwithstanding other provisions of the Act, including State authorization.

Source: Marty Madison (202) 382-2229
Research: Bob Adamson

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY 9541.1991(01)

3-11-91

MEMORANDUM

SUBJECT: Pilot Delegation of RCRA Subtitle C State Program Revision Authorizations to the Regions

FROM: Don R. Clay
Assistant Administrator

E. Donald Elliott
General Counsel

TO: Regional Administrators, Regions I-X

In response to a request made by the Regional Waste Management Division Directors as well as the recommendation of the RCRA Implementation Study, we are fully delegating the responsibility for RCRA Subtitle C State program revision application review and authorization decisions to the Regions on a two year pilot basis. We look upon this delegation as an opportunity to make EPA more responsive in authorizing RCRA State programs while, at the same time, developing an expanded cooperative role between the Regions and Headquarters. This pilot delegation will allow the Regions to review and make decisions on program revision applications without HQ consultation or concurrence. However, Headquarters review and concurrence will still be required for those few States, and in the future, Indian Tribes, applying for base RCRA program authorization. This delegation is effective March 1, 1991.

In setting up the Subtitle C program, Congress envisioned the Agency would expeditiously authorize qualified States. A quality authorization program requires a significant commitment to enhance State capability and actively delegate programs to the States. In order to support this commitment, we are asking that each Region submit an annual "State Enhancement and Authorization Plan" outlining what the Region is doing to build State capability and encourage authorization. Guidance for developing this plan will be in the FY 92 RCRA Implementation Plan to be issued by April 1, 1991, and will indicate when these plans will be due.

Each Region will be fully responsible for maintaining the integrity of the authorization decision process, including explaining those decisions to the public and Agency oversight bodies such as Congress. In addition, delegation of this authorization responsibility to the Regions is contingent on Regional commitment to raise issues of national significance to Headquarters on a timely basis and to adhere to basic guidance and policy as well as to the underlying statutory and regulatory requirements for authorization. To that end, each Regional Waste Management Division Director must certify prior to the Regional Administrator approving an application that national issues have been brought to Headquarters' attention.

As it is critical that the Office of the Regional Counsel be fully involved, the Regional Counsel must also provide assurances that all legal issues have been reviewed and satisfactorily addressed. The Offices of Regional Counsel and the Office of the General Counsel will share responsibility for any defensive litigation arising from delegated approvals. The Offices of Regional Counsel must notify OGC promptly when litigation is filed. OGC will determine whether the case raises any issues of national significance and retain responsibility for litigating such issues. The Offices of Regional Counsel will be responsible for all other issues.

Headquarters will issue broad national guidance outlining potential issues of national significance. However, since many of the issues that arise in a revision application are of first impression, increased Regional alertness to potential national issues is critical and Regions should err on the side of prudence in raising issues to Headquarters.

At the end of the two year delegation pilot, we will decide, based on our review of each Region's authorization performance, whether to continue the delegation. In the near future, Headquarters will establish oversight criteria by which we will measure Regional success in achieving the national authorization goals of enhancing State capability and delegating programs to the States is attached. There will be regular evaluation of Regional performance, possibly through annual audits and Headquarters attendance at end-of-year and mid-year State evaluations. Regions will also be expected to maintain accurate and timely authorization data.

Each Region undertaking this delegated review and authorization role must fully recognize the significantly increased responsibility of Regional authorization program staff and the need for active ORC involvement. In addition, each Region is responsible for providing adequate staffing and training for authorization. Headquarters will provide two

authorization training workshops beginning in the Spring of 1991 and be available for technical (policy and legal) assistance to the Regions upon request.

The success of this delegation is dependent upon all of us taking our responsibilities seriously, in full realization of the critical implications of authorization decisions. We know we can count on you and your staff to give RCRA authorization careful attention so that we can all be proud of our accomplishments and maintain a track record that withstands careful public and Congressional scrutiny.

cc: Hazardous Waste Management Division Directors, Region I-X
Regional Counsels, Regions I-X
Sylvia Lowrance, OSW
Bruce Diamond, OWPE
Lisa Friedman, OGC

9542 – INTERIM AUTHORIZATION

Part 271 Subpart B

9542.1980(01

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

OCT 3 1980

PIG-80-3

MEMORANDUM

SUBJECT: Requirement That State-Permitted Hazardous Waste Facilities Have "Interim Status"

FROM: Steffen W. Plehn
Deputy Assistant Administrator
for Solid Waste (WH-562)

R. Sarah Compton
Deputy Assistant Administrator
for Water Enforcement (EN-335)

TO: PIGS Addressees

ISSUE

If a State agency in a State with Phase I authorization issues a facility permit after November 19, 1980 but the State program has not been authorized for Phase II interim authorization:

a) Does the facility have interim status?

b) If the facility does not have interim status, can it begin operation?

DISCUSSION/DECISION

a) For a facility to obtain interim status it must meet three requirements as stated in Section 3005(e) of RCRA. These are:

- The facility must have been "in existence" on the date of enactment of RCRA (October 21, 1976), or on the date specified by any amendments passed by Congress; and
- The facility must have complied with the notification requirements specified in Section 3010(a); and
- The facility must have applied for a permit as required under Section 3005(a).

If a facility meets all three of these requirements, it has interim status for the purposes of RCRA until a RCRA permit has been issued or denied by EPA or a State authorized for Phase II.

b) Assuming that a facility does not qualify for interim status and has not been issued a RCRA permit, facility construction and operation are precluded until a RCRA permit is issued. Because EPA is not authorizing State permit programs during Phase I interim authorization, a facility permit issued by a State with Phase I authorization is not a RCRA permit. For the same reason, Phase I authorization of a State program does not suspend the RCRA Section 3005 requirement that in order to operate lawfully a facility must have a RCRA permit or interim status. Because neither EPA nor any States will be issuing RCRA permits during Phase I, only facilities with interim status may operate during that period.

9542.1980(02)

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

OCT 31 1980

PIG-80-2

MEMORANDUM

SUBJECT: Interim Authorization of Programs Based on Emergency State Regulations

FROM: Steffen W. Plehn
Deputy Assistant Administrator
for Solid Waste (WH-562)

R. Sarah Compton
Deputy Assistant Administrator
for Water Enforcement (EN-335)

TO: PIGS Addressees

ISSUE

Can States use emergency regulations to obtain interim authorization?

DISCUSSION

In order to qualify for interim authorization a State must have a hazardous waste statute and regulations that meet minimum Federal requirements. In some cases when a State promulgates final regulations they are subject to State administrative review. Such a review process may be time-consuming and delay the State's receipt of Phase I interim authorization. Many States have authority to enact emergency regulations which postpone this State administrative review.

A major drawback of authorizing State programs based upon emergency regulations is the possibility that the regulations may expire before final regulations are enacted. A State hazardous waste program without regulations obviously would not comply with minimum Federal requirements, and interim authorization would be subject to withdrawal under section 123.136. However, EPA could not administer a Federal program in the State until the State voluntarily returned the program to EPA or the extensive withdrawal procedures under section 123.15(b) were completed. Theoretically, this could result in a void during which no State or Federal regulations would be in force in the State.

In addition to the possibility that the emergency regulations would expire prior to the effective date of the final regulations, EPA is also concerned that the State's final regulations might be inadequate. The withdrawal procedures of 40 CFR 123.15(b) would apply in either case. However, the Agency wants to eliminate any possible gap in regulatory control and address in advance questions regarding reversion of the program in both of these situations.

Therefore, it is necessary that the Memorandum of Agreement (MOA) describe the process whereby the State would immediately and voluntarily return the program to EPA. The Federal regulations provide for such a reversion process at 40 CFR 123.15(a): "... or in such other manner as may be agreed upon with the Administrator." The State must also agree to submit its final regulations for review of adequacy at the time it applies for Phase II authorization.

DECISION

Recognizing both the advantages and disadvantages of allowing a State to use emergency regulations to qualify for interim authorization, EPA has decided to allow a State to use emergency regulations, provided the State meets certain conditions.

EPA will grant Phase I interim authorization to a State whose program under emergency regulations is substantially equivalent to the Federal program if, in addition, the following conditions are met:

1) The State must show that under its normal administrative procedures it will be able to enact final regulations which will take effect before the emergency regulations expire;

2) The MOA must provide that the State will submit its final regulations to EPA for review at the time the State applies for Phase II interim authorization; and

3) The MOA must describe the process by which the State will immediately and voluntarily return the program to EPA in the event that the emergency regulations expire prior to the effective date of the final regulations.

Emergency regulations will not be an eligible basis for issuance of final authorization.

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

OFFICE OF WATER
WASTE MANAGEMENT
PIG-81-1

[redacted] 17 [redacted]

MEMORANDUM

SUBJECT: The Use of State Permitting Systems During Phase I Interim Authorization Which are not Based on Explicit Regulatory Standards.

FROM: Steffen W. Plehn
Deputy Assistant Administrator
for Solid Waste (WH-562)

R. Sarah Compton
Deputy Assistant Administrator
for Water Enforcement (EN-335)

TO: PIGS Addressees

Issue:

Can a State program be considered substantially equivalent to the Federal Phase I hazardous waste program if the State controls hazardous waste management facilities through a permitting system which is not based on explicit regulatory standards?

Discussion:

This issue is not concerned with the authorization of States to issue/revoke RCRA permits, as is provided in §3005. Such authorization will not be available to States until the Phase II regulations are effective. During Phase I of interim authorization, Federal interim status standards or their State analogues apply to existing facilities. Some States with Phase I interim authorization may elect to apply their version of Federal interim status standards by issuing permits containing conditions analogous to the Federal interim status standards. This approach is perfectly acceptable. However, a permit containing those standards is not a RCRA permit and does not relieve the facility owner/operator holding it of the obligation to apply for and receive a RCRA permit after the effective date of Phase II.

In those States which deal with hazardous waste only through a permitting system, the Agency is concerned with the substance of the permit conditions. These permit conditions (along with compliance monitoring) will be the key elements which determine the success of a State program. The ideal situation exists when permit conditions are based on explicit regulatory standards which are substantially equivalent to the Federal interim status standards. This situation has the advantage of minimizing the potential for litigation by permittees who disagree with the permit conditions and provides a sound enforcement position. Some States, however, base their hazardous waste permit conditions on policy or guidance rather than on explicit standards established via regulation. Such a State program may require additional scrutiny by EPA prior to making a decision on whether to grant interim authorization.

Decision:

A State program may be issued interim authorization for Phase I even if it controls hazardous waste facilities through a permitting system which is not based on explicit regulatory standards. In determining whether the State's facility controls are substantially equivalent to the Federal program, the considerations discussed below must be examined.

The State's program description must delineate the conditions that will be used in all permits and must demonstrate that these conditions are substantially equivalent to the Federal interim status standards.

The State must have the legal authority to apply these permit conditions and to enforce compliance with the conditions. The State Attorney General must indicate in his or her statement (as part of the application) that such legal authority does exist.

Furthermore, the Memorandum of Agreement (MOA) must provide that all permit conditions delineated in the program description will be incorporated into all permits prior to the date of interim authorization. The MOA must state that permits will not be re-issued or modified unless as re-issued or modified they are substantially equivalent with the Federal interim status standards. The MOA must certify that the permits will be modified, if necessary, because of modifications in the Federal regulations, within one year of the date of promulgation of the new Federal regulation. In cases where a State statutory amendment or enactment is required to reflect changes in the Federal regulations, the MOA must provide that the permits will be modified within two years, as provided by 40 C.F.R. §123.13(e) (45 FR 33463). The MOA must also specify that all hazardous waste management activities without a permit are prohibited. Authority for such prohibition must be indicated in the Attorney General's Statement.

9542.1980(04)

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

3 1 330

PIG-81-4

MEMORANDUM

SUBJECT: "Delisting" of Wastes by Authorized States

FROM: Steffen W. Plehn
Deputy Assistant Administrator
for Solid Waste (WH-562)

R. Sarah Compton
Deputy Assistant Administrator
for Water Enforcement (EN-335)

TO: PIGS Addressees

ISSUE:

Can a State with an authorized hazardous waste management program be allowed to exempt ("delist") hazardous waste from individual sites?

DISCUSSION:

EPA has provided certain standards and procedures for "delisting" waste from a particular generating facility or storage, treatment, or disposal facility at which a hazardous waste is generated (see 40 CFR 260.20 and 260.22, 45 FR 33076, and preamble discussion at 45 FR 33116). Persons seeking such a delisting action may petition the Administrator of EPA for an amendment to the Federal regubations which would provide the exemption. In the petition, the person must show that the waste is fundamentally different than that listed by demonstrating, as appropriate, that the waste does not:

(1) exhibit the characteristic of ignitability, corrosivity, reactivity, or toxicity,

(2) meet the criteria for listing the waste as acutely hazardous (i.e., the oral or dermal LD50 or inhalation LC50 specified in 40 CFR 261.11(a)(2), 45 FR 33121) and also does not meet the toxicity criterion,

(3) contain the hazardous constituent of Appendix VIII of 40 CFR 261 (45 FR 33312) for which it was listed, or, if the waste does contain those constituents, show that consideration of other factors argue against the waste being considered a hazardous waste (see 40 CFR 261.11(a)(3), 45 FR 33121). This decision is based on consideration of any of approximately ten factors and is a discretionary one.

When a State program has been found to be substantially equivalent to the Federal program, it receives interim authorization to operate in lieu of the Federal program; i.e., Federal requirements generally no longer apply, and the "requirement(s) of this subtitle" which are enforced under section 3008 of the Act are those of the State program approved under section 3006. Therefore, action by EPA to delist a waste from a particular generating facility (or storage, treatment, or disposal facility which generates hazardous waste) in a State with interim authorization would not affect the State requirements unless the State took a similar action.

Some concern exists regarding the potential incompatibility inherent in allowing one State to delist, whereas another State may desire not to delist. This problem is not unique to the issue of delisting, since the latter State program may be viewed as a "more stringent" one (because it regulates more wastes) and is acceptable under section 3009 of RCRA. (See the preamble to 40 CFR Part 123, Subparts B and F, 45 FR 33385.)

The question here is whether a State program with interim authorization can provide a delisting mechanism. If so, what shape and form must that mechanism take if EPA is to authorize the State program as "substantially equivalent" to the Federal program?

In the regulations under 40 CFR Part 123, EPA is silent on the issue of State delisting mechanisms. A State without such a mechanism is not precluded from receiving interim authorization. The universe of wastes controlled by such a State would be subject to change only through regulatory or statutory change.

For interim authorization, EPA requires the States to control a universe of hazardous waste generated, treated, stored, and disposed of in the State which is nearly identical to that which would be controlled by the Federal program under 40 CFR Part 261 (see 40 CFR 123.128(a), 45 FR 33481). A State can demonstrate that its program contains a delisting provision which, nevertheless, leaves the State universe nearly identical to EPA's. On the other hand, if the State's delisting mechanism lacked explicit

standards and procedures analogous to those included in EPA's delisting mechanism, it would be difficult for EPA to assure that the State was providing the proper control of wastes.

It is possible that a State, as a result of its delisting, may decrease its universe of wastes such that its coverage is no longer nearly identical to the Federal universe. For example, a question has arisen as to what would happen if an interim authorized State abused its discretion in delisting wastes from individual sites, but EPA, operating the Federal program in one or more States into which those wastes were imported, refused to delist the wastes from those sites. This would clearly be a situation where the State would be subject to withdrawal of EPA's authorization for failure to exercise control over activities required to be regulated (40 CFR 123.136 and 40 CFR 123.14(a)(2)(i)).

DECISION: State programs with delisting mechanisms may receive interim authorization provided those delisting mechanisms are substantially equivalent to EPA's. In order to be considered substantially equivalent, the State must demonstrate that the delisting methodology is consistent with its methodology for listing. The Memorandum of Agreement must contain a provision that the State will keep EPA fully informed of any State delisting activities and should make clear the possibility of withdrawal of authorization in the event that, due to delistings, the State's universe of wastes is no longer nearly identical to EPA's.

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

PIG-81-6

NOV 14 1980

MEMORANDUM

SUBJECT: State Regulation of Federal Agencies for Purposes of Interim Authorization

FROM: Steffen W. Plehn
Deputy Assistant Administrator
for Solid Waste (WH-562)

R. Sarah Compton
Deputy Assistant Administrator
for Water Enforcement (EN-335)

TO: PIGS Addressees

ISSUE

Must States have independent statutory and regulatory control over Federal facilities and Federal agencies in order to qualify for interim authorization?

DISCUSSION

I. Introduction

Some States appear to exclude Federal agencies from their regulated community, thereby not requiring Federal agencies to comply with State requirements placed on generators and transporters of hazardous waste and on owners and operators of hazardous waste management facilities. Generally, the apparent exclusion is not explicit. Rather, Federal agencies are, as a group, not specifically identified in the State's definition of the regulated community.

Approximately 700 Federal installations have notified EPA that they are engaged in hazardous waste activities. Ground-water contamination from two Federal facilities was cited by the U.S. House of Representatives (House of Respresentatives Report #94-1491, 1976) as part of the hazardous waste management problem which required Federal action through the Resource Conservation and Recovery Act of 1976.

The purpose of this Program Implementation Guidance memorandum is to indicate whether a State must have statutory and regulatory authority for hazardous waste management over Federal agencies in order to qualify for Interim Authorization, pursuant to 40 CFR 123 Subpart F.

II. Definition of a Federal agency

Federal agency is defined in RCRA §1004 (4) and in 40 CFR 260.10(a)(22). Federal agency means "any department, agency, or other instrumentality of the Federal Government, any independent agency or establishment of the Federal Government including any Government Corporation, and the Government Printing Office". As used in this memorandum, "Federal facilities" are any facilities owned or operated by any "Federal agency".

III. What Federal requirements exist over Federal agencies?

Subtitle F of RCRA establishes Federal responsibilities for solid and hazardous waste management. RCRA §6001 states that each Federal agency shall be subject to, and comply with, the same substantive and procedural requirements for hazardous waste management that are imposed on other persons by Federal, State, and local governments, when that Federal agency is engaged in activities which result, or which may result, in the disposal or management of solid or hazardous waste.

Executive Order 12088 directs Executive agencies to comply with the Solid Waste Disposal Act, as amended by RCRA (42 U.S.C. 6901 et seq). Section 1-302 directs the EPA Administrator or his agent to conduct inspections, as necessary, to monitor compliance by Executive agencies. Section 1-601 establishes that the Administrator or an appropriate State agency can notify an Executive agency of its violation of an applicable pollution control standard, and approve a compliance plan and schedule. This procedure is in addition to the other applicable statutory enforcement procedures and sanctions.

IV. What controls must States have over Federal agencies to qualify for Interim Authorization?

A. Universe of Wastes

The Federal regulation at 40 CFR 123.128(a) requires that a State program control a universe of hazardous waste generated, treated, stored, and disposed of in the State which is nearly identical to that which would be controlled by the Federal program under 40 CFR Part 261. The "nearly identical" test is discussed in the RCRA State Interim Authorization Guidance Manual (EPA, 1980, pp. 3.1-1,2). The test for substantial equivalence is based on the generic nature of the waste, not on the nature of ownership (e.g. Federal) of the generating facility or the waste.

B. Generators, Transporters and Facilities

The Federal regulation at 40 CFR 123.128(b)(2) requires that a State program regulate all generators located in the State. The regulations at 40 CFR 123.128(b)(3) through (8) require that the State regulate generators in a manner substantially equivalent to the procedural and substantive requirements of 40 CFR 262. Parallel requirements for State programs concerning transporters of hazardous waste are established in 40 CFR 123.128(c). The Federal regulation at 40 CFR 123.128(e) requires that State programs enforce facility standards which are substantially equivalent to 40 CFR 265, and that State law prohibit the operation of facilities not in compliance with such standards. 40 CFR Part 123, Subpart F indicates that States are to exercise regulatory control over all generators, transporters, and owners/operators of facilities managing hazardous wastes.

C. State Controls

There is no provision in 40 CFR Part 123, Subpart F that States may exempt from their regulated community those wastes or waste management activities involving Federal agencies. Consequently, in order to be substantially equivalent to the Federal program, a State program must exercise authority over Federal agencies involved in hazardous waste management.

DECISION

For purposes of interim authorization, a State must demonstrate, through its Attorney General's Statement and Program Description, that it controls Federal agencies in the manner required by 40 CFR §123.128.

When State law and regulations explicity include Federal agencies in the State's regulated community, the issue is not in controversy, and the Attorney General's demonstration would be straightforward. This would be the case where a State's definition of "person" (i.e., those who are subject to the regulatory requirements for hazardous waste management established in the State Program) explicitly includes Federal agencies.

When Federal agencies are not explicitly included in (or excluded from) the State's regulated community (i.e., State statutes and regulations are silent on whether Federal agencies are regulated), the Attorney General's Statement must explain the basis for the State's assertion of jurisdiction over them. This explanation must be based on the State's overall statutory and regulatory framework. The State Attorney General can cite RCRA §6001 and Executive Order 12088 to demonstrate Congressional and Executive intent that Federal agencies comply with State Program requirements. However, these citations do not independently

provide the State with jurisdiction over Federal agencies.

In addition, when Federal agencies are not explicity included in the regulated community, the State must also indicate in its Program Description that it will regulate Federal agencies in the manner described by 40 CFR §123.128.

If a State Attorney General's Statement indicates that the State cannot control Federal agencies, interim authorization cannot be granted.

In defining their regulated community, States should be encouraged to explicitly include Federal agencies, in order to qualify for final authorization.

Attachment - Executive Order 12088

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

OFFICE OF WATER
AND WASTE MANAGEMENT

Feb 2 1981

PIG-81-11

MEMORANDUM

SUBJECT: Involvement of States without Phase II Interim Authorization in RCRA Permitting

FROM: Steffen W. Plehn
Deputy Assistant Administrator
for Solid Waste (WH-562)

R. Sarah Compton
Deputy Assistant Administator
for Water Enforcement (EN-335)

TO: PIGs Addressees

ISSUE

How should States without interim authorization for Phase II be involved in RCRA permitting?

DISCUSSION

As you know, the recent promulgations of Phase II facility standards under Part 264 and permitting requirements under Part 122 enable States to receive Phase II interim authorization for issuing RCRA permits to the following categories of facilities:

- use and management of containers;
- storage and treatment of hazardous wastes in tanks, surface impoundments, and waste piles; and
- treatment of waste in incinerators.

In addition, EPA has published interim final regulations (Part 267) which, for a period of 18 months, will allow EPA to issue permits to new land disposal facilities pending promulgation of the final land disposal regulations. States may not receive interim authorization for permitting land disposal facilities at this time, since the Part 267 regulations only provide temporary standards which will not suffice for determinations of substantial equivalence.

Although States may now apply for Phase II interim authorization for permitting certain facilities, some States may not choose to do so in 1981. Some States may postpone their Phase II application until the final Federal land disposal regulations are promulgated later this year or in 1982. Also, State preparation of Phase II applications may take longer than Phase I applications, due to the complexity of the technical facility standards and the financial responsibility requirements. Some States may need to adopt or amend legislation and regulations to obtain substantially equivalent authority in these areas and may need to add additional personnel to administer the permitting program.

Given this situation, the Federal permit process must be implemented in a way which maximizes the use of State resources and technical capabilities and avoids inefficient and confusing duplication with State programs. Therefore, EPA must work closely with State permitting programs, especially those programs which appear to be moving in a timely manner toward Phase II interim authorization.

DECISION

EPA Regional Offices must seek the active involvement of State programs in the conduct of RCRA permitting during the period before a State receives Phase II interim authorization. This policy will provide for the most efficient use of EPA and State permitting resources and technical expertise, reduce confusion and paperwork burdens for the regulated community and the public, and ease the transition toward State administration of the RCRA permit program in lieu of EPA. While EPA retains authority and responsibility for RCRA permitting until a State receives Phase II authorization, EPA must cooperate with the States as closely as possible in the implementation of this responsibility.

State involvement prior to Phase II interim authorization should take several forms:

* States should assist Regional Offices in the development of permitting priorities and in initial contacts with potential permittees, based on their own priorities and their knowledge of local conditions.

• States should review permit applications, share information from their files, assist EPA in obtaining additional information (including site visits) and help prepare technical analyses and support documents.

• States should assist in developing permit conditions and should comment on draft and final permits.

• Where unauthorized States must issue permits under State law, they should participate with EPA in joint permit issuance procedures (e.g., joint public notice, public hearings, response to comments).

These and other Federal-State working relationships should be formalized in writing through an amendment to a Cooperative Arrangement, a Phase I Memorandum of Agreement, or a Subtitle C grant work program. Through these mechanisms, the State can agree to perform specified tasks for which it has legal authority and can be funded by EPA to perform those tasks.

EPA can also support State involvement in the permit process through funding of State travel by the Peer Matching program, State access to EPA contractors, and participation of State personnel in RCRA training. We encourage Regional Offices to be aggressive in securing State involvement as we move toward the issuance of the first RCRA permits.

9542.1981(02)

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

MEMORANDUM

[illegible] 1981

PIG-81-10

SUBJECT: Transfer of Notification and Permit Application Information to States

FROM: for Steffen W. Plehn
Deputy Assistant Administrator
for Solid Waste (WH-562)

R. Sarah Compton
Deputy Assistant Administrator
for Water Enforcement and Permits (EN-335)

TO: PIGS Addressees

ISSUE:

When should EPA transfer information from both the notification forms and the Part A's of the RCRA permit applications to the States? In what format should EPA transfer this information? How can the States assist EPA to review and process this information?

DECISION:

(1) Until EPA authorizes a State for Phase II Interim Authorization to carry out a permit program in lieu of the Federal permit program (or authorizes a component of Phase II), EPA is responsible for reviewing and acknowledging RCRA permit applications in that State, including determining who appears to meet the statutory requirements for interim status and acknowledging the processes they may use and the wastes they may handle during interim status*. EPA is also responsible for these activities for those facilities not covered in a State's authorization for a Phase II component. However, EPA encourages States to assist the Agency in reviewing permit applications until such time as the State receives its Phase II authorization and will be receiving its own permit applications.

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*Note that this acknowledgment of the processes a facility may use and the wastes they may handle is based only on the owner/operator's Part A application. EPA merely copies on to the acknowledgment the wastes and processes the owner/operator included on the application; the acknowledgment is not a determination by EPA that a facility is an environmentally acceptable facility for particular wastes.

(2) EPA Headquarters is providing State solid and hazardous waste management agencies with copies of the Agency's notification report which presents a compilation of information that was received and processed between May 19, 1980 and November 19, 1980. The report includes the names and addresses of notifiers in each State and a listing of the hazardous waste(s) they handle. EPA will provide supplements of this report to State agencies as new notification information is received and processed.

(3) Subject to confidentiality constraints, EPA will also share all Part A permit application information with the States. Because there is a large volume of information, EPA Regional Offices and States should work together to sort out exactly which information items each State needs and when the State needs it. The Regional Offices and States should set mutually agreeable time frames for transferring the information. The following items should be considered when transferring information: (a) Transfer of information to States should not impede or delay issuance of the first round interim status acknowledgments (except in cases of special information needs, issuing these acknowledgments is the higher priority). (b) If information is transferred prior to completion of the verification of all items on the Part A application, the Regional Office should carefully identify the unverified information.

(4) EPA Regional Offices should initially use computer printouts for transferring data to the States before copying notification and Part A permit application forms. This may satisfy a State's initial information needs and will save EPA a considerable amount of time in copying forms.

DISCUSSION:

Status of EPA review and processing of notification and Part A permit application information

EPA has received approximately 60,000 notifications and 14,000 Part A permit applications. Except for recent submittals, the Agency has reviewed and processed all of the information from the notification forms and has the information available on the Agency's ADP computer files. EPA Regional Offices are presently reviewing and processing the Part A permit applications.

The Part A applications will be processed initially in two rounds. Round one of the review process consists only of determining that: (1) the applicant filed the correct permit application forms on time; (2) the application indicates the facility was in existence on November 19, 1980; and (3) a notification was filed for the facility on or before August 18, 1980. EPA

will send an initial acknowledgment to applicants when they meet all of these three conditions. The purpose of this acknowledgment is to inform the applicant that a preliminary review of the information he provided indicates that he appears to satisfy the statutory requirements for interim status. EPA will not load any data into the computer data base during this initial review except to "flag" the data base to indicate those facilities for which EPA has sent an acknowledgment.

During round two of the review process EPA will conduct a more detailed review of the permit application. The purposes of this round are (1) to attempt to verify that the facility needs a RCRA permit; (2) to acknowledge the processes which the facility is allowed to use and the wastes which the facility is allowed to handle during interim status; and (3) to check that the remainder of the information items required in Part A of the application, such as the map, photographs, and sketch have been provided. In the round two review, EPA (using State assistance wherever possible) will resolve errors and inconsistencies in information items by communicating with the applicant. When EPA has verified that certain key items are correct, the data on the application will be loaded into the computer data base, and a second acknowledgment will be sent to the applicant. This acknowledgment will include a list of the wastes which may be handled during interim status and the processes to which the interim status applies (based on the owner/operator's Part A application).

EPA and State responsibilities

There has been some confusion as to what role the States can play in reviewing and acknowledging permit applications. Until a State receives Phase II Interim Authorization to carry out a permit program in lieu of the Federal permit program (or part of a program, i.e., a component of Phase II)*, EPA is responsible for reviewing and acknowledging all permit applications, including determining who appears to qualify for interim status, and acknowledging the processes they may use and the wastes they may handle during the interim status period. States with only Phase I Interim Authorization are not authorized to carry out a RCRA permit program and cannot assume responsibility for these functions (although they can assist EPA in this area). EPA is also responsible for these activities for those facilities not covered in a State's authorization for a component of Phase II**.

*Do not confuse Phase I and Phase II of Interim Authorization with the two rounds of Part A permit application processing.
**When a State receives interim authorization for one or more components of Phase II, the issue of whether a facility (covered by a component handled by the State) qualifies for interim status is moot because State, rather than Federal requirements, then apply.

Therefore, EPA is responsible for completing the review of Part A of the permit applications and for sending out acknowledgments. EPA must therefore retain the originals of all notification forms and Part A's of the permit applications which the Agency has received*.

EPA encourages and welcomes States to assist the Agency in reviewing and acknowledging applications, particularly for the round two reviews. This State involvement has a number of advantages: (1) it will give the States an opportunity to become familiar with the information which applicants have submitted; (2) the extra resources will help EPA expedite the review and acknowledgment of applications; and (3) the States can provide useful, and sometimes crucial information about certain facilities of which EPA may not be aware.

State information needs and specific provisions for EPA to provide States with information

The information EPA received in the notification forms and in the Part A's of the applications can be useful to the States in various ways. Some examples are:

(1) to evaluate the scope of State regulatory coverage and to determine if State control of hazardous waste is "substantially equivalent" to Federal control,

(2) to calculate resource needs for conducting a State hazardous waste permit program, for conducting surveillance and enforcement activities, and for providing technical assistance,

(3) as a potential source of data for revisions to grant regulations,

(4) to assist States with interim authorization in preparing reports to EPA,

(5) as input for developing a strategy for siting hazardous waste facilities,

(6) to assist States with hazardous waste permit programs to identify facilities which may need a State permit but have not applied for one. (Likewise, State permit files will also be useful to EPA).

*Note that this continues to be important even after a State receives interim authorization for one or more components of Phase II, because if a State program reverts to EPA during Phase II or at the end of the interim authorization period, facilities without RCRA permits will again need interim status in order to be able to operate lawfully.

(7) to assist States with notification requirements to identify non-notifiers.

(8) to assist State inspectors in conducting facility inspections.

Both the "RCRA State Interim Authorization Guidance Manual", issued June 25, 1980, and the "Additional Guidance for Cooperative Arrangements under Subtitle C of RCRA", issued August 5, 1980, provide that States may obtain notification and permit application information. Specifically, the guidance for interim authorization indicates that EPA will furnish to States with interim authorization copies of notification forms and permit applications within 30 days after the Memorandum of Agreement is signed. The guidance for cooperative arrangements does not specify that EPA will furnish notification and permit application information to the States. However, under cooperative arrangements, the States are encouraged to assist EPA in identifying and contacting non-notifiers and to make recommendations to EPA concerning the review of applications. In order to make this process work, the Agency will have to provide the States with some notification and Part A information, consistent, of course, with the confidentiality provisions in 40 CFR Part 2.

Assessing individual State information needs and formats for transferring information

EPA Headquarters will send each State solid and hazardous waste management office copies of EPA's summary report containing notification information received during the period of May 19, 1980, to November 19, 1980. The report contains the following items of information on hazardous waste facilities: the name and location of the facility; the type of activity(ies) (i.e., generate, transport, treat, store, or dispose of hazardous waste); a listing of the hazardous waste(s) which the facility handles; the name of the owner of the facility; whether or not the facility is Federally or privately owned; and whether or not there is an underground injection well located at the facility. The report has ten volumes; one volume for each of EPA's ten regions. Each volume contains a State-by-State listing of notifiers. The Agency will routinely send State Agencies supplements to this report as new notification information is received and processed.

While EPA intends to share fully with the States all permit application information, transferring this information requires a significant resource commitment, and if not done carefully can result in the States being inundated with information which has not been verified and therefore may be of little use to the State. We recommend that Regional Offices and States work together and carefully assess what specific pieces of Part A

application data the individual States need to run their program and to assist EPA, and when that data is needed. For example, a State with Phase I interim authorization may need to know early on who has applied for a Federal permit and who has received a round one acknowledgement. The State may have no immediate use for information about the processes or wastes described in the application, except on a case by case basis. In this example, it would make little sense for EPA to spend time copying Part A forms in order to provide the State with the information. Instead, as EPA completes the round one reviews for facilities in the State, it would be better for the Agency to provide the State with computer printouts containing the names and addresses of all facilities EPA considers to have interim status. This approach would provide the State with much of the information it needs, save EPA a considerable amount of time in copying forms, and eliminate the possibility of the State clogging its files with superfluous information which may be inaccurate since it has not been reviewed by the Agency.

A number of notifiers and applicants have submitted claims of confidentiality for their information. EPA will transfer to the States information covered by these claims only in accordance with the provisions of 40 CFR Part 2.

9542.1982(01)

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

May 25, 1982

OFFICE OF
SOLID WASTE AND EMERGENCY RESPONSE

PIG-82-4

MEMORANDUM

SUBJECT: State and EPA Interaction Regarding Exclusion of Wastes Generated at Individual Facilities ("Delisting")

FROM: Rita M. Lavelle
Assistant Administrator (WH-562-A)

TO: Program Implementation Guidance Addressees

ISSUE:

What are the roles of EPA and the State with respect to exclusions granted to individual facilities ("delisting") in States with Interim Authorization?

DISCUSSION:

Previously issued Program Implementation Guidance (number 81-4) indicated that State programs which provide for the delisting of waste from individual facilities could receive Interim Authorization (IA) where the States' procedures were substantially equivalent to the Federal program. That Guidance also indicated that the Memorandum of Agreement (MOA) between the Regional Office and the authorized State must provide that the State will keep EPA fully informed of any State delisting activities. The MOA is also to clearly indicate that if delisting action causes the State program to no longer be substantially equivalent to EPA's, the Agency may begin proceedings to withdraw the State's authorization (40 CFR 123.136).

The purpose of this memorandum is to provide guidance regarding State/Federal delisting activities in States with Interim Authorization. More specifically, this Guidance will describe delisting assistance which EPA will provide, define the roles and responsibilities of the various State and EPA offices in delisting, and discuss coordination among these offices.

A. Authorized State's Role in Conducting Delisting Activities

Except as provided below, IA States which have the (State) legal authority to delist are solely responsible for the delisting of wastes in their States for purposes of State regulation. As resources allow, EPA will provide assistance to the States on request.

Federal delisting in an IA State would have no effect on the State's own regulatory control program and, therefore, could be a duplication of effort without any benefit. Thus, if the Office of Solid Waste (OSW) receives a delisting petition pertaining to a facility in a State with Interim Authorization, OSW will contact the petitioner and inform him that the State, rather than EPA, manages the hazardous waste program in the State and that Federal delisting may be unnecessary. It should be noted that, while the effect of Federal delisting is to exclude the facility's waste from Federal regulatory control, the State's regulatory control is not affected by the Federal delisting. (Thus, a waste delisted by EPA could still be a hazardous waste for State purposes when managed within the State.)

However, EPA delisting in IA States will be conducted if: (1) the facility's waste may be managed in a way which would bring the waste under Federal jurisdiction (e.g., the waste is transported across State boundaries) or (2) if the facility owner/operator specifically requests EPA to process his petition (e.g., the facility may want the option of shipping the wastes out-of-state in the future). Before OSW initiates processing of the petition, the appropriate Regional Office will be informed of the upcoming action; the Regional Office will be expected to then inform the State. The appropriate Regional Office will also be informed of OSW's decision on whether to grant or deny the petition before OSW informs the petitioner; the Regional Office should then inform the State.

B. EPA Role in IA States' Delisting Programs

Generally, EPA's role is one of oversight to provide that the State's program continues to be substantially equivalent to the Federal program. In some States an expanded EPA role may exist by virtue of special provisions in the MOA.

As discussed in previous Guidance (number 81-4), the MOA is to provide that the State will keep EPA fully informed of any State delisting activities. This will provide EPA with the opportunity to review State delistings. EPA's review function is especially relevant where categorization of a waste is not clearly defined. In order to facilitate this review function, this Guidance clearly defines

responsibilities of the various offices. Where appropriate, the Regions should consider amending existing MOA's to define specific responsibilities.

C. State and EPA Responsibilities

State Responsibilities

1. Authorized States should promptly notify the Regional Office of all "delisting" petitions received.

2. Authorized States must submit copies of all petitions, supplements to these petitions and decisions made (e.g., memoranda and letters imparting the State's position to the petitioner) to the Regional Office on a semi-annual (or more frequent, if desired) basis.

Regional Office Responsibilities

3. When the Regional Office receives notice from OSW of receipt of a Federal delisting petition (see item 6 below) it is expected to immediately inform the State and clearly offer and make arrangements for the State to comment on the petition before the Office of Solid Waste makes a determination to grant (temporarily or finally) or deny the petition. In particular, the State should be offered the opportunity to comment early on any deficiency of information in the petition to assist the Office of Solid Waste in requesting additional information from the petitioner which is necessary in many cases.

Because EPA's delisting process is a rulemaking procedure (resulting in an amendment to 40 CFR Part 261, if a delisting petition is granted), we cannot offer a State a participatory role in delisting determinations. However, because a State has a genuine interest in assuring that EPA's delisting determinations are made on accurate and complete information and because a State may have or know about information relevant to a petition, OSW, through the Regional Office, should assure that the States (both IA and other States) have a timely opportunity to comment on petitions received and being processed by OSW. State comments forwarded to OSW by the Regional Office will be maintained in the docket (along with all other comments) and be available for public inspection and copying during normal business hours.

4. The Regional Office will advise the State of the Agency's comments on the State delisting actions. As resources allow, OSW will be available to support the Regional Offices (at their request) in the review of and comment on State delisting actions.

5. Pursuant to 40 CFR 123.136, the Regional Administrator may begin proceedings to withdraw authorization of the State's hazardous waste program if the Regional Administrator determines that the State's delistings have rendered its program less than

substantially equivalent to the Federal program.

Office of Solid Waste Responsibilities

6. On receipt of a delisting package from a petitioner, OSW will notify the appropriate Regional Office, which in turn, will be expected to notify and solicit State input and relay it to OSW (see item 3, above).

7. On receipt of a State delisting package (e.g., petitions, supplements to petitions and a State's decisions on petitions) from the Region (see item 4, above), OSW will review the package and notify the Regional Office by memorandum of its agreement or disagreement (including pertinent reasons) with the State's decisions.

In their MOA's, some IA States have provided for prior EPA concurrence with the State delisting decision. In these instances, OSW will continue to evaluate petitions submitted to EPA but will work closely with the Region and State in order to reach a joint decision on whether or not to grant the delisting. Thus, if OSW receives a petition from a facility in a State which requires Federal concurrence with the State's delisting decision, OSW will contact the petitioner and inform him that the State manages the hazardous waste program in that State and that Federal delisting is unnecessary, except as noted above. OSW will then proceed to evaluate the petition, since the State will ultimately be seeking EPA concurrence on the State delisting decision. However, this evaluation will not culminate in the usual Federal Register rulemaking.

DECISION:

Where the State has IA and operates a delisting program, the State is the agency responsible for conducting the delisting of waste within the State for purposes of the State program. Where petitioners may manage wastes so as to bring the wastes under Federal jurisdiction, or if petitioners specifically request EPA to act on their petitions, OSW will continue to evaluate and reach decisions on the petitions. In such cases OSW will keep the Region informed; the Region, in turn, will keep the State informed and offer the State the opportunity to comment on the petition to EPA. In addition, in those States which require prior EPA concurrence with the State's delisting decision before a particular facility's waste is delisted, OSW will work with the Region and State in order to reach a decision on whether or not to grant the delisting.

9542.1982(02)

Federal Delisting and RCRA Permitting
in Interim Authorized States

Dan Derkics, Coordinator
Northern States PATs

Richard C. Boynton, Chief
Permits Development Section - Region 1

This is in response to your April 28 memo (postmarked May 26 and received on June 3) in which memo you requested Headquarters' clarification of the following:

> "In a Phase I authorized state, must EPA issue a permit to a facility handling a waste which was included in both the state's and EPA's universe of regulated wastes at the time of authorization, but was subsequently excluded by EPA?"

Your question has been reviewed by several Headquarters officials, including representatives on the Stablex PAT. The reviewers are in general agreement that EPA does not have to issue a permit to a facility managing a federally-excluded or delisted waste. Reviewers from the Office of General Counsel were careful to emphasize that the federal regulations also do not allow writing a federal permit for such a waste which is no longer a hazardous waste under the Federal system. The regulatory prohibition of 40 CFR 123.121(i)(2) applies for purposes of RCRA permitting, even in an authorized state which decides not to exclude or delist the waste:

> "Where an approved program has a greater scope of coverage than required by federal law the additional coverage is not part of the federally approved program".

Program Implementation Guidances (PIGs) 82-1 and 3 provide further explanatory guidance which can be read to address an important underlying issue raised by your question: what effect (if any) does a federal delisting [or exclusion] have in an authorized state? Both PIGs reaffirm the principle of the state's Phase I approved hazardous waste universe applying (in lieu of the Federal system) for purposes of federal permitting. PIG-82-1 defines "the universe of hazardous waste considered part of a state's Phase I authorized program are those wastes identified or listed by both EPA and the state". PIG 82-3 further describes that a state program, for purposes of federal enforcement, is broader in scope if it includes wastes that are in addition to those listed in the federal universe. Following the above-stated logic of this guidance, the federal delisting [or exclusion] can be seen to do two

things: (1) it reduces the federal hazardous waste universe against which the state universe is matched to determine what part of the state's program is authorized, and (2) it leaves the state program with a universe that is broader in scope than the Federal system (unless the state also delists or excludes wastes).

Accordingly, the federal delisting [or exclusion] must automatically place the waste outside the coverage of the RCRA program: both the federal program and the previously-authorized portion of the state program. The complete answer to the question in your memo is therefore as follows:

> If a state program is approved and EPA (but not the state) subsequently delists [or excludes] a waste in the state, that waste is automatically no longer a part of the federally-authorized state program and a RCRA hazardous waste permit cannot be issued to a facility managing that waste.

cc: John Skinner
Truett DeGeare
Susan Absher
Denise Hawkins
Dotz Darrah
Stablex PAT

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

9542.1982(03)

AUG 9 1982

PIG-82-5

OFFICE OF
SOLID WASTE AND EMERGENCY RESPONSE

MEMORANDUM

SUBJECT: Status of State Permits Issued Before a State Receives RCRA Phase II Authorization

FROM: Rita M. Lavelle
Assistant Administrator for
Solid Waste and Emergency Response (WH-562-A)

TO: Program Implementation Guidance Addressees

ISSUE

Once a state is authorized for a component of Phase II, what is the status of hazardous waste facility permits which the state issued prior to being authorized for the component? Can they be considered RCRA permits? What is the status of an EPA-issued federal permit in a state authorized for a component of Phase II?

DISCUSSION

Prior to being authorized for a component of Phase II a state may require facilities that treat, store, or dispose of hazardous waste to obtain a state permit. There are no provisions within RCRA or the federal hazardous waste regulations for designating these pre-authorization state permits as RCRA permits. RCRA permits can be issued only by EPA or an authorized state. Authorization requirements ensure that an authorized state will be using procedures substantially equivalent to the federal permitting procedures (state procedures must, of course, meet the requirements of Section 7004(b) of RCRA) and will be requiring compliance with standards providing substantially the same degree of protection as the federal technical standards (See 40 CFR 123.129).

Before a state is granted Phase II authorization, five situations are possible for a hazardous waste management facility operating in a particular state. In all of these situations

RCRA Section 3005(a) applies. That is, owners and operators of facilities that treat, store, or dispose of hazardous waste can legally do so only when they have a RCRA permit. Also, RCRA Section 3005(e) applies, allowing qualified facilities to continue to operate under federal "interim status". When the state receives interim authorization different results occur in each of the five situations as described below.

1) A facility has neither a state permit nor a federal RCRA permit (but does have federal interim status)

This situation is very straightforward. The state must eventually issue the facility a state RCRA permit. Of course, before the state could have obtained Phase I interim authorization, it must have had some mechanism in place to apply standards substantially equivalent to federal interim status standards to all of the hazardous waste management facilities within its borders.

2) A facility has a state-issued permit but no federal RCRA permit (but does have federal interim status)

This situation is also fairly straightforward; the state must eventually issue a RCRA permit to the facility. The facility can continue to operate lawfully until that time, provided the facility will be subject to state standards substantially equivalent to the federal interim status standards. The timetable for reissuance can be negotiated between the Regional Administrator and the State Director and is to be delineated in the Memorandum of Agreement and discussed in the Program Description. Legally, the state permit cannot be considered a RCRA permit even if the state permit was issued using standards and procedures that were eventually authorized. However, under these circumstances there would be very little reason to reissue the permit in the near future, and the state could plan to reissue the permit at the end of the current permit term or at some other convenient time.

3) A facility has a federal RCRA permit but does not have a state permit

In this situation the state can assume responsibility for the administration of the RCRA permit if it has explicit authority allowing it to directly administer and enforce permits issued by the federal government. As an alternative, the state can issue a RCRA permit to the facility. Where the state issues a RCRA permit, EPA should suggest to the federal permittee that the permittee should agree to the termination of the federal permit. The EPA-issued RCRA permit cannot be terminated without the agreement of the permittee unless one of the causes for termination in 40 CFR 122.16 is present.

4) A facility has both a federal RCRA permit and a state permit

This situation is a combination of cases (2) and (3), above. The state must eventually issue a state RCRA permit to the facility or can assume responsibility to administer the federal permit if it has the authority to do so. The schedule for reissuance of the state permit is to be specified in the Memorandum of Agreement. Since the facility has a federal RCRA permit, the urgency for state reissuence of a state RCRA permit diminishes. This would be especially true if the previous state permit was issued using standards and procedures that were eventally authorized.

5) A facility has identical federal RCRA and state permits that were issued jointly

In those situations where both permits are identical and were issued jointly, EPA can propose its intent to consider as RCRA permits the jointly-issued or identical state permits when the Agency announces receipt of the state's complete Phase II application. In this last situation, the RCRA permit can be terminated with the agreement of the permittee (or for one of the causes for termination in 40 CFR 122.16). If the RCRA permit is not terminated, then the facility will operate under two identical permits.

The assumption underlying all of the above scenarios is that any EPA-issued permit continues in full force and effect after Phase II authorization. EPA-issued permits continue in force until terminated either under 40 CFR 122.16 [see 40 CFR 123.6 (b)(1), 123.126 (c)(1) and 124.5(d)] or by the agreement of EPA and the permittee. Permittees with EPA-issued permits thus would be subject to the requirements of 40 CFR Parts 122 and 124 until their EPA-issued permits are terminated. The permit terms and conditions, as well as the applicable requirements of Part 122, would be the "requirement of this subtitle" (Subtitle C) which EPA could enforce under Section 3008 of RCRA.

EPA would prefer not to be administering and enforcing federal permits in authorized states. Thus, it is extremely desirable that EPA and a non-authorized state coordinate their permitting activities so that whenever possible they hold joint hearings and issue identical or nearly identical permits. Then, upon authorization, those state permits can be considered RCRA permits. Alternatively, it would be extremely desirable for those states that are currently

making legislative or regulatory changes to incorporate in their legislation (or in their regulations, if their legislative authority is already broad enough to allow it) a provision allowing them to summarily transform federal RCRA permits into state RCRA permits. That is, the state would want to be able, through some very simple procedure, to issue state RCRA permits incorporating all the terms and conditions of the federal permits.

DECISION

All facilities that treat, store, or dispose of hazardous waste can do so legally only under a state or federal RCRA permit, federal interim status, or a state analogue to interim status. The only instance where a state permit that was issued prior to Phase II authorization can constitute a RCRA permit is where the state permit was issued jointly with and is identical to a federal RCRA permit. In such a case, when EPA receives the state's application for Phase II, EPA should announce (as part of the Federal Register notice of receipt of a complete Phase II application) its intent to consider the identical, jointly-issued state permits to be RCRA permits and take comment on that intention. At the time of joint permit processing, EPA should also announce such an intent if the state is one that may seek Phase II interim authorization.

Except for the above situation where joint identical state and federal permits occurred, all state permits will need to be modified or reissued by the state as RCRA permits once the state is authorized. The schedule for reissuance can be negotiated between the state and the Region and must be delineated in the Memorandum of Agreement and described in the Program Description. In those cases where there are previously-issued federal RCRA permits, the state may possess the authority to assume the administration of those permits, thereby negating the need for issuance of a state RCRA permit. EPA-issued RCRA permits cannot actually be terminated without the agreement of the permittee unless one of the causes for termination in 40 CFR 122.16 is present.

9542.1983(01)

August 2, 1983

MEMORANDUM

SUBJECT: Changes During Interim Status in Phase II Authorized States

FROM: John H. Skinner
Director, Office of Solid Waste (WH-562)

TO: Merrill Hohman
Director, Air and Hazardous Materials Division
Region I

In your June 13 memo to me, several issues were raised concerning interim status changes in authorized States and the Region's role in quality control of changes to the RCRA facility data base. Our response to these issues is outlined below.

- Do Phase II interim authorized States make determinations on interim status changes and termination of interim status in lieu of EPA?

Yes, once a State has Phase II or final authorization, the State may make determinations relating to changes and termination of interim status. EPA may not make such determinations for facilities covered by components for which the State is authorized. Additional guidance on this issue can be found in the attached copies of PIG 81-10 and John Skinner's July 20, 1981 memorandum to Region IX.

- Do Phase II interim authorized States have to agree to utilize procedures substantially equivalent to EPA's procedures with respect to changes during interim status or termination of interim status? Must these procedures be in regulation in order for the State to qualify for Final Authorization?

State programs are not required to have an analogue to Federal interim status in order to qualify for interim or final authorization. A State may instead require existing facilities to comply with such standards through permit terms and conditions. If a State does allow continued facility operation through an interim status analogue, the State's requirements and

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procedures must be substantially equivalent to the Federal regulations for Phase II interim authorization. For final authorization they must be at least as stringent as the Federal requirements. These procedures need not be in regulation for interim authorization, but for final authorization they must be of a regulatory nature.

The RCRA regulations allow States to provide for continued facility operation without a RCRA permit only if the facility would qualify for Federal interim status. (See §§271.13(a) and 271.129(b)(2).) In order to qualify for Federal interim status, facilities must meet the requirements of §270.70 which requires compliance with §270.10 regarding general permit application requirements, including grounds for termination of interim status (§270.10(e)(5)). Section 270.10(g)(1)(iii) incorporates §270.72 or the authorized State's analogue to §270.72, obligating facilities to conform to specific provisions regarding changes during interim status.

For a State with an interim status analogue, the Model Attorney General's Statement on page 2.3-8 of the Final Authorization Guidance Manual requires the following certification: "State Law and regulations assure that any facility qualifying for State interim status continues to qualify for Federal interim status." As provided in §§271.13(a) and 271.129(b)(2), this certification ensures that facility changes allowed by the State will conform with §§270.71 and 270.72; otherwise, the facility would not continue to qualify for Federal interim status. Likewise, States should terminate interim status when a facility meets conditions under §270.73. Checklist V of the Final Authorization Guidance Manual provides for citations to State interim status analogues (page A-70).

The Headquarters' comment on Maine's Phase II application is consistent with the Final Authorization Guidance Manual and the above discussion. Since Maine has an interim status analogue, for final authorization the State provisions for changes to existing facilities must be no less stringent than §270.72.

- Does EPA Washington expect the regions to quality control the additions, deletions, or changes made to the RCRA facility Data Base (Ver. IV) by authorized States?

Yes, in order for HWDMS users to have full confidence in the data, systems must be in place to ensure that the information is correct. The Regional Offices should monitor the quality of additions, deletions, or changes to the data base made by

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authorized States. Regional quality control can be accomplished through the following activities. The Regions should assure that State deletions of Part A data are supported by on-site inspections of the facility. The reports of these inspections should be verified by the Regions during the quarterly file audits or mid-year reviews. If the inspection data is of questionable value, joint inspections should be conducted. Routine additions or changes to Part A information by the State should also be verified through random file audits during the Region's scheduled reviews of the State.

Thank you for relaying your concerns on these important issues. If you have any further questions, please contact Bruce Weddle at 382-4746.

Attachment

cc: Division Directors, Regions II-X
Pam Hill

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

9542.1985(01)

January 11, 1985

MEMORANDUM

SUBJECT: RCRA Reauthorization Statutory Interpretation #2 : Extensions of Interim Authorization of State Hazardous Waste Programs

FROM: Jack W. McGraw
Acting Assistant Administrator

TO: Regional Administrators
Regions I-X

The Hazardous and Solid Waste Amendments of 1984 extend the interim authorization period to January 31, 1986. Each Regional Administrator has extended the previous deadline (January 26, 1985) for some States for good cause (see 40 CFR 271.122(c)). In the absence of a further extension, interim authorization for these States' hazardous waste programs will expire on the previously published deadlines. At that point, reversion of the States' programs to Federal control would be automatic.

Extensions for "good cause" were typically granted to States which encountered unforeseen difficulty in developing RCRA equivalent programs or encountered difficulty in submitting their applications for authorization. Any further extensions should be granted on that basis also.

Should you decide to extend the authorization deadline for certain States, we have attached for your reference a sample Federal Register notice for announcing their extensions. Where you wish to grant extensions, the notices must be published by January 26, 1985, in order to avoid terminiation of interim authorization on that date.

Attachment

cc: Hazardous Waste Division Directors, Regions I-X
Hazardous Waste Branch Chiefs, Regions I-X

(SAMPLE NOTICE)

U. S. ENVIRONMENTAL PROTECTION AGENCY

40 CFR Part 271

Hazardous Waste Management Program; Extensions Of Application Deadline For Final Authorization

AGENCY: Environmental Protection Agency (EPA)

ACTION: Notice of Extension of Phase I and II Interim Authorization for California, Guam, and Nevada.

SUMMARY: EPA previously granted an extension of interim authorization to January 26, 1985, for the States of California and Nevada, and the Territory of Guam. These States and Guam recently requested a further extension of interim authorization beyond the January 26, 1985 deadline. This extension would allow for continuation of their interim authorization under the Resource Conservation and Recovery Act (RCRA), as amended. EPA is granting the requested extension to avoid the reversion, on January 26, 1985, of their interim authorization. This notice extends California's Phase I and IIB, Nevada's Phase I, IIA and B, and Guam's Phase I interim authorization until January 31, 1986, or until the date these States and Guam receive final authorization, whichever is earlier.

EFFECTIVE DATE: [Date of publication]

FOR FURTHER INFORMATION: Chuck Flippo, RCRA Programs Branch, Environmental Protection Agency Region IX,

215 Fremont Street, San Francisco, CA 94105, telephone (415) 974-8128.

SUPPLEMENTARY INFORMATION:

Background

Section 3006 of the Resource Conservation and Recovery Act (RCRA) allows EPA to authorize State hazardous waste programs to operate in the State in lieu of the Federal hazardous waste program. Two types of authorization may be granted. The first type, known as "interim authorization" is a temporary authorization which is granted if EPA determines that the State program is "substantially equivalent" to the Federal program (Section 3006(c), 42 U.S.C. 6226(c)). EPA's implementing regulations at 40 CFR 271.121-271.137 established a phased approach to interim authorization: Phase I, covering the EPA regulations in 40 CFR Parts 260, 263, and 265 (universe of hazardous wastes, generator standards, transporter standards and standards for interim status facilities) and Phase II, covering the EPA regulations in 40 CFR Parts 124, 264 and 270 (procedures and standards for permitting hazardous waste management facilities).

Phase II, in turn, has three components. Phase II A covers general permitting procedures and technical standards for containers and tanks, and, in certain instances (see California section below for discussion), for surface impoundments and waste piles as well. Phase II B covers incinerator facilities, and Phase II C addresses landfills and land treatment

facilities.

The second type of authorization is a "final" (permanent) authorization that is granted by EPA if the Agency finds that the State program (1) is "equivalent" to the Federal program, (2) is "consistent" with the Federal program and other State programs, and (3) provides for adequate enforcement (section 3006(b), 42 U.S.C. 6226(b)). States need not have obtained interim authorization in order to qualify for final authorization. EPA regulations for final authorization appear at 40 CFR 271.1-271.23.

40 CFR 271.122(c)(4) requires States which have received any, but not all, phases/components of interim authorization to have amended their original submissions by July 26, 1983, to include all components of Phase II. (See 47 FR 32377, July 26, 1982.) Further, 40 CFR 271.137(a) provides that interim authorization automatically terminated (reverted) on July 26, 1983, unless the State had submitted an application for all phases/components of interim authorization by that date. (See 47 FR 32178, July 26, 1982.) Where the authorization (approval) of the State program reverts, EPA is to administer and enforce the Federal program in the State.

However, 40 CFR 271.137(a) also allowed the Regional Administrator to extend the July 26, 1983, deadline for good cause so that the State program would not revert to EPA. A Regional Administrator could not, however, extend the deadline

past January 26, 1985, as 40 CFR 271.122(b) provides that interim authorization of a State's hazardous waste program ends 24 months from the effective date of the last component of Phase II. The last component of the Phase II regulations was published on July 26, 1982. It became effective on January 26, 1983; thus, interim authorization was to end on January 26, 1985. (See 47 FR 32365, July 26, 1982.)

The Hazardous and Solid Waste Amendments of 1984 (PL-98-616, Nov. 8, 1984), amended Section 3006(c) to allow interim authorization to extend to January 31, 1986. Therefore, the Regional Administrator has authority to extend a State's interim authorization to January 31, 1986, in appropriate cases.

California

California received Phase I interim authorization on June 4, 1981, and Phase II A interim authorization on January 11, 1983. The State's Phase II authorization includes only responsibility for permitting storage and treatment in tanks and containers. It does not include responsibility for permitting: 1) treatment in surface impoundments, waste piles, land treatment facilities, or incinerators; 2) storage in surface impoundments or waste piles; or, 3) disposal facilities.

The State chose to apply for final authorization in lieu of additional increments of interim authorization.

EPA granted California's request for an extension of interim authorization until January 26, 1985, because the State had made a good faith effort to pursue regulatory and statutory amendments necessary to secure final authorization. This effort constituted "good cause" for extending the State's deadline for submission of their application for final authorization. (See 49 FR 33018, August 20, 1984.) The State then expected to submit its application in September 1984; however, the State subsequently encountered significant delays in adopting the necessary three sets of regulations under two different statutes due to a lengthy public hearing process and extensive public interest in the regulations. California now intends to submit its official application by July 1985 after submitting a draft application in March 1985. California expects to receive receive final authorization by January 31, 1986.

Guam

The Territory of Guam received Phase I interim authorization on May 16, 1983. Guam chose to apply for final authorization rather than apply for Phase II interim authorization. Before submitting a final authorization application, the Territory needed to adopt both statutory and regulatory amendments. Guam requested and was granted an extension to submit their complete application and gain final authorization by January 26, 1985. Because the Territory had encountered significant delays in developing and adopting the necessary regulatory and statutory amendments, but had made a good faith

effort to pursue those amendments, good cause was shown to allow extension of the deadline for obtaining final authorization to January 26, 1985. (See 49 FR 33018, August 20, 1984.) The Territory expects to receive final authorization by July 1985.

Nevada

Nevada received interim authorization for Phases I, II A and II B on July 19, 1983. The State chose to apply for final authorization rather than apply for Phase II C interim authorization. Revisions to the State's regulations, needed to meet the requirements for final authorization, were completed in June 1984. The State then planned to submit an official final authorization application in July 1984. The State requested and was granted an extension to this deadline because the State encountered significant delays in completing the statutory amendment necessary to secure final authorization. The State's biennial legislature and limited (60 day) legislative term added to the State's difficulty in gaining approval of the necessary statutory amendments. The State's good faith effort to pursue the necessary statutory amendment constituted good cause for extension of the State's deadline for gaining final authorization to January 26, 1985. (See 49 FR 33018, August 20, 1984.) The State now intends to submit its official

application for final authorization by December 1984 and receive final authorization by July 1985.

DECISION:

In consideration of the above schedules and the States' continued good faith efforts to adopt hazardous waste programs necessary to obtain final authorization, the immediate reversion of these State programs because of their failure to meet the January 26, 1985, deadline is not in the best interest of California, Guam, or Nevada, this Agency, the regulated community, or the citizens of California, Guam, or Nevada. I have found good cause to extend the deadline for the final determination on the final authorization applications for California, Guam, and Nevada, until [insert appropriate date for each State and Guam]; after that, responsibility for implementing RCRA reverts to Federal control if they have not received final authorization.

EXECUTIVE ORDER 12291: The Office of Management and Budget (OMB) has exempted this rule from the requirements of Section 3, Executive Order 12291.

CERTIFICATION UNDER THE REGULATORY FLEXIBILITY ACT: Pursuant to the provisions of 5 U.S.C. 605(b), I hereby certify that this extension will not have a significant economic impact on a substantial number of small entities. The extension

effectively suspends the applicability of certain Federal regulations in favor of these States' programs, thereby eliminating duplicative requirements for handlers of hazardous waste in California, Guam, and Nevada. It does not impose any new burdens on small entities. This rule, therefore, does not require a regulatory flexibility analysis.

LIST OF SUBJECTS IN 40 CFR PART 271: Hazardous materials, Indian-lands, Reporting and recordkeeping requirements, Waste treatment and disposal, Water pollution control, Water supply, Intergovernmental relations, Penalties, Confidential business information.

AUTHORITY: This notice is issued under the authority of Sections 2002(a), 3006, and 7004(b) of the Solid Waste Disposal Act, as amended by the Resource Conservation and Recovery Act of 1976, as amended, 42 U.S.C. 6912(a), 6926, and 6974.

DATED:

Judith E. Ayres
Regional Administrator

9542.1988(01)

July 12, 1988

MEMORANDUM

SUBJECT: Notice Clarifying the Availability of Interim Status for Facilities in Unauthorized States Handling Radioactive Mixed Waste -- Transmittal Memo

FROM: Sylvia Lowrance, Director
Office of Solid Waste

TO: J. Winston Porter
Assistant Administrator

PURPOSE

This memorandum transmits a Federal Register notice for the Administrator's signature which extends the deadline for facilities that treat, store or dispose of radioactive mixed waste in unauthorized States to submit a Part A permit application in order to qualify for interim status. The notice also reiterates that qualification for interim status in authorized States is a matter of authorized State law.

BACKGROUND

EPA published a Federal Register notice clarifying the Agency's position that radioactive mixed waste is subject to Subtitle C regulations. That notice informed authorized States that they were required to amend their existing programs and obtain authority to regulate the hazardous component of radioactive mixed waste in order to maintain existing authorizations. The notice further announced that States seeking initial authorization after July 3, 1987 must include authority to regulate radioactive mixed waste in their initial application. The July 3 notice did not, however, delineate the responsibilities of handlers of radioactive mixed waste in unauthorized States. Because of the omission from the notice, owners and operators of facilities that treat, store or dispose of radioactive mixed waste in unauthorized States have been confused about their obligations under RCRA and about the availability of interim status for this hazardous waste activity.

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For this reason, we are extending the deadline for facilities handling mixed waste in unauthorized States to obtain interim status.

SCOPE OF THE NOTICE

The attached FR notice clarifies the availability of interim status for treatment, storage and disposal facilities (TSDF's) located in unauthorized States and extends the deadline for owners/operators of such facilities to submit a Part A permit application in order to qualify for interim status. The availability of interim status for TSDF's in authorized States has not been an issue. However, the notice does point out that facilities in authorized States must comply with authorized State law in order to obtain interim status. Additionally, the notice highlights the Agency's commitment to work with the regulated community on those aspects of the hazardous waste program which may pose unique implementation challenges because of the nature of the radioactive constituent of some mixed wastes.

EXPECTED REACTIONS

RCRA's applicability to mixed waste has been controversial and challenged by many segments of the regulated community. However, EPA clarified its position that these wastes were indeed subject to hazardous waste regulations as previously indicated, by notice in the FR of July 3, 1986. Likewise, the Department of Energy (DOE) embraced the EPA position in its final definition of byproduct material which was published in the FR on May 1, 1987. As a result, DOE and other Federal facilities have been working aggressively to comply with RCRA regulations and no adverse reaction is anticipated from them following issuance of the notice.

Unlike Federal facilities, the nuclear power industry has been confused about the implications of the attached notice. They believe its issuance will now subject them to hazardous waste regulations. However, this notice extends the date for submittal of the Part A permit application whereby TSDF's may continue handling mixed waste in compliance with the law. This confusion by the utilities may stem from their belief that the EPA/NRC approach to dual regulation of mixed waste is not in accordance with Congressional intent. Moreover, the utilities contend dual regulation is duplicative and burdensome while affording no greater level of environmental protection than that accomplished by sole NRC regulation. It is anticipated that the utilities may challenge the interim status clarification notice.

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Because we anticipate this adverse response from the utilities, a communication strategy targeting utility trade associations and related groups has been developed and is also attached.

RECOMMENDATION

The attached notice apprises owners and operators of TSDF's in unauthorized States of their obligations under RCRA and extends the date for submission of a Part A permit application in order to qualify for interim status. In the absence of this initiative, TSDF's in unauthorized States may be required to discontinue mixed waste management until a final RCRA permit is issued. The attached notice has received OGC concurrence and reflects the clarifications they requested. OWPE has also reviewed and concurred on the interim status clarification notice. Therefore, I recommend you transmit the notice to the Administrator for signature.

Attachments

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9543 – ASSESSMENT OF STATE CAPABILITIES

Part 271

ATK1/1104/64 kp

October 3, 1985

MEMORANDUM

SUBJECT: Applicability of PIG-82-5 and RSI #5 on Joint Permitting in Phase I Authorized States

FROM: Bruce R. Weddle, Director
Permits and State Programs Division (WH-563-B)

TO: Robert L. Allen, Chief
Waste Management Branch (3HW30)

Thank you for your memorandum of July 15, 1985, in which you asked for clarification on several issues relating to permits jointly-issued by EPA and a State with Phase I interim authorization. This memo addresses your concerns in the same order in which you stated them on page 2 of your memorandum.

1. You asked: What is Headquarters' definition of "nearly identical" permits as used in PIG-82-5?

A nearly identical State permit issued by a State with Phase I authorization would contain, at a minimum, no less stringent State analogues to all of the provisions that the jointly-issued Federal permit would incorporate. A State permit could contain provisions which are more stringent than corresponding Federal provisions and still be considered "nearly identical". State permit provisions that are broader-in-scope than the Federal program are not relevant in determining whether State permits are "identical" or "nearly identical". (See PIG 84-1 for a discussion of how to determine whether State provisions are broader-in-scope or more stringent.)

2. You asked: Under what circumstances can jointly-issued, nearly identical permits be issued by a Phase I authorized State yet be considered RCRA permits after Final Authorization?

Contrary to the approach described in #5 of PIG-82-5, we concluded that the EPA RCRA permit should not be terminated. While recognizing the State and Federal permits may have been issued jointly, receipt of Phase II or final authorization does not automatically convert the State permit into a RCRA permit.

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Rather, the State must have RCRA permitting authority at the time of permit issuance. Thus, were the EPA permit to be terminated prematurely, the facility would lose RCRA authority to operate.

Nevertheless, EPA can use its discretion to avoid duplicate State and Federal efforts to enforce identical permit provisions. That is, if the State were adequately enforcing its identical permit, EPA would not plan to devote enforcement resources to that facility.

Subsequent to being granted final authorization, the State could reissue its permit as a RCRA permit or wait until the EPA RCRA permit expires. When the State decides to issue a RCRA permit and the State is not authorized for HSWA provisions, the Region must determine whether and how the facility is affected by the HSWA requirements and either issue a permit for the HSWA provisions or a notice of its restitutional final decision that the facility is not affected by HSWA. At the time of permit reissuance, the HSWA provisions must be considered even though they were not applicable when EPA issued the first permit.

3. <u>You asked: What effect will HSWA have on the provisions of PIG-82-5</u>?

HSWA mandates incorporation of certain requirements and prohibitions in <u>all</u> RCRA permits as of November 8, 1984. Simply, a permit cannot be considered a RCRA permit unless it complies with all the applicable new requirements of HSWA. A State must be specifically authorized for provisions of HSWA to issue a RCRA permit. Thus the policy on joint permitting stated in RSI #5 supersedes the policy of PIG 82-5. (See RCRA Reauthorization Statutory Interpretation #5, July 1, 1985.) In relation to PIG 82-5, you will likely be issuing permits as described by situation #4, rather than situation #5. That is, a facility will be jointly issued a State permit and a Federal RCRA permit. Since the facility has a Federal RCRA permit, the urgency for State reissuance of a State RCRA permit diminishes. Unless there are extenuating circumstances, there is no compelling reason for a State to reissue a State permit to a facility which also has a Federal RCRA permit prior to the expiration of that Federal permit. This would be especially true if the previous State permit was issued using standards and procedures equivalent to EPA's.

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I trust that the above discussion answers your questions and concerns relating to jointly-issued permits prior to a Phase I State receiving final authorization.

cc: Permits Branch
State Programs Branch
RCRA Branch Chief, Region I, II, IV - X

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9543.1984(01)

December 27, 1984

MEMORANDUM

SUBJECT: Additional Guidance on RCRA State Capability Assessments

FROM: Lee M. Thomas
Assistant Administrator (WH-562-A)

TO: Regional Administrators
Regions I - X

Your assessment of the State's capability to implement a quality RCRA program is an important part of the process of making a Tentative Determination to grant RCRA final authorization. (Guidance on conducting the capability assessments was issued on June 26.) To help ensure timely Headquarters' concurrence on both tentative and final determination decision packages, this memorandum provides additional guidance on capability assessments.

Our review of the assessments indicates the need for a more formalized process to collect the information needed to assess the State capability. This process will ensure that program quality/capability can be readily discerned from the decision packages and that the packages can be processed well within the 10-day concurrence period.

Please make sure that your tentative and final determination decision packages include the following:

1. A chart outlining specific grant commitments and State accomplishments in the areas of permitting, compliance monitoring and enforcement for FY 84 (suggested format attached). A similar chart should also be updated upon submittal of the Final Decision (and for Notices of Tentative Decisions submitted later this year) with respect to State commitments and accomplishments to date in FY 85.

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2. As you know, the assessments must include an agreement in the form of a Letter of Intent or Memorandum of Agreement that outlines specific State and EPA actions necessary to strengthen State program capability and sustain a quality RCRA program over time. The Letter of Intent or Memorandum of Agreement must include specific schedules and/or dates for implementing both EPA and State activities identified as necessary for enhancing the State's RCRA program. Letters or Memoranda which are vague or generalized are more likely to lead to unachieved expectations and misunderstandings. It is imperative that both we and the State clearly understand and agree to these specific milestones so that each program knows what is expected. For example, if the State has not met its inspection commitments for ground-water monitoring facilities, the agreement should reference a schedule identifying specific facilities to be inspected and a timetable for completion of those inspections in the coming year. The agreement would also specify a timetable for the State to hire additional inspectors, and an EPA inspection schedule that would temporarily augment the State program and enable the State to meet its inspection commitments.

3. Where weaknesses are found in State program areas not identified in the grant accomplishment chart, include specific documentation to support the findings. For example, a State capability assessment may conclude that the State attorney general has been slow in processing cases referred by the program office. The assessment would identify the specific number of cases referred in FY 84, and the current status of those cases at the time of the assessment (pending, filed etc.). Corrective measures for this situation would be addressed in the Letter of Intent or in the Memorandum of Agreement.

I encourage you to submit drafts of your capability assessments to Headquarters (OSW's State Programs Branch) prior to transmitting your tentative or final determinations. By reviewing drafts in advance, the Office of Solid Waste and the Office of Waste Program Enforcement are able to identify and

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assist in resolving potential problem areas in the document without being constrained by the 10-day concurrence period.

Attachment

cc: Waste Management Division Directors,
Regions I - X

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Susan

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

FEB 21 1984

OFFICE OF
SOLID WASTE AND EMERGENCY RESPONSE

MEMORANDUM

SUBJECT: Review of State Capability in RCRA Final Authorization

FROM: Lee M. Thomas
Assistant Administrator (WH-562-A)

TO: Regional Administrators
Region I - X

At the heart of the Federal and State implementation of the hazardous waste management program under RCRA must be a commitment to quality in the permits we issue, the enforcement actions we initiate, the corrective steps we undertake, and the information we provide to the public on program accomplishments. The States are pivotal to the success of this effort. Our joint commitment to quality under final authorization is critical to meeting our mandate under the statute. Capable managers at all levels working together toward common objectives is a prerequisite to an effective, high quality program.

It is appropriate, therefore, to re-affirm the importance of jointly completing with the States a detailed review of program capability as a key component of the final authorization process. The enactment of State statutory authority and promulgation of regulations, although critical steps, must be coupled with a firm commitment to enhance program capability to effectively implement the authorized State program.

It is imperative that you reach agreement with each State, before the final authorization decision is made, on the steps necessary to strengthen program capability and sustain a quality State RCRA program over time. I am optimistic that the States will have achieved adequate program capability to implement the RCRA program. However, if your joint review with the State leads you to conclude that the State does not have this capability, you should be prepared to recommend that the State's application for final authorization be denied.

The Review of State Capability

The Region and State should jointly conduct a detailed review of State capability to identify areas that require strengthening. This review should use information gathered in previous reviews or analyses, particularly the mid-year and end-of-year evaluations and other activities related to the annual program grant. The review should address those portions of the Federal program a State has been conducting for EPA (if under a cooperative arrangement) or in lieu of EPA (if they have interim authorization). In the latter instance, more stringent State requirements may be included if they are part of the program authorized by EPA. Areas of a State's program broader in scope than the Federal program are not part of the authorized program and need not be included in the review.

The review must be broad enough to isolate the issues and needs of both EPA and the State to manage the program under final State authorization. It must provide for:

- An Assessment of the Quality of The State's Past Performance Under Interim Authorization or Cooperative Arrangements. Areas to consider include:

  - The compliance monitoring and enforcement program under interim authorization or cooperative arrangements, including an analysis of the number and thoroughness of inspections, the number, type and timeliness of enforcement actions, and the improvement shown by the State in bringing violators into compliance.

  - The permitting program under interim authorization or cooperative arrangements, including the number and types of permit actions handled, conformance to technical and procedural requirements, and future permitting strategy.

  - State program management, including resources, skill mix, State organization, institutional constraints (organization, salary rate, etc.), training needs, legal support, and timeliness for filling vacancies. Even when such areas cannot be directly influenced by EPA or the State program (e.g., salaries) they should be noted.

- The Identification of State and EPA Actions Which Will Be Taken To Ensure State Capabilities. The actions should:

- Define resource levels, skill mix, training needs and other factors necessary to address management issues raised in the assessment of past performance.

- Address the level of Regional involvement in direct activities after final authorization, and the form and content of oversight and assistance over time.

- Recognize the value of flexible State management approaches and, where appropriate, account for State institutional constraints or other unique features that determine the form of the authorized program.

Use of The Review In Final Authorization Process.

The joint review of State capability should take place as early in the final authorization process as possible, most appropriately before the draft application is submitted to EPA.

The Memorandum of Agreement (MOA) or an equivalent document (e.g., joint letter of intent) should reflect agreement on the responsibilities of both EPA and the State in sustaining program quality over time. Through the MOA, the Regions and States should agree to use the program grant process to annually (or more frequently) identify and commit to specific actions required to strengthen the State program. The specific commitments and associated resource impact should be incorporated into the State's grant work program.

To facilitate the final authorization decision, your Action Memorandum transmitting the Federal Register Notice of Tentative Decision (or Final Decision if State is later in the authorization process) must: (a) describe the major aspects of past State performance relevant to State capability under final authorization, (b) outline the steps agreed to by the Region and State to enhance program capability, and (c) include a statement that affirms that these actions will result in the implementation of a quality RCRA program. As stated before, if you conclude from your review that a State does not have the capability to implement the RCRA program, then you should recommend that the State's application be denied.

Timely completion of the review is critical to demonstrate that proper consideration has been given to identifying and resolving State capability questions prior to the decision on final authorization. Because we have already received several draft and official applications, the following schedule should be followed:

For States which have not yet submitted an official application, the capability assessment should be addressed in the Action Memorandum for tentative decision.

For States which have submitted an official application the assessment should also be addressed (where possible) in the Action Memorandum for tentative decision. However, if it is too late in the review process to permit this, the assessment should be addressed in the Action Memorandum for final determination.

In no case is the review of State capability to be completed later than the final Action Memorandum and Federal Register Notice of Final Decision.

As you know, I have established a joint Region/State task force to consider the question of RCRA program quality. The outputs from this task force will provide more specific guidance and policy on criteria to be used in evaluating program performance under final State authorization. We do not expect to issue the final policy on RCRA program quality until April, 1984. However, to the extent feasible you may wish to use the criteria developed by the task force to assist you in performing the State capability reviews outlined above. The criteria you use should be based on the circumstances appropriate to your situation and your experience with each State.

Support and assistance in completing the reviews during the final authorization process will be provided by the Permits and State Programs Division, Office of Solid Waste. The State Programs Branch will be developing recommended MOA language, a model Action Memorandum and a sample review of State capability to implement the new requirements. This will be completed in spring, 1984.

cc: Regional Hazardous Waste Management Division Directors
OSWER Office Directors
Kirk Sniff, Office of Enforcement and Compliance Monitoring
Lisa Friedman, Office of General Counsel
Bruce Weddle, Acting Director, Permits and State Programs Division
Donald Lazarchik, President, Association of State & Territorial Solid Waste Management Officials
State Hazardous Waste Management Directors

JUN 26 1984

MEMORANDUM

SUBJECT: State Capability Assessment Guidance
/signed/ Lee M. Thomas

FROM: Lee M. Thomas
Assistant Administrator

TO: Regional Administrators, Regions I - X

On February 21, I wrote to you explaining the importance of assessing State program capability as a key component of the final authorization process. I asked that before you recommend authorization of a State program you work with the State to evaluate its capabilities and come to an agreement on whether action is required to strengthen those capabilities. Several Regions requested guidance on conducting these assessments. The attached guidance was developed after reviewing several capability assessments and receiving comments from the Regions on a draft guidance document.

In conducting these assessments, you should work closely with the States to identify areas of program inadequacy and weakness and to devise remedial measures. The basic criteria to be used in this evaluation are the Criteria for a Quality RCRA Program, developed jointly by EPA and the States. These are the same criteria which will be used as a component of the Headquarters review of Regional activities where EPA operates the RCRA program.

It should be clearly understood that this review allows the Region and the State to take a prospective view of the RCRA program and mutually establish capability objectives and supporting strategies for their accomplishment. Its purpose is not to be an impediment to final authorization unless the Regional Administrator feels the weaknesses in the State program are so severe that additional time is needed to assess a State's ability to implement remedial measures. Through this exercise we hope to avoid granting final authorization to a State only to be faced soon after with concern about

inadequate performance and uncertainty about the criteria used to measure it. Your Action Memorandum should affirm that the remedial actions delineated in the capability assessment are mutually agreed upon strategies which will result in a quality RCRA program.

Support and assistance in completing the reviews will be provided by the State Programs Branch, Permits and State Programs Division, Office of Solid Waste. I recommend that a draft of your capability assessments be submitted to that Branch before you seek State concurrence on corrective measures. Comments will be provided as quickly as possible.

Attachment

cc: Regional Hazardous Waste Management
Division Directors

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

13 NOV 1984

OFFICE OF
SOLID WASTE AND EMERGENCY RESPONSE

MEMORANDUM

SUBJECT: Placement of Capability Assessments in Authorization File

FROM: Bruce R. Weddle
Director, Permits and State Programs Division (WH-563)

TO: Hazardous Waste Division Directors
Regions I-X

The Capability Assessments which you develop when making tentative and final decisions on authorizing a State's hazardous waste management program are an integral part of our decision-making process. This being the case, the Office of General Counsel has informed us that the Capability Assessment and Letter of Intent must be included in the public record. Therefore, when notice of the Region's decision is published in the Federal Register, copies of these documents should be placed in your State Authorization File for access by the public.

Several decisions have already been published. If the Capability Assessment was not part of the Authorization File at the time of publication, consult with your Office of Regional Counsel before adding them to the File now.

cc: John Skinner
Truett DeGeare
Gail Cooper
ORC Team Leaders

9545 – STATE AUTHORIZATION RESERVED

Part 271

Land Disposal Restrictions (Part 268)

9551 – LAND DISPOSAL RESTRICTIONS

Subpart A

RCRA/SUPERFUND HOTLINE MONTHLY SUMMARY

FEBRUARY 86

1. Land Disposal Ban of Solvents

Section 3004(e) of RCRA as amended by the Hazardous and Solid Waste Amendments of 1984 (HSWA) prohibited the land disposal of certain hazardous wastes by specific dates unless the Administrator determines that the prohibition is not required in order to protect human health and the environment for as long as the waste remains hazardous. The first group of wastes to be affected include "those hazardous wastes numbered F001, F002, F003, F004, and F005 in regulations promulgated by the Administrator under Section 3001 (40 CFR 261.31 (July 1, 1983)), as those regulations are in effect on July 1983."

EPA proposed regulations on January 14, 1986 (51 FR 1602), for the implementation of HSWA Section 3004(e). Proposed 40 CFR 268.30 addresses the prohibition on land disposal of solvent wastes and lists as prohibited, with certain exceptions, the wastes numbered F001, F002, F003, F004, and F005 as those listings were amended and expanded to include mixtures or blends on December 31, 1985, (50 FR 53315). How does EPA have the authority to use the expanded solvent listings for the prohibition when the statute specifies that the prohibition applies to the solvent listings as the solvent listings as they were in effect on July 1, 1983?

Section 3004(e) of RCRA as amended by HSWA specifies that the earliest land disposal prohibition applies to the solvent listings as they were in effect on July 1, 1983. The universe of solvent wastes covered by those listings in 1983 is proposed to be restricted from land disposal under the authority of that section. Section 3004(g)(4) of RCRA as amended requires the Administrator to make a determination concerning the prohibition on land disposal of "any new waste identified or listed under Section 3001 after the date of enactment" of HSWA within six months after the date of such identification or listing. Since the expanded solvent listings promulgated on December 31, 1985, (50 FR 53315) list new solvent blends or mixtures as hazardous wastes after the date of enactment of HSWA (November 8, 1984), EPA is required to make a determination concerning the prohibition on land disposal of these newly listed wastes within six months of listing. The universe of solvent wastes not covered by F001-5 listings on July 1, 1983, but included in the proposed §268.30 land disposal restrictions is proposed under the authority of §3004(g)(4) of RCRA as amended by HSWA.

Source: Susan Bromm (202) 382-4770

9551.1986(07)

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

COPY

OFFICE OF
SOLID WASTE AND EMERGENCY RESPONSE

Mr. Klaus L. Mai
Vice President
Health, Safety & Environment
Shell Oil Company
One Shell Plaza
P.O. Box 2463
Houston, Texas 77252

Dear Mr. Mai:

Thank you for your June 19, 1986, letter supporting the Environmental Protection Agency's (EPA's) proposed approach to implementing the land disposal restrictions.

You expressed support for the use of risk-based methodologies to implement the Congressional directives prohibiting land disposal of hazardous waste. Specifically, you state that EPA should incorporate risk assessment principles into the development of technology-based regulations. Although the Agency agrees that risk-based methodologies are an effective tool in developing regulations to implement the hazardous waste management program, Congressional leaders argued strongly that the risk-based approach, proposed by EPA, did not fulfill the intent of the law. Rather, they argued that the statute contains a statutory presumption against land disposal of untreated wastes. Further, the statutory presumption places a burden on facilities to demonstrate that continued land disposal will not allow any untreated hazardous constituents to migrate from the disposal site. The Agency has not yet reached a final decision on how to interpret its statutory authority on this issue.

The debate surrounding the land disposal ban program has prompted a careful consideration within the Agency of when we might best use risk-assessment for the Resource Recovery and Conservation Act (RCRA). For example, we concluded that risk-based methodologies are essential to identify wastes as "hazardous" and, therefore, subject to the RCRA Subtitle C program.

If you have questions or require additional information, please contact Stephen Weil of my staff at (202) 382-4770.

Sincerely,

J. Winston Porter
Assistant Administrator

RCRA/SUPERFUND HOTLINE MONTHLY SUMMARY

JULY 86

5. Land Disposal Prohibition

Will the EPA prohibit the land disposal of all hazardous waste?

Section 3004(d), (e) and (g) of RCRA prohibit the land disposal of untreated hazardous waste beyond specified dates. For the purposes of the land disposal restrictions program, Section 3004(k) specifically defines land disposal to include, but not be limited to any placement of hazardous waste in a landfill, surface impoundment, waste pile, injection well, land treatment facility, salt dome -- salt bed formation, or underground mine or cave.

Paragraphs (d), (e) and (g) do not impose an abosulte ban on the land disposal of hazardous waste. A waste may be excluded from the ban under the following circumstances:

(1) When wastes residues meet treatment standards established by EPA under Section 3004(m). On January 14, 1986, EPA proposed regulations to implement this provision at 40 CFR 268.40 (51 FR 17262).

(2) When EPA grants a site-specific variance that demonstrates that there will be no migration of hazardous constituents from the disposal unit for as long as the waste remains hazardous, under Section 3004(d)(1), (e)(1) or (g)(1). On January 14, 1986, the EPA proposed regulations to implement this provision at 40 CFR 268.5 (51 FR 1762); and

(3) Untreated waste may be treated in a surface impoundment under Section 3005(j)(11) if the impoundment complies with minimum technological requirements and if the treatment residues which are hazardous are removed within a year of entry. The EPA proposed regulations implementing this provision on January 14, 1986 at 40 CFR 268.1(e) (51 FR 1760).

Sections 3004(d)(3) and (e)(3) create an exemption lasting until November 8, 1988 for soil or debris resulting from response actions taken under Sections 104 or 106 of CERCLA or corrective action taken under Subtitle C of RCRA. (see proposed 40 CFR 268.1(f)(2)).

Land disposal prohibitions are effective immediately upon promulgation unless EPA sets another effective date (no more than two years beyond the statutory deadline) based on the earliest date on which alternative protective treatment, recovery, or disposal capacity would be available under Sections 3004(h)(2) and (h)(4); (see proposed 40 CFR 268.4). EPA may grant up to two, one-year, case-by-case extensions under Sections 3004(h)(3) and (h)(4) when an applicant demonstrates that there is a binding contractual commitment to construct or otherwise provide alternative capacity, but due to circumstances beyond the control of the applicant, such alternative capacity cannot reasonably be made available by the effective date. The procedures for these extensions were proposed on January 14, 1986 at 40 CFR 268.4 (51 FR 17611) (see also June 24, 1986, 51 FR 22948).

Treatment standards established under Section 3004(m) can take the form of prescribed methods of treatment, or they can be performance standards based on concentration levels of Appendix VIII constituents in the waste itself or in extracts from the wastes. EPA proposed to use technology-based levels in conjunction with risk-based standards (screening levels) (see 51 FR 1602, January 14, 1986). Screening levels would be based on a comprehensive modeling approach to assess potential adverse effects to human health and the environment through release of contaminants from land disposal units to ground water, surface water, and air. However, after evaluating comments received on the proposed rule, EPA may consider not using a risk-based methodology but rather to implement Section 3004(m) by solely relying on technology-based standards.

Treatment standards may be established by identifying all available and demonstrated technologies for a waste group and evaluating the performance of these technologies in order to identify the best demonstrated available technology (BDAT). According to the January proposal, BDAT are technologies that achieve the lowest concentration of constituents in either the treatment effluent or in the extracts from treatment residual. BDAT will only consider treatment technologies that are found through comparative risk assessments to not pose a greater risk than land disposal. The EPA prefers achieving BDAT by setting performance standards based on a concentration level associated with a technology or a series of technologies because the resulting regulation does not inhibit innovation or least cost compliance efforts.

If EPA fails to promulgate treatment standards for solvents and hazardous dioxin waste addressed in Section 3004(f) by November 8, 1986, the statute would ban the placement of all solvent and hazardous dioxin wastes addressed in Section 3004(f) in a land disposal unit.

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

9551.1986(11)

AUG 11 1986

Mr. Ray D. McIntosh
IBM General Products Division
Department 04C
Tucson, Arizona 85744

Dear Mr. McIntosh:

We received your request on July 11, 1986 for an extension of the effective date of the land disposal restrictions under the Hazardous and Solid Waste Amendments of 1984 (HSWA). While I have not had the chance to review your request yet, I will reiterate what was said both over the phone and in our meeting of June 10th.

The request for an extension should include, at a minimum, the following information:

- a demonstration that alternative capacity is not available - including a description of good faith efforts to locate or supply treatment capacity.
- a demonstration that the lack of capacity is beyond the control of the applicant.
- a demonstration of a binding contractual committment to provide sufficient permanent capacity by the end of the extension period.
- a schedule showing when capacity will be available.
- a demonstration that waste management capacity during the extension will be adequate and that the land disposal facility used during the extension meets the minimum technological requirements of suppart F section 265 and section 265.301 or subpart F of section 264 and section 264.301 as applicable.
- certification that the information provided is accurate.

As discussed, the following information will also be helpful:

- documentation of the site
- documentation of the proposed tank system
- documentation of the current lagoons and their leak detection and monitoring systems.
- a description of the processes and the wastes being granted the exemption.

At the meeting we discussed the possibility of using the statutory exemption of section 3005(j)(11) for treatment surface impoundments in lieu of seeking an extension under §3004(h)(3). You stated that this was possible but not desirable, as you did not want to risk rupturing the liners by dredging. If you do use section 3005(j)(11), even for a short time, you will be required to dredge by the end of one year after first utilizing this exemption in order to be in compliance.

The minimum technology requirements of §3004(o) for surface impoundments appear to have been met at your site based on your verbal description of the site to Kenneth Shuster during the July 10th meeting. We will be examining this as part of the petition request, and will notify you immediately if this is not the case.

From a procedural stand point, we will be notifying you of our initial determination within a few weeks. At the same time, we will be notifying the affected states (Arizona) and publishing a Notice in the FEDERAL REGISTER noting this initial determination, the availability of further information, and requesting public comment on your request. After review of the comments, the Administrator will notify you in writing of the Agency's final determination on your request. You will need to retain a copy of this notice during the period of the extension and for three years after the extension expires.

Finally, we will attempt to get all of this done by November 8,1986.

Sincerely yours,

Stephen R. Weil
Chief
Land Disposal Restrictions Branch

cc: Eileen Claussen, EPA
Kenneth Shuster, EPA
Gregory Bone, IBM

9551.1986(15)

September 15, 1986

MEMORANDUM

SUBJECT: Effect of Land Disposal Restrictions on Permits

FROM: Marcia E. Williams, Director
Office of Solid Waste

TO: Hazardous Waste Division Directors
Regions I-X

On or before November 8, 1986, the Agency will promulgate regulations that will restrict the disposal of certain solvents and dioxins that are hazardous wastes. (Note that in the absence of such regulations a ban on the land disposal of these wastes would automatically take effect on November 8 pursuant to the self-implementing RCRA provision at §3004(e).) The land disposal restrictions will apply to all land disposal facilities regardless of any existing permit conditions.

The HSWA land disposal restrictions supersede the §270.4 provision which currently provides that compliance with a RCRA permit constitutes compliance with Subtitle C. Therefore, the permit does not shield the facility from the new land disposal requirements. The Agency is in the process of amending §270.4 to make it consistent with the self-implementing requirements of RCRA. (See 51 FR 10715, March 28, 1986.) However, these provisions automatically apply to permitted facilities even without the regulatory change. In addition, there is no need to reopen or modify the existing permits to incorporate those provisions. The land disposal restrictions are fully enforceable notwithstanding contrary or absent permit provisions concerning land disposal.

Similarly, for those land disposal permits that are now being processed it is not necessary to provide permit conditions regarding the applicability of the land disposal restrictions since they apply automatically. However, the Fact Sheet should briefly describe the effect of the new requirements for the benefit of the public and the facility owner/operator. The following language is recommended for inclusion in the Fact Sheet:

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"SELF-IMPLEMENTING HSWA PROVISIONS

In several instances HSWA imposes self-implementing requirements that apply to all facilities regardless of their current permit conditions. RCRA provisions that supersede permit conditions include: 1) requirements that go into effect by statute and 2) regulations promulgated under 40 CFR Part 268 restricting the placement of hazardous wastes in or on the land. Pursuant to this RCRA authority, certain dioxins and solvents have been restricted from land disposal unless treated according to specified standards. Although the permit does not contain conditions regarding the management of the restricted dioxin and solvent wastes, the facility is required to comply with the standards in 40 CFR Part 268."

Once the land disposal restriction program is established, it will be preferable to incorporate the applicable standards and practices into the permit. This will clarify specific activities at the facility and will provide a stronger basis for enforcing the land disposal requirements at permitted facilities.

Please feel free to contact Frank McAlister of the Permits Branch (FTS 382-2223) if you have any questions regarding this matter.

cc: Hazardous Waste Branch Chiefs, Regions I-X
Bruce Weddle, OSW
Lloyd Guerci, OWPE
Carrie Wehling, OGC

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RCRA/SUPERFUND HOTLINE MONTHLY SUMMARY

OCTOBER 86

1. Land Disposal Restriction Variances

A manufacturer generates a waste which will be subject to land disposal restrictions and for which no treatment technologies have been developed that are capable of achieving the treatment standards. The only management method available is landfilling. Can the generator obtain a variance from or an extension to the effective date of the land disposal restrictions that will be finalized November 8, 1986?

The generator has three options:

1) He may demonstrate that there will be no migration of hazardous constituents from the disposal unit for as long as the waste remains hazardous, per §3004(e).

2) He may apply for a 1 year extension of the effective date of the prohibition, per §3004(h)(3), if he meets the criteria in §268.4(a). Essentially these criteria require that the generator has entered into a contractual agreement either with someone to build treatment capacity for him or with someone who can eventually provide alternative capacity for the waste, but that the capacity will not be available until some time after the effective date of the ban. The Administrator's decision to grant an extension will be made on a case-by-case basis. An extension may be renewed once for an additional year.

3) He may apply for a treatibility variance, wherein the generator proves that no treatment method for the particular waste will achieve the §3004(m) standards specified in the rule. The generator essentially applies for a different performance standard for the particular waste, although it would still be based on the performance achievable by the application of BDAT to the particular waste. This new option is discussed in the September 5, 1986 Federal Register (51 FR 31787).

Source: Steve Weil (202) 382-4770
Research: Kim B. Gotwals

RCRA/SUPERFUND HOTLINE MONTHLY SUMMARY

DECEMBER 86

9. Variances to Ban

What are the effective dates for solvents and dioxins under the land disposal restrictions?

The land disposal restrictions become effective on November 8, 1986, for all F001-F005 solvent wastes, with the exception of the following wastes which will receive a 2-year variance that extends the effective date for the land disposal restrictions to November 8, 1988:

(1) The generator of the solvent waste is a small quantity generator of 100-1000 kilograms of hazardous waste per month; or

(2) The solvent waste is generated from any response action taken under sections 104 or 106 of CERCLA or any RCRA corrective action, except where the waste is contaminated soil or debris not subject to the provisions of this chapter until November 8, 1988; or

(3) The solvent waste is a solvent-water mixture, a solvent-containing sludge, or a solvent-contaminated soil (non-CERCLA or RCRA correction action) containing less than 1 percent total F001-F005 solvent constituents listed in Table TCWE of §268.41. (51 FR 40579)

Furthermore, until November 8, 1988, contaminated soil or debris resulting from a response action taken under section 104 or 106 of CERCLA or a corrective action required under RCRA may continue to be land disposed (§268.1(c)(3)).

Finally, effective November 8, 1988, the dioxin-containing wastes specificed in 40 CFR 261.31 as EPA Hazardous Waste Nos. F020, F021, F022, F023, F026, F027, and F028, are prohibited from land disposal (§268.31(a)).

DECEMBER 86

LAND DISPOSAL RESTRICTIONS

4. Land Disposal Definition

How is land disposal defined regarding the Section 3004(d) RCRA land disposal restrictions?

Land disposal is defined to include, but not be limited to, any placement of hazardous waste in a landfill, surface impoundment, waste pile, injection well, land treatment facility, salt dome formation, or underground mine or cave [Section 3004(k) RCRA]. EPA also considers placement of hazardous wastes in concrete vaults or bunkers intended for disposal purposes as methods of waste management subject to the land disposal restrictions. However, EPA does not consider open detonation, which would include open burning, as methods constituting land disposal and has concluded that the land disposal restrictions program is not applicable to open detonation and open burning [51 FR 40580].

5. Lab Packs

Are lab packs containing wastes restricted from land disposal included in the land disposal restrictions?

Neither the legislative history nor the statute indicates that lab packs can be excluded from the land disposal restrictions if they contain restricted wastes. If a lab pack contains these restricted wastes, the entire lab pack is subject to the land disposal restrictions [51 FR 40585].

6. Conditionally Exempt SQG Waste

Are conditionally exempt small quantity generator wastes subject to the "Ban"?

In the land disposal restrictions rule [51 FR 40572], the Agency has amended §261.5 to exclude conditionally exempt small quantity generators from the requirements of part 268, so long as the generator has compiled with all applicable provisions of §261.5 [51 FR 40637].

7. Empty Containers

Is an "empty container" which held RCRA hazardous wastes F001-F005 subject to the land disposal restrictions?

No; according to 40 CFR 261.7(a)(1) as amended [51 FR 40637], "Any hazardous waste remaining in either (i) an empty container (ii) an inner liner removed from an empty container, as defined in paragraph (b) of this section, is not subject to regulation under Parts 261 through 265, 268 (added in this rule), and Parts 270 and 124 of this chapter or to the notification requirements of Section 3010 of RCRA. Thus, if the container has been emptied in accordance with the applicable provisions of §261.7(b), it is not subject to land disposal restrictions."

RCRA/SUPERFUND HOTLINE MONTHLY SUMMARY

DECEMBER 86

8. Storage of Restricted Wastes

When is the storage of restricted wastes not prohibited?

In section 3004(j) of RCRA, Congress expressly prohibited the storage of any hazardous waste restricted from land disposal "unless such storage is solely for the purpose of the accumulation of such quantities of hazardous waste as are necessary to facilitate proper recovery, treatment or disposal."

In the final rule (51 FR 40572, §268.5), EPA has incorporated this language directly into provisions for generator accumulation and storage by owners or operators of treatment, storage, or disposal facilities. "The Agency believes that a storage limit of up to one year should generally provide sufficient time for an owner/operator to accumulate sufficient quanitities to facilitate proper recovery, treatment, or disposal of restricted hazardous wastes while meeting the intent of Congress to prohibit long-term storage as a means of avoiding the land disposal restrictions. The burden is on the Agency to demonstrate that storage of restricted waste for periods less than or equal to one year is not in compliance with the storage provisions. The Agency also recognizes that there may be instances where one year does not provide sufficient time to accululate such quantities. Therefore, the Agency will allow an owner/operator to store restricted wastes beyond one year. Although, the owner/operator is not required to submit any data or application to EPA, in the event of an enforcement action, the burden of proving compliance with §268.50(b) is on the owner/operator. The Agency believes that this is reasonable because the record for this rulemaking indicates that less than one year should be sufficient. This provision does not apply to situations where back-ups at treatment or recovery facilities, operational difficulties, and repairs and maintenance result in additional delays" (51 FR 40583).

9551.1987(01)

January 20, 1987

Michael Edwards, Training Officer
GSX Chemical Services, Inc.
Post Office Box 216799
121 Executive Center Drive
Congaree Building, Suite 100
Columbia, SC 29221

Dear Mr. Edwards:

Thank you for your letter of November 25, 1986, requesting confirmation of EPA's interpretation on several issues pertaining to the land disposal restrictions final rule (51 FR 40572, November 7, 1986). With a few exceptions, your interpretations of the regulation are correct. I have addressed each issue raised in your letter and provided the responses below:

1. "Only the RCRA and CERCLA contaminated soils are exempted for disposal at landfills."

   -- Congress provided a statutory exemption from the land disposal restrictions for contaminated soil and debris resulting from a response action taken under Section 104 or 106 of CERCLA or a corrective action under RCRA. The exemption is in effect until November 8, 1988, (48-months after the date of the Hazardous and Solid Waste Amendments enactment). This exemption does not apply solely to landfills; rather, it applies to all units defined as land disposal in 40 CFR 268.2.

   On November 7, 1986, the Agency promulgated a two-year delay of the effective date (ending November 1988) of the land disposal restrictions for solvent wastes from generators of 100-1000 kilograms of hazardous waste per month, CERCLA and RCRA corrective action solvent wastes (except solvent-contaminated soils), and solvent wastes containing less than 1 percent total F001-F005 solvents. In addition, the Agency granted a two-year exemption (ending November 1988) for certain dioxin-containing wastes, including dioxin-contaminated soils.

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2. "Federally ordered cleanups are the only ones that have the extension for soils, State ordered cleanups are not exempt."

   -- This is correct. Only Federally ordered cleanups under CERCLA or RCRA are covered under the statutory exemption.

3. "Waste collected from small quantity generators can be collected at a TSDF and be remanifested by the TSDF and still go to the landfill for disposal under the small quantity generator extension."

   -- The Agency granted a two-year exemption for spent solvent wastes generated by small quantity generators of 100-1000 kilograms of hazardous waste per month. These wastes are exempt from the restrictions until November 1988. Wastes from these generators may go to land disposal even if collected and remanifested by a TSDF. However, each generator of the waste must forward a notice to the land disposal facility stating that his waste is exempt from the restrictions (see 40 CFR 268.7 (a)(3)).

4. "The ash from the incineration of F003 waste does not exhibit the characteristic of ignitability; so the ash is nonhazardous. This waste can be landfilled without meeting the CCWE standards."

   -- This is incorrect. According to the "derived-from" rule in 40 CFR 261.3(c)(2)(i), any waste generated from the treatment, storage, or disposal of hazardous waste is a hazardous waste. Therefore, although incineration of an F003 waste may render the waste nonignitable, the waste remains a hazardous waste and as such the residual is subject to the land disposal restrictions and cannot be landfilled without meeting the treatment standards in Table CCWE.

5. "F003 materials once changed from the ignitable state can be landfilled. (i.e., mixing the waste with an absorbent is an acceptable means of treatment.)"

   -- According to the mixture rule in 40 CFR 261.3(a)(2)(iii) a mixture of a solid waste and a hazardous waste that is listed in Subpart D solely because it exhibits one or more of the characteristics of hazardous waste is excluded from regulation provided that the mixture no longer exhibits any of the

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characteristics of hazardous waste. Thus, mixing of an F003 waste with a solid waste is an acceptable means of treatment.

6&7. "F001-F005 waste may be stored at a TSDF for a period of one year for the sole purpose of accumulation of such quantities of waste to facilitate proper disposal, recovery, or treatment."

"It will be acceptable to use the tank inventory as means of showing disposal of F-listed material in the one year time frame."

-- These two statements reflect a misconception about the storage provision. The statute prohibits storage of restricted wastes unless such storage is solely for the purpose of accumulating sufficient quantities to facilitate proper recovery, treatment, or disposal. Therefore, according to the provisions in 40 CFR 261.50, an owner/operator may store prohibited wastes if such storage is for the purpose defined above. Storage is not limited to 1-year. Rather, the 1-year period serves as a benchmark to determine who bears the responsibility of demonstrating whether or not the waste is being stored to accumulate sufficient quantities to facilitate proper recovery, treatment, or disposal. 40 CFR 268.50 (b) places the burden on the Agency to show that wastes being stored for up to 1-year are not being stored for reasons allowed under the statute. Under 40 CFR 268.50(c) the owner/operator bears the burden of showing that storage beyond 1-year is for the reasons allowed under the statute. It should be noted that the owner/operator is not required to notify the Agency that wastes are being stored for longer than 1-year.

8. "Solvent waste which is a solvent-inorganic sludge mixture or solvent-contaminated soil (non-CERCLA or RCRA corrective action) containing less than one percent total F001-F005 solvent constituents may be landfilled."

-- This statement is correct. These wastes are subject to the two-year extension of the effective date due to the lack of alternative treatment capacity. After November 8, 1988, these wastes are restricted from land disposal.

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9. "F001-F005 contaminated soils may not be removed from the ground and be stock piled."

   -- This is correct. F001-F005 contaminated soils (i.e., non-CERCLA and non-RCRA corrective action) containing greater than 1% total F001-F005 solvents, are subject to the November 8, 1986, effective date. Once removed from the ground, these wastes only may be stored for the purpose of accumulating sufficient quantities to facilitate proper treatment, recovery, or disposal. Such storage must be in tanks or containers. F001-F005 contaminated soils containing less than 1% total F001-F005 solvents are subject to the two-year extension of the effective date may be stored or disposed in or on the land until November 8, 1988.

10. "When working with RCRA and CERCLA cleanups, it is acceptable to assume the best scenario when determining whether the waste is F-listed or not (i.e., do not assume a solvent is spent)."

   -- The Agency recognizes that situations occur in cleanup operations where the origin and type of waste is not known. When such cleanups involve F001-F005 constituents, it is the Agency's policy, when conducting Superfund cleanup operations, to consider such wastes as listed hazardous wastes.

I trust that this letter clarifies the issues raised in your letter. If you have additional questions, please contact me or Jacqueline Sales of my staff at (202) 382-4770.

Sincerely,

Stephen R. Weil, Chief
Land Disposal Restrictions Branch

This document has been retyped from the original.

2. Land Disposal Restriction, Dioxins, and 90-Day Accumulation

The land disposal restriction rule, published in the November 7, 1986 Federal Register (51 FR 40572) allows generators to store their restricted wastes on-site beyond the 90-day limit set forth in 40 CFR 262.34 provided that the waste is being accumulated to "facilitate proper recovery, treatment, or disposal" (40 CFR 268.50(a)(1)). Generators of the restricted wastes are eligible for interim status provided that they are in existence on the effective date of the new regulations (40 CFR 270.70(a)) and the new requirements will subject them to storage periods longer than 90 days. A generator who stores the waste for more than 90 days must submit a Part A application no later than 30 days after the generator becomes subject to the new regulations (40 CFR 270.10(e)). Are generators of the restricted dioxin wastes, which received a two year extension for compliance with land disposal restrictions, eligible for interim status and, therefore, able to store their wastes on-site for more than 90 days between November 8, 1986 and November 8, 1988?

No, the provision in 40 CFR 268.50(a) and under section 3005(e), that makes generators eligible to apply for interim status and subsequently able to store their restricted waste on-site for longer than 90 days applies only to those generators whose waste is currently subject to land disposal restrictions and who are accumulating to recover, treat, or dispose of the waste. The dioxin generator would not yet be eligible for interim status since he was not in existence on the date of regulatory changes which affect his operation (RCRA (§3005(e)(1)(ii)) since the effective date of the land disposal restrictions that applies to the dioxin waste was deferred until November 8, 1988 (40 CFR 268.31). The dioxin generator would have been eligible for interim status for the storage of his dioxin wastes on July 15, 1985, the effective date of the listing of the dioxin-containing wastes. Interim Status would have to have been applied for within 30 days after the generator became subject to the new regulations (40 CFR 270.10(e)(1)).

If a dioxin generator did not apply for interim status pursuant to the July 15, 1985 Dioxin Rule the generator of dioxin wastes would not currently be eligible for interim status. The dioxin generator could however, apply through the state or region for a full permit as a new facility. The generator may also be able to obtain an informal compliance agreement with the state or region. This agreement could only be obtained if the generator has not previously applied for interim status. It could include enforcement orders and may grant the generator some immunities.

The specifics would have to be determined by the Regional Administrator or the state. The dioxin generator should be physically in compliance with applicable regulations under 40 CFR 265. He should also notify the state or region of his activities and submit a Part A Permit Application. Although he could not technically obtain interim status, the proper steps should be taken to show a "good faith effort" on his part. The compliance agreement with EPA, or other authority, could include promises not to enforce against the facility as long as all applicable regulations were complied with.

Source: Tony Baney (202) 382-4460
Jacqueline Moya (202) 382-3122

RCRA/SUPERFUND HOTLINE MONTHLY SUMMARY

FEBRUARY 87

4. Land Disposal Restrictions

The November 7, 1986 Federal Register (51 FR 40572), land disposal restrictions final rule, states that the storage of hazardous waste which is restricted from land disposal is prohibited unless conditions are met under §268.50.

A generator has interim status to store waste on-site. The generator wants to store his waste for up to one year to accumulate the waste as necessary to facilitate proper recovery, treatment and disposal in accordance with §268.50(b) (51 FR 40572). When does the one year begin?

Storage of restricted wastes by permitted or interim status facilities is allowed solely for the purpose of accumulating sufficient quantities to facilitate proper treatment, recovery or disposal. The one-year period acts as a bench-mark to determine which party (EPA or the storage facility) bears the burden of proof to demonstrate that storage is for the allowable reasons. For storage of one year or less, the burden is on EPA to demonstrate non-compliance. For storage more than one-year, the burden is on the facility owner or operator to demonstrate that such storage time is necessary. The owner/operator does not have to notify the agency of storage for more than one year. The burden of proof only applies in the event of an EPA inspection or for enforcement purposes.

For a generator with interim status or a permit to store hazardous wastes, the one year begins on the date the waste is first placed in the tank or container. If the generator accumulated the waste prior to the effective date of the land disposal restrictions final rule (51 FR 40572), the waste is not subject to the rule. Therefore, the generator can store his waste indefinitely since he has interim status to store a hazardous waste.

The November 7, 1986 land disposal restrictions final rule (51 FR 40572) allows generators to gain interim status if compliance with the land disposal restrictions requires storage for more than 90 days.

Source: Mitch Kidwell (202) 382-4805
Research: Carla Rellergert (202) 382-3112

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

9551.1987(06)

MAR 10 1987

Lauren R. Brown, Ph.D.
President
J&L Scientific, Inc.
325 Capitolio Way
San Luis Obispo, California 93401

Dear Dr. Brown:

This letter responds to your inquiry of December 9, 1986, to Robert Scarberry requesting that the Agency grant either an exemption from the land disposal restrictions or an extension of the effective date of the restrictions for solvent-containing waste generated at your facility and solidified with vermiculite. I apologize for the delay in responding to your inquiry. After the new regulations were published the Agency received numerous requests for guidance on implementing the restrictions.

The Hazardous and Solid Waste Amendments of 1984 do not provide the Agency with the flexibility to grant an extension of the effective date of the land disposal restrictions to generators that need time to find treatment capacity for restricted wastes. However, if adequate treatment capacity does not exist a generator may apply for a case-by-case extension of the effective date if he has entered into a binding contractual commitment to construct or otherwise provide adequate capacity. Likewise, the statute does not provide a mechanism for granting an exemption from the restrictions in cases where the generator finds the cost of treatment to be prohibitive.

I suggest that you evaluate available treatment alternatives, and then choose the most suitable method for treating your waste. For example, biological treatment is an efficient method for treating many solvent-containing wastes. You should contact either your State or EPA Regional Office for assistance. James Berlow, of the EPA Waste Treatment Branch, can provide information on alternative treatment methods. He can be reached at (202) 382-7917.

If you have additional questions, you may call me at (202) 382-4770.

Sincerely,

Jacqueline W. Sales, Chief
Regulation Development Section

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY 9551.1987(07)

MAR 10 1987

Mr. Bert Drews
National Institute of Health
National Institute of Environmental
Health Services
Post Office Box 12233
Research Triangle Park, North Carolina 27709

Dear Mr. Drews:

This is in response to your January 30, 1987, letter where you request clarification of GSX's legal authority to require generators to clarify that wastes shipped to its Pinewood facility do not contain restricted wastes.

According to the land disposal restrictions final rule, published November 7, 1986 (51 FR 40572), generators are required to determine if their wastes are restricted from land disposal. As you correctly state in your letter, generators must send a notice with each shipment of restricted wastes. The notice must include the EPA hazardous waste number, the corresponding treatment standard, the manifest number associated with the shipment of the waste, and the waste analysis data, where available. When it is determined that the restricted waste can be land disposed without further treatment, generators must send a certification, (signed by an authorized representative) to the land disposal facility according to the provisions in §268.7(a)(2)(ii). As you point out, the land disposal restrictions do not require generators to certify to either treatment or disposal facilities that their wastes do not contain restricted hazardous wastes. However, it must be noted that disposal facilities have the ultimate responsiblity to verify that only restricted wastes which meet the applicable treatment standards are land disposed. There is nothing in the land disposal restrictions which prohibits a treator or disposer such as GSX from imposing more stringent requirements.

I hope this letter adequately addresses your concerns. If you have questions, you may contact me or Jacqueline Sales of my staff (202) 382-4770.

Sincerely,

CURRENCES

Stephen R. Weil, Chief
Land Disposal Restrictions Branch

RCRA/SUPERFUND HOTLINE MONTHLY SUMMARY

MARCH 87

1. Land Disposal Restrictions-California Waste

A generator produces two separate liquid hazardous waste streams; one waste stream contains 8,000 ppm halogenated organic compounds, and the other waste stream contains 25,000 ppm halogenated organic compounds. After the effective date of the Land disposal restrictions, (July 1, 1987), may these waste streams be land disposed?

According to the Agency's proposed rule, the waste stream containing 8,000 ppm halogenated organic compounds will be prohibited from land disposal effective July 8, 1987. The waste stream containing 25,000 ppm halogenated organic compounds will be prohibited from land disposal effective July 8, 1989.

Section 3004(d) of the Hazardous and Solid Waste Amendments (HSWA) requires the EPA Administrator to determine whether to prohibit hazardous waste containing greater than 1000 mg/kg (1000 ppm) halogenated organic compounds from land disposal by July 8, 1987.

HWSA section 3004(h)(2) allows the EPA Administrator to grant a variance from the prohibition for up to two years if adequate treatment capacity does not exist for the waste.

The proposed rule published in the December 11, 1986 Federal Register states that the best demonstrated available technology (BDAT) for solids containing greater than 1000 mg/kg (1000 ppm) halogenated organic compounds is incineration; however, the incinerator capacity is insufficient. Therefore, a two-year nation-wide variance from the prohibition is granted (51 FR 44725).

Liquid hazardous waste containing greater than 1% (10,000 ppm) halogenated organic compounds has a BDAT of incineration and is also granted a two year nationwide variance due to a lack of treatment capacity (51 FR 44725).

EPA has not determined a BDAT for HOC liquids containing between 1000 mg/kg (1000 ppm) and 1% (10,000 ppm) halogenated organic compounds. The statute requires that a lack of capacity be demonstrated in order to grant a variance. The Agency indicated that lack of capacity cannot be demonstrated if no BDAT is specified. As a result, the Agency proposed that the effective date of the ban for liquid hazardous wastes containing between 1000 mg/kg (1000 ppm) and 1% (10,000 ppm) halogenated organic compounds is July 8, 1987, since no variance can be granted.

Source: Steve Weil 382-4770
Research: Randy Eicher

UNITED STATES ENVIRONMENTAL PROTECTION

9551.1987(10)

JUN 12 1987

Suellen Pirages, Director
Institute of Chemical Waste Management
1730 Rhode Island Ave, NW
Suite 1000
Washington, D.C. 20036

Dear Suellen:

Your recent letter of May 21, 1987 concerning waste analysis requirements raised a question about the level of detail required in analyses of incoming waste shipments. This is an old problem which has surfaced again because of the original language in §268.7(c) of the land disposal restrictions rule published on November 7, 1986. I believe that your specific concerns over the testing required under the land disposal restrictions rule will be addressed by corrections in the regulations soon to be published in the Federal Register.

The correction notice for the land disposal restrictions rule modifies the language in the rule dealing with waste analysis requirements for disposal facilities receiving wastes subject to restrictions under §268. The original rule (§268.7(c)) required the owner/operator to "obtain waste analysis data through testing of the waste to determine that the wastes are in compliance with the applicable treatment standards in §268.41." As the preamble to the correction notice explains, the original rule incorrectly implied that land disposal facilities have an obligation to test each incoming shipment, even if the generator or treatment facility has provided the disposal facility with data indicating that the incoming wastes meet the treatment standards.

The corrected rule requires that testing to assure wastes are in compliance with treatment standards must be performed "according to the frequency specified in the facility's waste analysis plan as required by §264.13 or §265.13." Therefore, testing of each shipment is not necessarily required. Enclosed you will find a copy of the correction notice as it will appear in the Federal Register.

Prior to entering into an agreement to accept hazardous wastes from a generator or treatment facility, the owner/operator of an off-site disposal facility must obtain a detailed listing of waste constituents. While the frequency of comprehensive

testing will depend upon the variability of the waste stream, the Agency recommends that a detailed analysis for the waste constituents regulated under the land disposal restrictions rule be completed at least annually by the generator or treater (see 51 FR 40596, November 7, 1986). If the owner/operator of the disposal facility does not receive such information in writing, he must perform the analysis to determine whether the wastes meet the treatment standards according to the waste analysis plan.

The Agency has issued guidance that discusses the general waste analysis requirements of §264.13 (see Waste Analysis Plan Guidance Manual, September, 1984; available from GPO #055-000-00244-4). As §264.13(a)(3) states, the preacceptance analysis must be repeated if the generating process changes, or if inspection of incoming shipments reveals a discrepancy with the manifest. Off-site disposal facilities are also required under §264.13(a)(4) to inspect and, if necessary, analyze each shipment of hazardous waste to ensure that the waste matches the specifications in the manifest. When necessary, shipments are sampled and analyzed for a few key parameters, i.e., a "fingerprint" analysis.

While screening of each incoming shipment will usually be limited to relatively simple and rapid tests, such as visual inspection, tests for pH, density, weight, etc., the disposal facility has a responsibility to identify any restricted wastes that exceed treatment standards. Some flexibility is allowed under §264.13(c) as to the extent of analysis necessary for each shipment. The need for sampling and analysis depends on a variety of site-specific factors which the permit writer should consider. Such factors include: the variability of the waste; the prior history of the waste generator's performance and reliability; the impact of improperly treated waste on the waste management process; and frequency and extent of testing performed by the generator or treater. The permit writer may require further analysis by the owner/operator, for example, if shipments of a highly variable wastestream (e.g., from occasional batch processes) are sent without sufficient analysis by the generator/treater to determine if waste constituents exceed the treatment standards.

One strategy used by some disposal facilities to verify data supplied by generators is a random sampling program for incoming waste shipments. In this program, the disposal facility takes a representative sample from a small percentage of incoming waste shipments and performs a comprehensive chemical analysis. Such a program may encourage generators and treaters to properly test and treat restricted wastes.

I believe that the corrections to the land restrictions rule and the flexibility inherent in the general waste analysis regulations in §264.13 adequately address the concerns you raised in your recent letter. I have forwarded copies of this memo and your incoming letter to the Hazardous Waste Division Directors in the Regions. Please let me know if I can be of any further help in this matter.

Sincerely,

/S/

Marcia Williams, Director
Office of Solid Waste

Enclosure

cc: Regional Division Directors

bcc. Bruce Weddle
Suzanne Rudzinski
Bob Kayser
Sylvia Lowrance
Jacqueline Sales

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY 9551.1987(12)

JUN 26 1987

Mr. Robert H. Campbell
Sun Refining and Marketing
Company
Ten Penn Center
1801 Market Street
Philadelphia, Pennsylvania 19103-1699

Dear Mr. Campbell:

Thank you for your June 8, 1987, expressing your concern regarding the Environmental Protection Agency's (EPA) regulatory approach to land treatment, and in particular, the classification of land treatment as land disposal.

Under the Resoruce Conservation and Recovery Act (RCRA), as amended by the Hazardous and Solid Waste Amendments (HSWA) of 1984, land disposal is defined as including, among other things, land treatment. Given the explicit statutory language found in HSWA, the intent of Congress to include land treatment as land disposal is clear. If a variance has not been granted extending the effective date for the waste due to insufficient treatment capacity, restricted waste may not be land treated (i.e., land disposed) unless it meets the applicable treatment standard in 40 CFR 268 Subpart D, or has been granted a "no migration" exemption under § 268.6.

The "no migration" exemption is based on a petition demonstrating, to a reasonable degree of certainty, that there will be no migration of hazardous constituents from the disposal unit of injection zone for as long as the waste remains hazardous. The Agency is currently developing guidance on the § 268.6 "no migration" petition. Until EPA develops this guidance, the Agency will evaluate such petitions on a case-by-case basis.

Thank you for your interest in this matter, and for expressing your concerns.

Sincerely,

for J. Winston Porter
Assistant Administrator

WH-562/PERLA/T.MCMANUS - 475-8613/sld/6-19-87/Control No: AX701033/Due Date: 6-26-87/CONTROLLED CORRESPONDENCE #13

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

9551.1987(13)

JUN 2 5 1987

Mr. Donald E. Stone
Safety, Health and
Environmental Manager
GSX Services of South Carolina, Inc.
Route 1, Box 255
Pinewood, South Carolina 29125

Dear Mr. Stone:

This is written in response to your letter of April 24, 1987, requesting confirmation of an earlier phone conversation with a member of my staff concerning the regulatory status of a sludge containing 1,1,1-Trichloroethane (TCE).

As described in your letter and phone conversation, a generator operates a surface impoundment for separating metals from an electroplating waste stream prior to discharging the water to a POTW. The sludge is removed from the impoundment, dewatered, and then shipped to your facility for disposal. Chemical analysis of the Toxicity Characteristic Leaching Procedure (TCLP) extract from the sludge showed the presence of TCE in concentrations above the applicable treatment standard, but less than one percent. However, the generator has not used TCE for two years and you assume that the TCE is a spent solvent residual from wastes placed in the impoundment at least two years prior to the effective date. The question is whether the TCE must meet the treatment standard or whether the extension to the effective date for wastes containing <1% total F001-F005 solvent constituents would apply.

The Agency stated in the November 7,1986, final rule (51 FR 40572) and in the June 11, 1987, Notice of Availability of Data (52 FR 22956), that wastes placed in storage or land disposed prior to the effective date become subject to the land disposal restrictions when removed from storage or taken out of the land. It is at this point (i.e., prior to treatment) that a determination is made as to whether the waste is subject to a variance or must be treated to meet the applicable treatment standard. Therefore, if the total concentration of F001-F005 solvent constituents is less than 1% as the sludge is removed from the impoundment, the waste is subject to the variance.

I trust that this letter adequately addresses your concerns. If you have any further questions please call Mitch Kidwell, of my staff, at (202) 382-4805.

Sincerely,

Stephen R. Weil, Chief
Land Disposal Restrictions Branch

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

9551.1987(14)

JUL 16 1987

Mr. D. L. Brucker, Plant Manager
Taft Plant
Union Carbide Corporation
Post Office Box 50
Hahnville, Louisiana 70057

Dear Mr. Brucker:

We have completed a preliminary review of your application for an extension of the effective date of the California list land disposal restrictions for corrosive wastewaters generated at your facility. However, more information is needed before a determination can be made to grant or deny your petition. This information is necessary to demonstrate that the procedures for a case-by-case extension to an effective date have been met, as specified in § 268.5 of the November 7, 1986 final rule.

The applicant is required under § 268.5(a)(1) to make a good-faith effort to locate and contract with treatment, recovery, or disposal facilities to manage his waste. Your petition indicates that you are aware of alternative capacity for your waste. More specific information is needed, however, to properly evaluate this showing. Please submit the names and addresses of all off-site facilities that have been contacted in an effort to provide alternative capacity for your wastewater.

Paragraph (a)(2) requires a showing that the applicant has entered into a binding contractual commitment to construct or otherwise provide alternative treatment or disposal capacity that meets the treatment standards specified in Subpart D. In your application you include copies of contracts with Jacobs Engineering and Daniel Construction Company; however, the contract with Daniel Construction Company does not include a signature page. We are requesting this information so that we can further process your application.

Paragraph (a)(3) specifies that due to circumstances beyond the applicant's control, alternative capacity cannot reasonably be made available by the effective date. Although your application

emphasizes that due to technical and practical difficulties alternative capacity will not be available for your waste by the July 8, 1987, effective date, it is unclear why the project to provide alternative capacity or to provide a means of transporting these wastes off-site for treatment was not initiated at an earlier date (the regulated community has been on notice since December 11, 1986). We are requesting that you provide an explanation or data indicating why such measures were not initiated in a more timely fashion.

Your application indicates that there are interim measures that could be implemented in the event that EPA fails to respond to your request for a case-by-case extension in a timely fashion. It is necessary for EPA to evaluate these interim measures to determine that a case-by-case extension and continued use of the existing Regenerant Neutralization Basin (RNB) is a viable option in light of existing alternatives. Please submit a technical description of the interim measures and, if necessary, a complete explanation of why these interim measures are not reasonably available as a source of alternative capacity.

Paragraph (a)(7) specifies that any waste managed in a surface impoundment or landfill during the extension period may be disposed of at a facility only if each new landfill or surface impoundment unit, each replacement of an existing landfill or surface impoundment unit, and each lateral expansion of an existing landfill or surface impoundment unit at the facility is in compliance with the minimum technological requirements of Part 265, Subpart F and § 265.301(a), (c), and (d) for interim status facilities. This requirement applies not only to the RNB, but also to any such units at your facility. Your application states that "[t]here will be no new surface impoundment installed, no replacement in kind of the existing unit, nor will there be any lateral expansion of the existing unit during the extension." To determine if the facility itself is presently in compliance with the minimum technological requirements for interim status facilities, we are requesting that you submit data indicating the current status of all other units at the facility with respect to this requirement.

We are making every effort to respond to your request for an extension of the effective date as quickly as possible. The case-by-case extension of the effective date is a rulemaking procedure; although this process takes time, we will continue to work with you to arrive at a suitable solution to your problem. However, to expedite this effort, please submit your response to the following address:

Rhonda Craig
U.S. Environmental Protection Agency
Mail Code: WH-562B
401 M Street, SW
Washington, D.C. 20460

Should you have any questions regarding this request, please call Rhonda Craig at (202) 382-4800.

Sincerely,

Marcia Williams
Director
Office of Solid Waste

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

9551.1987(16)

SEP 4 1987

Ms. Patricia M. Trainer
AQUA-TECH, INCORPORATED
140 South Park Street
Port Washington, Wisconsin 53074

Dear Ms. Trainer:

In your letter of August 12, 1987, you requested Agency guidance in clarifying the interpretation of "restricted waste" as defined under 40 CFR Part 268, entitled Land Disposal Restrictions.

A restricted waste is a waste which is prohibited from land disposal by regulation, even if such prohibitions are accompanied by a delayed effective date, or which, absent any regulatory action by the Agency, would be prohibited from land disposal by the statute.

The example given in your letter is a California list liquid waste containing 100 mg/l arsenic. Under Section 268.7, waste analysis and recordkeeping is the responsibility of the "initial generator" to test the waste utilizing the Paint Filter Liquid Test (PFLT) or use knowledge of the waste to determine if the waste is restricted from land disposal.

In your example, it is not specified whether the waste containing 100 mg/l arsenic has been treated to reach that level. If so, certification under Section 268.7(a)(2) is required.

If the waste in your example contains 100 mg/l arsenic upon generation, prior to any treatment, Section 268.7(a)(2) does not apply. As a practical matter, the generator in your example may have to prepare a certification, even though it is not legally required, in order to satisfy the land disposal facility accepting the waste.

You should also be aware that the Agency solicited comments on the possibility of lowering levels of toxic metals in liquid wastes. Were we to take this action, your waste would then be restricted and subject to all of the requirements of Section 268.7.

RCRA/SUPERFUND HOTLINE MONTHLY SUMMARY

SEPTEMBER 87

8. Land Disposal Restrictions - Corrosive Waste

A manufacturer generates an acidic aqueous hazardous waste stream (D002, per 40 CFR 26.122(a)) with a pH of 1.8 in his production process. The waste is piped from the production area to an acid neutralization tank, where the pH is raised to an average of 3.0. After treatment, the waste stream is shipped off-site to a commercial wastewater treatment plant where it is neutralized further and then discharged under a NPDES permit. Must the manufacturer comply with the requirement of 40 CFR 268.7(a)(2) to certify that the restricted waste may be land disposed without further treatment when he ships the waste off-site?

No. If the waste stream was hazardous solely for the characteristic of corrosivity (40 CFR 261.22(a)) and after treatment it does not exhibit any characteristic of a hazardous waste, as described in Subpart C of Part 261, the waste is no longer a hazardous waste (40 CFR 261.3(d)(1)).

According to the applicability provisions set forth in 40 CFR 268.1(a), "This part identifies hazardous wastes that are restricted from land disposal and defines those limited circumstances under which an otherwise prohibited waste may continue to be land disposed." Consequently, if the waste cannot be identified as a hazardous waste under RCRA, then the regulations of Part 268 do not apply, including the certification requirement of 40 CFR 268.7(a)(2).

Source: Mitch Kidwell (202) 382-4805
Research: Kris Andersen

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

9551.1987(20)

OCT 28 1987

Mr. James T. Bell
Manager Environmental Control
Advanced Environmental Technology Corporation
Gold Mine Road
Flander, New Jersey 07836

Dear Mr. Bell:

In your letter of October 14, 1987, you requested confirmation in writing of the application of the land disposal restrictions notification requirements to Advanced Environmental Technology Corporation (AETC) as a interim status treatment, storage, and disposal (TSD) facility. It is our understanding that your facility stores waste generated at off-site sources and packages that waste for treatment or disposal elsewhere.

The generator is required to determine that he is managing a restricted waste at the point of generation through analysis or knowledge of the waste. The Environmental Protection Agency (EPA) has imposed certain waste analysis, notice, and recordkeeping requirements on generators, treatment facilities and disposal facilities. In the preamble to the final rule (51 FR 40597), the Agency stated that testing and recordkeeping is essential to implementation of the land disposal restrictions.

Although storage facilities were not directly referenced in 40 CFR 268.7 or the preamble, the intent reflects that these requirements are applicable. In other words, a notification is required when restricted waste is shipped to an off-site storage facility.

I hope this information adequately addresses your concerns. If you have additional questions, you may contact me at (202) 382-4770.

Sincerely,

Jim Thompson
Environmental Specialist

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

9551.1987(21)

OCT 28 1987

Mr. Steven H. White
Regulatory Affairs Manager
Tricil Environmental Services Inc.
Talbott Tower, Suite 510
131 North Ludlow
Dayton, Ohio 45402

Dear Mr. White:

This letter repsonds to your request for information regarding compliance with the California list final rule (52 FR 25760, July 8, 1987). I apologize for the delay in responding to your correspondence.

Each of the issues raised in your letter is restated below and followed by the appropriate response.

1. Tricil is a treatment facility and not a disposal facility. Must generators of restricted waste notify Tricil that their wastes are restricted?

   Yes, section 268.7(a)(1) requires generators managing restricted waste to notify the treatment facility that the waste does not comply with treatment standards specified in 40 CFR 268, Subpart D and all applicable prohibitions set forth in 40 CFR 268.32 or RCRA Section 3004(d).

2. When notified that a waste is restricted, must the generator identify the appropriate treatment method or standard?

   Yes, the generator must identify equivalent treatment standards and all applicable prohibitions set forth in section 268.32 or RCRA section 3004(d).

3. Can notification information be placed on the Uniform Hazardous Waste Manifest under the section entitled Special Handling Instructions?

Yes, the federal regulations do not prohibit it, but review your state regulations as they may.

I hope this information adequately addresses your concerns. Please feel free to contact Jim Thompson at (202) 382-7438 if you have any additional questions.

Sincerely,

James A. Thompson
Environmental Specialist

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

9551.1987(23)

NOV 13 1987

OFFICE OF
SOLID WASTE AND EMERGENCY RESPONSE

Mr. Richard C. Fortuna
Executive Director
Hazardous Waste Treatment Council
1440 New York Avenue, N.W.
Suite 310
Washington, DC 20005

Dear Mr. Fortuna:

Thank you for your letter of October 21, 1987 regarding the applicability of the California list land disposal prohibitions to the practice of adding certain materials to restricted liquid hazardous wastes solely for the purpose of rendering the wastes nonliquid. Specifically, you requested guidance on whether the mixing of fly ash or cement kiln dust to California list metal-bearing or cyanide-containing wastes constitutes dilution or an allowable method of treatment. In addition, you inquired about the schedule for promulgating requirements relating to containerized wastes, including the regulatory status for incorporating the use of the Liquids Release Test.

In order for a metal-bearing or cyanide-containing hazardous waste to be subject to the Resource Conservation and Recovery Act (RCRA) Section 3004(d) provisions, the waste must exist in liquid form. As indicated in the July 8, 1987 final rule, the Environmental Protection Agency (EPA) believes that Congress' primary intent behind the California list prohibitions was to eliminate the land disposal of highly toxic liquid hazardous wastes as a starting point (emphasis added). As you are aware, California list metal and cyanide wastes are currently subject to the statutory prohibition levels and thus are restricted from land disposal unless treated to concentrations below the prohibition levels or rendered nonliquid.

Under the land disposal restrictions program, the regulated community is prohibited from diluting restricted wastes (a) as a substitute for adequate treatment standards, (b) to avoid a prohibition level for the California list wastes, and (c) to circumvent the effective date of a prohibition on land disposal. The Agency has noted that in many cases solidification techniques may be considered treatment rather than dilution. As you cited in your correspondence, solidification techniques that produce physical or chemical changes, or otherwise immobilize the hazardous constituents, would be

considered appropriate treatment. In other words, the addition of reagents (i.e., substances that take part in reactions or processes) must aid in treatment of the hazardous waste in order to be considered legitimate treatment. See generally 52 FR at 25778 (July 8, 1987).

With these considerations, the addition of fly ash or cement kiln dust to metal-bearing or cyanide-containing wastes must contribute to immobilization of the hazardous constituents contained in the liquid hazardous waste (through chemical fixation or some other reaction or process). If this solidification technique results only in the absorption or mixing of the hazardous constituents with these materials, the practice would constitute impermissible dilution. Where the addition of fly ash or cement kiln dust generates a nonliquid waste [illegible] appropriately immobilizes the hazardous constituents, the waste [illegible] be rendered nonliquid legitimately and no longer be prohibited from land disposal (even if the constituent concentration exceeds the prohibition levels). As stated in the July 8, 1987 final rule, however, should treatment standards be established for California list metal and cyanide wastes, these wastes will have to meet the treatment levels or be treated by the specified technology designated as the treatment standard.

You also inquired about the time frame for promulgating restrictions on the disposal of containers holding liquid hazardous wastes and free liquids. At present, the Agency is intending to publish the final containerized liquids rule in June 1988. An initial evaluation of the public comments on the December 24, 1986 proposed rule and the June 24, 1987, notice of supplemental information has been conducted. The Agency is currently in the workgroup phase of developing a final rulemaking. The Agency intends to include the Liquids Release Test to determine whether a containerized liquid treated with absorbents would release liquids under pressure experienced in landfills.

If I can be of any further assistance, please let me know.

Sincerely,

J. Winston Porter
Assistant Administrator

RCRA/SUPERFUND HOTLINE SUMMARY

NOVEMBER 87

Land Disposal Restrictions

An F001 F002 waste subject to the November 7, 1986 FR land disposal restrictions meets the criteria for the 1% National Variance specified in Section 268.30. In the July 8, 1987 FR, treatment standards were set for most HOCs. F001 and F002 wastes are also HOCs. Would the F001 F002 wastestream be subject to the newly-promulgated HOC treatment standards even though it has been granted a two-year variance for F001-F005 solvent wastes?

The solvent would only be subject to the treatment standards and effective date in the November 7, 1986 rule. In 52 FR 25762, it says that "where treatment standards and prohibition effective dates are promulgated for California list waste constituents that are also covered under the November 7, 1986 rule, the treatment standards and effective dates from the prior rule apply." The general rule is that where a constituent is subject to more than one treatment standard, the treatment standard (and effective date) for the more specific constituent applies. Example: the F001-F005 treatment standard effective date presides because, as a subset of the HOCs, it is more specific.

Also, for a waste where two or more treatment standards apply because of different constituents (e.g., F001 and lead), both would apply with respective effective dates. In the case above mixed with lead, the F001 F002 treatment standard and effective date would apply for the solvent constituents (rather that the HOC standard) and would get a variance until 11/8/88. However, the lead would be subject to the requirements effective 7/8/87.

Source: Mitch Kidwell (202) 382-4805
Research: Mark Janaskie

This document has been retyped from the original.

9551.1988(01)

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

APR - 5 1988

OFFICE OF
SOLID WASTE AND EMERGENCY RESPONSE

MEMORANDUM

SUBJECT: Facility Testing Requirements and Solidification Issues Under the Land Disposal Restrictions Rules

FROM: Sylvia K. Lowrance, Director
Office of Solid Waste

TO: Robert L. Duprey, Director
Hazardous Waste Management Division, 8 HWM
Region VIII

This memo is in response to your memorandum of February 4, 1988 to Marcia Williams requesting clarification of two key provisions of the Land Disposal Restrictions Rules. The issues are related to the testing requirements under 40 CFR 268.7 and the use of solidification/stabilization prior to landfilling.

Issue 1 What are the exact testing requirements (appropriate sampling conditions, analytical methods, frequency and data comparisons) under 40 CFR 268.7(c) for off-site commercial disposal facilities receiving land disposal restricted wastes.

As you note, section 268.7 itself does not specify the frequency of testing required for disposal facilities receiving wastes from off-site (nor does it specify the frequency of testing required for treatment facilities or on-site disposal facilities). In particular, the requirements in section 268.7 only specify the frequency of testing required by generators, treatment facilities or land disposal facilities by reference to the facility waste analysis plan. Specifically, section 268.7(c) requires that the owner or operator of the treatment or land disposal facility must test the waste according to the frequency specified in their waste analysis plan. Those plans may allow the data to be supplied by the generator or treatment facility, such determinations being the subject of negotiations between the permit writer and the owner/operator during the development of the permit.

I would note that the December 1, 1987 Codification rule (52 FR 45788) does allow the permits to be reopened to incorporate HSWA provisions, and this could be used to reopen and modify the Waste Analysis Plans to require testing at a specified frequency.

We are aware of the potential cost of testing for not only the disposal facility, but also for the treatment facility and the generator. We are also aware of the need for adequate data for compliance monitoring and enforcement purposes. Unfortunately, these factors work in opposite directions, one indicating the need for more testing and the other the need to minimize the testing burden. At the time the rules were written, we felt that the individual permit writer would be in the best situation to determine on a case by case basis the appropriate frequency of testing that would best balance those opposing factors while remaining in compliance with the general parameters outlined under section 264.13 and secton 265.13. This point is also addressed at 52 FR 21012, Col 2 (June 4, 1987).

Issue 2 Which wastes restricted under 40 CFR Part 268 Subpart C may be treated at an off-site commercial facility utilizing stabilization/solidification prior to landfilling.

The Agency has not specified methods of treatment for restricted wastes with the exception of PCB and most HOC wastes under the California List (which must be incinerated). For spent solvent and dioxin containing wastes covered by the November 7, 1986 rule (51 FR 40572), the Agency has specified performance standards based on a concentration of a hazardous constituent in an extract generated using the Toxicity Characteristic Leaching Procedure (Appendix I to 40 CFR Part 268). While the treatment standards were based on incineration of the wastes, the rules do not prohibit stabilization/solidification in order to meet the treatment standard. On the other hand, we do not encourage the solidification of wastes containing high levels of organic constituents.

California List wastes may not be placed in land disposal facilities as liquids with concentrations exceeding the statutory levels. With the exception of PCBs and HOCs, stabilization/solidification may be used to treat the wastes, converting them to a non-liquid form, after which they may be placed in land disposal units. However, I would call your attention to the preamble language in the final California List rule (July 8, 1987, 51 FR 25760) on page 25778 dealing with dilution, where we note that:

> "Where such physical or chemical changes do not occur, or where hazardous constituents (e.g., metals) are not otherwise immobilized, "solidification" techniques may possibly be considered dilution as a substitute for adequate treatment within the meaning of the section 268.3 prohibition."

While this language is not definitive, it does indicate that solidification by simple absorption is not what was intended.

Further, the preamble goes on to note that even where solidification techniques are not considered dilution, the liquids in landfills prohibitions remain applicable, and that these provisions prohibit certain types of absorbency. The specific document referred to is the "Statutory Interpretative Guidance on the Placement of Bulk Liquid Hazardous Wastes in Landfills," OSWER Policy Directive #9487.00-2A, June 11, 1986.

Your memorandum raises several other issues with respect to the use of solidification that we have tried to address below.

On page 9 of the attachment to your letter, you state "Apparently, solidification may be an appropriate treatment methodology for F001-F005 solvent/solid/sludge mixtures and dilute wastewater HOCs (and F020-F028 dioxin wastes?)." We do not specify the methods that are used to meet the treatment standards. The Part 268 regulations do not prohibit solidification for either solvents or dioxins. As noted above, we are not advocating the solidification of wastes containing high concentrations of organic constituents. With respect to the dioxin containing wastes, sections 264.317, 264.343 and 265.352 all deal with special requirements for handling the F020-F023 and F026-F028 dioxin containing wastes, and to our knowledge, there are no commercial facilities treating or disposing of these wastes in the United States.

Dilute HOC wastewaters, on the other hand, may not be solidified to take advantage of the two year extension of the effective date. If at the point of initial generation (i.e. when the waste first meets the Part 261 listing description or first exhibits a Part 261 characteristic of a hazardous waste), the wastewaters are greater than 1,000 mg/kg HOCs, solidification cannot be used to make the waste a non-liquid subject to the two year extension of the effective date. In such a case, the July 8, 1987 effective date attaches at the point of initial generation, and solidification can only be used if it is "treatment" and such treatment succeeds in lowering the concentration below the 1,000 mg/kg statutory prohibition level (which is applicable in the case of HOCs to both liquid and non-liquid hazardous wastes.

Section 268.41 does not require the use of the TCLP and GC/MS. In some cases, a total waste analysis could be used for the F001-F005 solvent to show compliance with the requirements of section 268.41. If the results of the total waste analysis are less than 20 times the applicable Table CCWE concentration, then the concentration in the waste extract cannot be greater than the Table CCWE concentration. We agree that the requirement in the TCLP that the waste be ground or crushed does limit the usefulness of stabilization for organics since no physical

or chemical reaction is likely to be occurring. This is not, in our view, an unfortunate result.

If the treatment standards or statutory levels are set as total waste concentrations, then the total waste must be analyzed, and not just an extract developed using the TCLP.

Finally, we are not aware of any easy surrogate tests that provide any realistic information about Table CCWE or California List HOC constituents. TOC and TOX tests do provide an upper limit in that if the TOC or TOX concentrations are below the relevant standard, then the waste must pass that standard, since the standards are based on a subset of the constituents measured by the TOC or TOX test. However, we realize that if the results of the tests are greater than the regulatory levels (e.g. 1,000 mg/kg HOCs), we still know nothing about the actual levels of the constituents of concern, which may in fact be below the concentration of concern.

If you have further questions, please contact Stephen Weil, Chief of the Land Disposal Restrictions Branch, on FTS 382-4770.

cc. Regional Waste Management Division Directors
Steven Silverman, OGC
Bruce Potoka, OWPE
Gary Jonesi, OECM

RCRA/SUPERFUND HOTLINE MONTHLY SUMMARY

APRIL 88

6. Dilution of Land Disposal Restricted Waste

A generator of a spent solvent, which contained one hundred percent (100%) acetone before use, identified the waste as F003. She/he regenerates the spent solvent by distillation, and then treats the stillbottoms in an accumulation tank by mixing them with nonhazardous solid waste. The resulting mixture no longer exhibits the characteristic of ignitability. According to 40 CFR Section 261.3(a)(2)(iii), the material is no longer a hazardous waste. However, the enforcement agency considers the mixing with nonhazardous waste to be dilution, which is prohibited by Section 268.3. Would the dilution prohibition prevent the generator from being able to mix the F003 waste with nonhazardous solid waste?

The preamble to the November 7, 1986 Federal Register (51 FR 40592) specifies that the prohibition on dilution of wastes restricted from land disposal, found at Section 268.3, "does not affect provisions in other EPA regulations which may allow dilution for other purposes." Thus, if the generator's purpose in mixing the stillbottoms with nonhazardous waste is to render the mixture nonhazardous she/he is not precluded from doing so by Section 268.3. However, if the generator's purpose in mixing the waste is to dilute the F003 waste as a substitute for adequate treatment to achieve compliance with Part 268, Subpart D, the action is prohibited.

Source:	Mike Petruska	(202) 475-9888
	Mitch Kidwell	(202) 382-4805
Research:	Becky Cuthbertson	
	Deborah McKie	

9551.1988(03)

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

MAY 13 1988

OFFICE OF
SOLID WASTE AND EMERGENCY RESPONSE

Dr. Paul Palmer, Ph.D.
Onscreen Directories Inc.
7345 Healdsburg Avenue
Suite 524
Sebastopol, California 95472.

Dear Dr. Palmer:

This letter is in response to your March 1, 1988 and April 19, 1988, letters requesting an interpretation of 40 CFR 268.7 requirements. Your letter of April 19, 1988 expresses a general frustration with EPA's seemingly meaningless recordkeeping and certification requirements. EPA believes that these requirements are necessary, and I will try to explain the rationale behind the rules.

EPA is responsible for enforcing the prohibitions on land disposal of untreated hazardous wastes imposed by Congress. A determination that a waste is a listed hazardous waste (40 CFR 261.31, and 261.32) is, in general, based on how the material is used or the process by which it was generated, not on the constituents in the wastes. Thus, only the original generator can determine what the applicable waste codes are. This information is frequently, but not always, on the manifest. Waste codes have also been subdivided for the purpose of setting treatment standards. The treatment, storage, or disposal facility must be informed of the applicable standard. In cases where no land disposal is anticipated, the notice is still required to insure that the waste is not disposed of by a facility not realizing that such disposal for that particular waste is prohibited.

All restricted wastes, whether treated and disposed on site, or sent off-site to a RCRA treatment or disposal facility or to a non RCRA recycling facility, are subject to testing and recordkeeping requirements. Please note that although recycling facilities may be exempt from RCRA regulation, the wastes they receive and the resulting residues are regulated by RCRA and are

subject to the land disposal restrictions. We believe that the notifications are necessary to assure that the information for insuring compliance with the statute is available to both the handlers of the hazardous waste and to EPA.

Certification is a necessary tool for tracking restricted wastes from generation to final disposal. This law clearly puts the burden on the generator to see that the waste is properly managed and disposed of. Thus, the certification operates to protect the generator in addition to providing EPA information needed to efficiently enforce these regulations.

In response to the specific questions in your March 1 letter, I hope the following discussion will be helpful. After a generator makes a determination that he is managing a restricted waste which does not meet the appropriate treatment standards, or where the waste does not comply with the applicable prohibitions in section 268.32 or RCRA Section 3004(d), the generator must notify the treatment or storage facility in writing of the appropriate treatment standards and applicable prohibitions in section 268.32 or RCRA section 3004(d). This notification must accompany each shipment of the waste.

As a treatment and storage facility that ships restricted wastes off-site for further management, you must comply with the notice requirements applicable to generators in section 268.7(a)(1). You must also comply with the manifest requirements of section 264.71(c) or section 265.71(c).

In the case of the operator of a cement kiln receiving restricted wastes for further management (for use as a fuel supplement), the treatment residues from these restricted wastes are subject to all requirements under section 268.7(b)(2), (i) and (ii) prior to land disposal.

Your interpretation of 40 CFR 268.7 certification requirement is correct. A certification is required that the waste meets the applicable treatment standards before the restricted waste may be land disposed. When the restricted waste is not destined for land disposal a certification is not required. However, a written notification must accompany each shipment of restricted waste where further management is appropriate before land disposal.

I hope this information adequately addresses your concerns. If you have further questions, please feel free to contact Jim Thompson, at (202) 382-7438.

Sincerely,

Sylvia K. Lowrance, Director
Office of Solid Waste

cc: Region IX

3. Land Disposal Restrictions - Manifest Requirements

The EPA regulations that prohibit land disposal of spent solvent hazardous waste, specified in 40 CFR Section 261.31 (F001-F005), became effective on November 8, 1986. These restricted wastes must meet applicable treatment standards in 40 CFR Section 268.41 prior to land disposal. A two-year nationwide variance from the effective date of the prohibition was provided to small quantity generators of 100-1,000 kilograms of hazardous waste per month, as per 40 CFR Section 268.30(a)(1).

These small quantity generators are still required, however, to determine if their spent solvent hazardous wastes are restricted using waste analysis test methods described in 40 CFR Section 268.7(a). If the wastes are restricted, a notice stating

that the waste is exempt from the land disposal restrictions must be sent with the shipment of waste to the receiving land disposal facility as per 40 CFR Section 268.7(a)(3).

At the end of the two-year nationwide variance period, (November 8, 1988) the small quantity generator's restricted spent solvent wastes will be required to meet the appropriate treatment standards prior to land disposal. As well, when the restricted waste is now sent to a treatment facility prior to land disposal, the applicable notification requirements are detailed in 40 CFR Section 268.7(a)(1)(i-iv).

As required by 40 CFR Section 268.7(a)(1)(iii) the notice must include the manifest number associated with the shipment of the waste. Under certain conditions; (in example, 40 CFR Section 262.20(e)) small quantity generators of 100-1,000 kilograms of hazardous waste are not subject to the manifest requirements in 40 CFR Part 262, Subpart B. Specifically when the generator's wastes are being reclaimed under a contractual agreement with a recycling facility. When these conditions apply and the waste shipment is a restricted waste being sent to a treatment facility, will a manifest be required to comply with 40 CFR Section 268.7?

When a manifest is not required to be sent with a shipment of hazardous waste (e.g., 100-1,000 small quantity generators having their wastes reclaimed under contractual agreement with a recycling facility as per Section 262.20(e)), a manifest number will not be associated with those shipments of hazardous waste. Therefore, the manifest number information that is required in the notification requirements in 40 CFR Section 268.7(a)(1)(iii), is not applicable to shipments of restricted hazardous waste that do not require a manifest. Shipments of hazardous waste previously not required to have a manifest will not become subject to manifesting solely due to information required by the land disposal restriction regulations.

Source: Mitch Kidwell (202) 382-4805
Research: George Kleevic

4. Land Disposal Restrictions - Disposal of Wastes Granted a Variance

On November 8, 1986, all spent solvent wastes (F001-F005) were prohibited from land disposal unless those wastes met treatment standards set forth in Section 268.41. However, based on a shortage of incineration capacity, EPA granted a two-year variance for spent solvent wastes that meet the criteria set forth in Section 268.30(a)(1-3).

According to Section 268.30(b), these wastes granted a variance may be land disposed in a landfill or surface impoundment only if the facility is in compliance with Section 268.5(h)(2) (minimum technological requirements). Does this preclude land disposal of these wastes in other types of land disposal units, such as a land treatment facility?

No, land disposal of these wastes in other types of land disposal units is not precluded.

RCRA Section 3004(h) is the statutory authority that EPA uses to implement Section 268.30(b). It applies only to land disposal in landfills and impoundments, not to any other type of land disposal. The language in RCRA Section 3004(h) is similar to that in Section 268.30(b) and states, "Whenever another effective date (herein after referred to as a "variance") is established..., with respect to any hazardous waste during the period for which such variance or extension is in effect such hazardous waste may be disposed in a landfill or surface impoundment only if such a facility is in compliance with the requirements of subsection (o)."

Section 3004(k) defines the term "land disposal" to include land treatment facilities. Neither the RCRA statute nor the land disposal prohibition regulations specifically prohibit the placement of these wastes in other types of land disposal units such as land treatment facilities with the exception of RCRA Section 3004(b). This section prohibits the placement of noncontainerized or bulk liquids in any salt dome formation, salt bed formation, underground mine or cave. Furthermore, RCRA Section 3004(h) which requires all new, replacement or lateral expansion landfill or surface impoundment units to have minimum technological standards in place, does not require the minimum technology standards for other types of land disposal units. Thus, wastes granted a variance under Section 268.30(a) may be disposed in a land treatment facility that is not in compliance with the minimum technology standards.

Source: Mitch Kidwell (202) 382-4805
Research: Susan Brugler

9551.1988(07)

Sup 13

Mr. Kerry Bennert
Coordinator Special Projects
E.I. du Pont de Nemours & Co. (Inc.)
Medical Products Department
331 Treble Cove Road
No. Billerica, MA. 01862

Dear Mr. Bennert:

I received your letter of April 18, 1988 in which you commented that regulatory events limiting mixed waste disposal have impacted your radioactive materials manufacturing operations. Specifically, you cited as examples, the absence of disposal capacity for "small-volume mixed waste laboratory generated (organic solvents) materials" and lead.

As you know, EPA promulgated regulations which appeared in the Federal Register of November 7, 1986 prohibiting land disposal of certain spent solvent wastes unless they meet specific concentration based treatment standards. Some solvent containing mixed wastes may not lend themselves to incineration, the best demonstrated available technology (BDAT) for solvent wastes. Such wastes could conceivably be delisted and disposed in a low-level waste disposal facility following treatment.

Enclosed is a copy of a letter to Mr. Terry Husseman, Chair, Northwest Interstate Compact Committee which details the Agency's position on disposal of lead. As the Husseman letter points out, EPA has not evaluated specific containerization or encapsulation methodologies using the EP toxicity test. Such approaches to managing lead mixed waste may be viable in certain circumstances. Of course, States may adopt a more stringent position with regard to regulation of lead or any other hazardous waste. We recommend disposal of lead in a mixed waste unit.

Also, I share your concern that neither of the three existing commercial low-level radioactive waste disposal facilities have applied for a RCRA permit although U.S. Ecology has expressed a strong interest in filing such an application. EPA and NRC developed a series of guidance documents last year aimed at facilitating the State and compact effort in siting and designing a low-level waste disposal unit that could also accept mixed waste. As a regulatory agency, EPA believes this level of involvement is consistent with its mandate. The Agency is available to review alternate waste management proposals developed by industry. However, until such time as disposal capacity becomes available or treatment technologies are identified, storage, an activity which also requires a RCRA permit, may be the only waste management option available to generators of mixed waste.

Although mixed wastes are not subject to Federal hazardous waste regulations until the State applies for and obtains authorization to regulate the hazardous component of the mixed waste, State law is applicable in the interim. The deadline for filing mixed waste authorization applications is July of this year. You may want to contact Paul Bedrosian, the mixed waste coordinator for EPA Region I (617-833-1792) to discuss your concerns. Further, I will apprise you of any future developments on management of solvent containing mixed wastes.

Sincerely,

Bruce R. Weddle, Director
Permits and State Programs Division

cc: Paul Bedrosian, Region I

9551.1988(08)

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

JUN 16 1988

OFFICE OF
SOLID WASTE AND EMERGENCY RESPONSE

Subject: Land Ban Issues

From: Sylvia K. Lowrance, Director
Office of Solid Waste

To: Hazardous Waste Division Directors, Regions I-X

The purpose of this memo is to alert you to a number of issues that may arise on the Land Ban. As you know, during the period from early August to mid-November of this year, the number of waste disposal activities affected by the land ban will increase substantially. In August, we will issue treatment standards for approximately 40 "F" and "K" waste codes. We expect the standards to be immediately applicable for at least 33 of these wastes; the remaining wastes will likely be subject to a two-year capacity variance. In November, the previously-granted capacity variances for under-1% solvent wastewaters, soil and debris, and small quantity generator wastes will expire. Because of a substantial increase in liquid incineration capacity, we also plan to rescind certain of the California list capacity variances in November, making those wastes subject to the ban earlier than expected.

Final policy decisions have not yet been made on many of these issues, but given the short deadlines on land ban rules, we wanted to apprise the Regions of potential issues that some facilities may face. There appear to be several areas in which the relationship between RCRA permit activities and aspects of the land ban program may not be well understood. In this memo, we are highlighting seven land ban issues which could affect permitting activities or considerations. Our intention is to alert regional permit staff to these issues and invite you to consult with the staff of the Land Disposal Restrictions Branch on these or any other issues.

Staff of the Land Disposal Restrictions Branch will be travelling to the Regions near the time of promulgation of the final First Third rule to discuss the content of the rule and any specific regional issues. In the meantime, if you have any questions about the application of the land ban to facilities you are dealing with, please call Barbara McGuinness or Steve Weil at FTS - 382-4770.

1. Surface Impoundment Retrofit Waivers

After November 8, 1986, a non-minimum technology surface impoundment could not be used to treat a banned waste for which the effective date had passed unless the impoundment had a 3005 (j)(2) or (j)(4) waiver. After August 8, 1988, "soft hammers" will apply to a number of First Third waste codes for which we will not set treatment standards; most notably, "soft hammers" will apply to 107 "P" and "U" waste codes and to all or part of 12 "F" and "K" waste codes. (See Attachment 1.) **Surface impoundments cannot receive banned wastes or "soft hammer" wastes on the basis of (j)(3) or (j)(13) waivers alone.** If an impoundment has received a (j)(3) or (j)(13) waiver and wishes to receive a banned waste or a "soft hammer" waste, a further equivalency demonstration under 3004(o)(2) is required. In the case of a (j)(13) impoundment which already has releases, this is likely to be a very difficult showing.*

2. Minimum Technology Requirements During Extensions

In the April 8, 1988 Notice (the "First Sixth"), we proposed to change our interpretation of the term "facility" in 3004(h)(4). This is the section which specifies that "facilities" receiving banned wastes during an extension of the effective date (i.e., a national capacity variance or a case-by-case extension) must meet minimum technology requirements. Previously, we had defined "facility" in the broad sense of property boundaries. Thus, as long as new, replacement or expansion units met minimum technology requirements (MTR), banned wastes with extensions of the effective date could go to existing, non-MTR units.

In the April proposal, we changed that interpretation to equate "facility" with "unit" for purposes of 3004(h)(4). As a result, after the effective date of the change (most likely November 8, 1988 to avoid short- term disruptions for surface impoundments), when banned wastes with capacity extensions are placed in landfills or surface impoundments, those units must meet MTR.

Note that here, as in Issue 1, 3005 (j)(3) or (j)(13) waivers will not suffice unless the stricter 3004(o)(2) equivalency demonstration can also be made.

** Note that the equivalency demonstration required as part of the (j)(13) waiver and that required for 3004(o)(2) are quite different.*

3. Closures of Surface Impoundments

The expected closures of numerous surface impoundments over the next several years could result in significant additional volumes of land-banned wastes requiring treatment and disposal. At this time, EPA HQ does not have a clear picture of how many impoundments will clean close (or require removal of at least some accumulated material), or the time frame in which closures will occur. As a result, it is difficult to assess whether adequate BDAT treatment and disposal capacity will be available for these wastes.

We know of several industries likely to produce significant volumes of banned wastes when impoundments are closed. These include wood preservers (K001 sludges), metal platers (F006 sludges), chemical manufacturers (F001-005 solvent sludges). Some of these industries have expressed concern that there will not be adequate capacity to treat wastes generated from closing units. If this proves to be true, it may be necessary to delay closure, or to close in place.

If you believe that a facility or industry will have a problem finding treatment and disposal capacity for wastes from closures (particularly if there is an indication of environmental damage that may be exacerbated by a lengthy delay in closure or closure in place), please alert us to this situation.

4. Case-By-Case Extensions

In instances where capacity to treat banned wastes is determined to be available (i.e., there is sufficient capacity on a national basis), but where BDAT treatment capacity is not actually available to a specific facility, a generator or owner/operator may apply for a case-by-case extension of the effective date. A total of two one-year extensions may be granted.

For a successful case-by-case extension petition, the generator or owner/operator must show that BDAT treatment is not available in fact and must have a binding contractual commitment to build or acquire access to the necessary capacity within the period of the extension. The first showing cannot be based on cost or inconvenience, but rather must be based on actual infeasibility of obtaining treatment. It must be supported by evidence that the generator or owner/operator has attempted to obtain treatment capacity but has been unable to do so. An example could be a facility with a very large volume of material requiring incineration to meet BDAT. Commercial incinerators have rejected the material because of its volume and because the form of the waste requires special loading and feed equipment which is not now in

place. A case-by-case extension can be granted while the company (or a waste treatment facility) completes construction of the needed facilities.

The Land Disposal Restrictions Branch is now preparing guidance on case-by-case extensions; the draft guidance will be distributed to the Regions for review and comment. Please note that the review and notice processes for case-by-case extensions will require at least four to six months. After the deadlines, facilities must comply with BDAT treatment standards until case-by-case extension applications are approved.

The deadline for First Third wastes is August 8, 1988. Capacity variances for three solvent waste groups (under 1-% solvent wastewaters, small quantity generator wastes and non-soil and debris solvent wastes from RCRA and CERCLA actions) will be subject to land disposal restrictions. Also, after November 8, restrictions may apply to RCRA and CERCLA soil and debris, and to many California list wastes. At this point, it is not possible to process a case-by-case extension of the August deadline by August 8. If any facilities plan to seek a case-by-case extension of the August deadline, they should recognize that they will be required to comply with the standards for at least some period while the petition is reviewed and processed. Facilities seeking case-by-case extensions of the November 8, 1988 deadlines should submit petitions as soon as possible.

5. New Treatment Capacity Information

The May 17, 1988 proposal (the "Second Sixth") contains new capacity data from the comprehensive survey of treatment, disposal and recycling facilities. In general, there is significantly more treatment capacity available than had previously been assumed. This means that BDAT for most waste codes is likely to go into effect August 8, 1988, and few national capacity extensions will be granted. In particular, there is a large amount of liquid injection incineration capacity available at both incinerators and cement kilns and other industrial furnaces. Also, stabilization capacity is commercially available in virtually every area of the country; stabilization is also relatively easy to bring on line, given the availability of materials and technology (lime or cement dust and mixing apparatus).

There has also been a significant increase in the amount of rotary kiln and fluidized bed combustion capacity, although incineration capacity for solids and sludges is still considerably more limited than for liquids. We expect that only a few of the First Third waste codes (principally the petroleum refinery wastes) will receive a two-year capacity extension.

6. Contaminated Soil and Debris

The May 17, 1988 Notice proposed a two-year national capacity variance for RCRA and CERCLA contaminated soil (and possibly debris) which required solids incineration. It now appears possible that there will be adequate solids incineration capacity and that the variance will not be finalized. If this proves true, soil and debris contaminated by First Third wastes will be required to meet BDAT treatment standards as of August 8, 1988. Soil and debris from Superfund and RCRA corrective actions contaminated with solvents and dioxins or California list wastes would be required to meet BDAT treatment standards as of November 8, 1988.

Guidance on treatment of contaminated soil and debris at RCRA and CERCLA sites will be available soon. This will include guidance on obtaining a site-specific, administrative treatability variance in cases where the basis for BDAT is inappropriate for soil and debris.

OSW and OERR have been working for the past few months to develop interim treatment levels for soil and debris; the interim treatment levels are for use during the next several years while BDAT treatment testing for soil and debris is conducted. When a treatability variance for contaminated soil and debris is necessary, the interim treatment levels provide guidance on the range of constituent concentration levels that can be achieved by well-designed and well-operated technologies. The treatment levels were derived from Superfund site data on constituent concentrations after treatment. Generally, several alternative types of treatment can achieve the concentration levels within the range.

The attached memo to Regional Superfund staff explains the purpose of the interim levels and requests comments on the levels. We will be interested in receiving comments from RCRA staff as well.

7. Soft Hammer Provisions

If the Agency does not set treatment standards for a First or Second Third waste by the statutory effective date, the waste may continue to be land disposed in a landfill or surface impoundment only if the generator has investigated the availability of treatment capacity and certified to the Regional Administrator that the use of the surface impoundment or landfill is the only practical alternative to treatment currently available. Other forms of land disposal are not affected.

The proposed rule also allowed certification for disposal of wastes that have been treated but for which no further "meaningful" treatment is practically available. This was done to allow the generators of wastes for which treatment standards have not been set to continue to operate, as we believe that Congress intended them to use the available treatment rather than shut down.

Several commentors have raised concerns as to how the Agency will define treatment. In the proposed rule, the Agency asked for comment on how to define treatment for the purposes of the soft hammer, discussing concepts such as requiring "meaningful" treatment, or specific percent reductions. Owners and operators of disposal facilities tell us they will not accept wastes if there is a chance that the RA will disallow the certification and subject them to enforcement action. They feel that we need a firmer definition. In the final rule, we are planning to discuss a hierarchy of treatment technologies that should be investigated before certification. For example, removal/reclamation is preferrable to destruction which is preferrable to stabilization. Is this a workable approach from your perspective? Is there a way to make this approach even more concrete?

We are looking for ideas on how to make the certification meaningful, and yet not bring the land disposal of all soft hammer wastes to a grinding halt due to uncertainty regarding the criteria.

At this time, we expect to publish the First Third Final Rule around August 8. Attachment 1 gives the expected status of all restricted wastes (except those covered by UIC rules), assuming promulgation of the final First Third rule by the August 8 deadline. The "Second Sixth" comment period closes June 16, 1988. It is possible that, given the short timeframe, it may be several weeks after August 8 before the final rule is signed and published. If this happens, the "soft hammer" goes into effect for all non-UIC First Third wastes.

As noted earlier, all of the policy calls on these issues have not been made. Some of those we have indicated may change. However, we wanted to give you an early alert on these potential issues. We will keep you posted on developments.

Attachments

cc: RCRA Branch Chiefs, Regions I-X
RCRA Section Chiefs, Regions I-X
Bruce Weddle, PSPD
Joe Carra, WMD
Dev Barnes, CAD
Elaine Stanley, OWPE, RCRA
Jon Cannon, OWPE

Attachment 1

Expected Status of Restricted Wastes* as of August 8, 1988

1. Wastes with BDAT in Effect

Solvents and Dioxins

- o Over 1-% Solvents -- F001-005 *(11/8/86)*
- o Listed Dioxin Wastes -- F020-023 and F026-028 *(11/8/86)*

California List

- o Liquids or Free Liquids Containing Free Cyanides *(7/8/87)*
- o Liquids or Free Liquids Containing Arsenic, Cadmium, Chromium, Lead, Mercury, Nickel, Selenium, Thallium *(7/8/87)*
- o Liquids or Free Liquids Containing Corrosives with pH $\leq$ 2 *(7/8/87)*
- o Liquids or Free Liquids Containing PCBs $\geq$ 50 ppm *(7/8/87)*
- o Halogenated Organic Compounds: Dilute Wastewaters $\geq$ 1,000 mg/l *(7/8/87)*

First Third

- o F006 *(8/8/88)*
- o K001, 004, 008, 015, 016, 018, 019, 020, 021, 022, 024, 025, 030, 036, 037, 044, 045, 046, 047, 060, 062, 069, 073, 083, 086 (solvent washes only), 087, 099, 100, 101, 102, 103, 104, 106 *(8/8/88)*

2. Wastes with BDAT, with Capacity Extension in Effect

Solvents and Dioxins

- o Small Quantity Generator Solvents *(11/8/88)*
- o RCRA and CERCLA Corrective Action Wastes *(11/8/88)*
- o RCRA and CERCLA Soil and Debris *(11/8/88)*
- o Under 1-% Solvent Wastes *(11/8/88)*

California List

- o Other Halogenated Organic Compounds *(11/8/88)*
- o RCRA and CERCLA Soil and Debris *(11/8/88)*

First Third

- o K048, 049, 050, 051, 052, 061, 071 *(8/8/90)*

3. No BDAT Established, "Soft Hammer" in Effect

First Third

- o F007, 008, 009, 019
- o K011, 013, 014, 017, 031, 035, 084, 085, 086 (solvent sludges and wastewaters)
- o First Third "P" and "U" Wastes

Other than UIC.

AUG 11 1988

Mr. James W. Walpole
Plant Manager
BP Chemicals International
Sohio Division
Ft. Amanda Road
Post Office Box 628
Lima, Ohio 45802-0628

Dear Mr. Walpole:

This letter responds to your July 19, 1988, correspondence requesting the Environmental Protection Agency (EPA) to act on your case-by-case extension petition for an extension of the applicable effective date of the land disposal restrictions. This petition addresses K011, K013, and K014 wastes, generated at BP Chemicals International, which you want to continue treating in a surface impoundment until November 8, 1988. We have completed a preliminary review of your petition. However, more information is needed before a determination can be made to grant or deny your request. This information is necessary to satisfy the demonstrations for a case-by-case extension of an effective date specified in 40 CFR 268.5.

Under 40 CFR 268.5(a)(1) the petitioner is required to make a good-faith effort to locate and contract with treatment, recovery, or disposal facilities nationwide to manage his waste in accordance with the land disposal restrictions. Your application addresses off-site capacity by claiming that off-site disposal capacity is available, but the logistics of loading, transporting, and unloading the large volume of wastewater prevents the use of such capacity. To satisfy this demonstration you must also address the availability of on-site capacity and, if the capacity is available, the feasibility of using such capacity.

As required by 40 CFR 268.5(a)(2) the applicant must demonstrate that there is a binding contractual commitment to construct or otherwise provide alternative treatment, recovery,

or disposal capacity. In your petition you give only the signature dates for individual contracts which will provide alternative treatment capacity. To make this showing you will have to provide a copy of the signed contracts, which includes the signature page. This material will be used by EPA to determine the scope of the contracts and to verify that the contracts have been signed.

As specified in 40 CFR 268.5(a)(4) a successful petition must show that the capacity being constructed or otherwise provided will be sufficient to manage the entire quantity of waste that is the subject of the application. Although your petition states that the alternative capacity will have the volume of the surface impoundment it is replacing you need to provide numerical values for the volumes of the individual treatment system units and the maximum flow rates that can be accomodated by these units. This information will support your general statement.

Under 40 CFR 268.5(a)(6) the petitioner must arrange for adequate capacity to manage his waste during an extension period and document in the application the location of all sites at which the waste will be managed. You state that the waste will undergo physical treatment in the surface impoundment to reduce its solids content. This treatment should be described in more detail, and you must include the location of the surface impoundment. Furthermore, you fail to show how and where the solids from physical treatment are to be managed. Locations can best be shown on a map of your facility.

To properly evaluate your petition EPA is requesting additional information pertaining to your facility. The Agency wants to know whether the ground water in the vicinity of the surface impoundment is contaminated. In addition, we are requesting a brief description of the impact of curtailing production.

EPA is making every effort to process your case-by-case extension petition as quickly as possible. However, this is a rulemaking procedure which for your application has the following minimum schedule:

middle of August	receive additional information on petition
end of August to end of September	write Federal Register notice proposing to grant petition
beginning of October	publish Federal Register notice proposing to grant petition

beginning to end of October	public comment period
beginning of November	write Federal Register notice granting petition
middle of November	publish Federal Register notice granting petition

To expedite the processing of your petition, please submit the requested information to the following address:

Ms. Barbara McGuinness
Acting Section Chief
Regulation Development Section (OS-333)
U.S. Environmental Protection Agency
401 M Street, SW
Washington, DC 20460

Should you have any questions, please call Barbara McGuinness at (202) 382-4800.

Sincerely,

Stephen R. Weil, Chief
Land Disposal Restrictions Branch

RCRA/SUPERFUND HOTLINE MONTHLY SUMMARY

SEPTEMBER 88

3. Land Disposal Restrictions - First Third

On August 17, 1988, EPA promulgated a final rule on the "first third" of listed wastes which were banned from land disposal on August 8, 1988 (53 FR 31138). In this final rule, the Agency did not establish treatment standards for many of the wastes that

were on the first third list, but did promulgate regulations to allow for the continued land disposal of these wastes (Section 268.8). These so-called "soft hammer" wastes may be land disposed until May 8, 1990, or until treatment standards or extensions to the effective date are promulgated, whichever is later and provided the generator of the waste complies with Section 268.8.

What must a generator of "soft hammer" waste do in order to land dispose of his waste?

Basically, the generator must demonstrate and certify that there is no practically available treatment that reduces toxicity or mobility of the waste and that disposal of these wastes in a landfill or impoundment is the only practical alternative. (Any landfill or impoundment that receives "soft hammer" waste must meet the minimum technological requirements of RCRA Section 3004(o), which consists of a double liner, leachate collection system and groundwater monitoring.) If treatment is practically available, the generator must certify that his waste is being treated by the treatment that provides the most environmental benefit that is practically available. The residuals from treatment of "soft hammer" waste remain "soft hammer" waste. Thus, if these residues (e.g., incinerator ash) are disposed in a landfill or surface impoundment unit, that unit must be in compliance with the minimum technological requirements of Section 3004(o).

Where the generator determines that there is no practically available treatment prior to disposal, with the initial shipment of waste, the generator must submit a copy of his demonstration/certification to the Regional Administrator and to the receiving facility. With each subsequent shipment, only the certification is required to be submitted, provided that the conditions being certified remain unchanged. This paperwork trail is the same for situations where treatment prior to disposal is practically available.

Source: Bill Fortune (202) 475-6715
Research: Chris Bryant

RCRA/SUPERFUND HOTLINE MONTHLY SUMMARY

NOVEMBER 88

4. "Soft Hammer" Certifications/Demonstrations

On August 17, 1988, EPA promulgated a final rule on the "first third" of listed wastes which were banned from land disposal on August 8, 1988 (53 FR 31138). In this final rule, the Agency did not establish treatment standards for many of the wastes that were on the first third, but did promulgate regulations to allow for the continued land disposal of these so-called "soft hammer" wastes. Generators of soft hammer wastes who dispose of the waste in surface impoundments or landfills must comply with the regulations found in Section 268.8. This section requires the generator to demonstrate and certify that there is no practically available treatment for the waste and that disposal in a landfill or surface impoundment is the only option. If treatment is available, the generator must certify and demonstrate that the treatment method is the most environmentally sound method available. These requirements also apply to the treatment residuals of soft-hammer wastes (53 FR 31138). Also, landfill or surface impoundments must meet minimum technology standards for double liners and leachate collection systems.

A generator of "soft hammer" waste ships the waste to an incinerator. The operator of the incinerator burns the waste and subsequently ships the ash to a hazardous waste landfill.

With respect to the ash that is shipped off-site from the incinerator, who is responsible for meeting the demonstration/certification requirements of Section 268.8, the original generator of the waste or the incinerator operator?

In this situation, both are responsible. The original generator of the waste that was sent to the incinerator would be responsible for complying with the demonstration/ certification requirements of Section 268.8. Thus, a generator is responsible for knowing the final disposition of the treatment residues from his wastes. If the treatment residues are disposed of in a surface impoundment or landfill, the original generator must comply with the Section 268.8 requirements with respect to the shipment of that waste. The generator is solely responsible for determining which treatment is the best practicable and available alternative (or for certifying that no treatment is practical or available). The operator of the incinerator would be required to certify that the treatment of the waste had been properly accomplished. Finally, the owner or operator of the disposal facility would be responsible for ensuring that the treatment residuals were placed in a unit meeting minimum technology requirements.

Source: Rhonda Craig (202) 382-4800
Research: Chris Bryant

RCRA/SUPERFUND HOTLINE MONTHLY SUMMARY

DECEMBER 88

2. Land Disposal Restrictions: Soils and Debris from RCRA Corrective Action

Under the land disposal restrictions, some soil and debris have national capacity variances. Must the response action under CERCLA be pursuant to Section 104 or Section 106 of CERCLA and must the corrective action under RCRA be pursuant to a corrective action order?

Soil and debris contaminated with wastes from the "first third" list and for which the promulgated treatment technology is incineration have a national capacity variance until August 8, 1990. This variance, however, applies to all soil and debris contaminated with these wastes not just to soil and debris generated by CERCLA or RCRA clean-up actions (53 FR 31196). In contrast, soil and debris contaminated with solvent, dioxin, or California list wastes are subject to a variance only if they result from an action taken under Section 104 or Section 106 of CERCLA, or a corrective action under Subtitle C of RCRA. This variance extends to November 8, 1990. EPA, however, can use either orders or permits to require corrective action under RCRA. The variance is not limited to soil and debris from corrective action orders.

Source:	Steve Weil	(202) 382-4770
	Steve Silverman	(202) 382-7706
Research:	Renee Pannebaker	

JAN 6 1989

Mr. Robert H. Simmington
Senior Environmental Engineer
Niagara Plant - Waste Disposal
Occidental Chemical Corporation
P.O. Box 344
Niagara Falls, New York 14302

Dear Mr. Simmington:

In response to your letter of November 28, 1988 to Mr. William Fortune, the following information is provided to clarify your questions about hazardous wastes containing halogenated organic compounds (HOCs). Mr. Fortune is no longer with the Agency, so I am responding to your letter in his place.

As correctly stated in your letter, the two-year national capacity variance for hazardous wastes containing HOCs in concentrations greater than 1000 ppm was rescinded in the First Third rule (Federal Register, August 17, 1988, page 31138), with the exception of HOC-contaminated soil and debris. Your questions relate to the specific HOCs regulated by these provisions. Your questions are repeated below, followed by our response.

Question 1: "The HOCs to be included in the 1000 ppm are only those listed in the Appendix III to Part 268 - List of Halogenated Organic Compounds Regulated Under Part 168.32, as published in the Federal Register, Vol. 562, No. 130 on Wednesday, July 8, 1987."

Response: As stated in your question, the Agency has limited the California list HOC prohibition to those HOCs listed in Part 268 Appendix III, which is a finite list of constituents for which test methods exist. In determining the concentration of HOCs in a hazardous waste for purposes of the land disposal restrictions, EPA has defined the HOCs that must be included in the calculation as any compounds that have a carbon-halogen bond and are listed in Appendix III. Therefore, those wastes affected by the rescission of the two-year national capacity variance for hazardous wastes containing HOCs in total concentrations greater than or equal to 1000 mg/l are those wastes contained in Part 268 Appendix III.

Question 2: "The land disposal restrictions only apply to hazardous wastes that contain over the 1000 ppm HOCs (i.e., wastes classified as non-hazardous that contain over 1000 ppm of these HOCs or hazardous wastes with less than 1000 ppm of these HOCs are not restricted from land disposal)."

Response: The California list land disposal restrictions apply to wastes that:

- Are listed as hazardous under 40 CFR Part 261; OR
- Exhibit one or more of the characteristics of hazardous waste identified in Part 261 (i.e., ignitability, corrosivity, reactivity, or EP toxicity); AND
- Also contain a California list constituent.

In other words, as indicated in your question, the California list land disposal restrictions only apply to wastes that are listed or characteristic hazardous wastes and that also contain a California list constituent in concentrations that exceed the prohibition levels.

Your second example in question 2 mentions hazardous wastes with less than 1000 ppm HOCs. While these wastes would not be restricted from land disposal as California list wastes, they might be restricted as solvent- or dioxin-containing wastes, or as First Third wastes. These restrictions include treatment, notification, demonstration, and certification requirements prior to disposal (see 53 FR 31138).

Question 3: You also requested an opinion as to whether the PCBTF Finishing Filter Soda Ash described in your "OXY CHEM-Niagara Plant Waste Characterization Form" is now subject to the land disposal restrictions on the basis of its HOC content, or will be in the future due to its characteristic of EP Toxicity for arsenic.

Response: Based on the data provided in your waste characterization, it appears that the total concentration of HOCs in this waste may exceed 1000 ppm (i.e., the value for total organic halogen is 3.7 percent, or 37,000 ppm). As indicated in the response to question 1 above, however, the HOCs to be included in the calculation are only those listed

RCRA/SUPERFUND HOTLINE MONTHLY SUMMARY

MARCH 89

1. Mixed Waste and Land Ban

The owner/operator of a facility generates a liquid mixed hazardous/radioactive waste. The waste contains F006 waste as well as California list metals above the levels specified in RCRA Section 3004(d)(2). Is this waste subject to the land disposal restrictions? If so, which land disposal restrictions apply?

According to the August 17, 1988, Federal Register (53 FR 31202), First Third waste mixed with radioactive waste is moved to the Third Third schedule, whether that First Third waste has a treatment standard associated with it or not. Section 268.10 identifies F006 waste as a First Third Waste, thus mixed waste which contains F006 will not be subject to the land disposal restrictions until May 8, 1990. However, this action only affects First Third wastes mixed with radioactive wastes. Mixed waste containing spent solvents, dioxins and California list wastes or mixed radioactive/First Third waste that also contains spent solvents, dioxins, and California list waste (i.e., wastes prohibited under Sections 268.30, 268.31, 268.32) would still be subject to the land disposal restrictions associated with those wastes. However, this is only true in unauthorized states or authorized states that do not have mixed-waste authority. Therefore, mixed waste which contains F006 and California list metal wastes must only comply with the land disposal restrictions in Section 3004(d) of RCRA. Sections 3004(d) states that California list metal wastes were prohibited from land disposal as of July 8, 1987 unless the waste meets the statutory prohibition standards in Section 3004(d)(2)(B). However, if the State in which the facility is located is authorized for the base RCRA program, and the State has not yet received mixed waste authorization, the waste is not considered hazardous and the land ban does not apply.

Source:	Rhonda Craig	(202) 382-4770
Research:	Kim Jennings	(202) 382-3112

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

OFFICE OF
SOLID WASTE AND EMERGENCY RESPONSE

DEC 20, 1989

MEMORANDUM

SUBJECT: Applicability of the Land Disposal Restrictions to Recycled Hazardous Wastes

FROM: Devereaux Barnes, Director
Characterization and Assessment Division

TO: Gerald M. Levy, Chief
MA Waste Management Branch
Region I

This memorandum responds to your November 9, 1989, request for clarification concerning the applicability of the Part 268 Land Disposal Restrictions (LDR) program to recycled wastes that are subject to the provisions of Part 266; in particular, recyclable materials from which precious metals are reclaimed (i.e., wastes subject to 40 CFR 261.6(a)(2)(iv) and Subpart F of Part 266).

The requirements of Part 268 <u>are</u> applicable (as stated at 40 CFR 268.1(b)) unless specifically provided otherwise in Part 261 (or in Part 268). Section 261.6(a)(2) does <u>not</u> specifically provide otherwise and, therefore, the LDR requirements, including the applicable notification, certification and demonstrations required by the generator of a restricted hazardous waste, are applicable to those recyclable materials listed in section 261.6(a)(2). (For comparison, section 261.6(a)(3) <u>does</u> specifically provide otherwise and, therefore, the LDR requirements do <u>not</u> apply to those wastes listed in 261.6(a)(3)).

In future rulemakings, we will consider adding "Part 268" to the introductory paragraph of 40 CFR 261.6(a)(2), specifically stating that "the following recyclable materials" <u>are</u> subject to the LDR requirements to help clarify the applicability of Part 268. However, we have consistently maintained and believe it is understood that such "recyclable materials" (and, in fact, <u>all</u> hazardous wastes, unless specifically provided otherwise) are (or will be) subject to the LDR requirements. For example, Subpart C of Part 266 was specifically modified (see 53 FR at 31197, August 17, 1988) due to the LDR statutory requirement that a hazardous waste must meet the treatment standards prior

to placement on the land. Were those recyclable materials listed in 261.6(a)(2) not subject to Part 268, this modification would not have been necessary.

Should you have further questions, or need more information, please contact Andrea McLaughlin, of my staff, at FTS 382-6946.

cc: RCRA Branch Chiefs, Regions II-X
Jim Thompson, OWPE

9551.1989(04)

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

OFFICE OF
SOLID WASTE AND EMERGENCY RESPONSE

JUL -6 1989

MEMORANDUM

SUBJECT: Current Status of Health-Based Values for PAH's in Coke By-Product Wastes

FROM: Susan Griffin, Ph.D.
Toxicologist
Health Assessment Section
Technical Assessment Branch (OS-331)

THRU: Stephanie R. Irene, Ph.D.
Section Chief
Health Assessment Section
Technical Assessment Branch (OS-331)

TO: Ron Josephson
Environmental Engineer
Listing Section
Land Disposal Restrictions Branch (OS-333)

Listed below are the PAH compounds commonly detected in coke by-product wastes and their health-based numbers derived from carcinogenic or non-carcinogenic endpoints. The RfD's indicate non-carcinogenic health numbers verified by the reference dose workgroup. The RSD's (risk specific doses) indicate carcinogenic numbers derived from CRAVE, the cancer risk assessment verification workgroup, or from CAG, the cancer assessment group. The risk level for the RSD is $1x10^{-6}$.

Benzo[a]pyrene
-B_2 carcinogen; RSD is $8.6x10^{-8}$ mg/kg/day (CAG profile)

Benzo[a]anthracene
B_2 carcinogen; RSD is $3x10^{-7}$ mg/kg/day (CAG profile)

Benzo (b) fluoranthene
-B_2 carcinogen; no quantitative RSD (CAG profile)

Benzo (k) fluoranthene
-B_2 carcinogen; RSD in 1.1×10^{-4} mg/kg/day (1985 NIOSH RTECS

Benzo [g, h, i] perylene
-This compound was assigned an RSD equal to the RSD for benzo[a]pyrene for the wood preserving listing.

Benzene
-A carcinogen; RSD is 3.4×10^{-5} (CRAVE verified)

-RfD inhalation is 5.7×10^{-3} mg/m^3 (under review by RfD workgroup)

Chrysene
-C carcinogen; This compound was assigned an RSD equal to the RSD for bnezo[a]pyrene.
(CAG profile)

Dibenzo [A, H] anthracene
-B_2 carcinogen; RSD is 2.0×10^{-8} mg/kg/day (CAG profile)

Ethylbenzene
-Oral RfD 1×10^{-1} mg/kg/day (RfD workgroup verified)

Indeno (1,2,3-cd) pyrene
-C carcinogen; RSD is 5.7×10^{-5} mg/kg/day (Water Quality Criteria Document)

2-Methyl napthalene
This compound was assigned an RfD equal to the RSD for Indeno (1,2,3-CD) pyrene for the wood preserving listing.

2-Methyl phenol (o-cresol) (RfD workgroup verified)

-oral RfD 5×10^{-2} mg/kg/day

4-Methyl phenol (p-cresol) (RfD workgroup verified

-oral RfD 5×10^{-2} mg/kg/day

Napthalene
-oral RfD 0.4 mg/kg/day (1986 Health and Environmental Effects

Phenanthrene
-This compound was assigned an RfD equal to the RSD for Indeno (1,2,3-cd) pyrene for the wood preserving listing.

Phenol

-oral RfD $6x10^{-1}$ mg/kg/day (RfD workgroup verified)

Styrene

-oral RfD $2x10^{-1}$ mg/kg/day (RfD workgroup verified)

-B_2 carcinogen; oral RSD $3.3x10^{-5}$ mg/kg/day (CRAVE verified)

-Inhalation RSD is $5.0x10^{-5}$ mg/kg/day

Toluene

-oral RfD $3x10^{-1}$ mg/kg/day (RfD workgroup verified)

-inhalation RfD 2.0 mg/m^3 (RfD workgroup verified)

Xylenes

-oral RfD 2.0 mg/kg/day (RfD workgroup verified)

-inhalation RfD $3.0x10^{-1}$ mg/m^3 (RfD workgroup verified)

The following PAH's are in the process of having RfD values developed.

Acenaphthene
Acenaphthylene
Anthracene
Fluoranthene
Fluorene
2,4-dimethyl phenol
Pyrene

9551.1989(05)

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

JUN 12 1989

OFFICE OF
SOLID WASTE AND EMERGENCY RESPONSE

MEMORANDUM

SUBJECT: Health Status of PAH's in Coke By-Product Wastes

FROM: for Susan Griffin, Ph.D.
Toxicologist
Health Assessment Section
Technical Assessment Branch (OS-331)

THRU: Stephanie R. Irene, Ph.D.
Section Chief
Health Assessment Section
Technical Assessment Branch (OS-331)

TO: Ron Josephson
Environmental Engineer
Listing Section
Land Disposal Restrictions Branch (OS-333)

The following PAH's currently have RfD values or CAG classifications.

1. Benzo[a]pyrene 50-32-8
   -B2 carcinogen, no quantitative data

2. Benzene 71-43-2
   - A carcinogen; oral and inhalation slope factor 2.9×10^{-2} mg/kg/day
   - RfD inhalation 5.7×10^{-3} mg/m^3 (under review)

3. Ethylbenzene 100-41-4
   - D carcinogen
   - RfD oral 1×10^{-1} mg/kg/day

4. 2-Methyl phenol (o-cresol) 95-48-7
   - No CAG data
   - RfD oral $5x10^{-2}$ mg/kg/day

5. 4-Methyl phenol (p-cresol) 106-44-5
   - No CAG data
   - RfD oral $5x10^{-2}$ mg/kg/day

6. Napthalene 91-20-3
   - No CAG data
   - RfD oral 0.4 mg/kg/day

7. Phenol 108-95-2
   - No CAG data
   - RfD oral $6x10^{-1}$ mg/kg/day

8. Styrene 100-42-5
   - No CAG data
   - RfD oral $2x10^{-1}$ mg/kg/day

9. Toluene 108-88-3
   - No CAG data
   - RfD oral $3x10^{-1}$ mg/kg/day
   - RfD inhalation 2.0 mg/m^3

10. Xylene 1330-20-7
   - D carcinogen
   - RfD oral 2.0 mg/kg/day
   - RfD inhalation $3.0x10^{-1}$ mg/kg/day

The following PAH's are in the process of having RfD values developed.

Acenaphthene
Acenaphthylene
Anthracene
Fluoranthene
Fluorene
2,4-dimethyl phenol
Pyrene

The following PAH's have health documents (HEEPs, Tox Profiles, Hazard Profiles) indicating no evidence of systemic toxicity and limited or inadequate evidence or carcinogenicity.

Benzo(b) fluoranthene
Benzo(k) fluranthene
Chyrsene

Phenanthrene
Dibenzo [A, H] Anthracene
Benzo [a] anthracene
Benzo [g,h,i] perylene

No information could be located on the following PAH's.

Indeno (1,2,3-cd) pyrene
2-methyl naphthalene

UNITED STATES ENVIRONMENTAL PROTECTION A

9551.1989(06)

MAY 3 1989

Ms. Barbara Young
Booz-Allen & Hamilton, Inc.
4330 East West Highway
Bethesda, MD 20814-4455

Dear Ms. Young:

I have received your letter of April 20, 1989 requesting clarification on the Q. & A. associated with Ms. Barbara McGuinness' presentation at the Environmental Compliance Conference in San Antonio, TX on January 31, 1989.

I have enclosed the necessary corrections and clarifications to each question. If you have further questions, you may contact me at (202) 382-4770.

Sincerely,

Michaelle Wilson, Chief
Regulation Development Section

Enclosure

Land Disposal Restrictions

Q. #1 Correct as stated.

Q. Does a facility have to certify a "soft-hammered" waste even if it is going to an incinerator and not to a landfill?

A. "Soft hammer certifications/demonstrations are required only when the wastes (or residues) are disposed in a landfill or surface impoundment. Typically, incinerator residues are disposed in such units and a certification is required. The owner/operator must also certify that treatment was conducted as per the generator certification/demonstration.

Q. Who would be responsible for providing the waste analysis of residuals from incineration, and what sample would they take?

A. The treatment facility would have to perform a waste analysis before land disposal of incinerator residual waste at the frequency indicated in the waste analysis plan. The samples required for testing would be incinerator ash and scrubber water.

Q. #4 ...carry the waste codes...

Q. Is waste that is sent to a recycler considered hazardous waste?

A. This question relates to the definition of a solid waste, not land disposal restrictions. Certain types of recycling exclude the material from the definition of solid waste, while others do not. See 40 CFR 261.2(c) and (e). Also, for a more specific determination, contact the appropriate State regulatory agency, EPA Regional office, or the RCRA Hotline at 1-800-424-9346.

Q. If a facility sends an F-solvent waste to a recovery facility, do they have to notify them that it is an LDR waste?

A. Yes. Recycling is defined as treatment and is likewise subject to the recordkeeping requirements. Typically, solvent recyclers generate a still bottom (that carries the same waste codes) that must be treated to the treatment standards prior to disposal. Recyclers are definitely in the loop.

Q. What facilities are allowed to store waste for up to a year if they are storing solely for the purpose of accumulating sufficient quantities for efficient recycling or treatment?

A. One year is the rule of thumb as far as delegating responsibilities of the burden of proof. The rebuttable presumption is that one year is sufficient time to store wastes solely for the purpose of accumulating sufficient quantities to facilitate treatment. For less than one year, EPA bears the burden of proof that such storage is not in compliance (i.e., not for the sole purpose allowed by the statute). For more than one year, the burden of proof is on the storage facility. The facility is, of course, subject to all other regulatory requirements, including Part B permits, interim status, or the 90-day generator storage rule.

Answers to questions on Research Permits and Medical Waste are correct as stated.

UNITED STATES ENVIRONMENTAL PROTECTIOI

9551.1989(07)

NOV 4 1988

Mr. James P. Ward, Chief Chemist
Omark Industries
Post Office Box 856
Lewiston, Idaho 83501

Dear Mr. Ward:

This letter is in response to your letter of July 19, 1988 requesting Environmental Protection Agency (EPA) guidance with respect to Omark Industries generation and treatment of EPA hazardous waste K044, a First Third restricted waste.

As you are aware, K044 was listed as hazardous waste because it exhibits the characteristic of "reactivity". (See 40 CFR 261.23.) In your letter you indicated that after the K044 material is treated in the facility's waste water treatment process, it ceases to exhibit reactive/explosive characteristics and thus should not be subject to the K044 land disposal restrictions.

The Agency has addressed this situation in 40 CFR 261.3(a)(2)(iii) which states that if a hazardous waste is mixed with a solid waste, the resulting mixture is also a hazardous waste unless the hazardous waste is listed solely because it exhibited in characteristic of hazardous waste (as is the situation for K044). In that case, the mixture is only considered to be a hazardous waste if it continues to exhibit hazardous characteristics describes in 40 CFR 261.21-.24. In the case described in your letter, the K044 no longer exhibits the reactivity characteristic, and is therefore no longer considered to be K044, and no longer subject to the Land Disposal Restrictions. However, should the treated waste exhibit one of the other hazardous characteristics (i.e., ignitability, corrosivity, or extraction procedure toxicity), it must be designated as a hazardous waste.

I would also note that the treatment standard promulgated on August 8, 1988 for K044 was "no land disposal", based on the ability to treat the waste so that it no longer exhibited the characteristic of reactivity (53 FR 31158, August 17, 1988). The treated waste generated by Omark therefore also meets the applicable treatment standard.

If your have any further questions, please get back to me.

Sincerely,

Stephen R. Weil, Chief
Land Disposal Restrictions Branch

cc: Pat O'Flaherty, CH_2M Hill
Mike Gearheard, Region X

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

9551.1988(15)

JAN 21 1988

MEMORANDUM

SUBJECT: Headquarter's Clarification of the Regulatory Status of Drainage Water Beneath Land Treatment Units and Integration of the Region's Permitting Activities with the "No Migration" Petition Program

FROM: Marcia E. Williams, Director
Office of Solid Waste

TO: Charles E. Findley, Director
Hazardous Waste Division-Region 10

This memorandum responds to your December 4, 1987, memorandum in which you raised several issues on permitting of land treatment units at oil refineries in Region 10.

Your first question was whether ground water which is seasonally drained from beneath land treatment units constitutes a hazardous waste. You concluded that the situation is roughly analogous to situations described in the 1985 policy memorandum clarifying application of the derived from and mixture rules to petroleum refinery wastewater treatment systems. Based on that 1985 policy, you concluded that the drainage water is not a hazardous waste by definition.

While we agree that ground water pumped from beneath a land treatment unit is not necessarily hazardous, we do not agree that ground water contaminated with hazardous waste leachate from a land treatment unit can be categorically deemed non-hazardous. The 1985 policy on wastewater treatment systems does not address releases to ground water. The regulatory status of contaminated ground water is addressed more directly in Marcia Williams' memorandum of November 13, 1986, which states that ground water contaminated with hazardous waste leachate must be managed as if it were a hazardous waste. This applies equally to land treatment units and other RCRA units.

You also questioned whether the drainage water, which is returned to an NPDES treatment system, must be addressed in a "no migration" petition. Under the "no migration" standard, there can be no migration from the unit. If the drainage water is to be excluded from the "no migration" petition, the petitioner must demonstrate that the drainage water is not being contaminated by hazardous constituents migrating from the land treatment unit. However, for a leachate collection system that is considered part of the unit (e.g., it is above a liner), and where leachate is pumped directly to a wastewater treatment plant, the leachate would not be considered to be migrating from the unit. However, any ditches or pipes used to conduct leachate from a leachate collection system, or runoff from the unit must meet the "no migration" standard, since these conduits could be extensions of the unit.

With respect to your suggestion that a Part B land treatment demonstration can be used in lieu of a "no migration" petition covering subsurface transport, we do not believe that an approved Part B land treatment demonstration can replace a "no migration" petition. Although it is true that the subsurface transport demonstrations for the permit and the petition are very similar, the statutory standard that must be met for a "no migration" demonstration is more stringent. For example, "no migration" must be demonstrated for "as long as the waste remains hazardous," and not just for the permitted life of the facility. Thus, a "no migration" demonstration may have to meet a standard for a much longer time than the land treatment demonstration. In addition, "no migration" must be demonstrated for all media, including soil, surface water and air. We realize that much of the information contained in a Part B application is relevant to "no migration" demonstrations. Thus, we have been encouraging potential petitioners to attach a summary of all relevant Part B data and/or specific sections of the Part B application. We are planning to work very closely with both the Regions and the States when reviewing "no migration" petitions, since the permit writers can offer invaluable technical and historical information on the site.

In response to your suggestion that a determination made under a RCRA Facility Investigation (RFI) can replace an evaluation of air emissions addressed in a "no migration" petition, we do not believe that such a determination can automatically substitute for a "no migration" demonstration. The standard that must be met for no migration from the unit will likely be more stringent than the demonstration required under the RFI. We are continuing to evaluate the best way to handle the air pathway for "no migration" demonstrations, and propose to use health or environmentally-based exposure levels at the edge of the unit. For the air pathway, we have not yet defined what this will be, but one option is that the edge of the unit be defined as the surface of the waste. In defining the "no migration" standard the Agency must determine how this

standard relates to the section 3004(n) standards which will control air emissions from treatment, storage, and disposal facilities as "may be necessary to protect human health and the environment." Finally, RFI information may not be available at the time a "no migration" petition is submitted. When it is available, it will be considered. We are encouraging the use of all relevant site data in the "no migration" petition, including information collected for permitting or corrective action purposes.

In your memorandum you requested that authority to grant "no migration" petitions be delegated to the Regional Administrators. We are planning to propose an interpretation of the "no migration" language in the Federal Register for public comment. Because of the controversy surrounding the interpretation of the "no migration" statutory language, and the potential for changes in policy, we believe that Headquarters should evaluate the initial set of "no migration" petitions received. We will consider delegation to the regions after the program is developed and initial petitions have been evaluated to assess issues and establish precedent. Therefore, you should advise facilities to submit petitions to the Administrator. It would also be advisable to send a copy of the petitions to the Assistance Branch of the Permits and State Programs Division, which will have the lead on reviewing the petitions. We will coordinate individual petition reviews on a case-by-case basis. The Agency expects to receive relatively few viable petitions. The petition approval process should not affect the November 1988 permitting deadline, since petition approval is not a prerequisite for Part B permit approval.

In addition, you asked Headquarters to have a staff person devoted primarily to covering land treatment issues for the Permit Assistance Team (PAT). We understand your concern regarding the need for technical expertise in this subject area. Unfortunately, we do not have the resources to assign an individual to land treatment on a full-time basis. We will continue to use the technical staff available, and supplement with contractual support when necessary. If you need assistance or wish to discuss this, please contact Elizabeth Cotsworth on (FTS) 382-4206.

For further clarification on these issues, please contact Stephen Weil at (FTS) 382-4770.

9551.1990(01)

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

MAY 9 1990

OFFICE OF
SOLID WASTE AND EMERGENCY RESPON

MEMORANDUM

SUBJECT: RCRA Waste Disposal Sites and Their Potential Association with Wetlands

FROM: Sylvia K. Lowrance, Director
Office of Solid Waste

TO: Tom Kelly, Director
Office of Regulatory Management and Evaluation

Thank you for your memorandum of April 9, 1990, in which you discuss the need for an assessment of industrial waste disposal facilities and their proximity to wetlands, and suggest that we coordinate a joint effort to examine these issues.

My office also shares a serious concern that many waste management facilities -- hazardous as well as non-hazardous -- are located in sensitive locations, including wetlands. We have several efforts underway to analyze and, where appropriate, control the risks posed by facilities in sensitive locations, including in or adjacent to wetlands.

First, we expect to promulgate this summer revised criteria for municipal solid waste facilities, and a notification requirement that will apply to industrial solid waste disposal facilities and to construction/demolition waste landfills. The revised criteria for municipal facilities will incorporate location standards, under which new facilities cannot be sited in or adjacent to wetlands unless there is no alternative, impacts will be minimized, and any wetlands that are destroyed will be offset by the creation of new wetlands. The notification requirement would include information on latitude and longitude, which would enable us to access geographic information systems and determine proximity to sensitive locations.

Second, it is our intention to request funding to complete, distribute and evaluate the Industrial D Survey. Completion of the survey can occur in tandem with the notification process described above, and distribution of the survey can be targeted to the facilities identified in the notification process. This

survey will provide a comprehensive view of waste types, volumes and management practices at industrial solid waste facilities for a large sample of facilities. When coupled with information on proximity to sensitive locations, this information will enable us to characterize the potential risks posed by facilities in or adjacent to wetlands.

Another major effort is the development of location standards for hazardous waste management facilities. In the near future the draft proposed location standards will enter Red Border review. Under this proposal, wetlands would be one of the sensitive locations in which the siting of hazardous waste facilities would be restricted.

Finally, we are initiating an effort to characterize the market and non-market values associated with wetlands due to a variety of functions such as flood control, water quality improvement, spawning grounds for fisheries, and ground-water recharge. The values generated could be useful in examining the resource damages due to industrial solid waste facilities.

We would welcome the opportunity to discuss further with you how to coordinate our respective efforts. My understanding is that Ruth Miller is working with ORD/Las Vegas on the study you are currently initiating on industrial waste disposal facilities, and that this study will characterize the proximity of facilities to wetlands in several states (those with the best data available on location). My staff are reviewing and will provide specific technical comments on the proposed effort. I anticipate that the results of your work will support OSW's efforts to analyze and control potential risks posed by facilities in wetlands. At this time, I am designating Glen Galen (382-4654) to coordinate near-term issues on the industrial waste facility study. For wetlands issues in general, our contact is Fred Chanania, one of my Special Assistants (382-4627). I suggest we also meet in the near future to discuss longer-term coordination.

I look forward to a continuing discussion of these critical issues concerning hazardous and non-hazardous facilities located in proximity to wetlands.

cc: Loretta Marzetti
Dave Bussard
Bruce Weddle
David Davis

UNITED S .TES ENVIRONMENTAL PROTECTION . .NCY

9551.1990(02)

August 8, 1990

William J. Ziegler
Vice President of Health,
Safety and Environmental Affairs
ThermalKEM, Inc.
454 S. Anderson Rd.
BTC532
Rock Hill, SC 29730

Dear Mr. Ziegler:

This letter responds to your request of July 12, 1990, for clarification of the following aspects of the land disposal restrictions rule for lab packs as published on June 1, 1990 (55 Federal Register 22520):

(1) EPA's rationale for excluding EPA Hazardous Waste Codes P046, P111, and U163 from Appendix IV, and

(2) whether §265.316(f) requires that fiber drums used for disposal of lab pack waste be overpacked in steel drums.

In response to your first question, EPA inadvertently excluded P046, P111, and U163 from Appendix IV. You are correct in stating that these wastes are incinerable and should be included in Appendix IV.

With respect to your second question, lab packs destined for incineration in fiber drums are not required to be placed in metal or steel containers. Paragraph (f) states that persons who incinerate lab packs prior to landfilling "may use fiber drums <u>in place of</u> metal outer containers" (emphasis added) . . . However,

fiber drums used in this manner must be overpacked with inside containers and absorbent material as described in §265.316(b). This provision does not require the use of metal shipping containers; however, it continues to require safe packaging and management of lab pack waste.

I hope that this letter adequately address your concerns. If you have additional questions, you may contact Rhonda Craig at 382-7926.

Sincerely,

Richard Kinch, Chief
Waste Treatment Branch

I. SIGNIFICANT QUESTIONS AND RESOLVED ISSUES—SEPTEMBER 1990

RCRA

1. Pretreatment of Characteristic Wastes Subject to Land Disposal Restrictions

A Treatment, Storage and Disposal Facility (TSDF) receives an ignitable waste (D001) from a generator. The waste, which is identified as a high Total Organic Carbon (TOC) D001 has a specified technology of fuel substitution, recovery of organics, or incineration as methods for treating the waste. Prior to introduction to one of these technologies, the TSDF pretreats the material by filtering or decanting the waste and separating it into a liquid and a solid phase. The solid phase, upon testing, does not exhibit the characteristic of ignitability. Would that portion of the waste that no longer exhibits a characteristic not be subject to Subtitle C regulation and the notification/certification requirements of Section 268.7 even though the waste was not treated by the specified technology indicated in Section 268.42?

The noncharacteristic solid phase would no longer be regulated under Subtitle C. EPA considers processes that separate phases of a waste, in this case a solid and an ignitable liquid, to be recovery and hence an acceptable form of pretreatment provided that the remaining material that exhibits the characteristic is treated by the required technology (June 1, 1990; 55 FR 22544). In this example, the non-characteristic solid, assuming it is not hazardous for any other reason, would pass from Subtitle C into Subtitle D solid waste regulations. This would be the case for any aqueous, liquid, or solid material which, as a result of pretreatment, no longer exhibits a characteristic. Moreover, the notification/certification requirements of Part 268 would not attach to the non-hazardous solid; however, this paperwork would follow the remaining hazardous material (e.g., the ignitable liquid) to the treatment facility. Once the ignitable liquid is treated and no longer exhibits the characteristic, then the paperwork would be forwarded on to the Regional Administrator and the remaining waste (e.g., any ash resulting from the treatment of the liquid) sent to a Subtitle D facility per Section 268.9 (d).

Contact: Larry Rosengrant, OSW (202) 382-3678
Research: Steve Baker

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

9551.1990(04)

OCT 3 1990

Mr. Joseph J. Zimmerman
Sachs & Taylor
1140 Connecticut Avenue, N.W.
Washington, D.C. 20036-4002

Dear Mr. Zimmerman:

Thank you for your recent correspondence dated August 20, 1990 concerning the prohibitions on land disposal of untreated hazardous waste and the prospect of a "no migration" variance for your client, Giant Industries Arizona, Inc. (Giant).

In that letter, you correctly stated that the land disposal prohibitions become effective for refinery hazardous wastes (K048-K052) on November 8, 1990, after being extended from the original effective date of August 8, 1990. You also correctly reiterated EPA's advisory that the processing of "no migration" petitions, from the date of receipt by EPA, through internal review, notification of any petition deficiencies, statutorily mandated publication of a proposed decision in the Federal Register, and public comments, to publication of the final decision in the Federal Register, is likely to take approximately 12-18 months. (EPA records indicate that Mr. Jim Michael of my staff discussed this issue with Mr. John Stokes of Giant in a December 13, 1989 telephone conversation.) Finally, your correspondence refers to EPA's policy, where a national lack of BDAT treatment, recovery, or disposal capacity can be demonstrated, for granting a one-year, case-by-case extension to the land disposal prohibition effective date, for provision of alternative protective treatment, recovery, or disposal. (See 40 CFR 268.5.) However, you should be aware that the statutory provisions under RCRA Section 3004(h)(3) require that the applicant make several demonstrations, among them that a binding contractual commitment has been made to construct or otherwise provide alternative treatment, recovery, or disposal capacity that protects human health and the environment. In order to address this requirement, the Agency has indicated that this provision may be satisfied by a Federal Register notice wherein the Agency proposes to grant either a "no migration" or a treatability variance. (See 55 FR 22673-4, June 1, 1990.) The Agency believes that once we have proposed to grant either a treatability or "no migration" petition, the petitioner has made a good faith effort to commit to obtaining alternative protective

disposal capacity. In addition, the Agency's action in proposing to grant the petition serves as a preliminary determination that the disposal unit is protective; the mere filing of a treatability or "no migration" petition provides no such indication of protectiveness and thus, cannot be deemed to satisfy the statutory requirement.

However, contrary to statements in your letter, regulations and draft guidance on the content and evaluation criteria for "no migration" petitions are currently available to the public, and have been for some time. Regulations currently exist at 40 CFR 268.6 describing the requirements for petitioning EPA to receive a "no migration" variance. These regulations were promulgated on November 7, 1986, and June 4, 1987, and since have been amended on July 8, 1987 and August 17, 1988. EPA also anticipates proposal of another "no migration" rule in 1990 that would further define "no migration" and would create new procedural and substantive petition requirements. Furthermore, a draft guidance document entitled "No Migration Variances to the Hazardous Waste Land Disposal Prohibitions: A Guidance Manual for Petitioners" has been available to the public upon request during the past two years. It also is available from the National Technical Information Service (NTIS, telephone number 703-487-4650), document number PB90204736. EPA records indicate that Mr. Michael of my staff responded to a January 16, 1990 request from Ms. Kim Bullerdick of Giant for a copy of this draft guidance. A copy of the latest draft of this guidance, dated March 1990, also is attached for your convenience.

EPA recognizes the situation land disposers face as the land disposal prohibitions become effective. However, the prohibition of land disposal of K048-K052 hazardous wastes prevents the continued land disposal of these wastes past November 8, 1990. Land disposal is prohibited until the "no migration" variance has received final approval.

Although a "no migration" variance could be granted to Giant after November 8, 1990, Giant is advised to be actively arranging for other treatment or disposal after November 8, 1990. Should Giant decide to petition EPA for a "no migration" variance, that petition should be submitted to: U.S. Environmental Protection Agency, Permits and State Programs Division, 401 M Street S.W., Washington, D.C. 20460. As Mr. Michael discussed previously with Mr. Stokes of Giant, EPA strongly recommends that potential petitioners meet with the Agency prior to development and submittal of "no migration" petitions. You may contact Mr. Michael of

my staff at 202-382-2231 to arrange such a meeting, or if you have specific questions concerning the "no migration" petition process.

Sincerely,

/S/

Sylvia K. Lowrance, Director
Office of Solid Waste

Attachment

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY 9551.1990(05)

OCT 9 1990

MEMORANDUM

SUBJECT: Replacement of Contaminated Soil and Debris Treated under a Treatability Variance

FROM: Sylvia K. Lowrance, Director
Office of Solid Waste

TO: David Ullrich, Acting Director
Waste Management Division, Region V

This memorandum is in response to your correspondence of April 25, 1990, in which you requested guidance in relation to six specific questions dealing generally with how the RCRA land disposal restrictions may affect certain remedial situations. We offer the following response to those six questions:

1. Q: Can soil and debris which has been treated in a tank within the area of contamination (AOC) in accordance with a treatability variance be replaced within the area of contamination without meeting any additional 40 CFR Part 264 requirements?

A: If contaminated soil and debris is treated to meet standards specified in a treatability variance that has been approved by the Agency, the treated soil/debris may then be placed in any treatment, storage or disposal unit that is in compliance with RCRA Subtitle C. This could include an "area of contamination" (i.e., a RCRA landfill) that has been designated by the Regional Administrator for the purpose of remediating the facility or site. Thus, as a regulatory matter, there would be no real distinction between soil/debris that is treated to the standard(s) set in the treatability variance and then placed in another unit, as opposed to "pure" hazardous wastes that are treated to the applicable Part 268 standards, and placed in another unit, except as discussed in the response to Question #5 (concerning contaminated media which no longer contains any waste).

By stating in your question that the treated wastes are to be redeposited into the AOC, we assume there is an implied question as to what design and operating

implied question as to what design and operating standards would then be applicable to the AOC itself. This is discussed in our response to question #6, below.

2. Q: Has the policy set forth on Page 5.12 of the document Implementing the Land Disposal Restrictions, October 1989, been revised?

   A: This policy has not been revised. The policy states that once an owner/operator receives a treatability variance, completes treatment, and has a treatment residual to be land disposed, the residue can be directed to any permitted or interim status unit.

3. Q: For the purpose of land disposal, is the residue of soil treated under a treatability variance to be distinguished from the residue of waste treated according to treatment standards?

   A: No. See response to Question 1, above.

4. Q: For the purpose of land disposal, is the residue of soil treated under a treatability variance in a tank within the area of contamination to be distinguished from the residue of soil treated under a treatability variance in a tank outside of the area of contamination?

   A: No. The location of the tank in relation to the "area of contamination" would not create a distinction as to how or where the treatment residuals could be land disposed. This assumes, of course, that the wastes have been treated to the standards specified in the treatability variance. A tank cannot be considered a part of the AOC (landfill), regardless of where it is physically located; thus, its location would have no bearing on the standards that would apply to management of the contaminated soils (or other hazardous wastes, for that matter) after they have been treated in the tank.

5. Q: Is a treatability variance for soil and debris to be considered in effect a delisting? Do the principles of the "contained in" policy for the treatment of contaminated ground water have any applicability to the treatment of contaminated soil and debris?

   A: A treatability variance for soil/debris does not have the effect of a delisting approved for the waste. The treated residuals typically will still contain hazardous wastes, and thus must be managed as such. In contrast, when wastes are delisted they are generally no longer subject to Subtitle C regulation.

The "contained in" policy applies to ground water

and other contaminated media such as soil which are contaminated with listed hazardous wastes. Thus, if ground water or soil are treated such that concentrations of the listed wastes are at or below health based levels, the ground water or soil would no longer "contain" the hazardous wastes, and would therefore be no longer subject to Subtitle C regulation. Enclosed is a recent memorandum which provides a more detailed explanation of the contained-in policy.

6. Q: If an AOC can be considered a RCRA unit for the purpose of closure, would an AOC ever be considered equivalent to a RCRA compliant unit for the purpose of disposal? (See page 6 of OSWER Directive 9234.2-04FS RCRA ARARs: Focus on Closure Requirements.)

A: As outlined in the cited ARARs manual, the AOC is a concept which can be applied in the context of remediation under CERCLA response actions or RCRA corrective actions. It is in many ways analogous to situations where two or more regulated surface impoundments would be treated as one unit in the context of closure of the impoundments.

When applied in the context of RCRA corrective actions or CERCLA remedial actions, the AOC concept would allow the Regional Administrator to designate a broadly contaminated contiguous area to be a RCRA "unit" (i.e., a landfill) for the purpose of implementing the remedy. In an existing landfill, the movement or consolidation of hazardous wastes within the designated area would not by itself trigger Subtitle C requirements (including the land disposal restrictions and the RCRA minimum technology requirements) since that movement or consolidation does not constitute "disposal" for Subtitle C purposes. If, however, wastes are excavated from the designated area, treated in another unit, and subsequently redeposited into the same area or unit, disposal has occurred, and the landfill would have to comply with applicable Part 264 or 265 requirements, including the LDRs, MTRs, closure standards (264.310), and the ground water monitoring requirements of Subpart F, Part 264 or 265.

The proposed Subpart S corrective action rule explains the AOC (described therein as the "corrective action management unit") concept in more detail. However, if you have more specific questions or issues regarding AOCs, we will be glad to work with you or your staff to resolve them.

If there are any questions on the above responses to your

questions, please contact Dave Fagan (FTS 382-4497) or Judy Goldberg (FTS 382-4534).

ıclosure
:: Regional RCRA Branch Chiefs
PSPD Branch Chiefs

OCT 14 1990

MEMORANDUM

SUBJECT: Guidance from Headquarters to Help Determine Possible Violation of the Land Disposal Restrictions

FROM: Jeffery D. Denit, Deputy Director
Office of Solid Waste (OS-300)

TO: Bruce Smith, Director
Office of Hazardous Waste Programs (3HW03)
Region III

This memorandum is written in response to your request for assistance from EPA Headquarters in making a Land Disposal Restrictions (LDR) determination for the Rhone-Poulenc facility located in Institute, West Virginia. As stated in your August 17, 1990, memorandum, Region III is concerned that the facility may be impermissibly diluting several waste streams subject to the LDR requirements. The restricted wastes of concern are: (1) F039 multi-source leachate wastewater streams from the Goff Mountain RCRA Landfill, from the site of Union Carbide's Private Trucking Operation, and from recovery well (RW-1); and (2) U025 dichloroethyl ether "chlorex" from the RW-1 well. The characterization data provided by Rhone-Poulenc show the F039 wastewaters as generated (prior to mixing) exceed both organic and metal LDR treatment standards, and U025 wastewaters as generated exceed the LDR treatment standard for dichloroethyl ether.

As described by Rhone-Poulenc in the document entitled "Treatment of Multisource Leachate in Rhone-Poulenc's Institute, West Virginia WWTU" submitted to EPA Region III on June 14, 1990, the treatment system consists of primary treatment (e.g., mixing, equalization, emergency diversion, neutralization and clarification) in tanks and secondary treatment (biotreatment and clarification) in surface impoundments. Before entering the primary treatment tanks, approximately 15,000 gallons per day (GPD) of F039 and U025 wastewaters subject to the LDR are mixed with approximately 4.5 million GPD of process water not subject to the LDR. The resultant wastewater mixture apparently meets the LDR levels for F039 and U025 wastewaters before entering the secondary treatment system. Rhone-Poulenc did not analyze for all regulated constituents or properly justify the selected constituents.

We believe that the facility may be violating the dilution prohibition. They have not provided evidence supporting that legitimate treatment for LDR organic or metal constituents is occurring in their treatment system. We also believe that the facility may be in violation of land disposing nonwastewaters that exceed the U025 treatment standards because the facility appears to have interpreted a portion of the LDR requirements for nonwastewaters incorrectly. Our analysis is summarized below.

Possible LDR Dilution Prohibition Violation

Rhone-Poulenc argues that its system consists of an initial aggregation point which equalizes wastes, followed by legitimate centralized treatment in section 3005(j)(3) aggressive biological treatment impoundment. (Chambers letter, pp. 4-5.) We discuss this argument below with respect to organic and metal contaminants.

Organics

The Agency's discussion of this issue appears at 55 FR 22666. In general, we determined that initial aggregation of similar wastes followed by legitimate centralized treatment may be permissable (i.e., may not constitute impermissible dilution), even if treatment occurs in a surface impoundment or other land disposal unit (provided, of course, that the waste meets the treatment standard before land disposal occurs, or that disposal occurs in a section 3005(j)(11) impoundment). (Thus, the issue of treatment of organics in aggregation tanks is not relevant.) In determining what constitutes legitimate centralized treatment, we indicated that the clearest indication was use of the same type of treatment as that on which the treatment standard for the prohibited waste is based. Id. col. 2. While biological treatment was one of the treatment technologies relied upon by the Agency in establishing treatment standards for multi-source leachate, it is not the only treatment and is clearly not appropriate for all F039 constituents. (See Background Documents on BDAT for F039.) In addition, combination of leachate containing organics with process wastewater containing organics for biological treatment could be permissible aggregation, because it appears that the facility could be combining different wastes amenable to the same type of treatment technology. Id. col. 1. Before a final assessment could be made, Rhone Poulenc would need to submit characterization data demonstrating similarities in composition between leachate and process wastewaters (e.g., indicating biodegradable constituents at approximately the same concentration levels). A demonstration would also be needed indicating that the treatment impoundment is capable of treating toxic organics in the commingled wastewaters, i.e., that levels of these toxic organics are not so low as to go untreated in the Rhone Poulenc impoundment. Absent such a showing, EPA could not conclude that the impoundment is legitimately treating the organics in the prohibited wastes.

Assuming that the leachate is commingled with similar plant wastewaters and that biodegradation is the appropriate treatment for all of the F039 organics and for the plant wastewaters, the treatment of organics would be permissible.

Metals

It appears that Rhone-Poulenc is impermissibly diluting metals in its system. The same analysis used for organics would indicate that biological treatment is inappropriate for metals (id. col. 1-2 ("An example of a type of treatment that is inappropriate for treatment of certain prohibited wastes would be biological treatment standards for metals. In these systems, metal removal is incidental and nowhere as efficient as systems designed to treat metals...")). The initial aggregation step, in which metals are removed by settling, likewise probably does not constitute proper treatment of metals. As Rhone-Poulenc states, it is an aggregation step, not a treatment step; it achieves a homogenous mixture that allows optimization of biological treatment of organics. Adequate treatment of metals would require chemical precipitation or some other type of comparable treatment. (See Background Documents on BDAT for F039.) At the least, Rhone-Poulenc has not yet demonstrated that it can meet the F039 wastewater metals standards by use of primary treatment (i.e., settling in tanks for short periods of time).

Consequently, Rhone-Poulenc is taking a prohibited waste with treatment standards for metals, which does not meet those treatment standards as generated, mixing it with a large volume of wastewater, and introducing it to a system that does not provide anything more than incidental removal of metals. This appears to constitute impermissible dilution. Id. at 22666 col. 1-2. (Rhone-Poulenc's argument that the leachate does not differ significantly from its process wastewater which is only treated by biological treatment does not prove anything; it may be that Rhone-Poulenc is not adequately treating the metals in its process wastewater either. The key here is that there are metal standards for multi-source leachate, Rhone-Poulenc's leachate as generated does not meet those standards, and the leachate only meets those standards after it is mixed in a treatment system that at no point does proper treatment for metals.)

Rhone-Poulenc submitted influent and effluent data from a lab-scale model in an attempt to demonstrate the applicability and treatment performance of the primary treatment system. The data submitted show only some reduction for a few regulated organic constituents and no data is provided to demonstrate removal rates for any metal constituents. While the final determination on a case-specific dilution issue should generally be made by the Region (or State), you should be aware of our concerns with these data submitted by Rhone-Poulenc. (In many

instances, our concerns are similar to those presented in a memorandum from Region III to Rhone-Poulenc on July 30, 1990.) The facility incorrectly labels their lab-scale experiment as a more stringent test criteria than that required by the Agency to demonstrate treatment performance and refers to the November 1989 proposal for the Third-Third rule. EPA proposed to require a reduction of at least one BDAT list constituent at the point of aggregation to demonstrate that the aggregation did not constitute impermissible dilution (54 FR 48372, 48494-48496). The reason the Agency did not finalize this criteria is because it was not stringent enough to provide the adequate information needed to make a reliable determination of legitimate treatment (55 FR 22665).

We believe that the lab-scale data are inadequate to demonstrate that appropriate treatment for F039 and U025 wastewaters is achieved before disposal into the surface impoundments. Not only should data from the actual full-scale treatment system be used to make a demonstration of treatment performance, but it should include removal rates for all regulated constituents determined to be present in the wastes. (For F039, the regulated constituents include over 200 constituents, regardless of the original constituent listings of wastes disposed in the landfill and surface impoundments.) Based on our experience, the type of treatment used by Rhone-Poulenc will likely not provide removal rates comparable to the levels otherwise needed to legitimately treat the metals present in the F039 wastes to BDAT levels; consequently, it appears the facility is diluting metals impermissibly to achieve the LDR levels for F039 wastewaters.

Possible Nonwastewater LDR Violation

It also appears that Rhone-Poulenc is in violation of various standards for nonwastewaters. First, with respect to the sludge derived from treating F039 wastewaters, the sludge received a two-year national capacity variance and consequently can only be disposed of in a minimum technology surface impoundment during that period or must comply with F039 nonwastewater standards. See Section 268.35(h). Section 3005(j)(3) impoundments do not meet the minimum technology requirement provisions unless they have received one of the section 3004(o)(2) or (3) waivers. See 53 FR 31185-186 (August 17, 1988) ("although many commenters stated that the retrofit waivers granted under 3005(j)(3) ... should also be recognized under the land disposal restrictions, the Agency disagrees. EPA believes that Congress would have included these waivers had it intended to do so.") Thus, absence compliance with a waiver from minimum technology requirements (the section 3004(o)(2) waivers are codified in 264.221(d) and (e) and 265.221(c) and (d)), the sludge cannot be placed in the surface impoundment.

With respect to the treatment standard for U025, the standard must be met before land disposal of the waste. API v.

EPA, 906 F. 2d 729, 735-36 (D.C. Cir. 1990). Consequently, the sludge in the impoundment must meet the nonwastewater U025 standard. In addition, further placement of the sludge in the Goff landfill is acceptable only if that landfill is a subtitle C unit (and the sludge would have to meet the U025 treatment standards before that land disposal as well).

Should you require additional information, please contact me at FTS 382-4627 or Richard Kinch at FTS 382-7917.

Attachments

OCT 14 1990

Mr. G. A. Vogt, Manager
Environmental Compliance & Plant Services
Thompson Consumer Electronics, Inc.
P.O. Box 2001
Marion, Indiana 46953-4399

Dear Mr. Vogt:

This letter is in response to your July 10, 1990, letter regarding clarification of the national capacity variance for inorganic solids debris under EPA's Land Disposal Restriction Regulations for Third Third Wastes. In general, your letter questioned the scope of the definition of inorganic solids debris as well as its application. The delay in responding to your letter results from the myriad related questions that the Agency has received concerning these issues. The Agency can now offer the following clarifications for your situation:

For the purposes of determining the applicability of the capacity variance extension, the waste in question must only be specified as a D004, D005, D006, D007, D008, D009, D010, or D011 waste and must meet all the criteria listed in the definition of inorganic solids debris in 268.2(g). (See 55 FR 22686 (June 1, 1990).) It must also exactly fit one of the eight specific categories of inorganic solids debris listed in 268.2(g)(1)-(8). While some wastes may appear to fall under one of these categories (e.g., 268.2(g)(6) and (7) include wastes identified as containers, drums, pipes, valves, appliances, or industrial equipment), they must first meet the criteria in the preceding portion of the definition that clearly indicates <u>that these wastes must be inorganic or metal materials</u>. In the June 1, 1990 rule, the Agency also gave specific examples of organic solids debris (55 FR 22555) in order to help clarify the classification of a waste as organic versus inorganic. These examples of organic debris included: rags, paper, cardboard, clothes, gloves, paints, paint chips, wood, grubbing materials, blankets, hoses, bags, resins, plastic liners, and PVC piping. (Please see also the discussion of inseparable mixtures of inorganic and organic debris later in this letter.)

In response to your question on metal-contaminated cloth filters, they would be classified as <u>organic</u> solids debris because cloth is typically comprised of organic materials. EPA

has granted a national capacity variance for soil and debris for which the underlying standard (i.e., waste code-specific standard) is based on incineration, vitrification (D004 arsenic wastes), or mercury retorting (D009 mercury wastes with greater than 260 mg/kg total mercury). While the underlying standards for most D004--D011 metal wastes were generally based on stabilization rather than incineration, the Agency did state, at 55 FR 22555 (June 1, 1990), "as a matter of treatment policy prohibited metal wastes that are generated as an organo-metallic or in an organic matrix can be incinerated ... , prior to subsequent treatment of the ash (if necessary), in order to comply with a concentration-based standard or to comply with a technology-based metal treatment standard." and that "... much of the D004--D011 organic debris may be treatable by washing or extraction rather than incineration." Thus, only organic solids debris that must be treated by incineration, vitrification, or mercury retorting in order to comply with the metal standards, received a variance. If the metal-contaminated cloth filters cannot be decontaminated to below the appropriate treatment levels by washing or extraction with acids (or other appropriate media) and would therefore have to be incinerated, they are subject to the national capacity variance.

During a follow-up telephone conversation with my staff, you also indicated that one of the wastes on which you were seeking guidance consists of broken color picture tubes made primarily of glass. While EPA has specifically identified glass as one of the specific types of inorganic debris according to 268.2 (g)(3), one needs to evaluate the applicability of the rest of the definition of inorganic solids debris. One must first determine if the waste is friable (i.e., easily or readily crumbled). Although broken color picture tubes would be expected to be somewhat friable, one must also determine whether the subsequent pieces pass the 9.5 mm sieve size. Based on your remarks, we assume that at least some of the waste (either "as generated" or the friable residues) will indeed pass through, but not all. Also, additional small pieces from other similar friable materials may be generated during transportation and handling (i.e., more pieces may be generated that would pass through a 9.5 mm sieve). Thus, the questions become "When does one apply the standard?" and "Is there a percentage of the waste that must not pass through the sieve in order to be classified as an inorganic solids debris?"

In responding to this question, one must examine the Agency's intent in promulgating the variance. The key to the variance is that wastes in the inorganic solid debris categories would have to be crushed or "otherwise reduced in size" prior to stabilization (55 FR 22556). The Agency had determined that there was inadequate capacity for "cutting, or crushing and grinding in mechanical sizing equipment" for these wastes. Thus, it is the link between the type of inorganic solids debris and

the sizing equipment required as pretreatment (i.e., prior to the stabilization process) that was the key factor in determining the need for the capacity variance.

As a result, the Agency has determined that the point of generation is where the waste is identified as inorganic solid debris for purposes of the national capacity variance. If any of the waste material does not completely pass through a 9.5 mm sieve, then the entire quantity of waste material qualifies as inorganic solid debris. In addition, if the waste material is friable (i.e., easily crumbled) but some of the pieces will not pass through a 9.5 mm sieve, then the entire quantity of waste material is considered to be inorganic solid debris. Therefore, any debris that may fall through a 9.5 mm sieve because of transporting from the generator's site to the disposal site is also considered to be inorganic solid debris that is subject to the national capacity variance.

Wastes appearing to meet the definition of inorganic solids debris under section 268.2(g)(6) (metal cans, containers, drums, or tanks) and (7) (metal nuts, bolts, pipes, pumps, valves, appliances, or industrial equipment) often contain organic parts that are difficult to separate. This occurs particularly in cases such as: 1) industrial process equipment being dismantled; 2) industrial valves comprised of composites of organic and inorganic materials; and 3) appliances containing multiple connected parts. Capacity for sizing and separation is also lacking for this type of inorganic solid debris (which was the basis of the variance is also applicable for this type of inorganic solids debris. Thus the variance for inorganic solids debris will apply to these inseparable mixtures except in situations where during the dismantling, the organic materials or a significant portion of the organic materials are manually separable or separable by simple mechanical means. The separated organic materials must then be treated for their metals content and thus comply with the applicable treatment standards for D004 -- D011 (except as noted above). Only the inorganic solids debris that are separated from the nonhazardous organics are subject to the national capacity variance.

I hope this letter addresses your major concerns. If you have any further questions, please call Richard Kinch, Chief of the Waste Treatment Branch, at (202) 382-7927.

Sincerely,

Sylvia K. Lowrance
Director
Office of Solid Waste

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

9551.1990(08)

OCT 24 1990

Mr. Fielding Formway
ARCO Products Company
Post Office Box 1127
Ferndale, Washington 98248

Re: No-Migration Petition submitted for ARCO Products Company's Ferndale, Washington Land Treatment Facility (F-90-NCPP-FFFFF)

Dear Mr. Formway:

I am writing in regard to your September 5, 1989 "no-migration" petition, which requests a variance under 40 CFR §268.6 to allow ARCO Products Company (ARCO) to continue the land treatment of restricted wastes (EPA Hazardous Waste Nos. K050 and K051) at ARCO's Ferndale, Washington Land Treatment Facility No. 7 (LTF-7). After a careful review of your petition, we have concluded that your facility does not meet the standard for a no-migration finding. Therefore, we will recommend to the Assistant Administrator for Solid Waste and Emergency Response that the petition be denied.

Our decision to recommend denial of the petition is based on several concerns:

- The ground-water monitoring system is inadequate for the purpose of a no-migration variance, because it will not detect migration at the earliest time.

- The separation between the bottom of the treatment unit and the top of the seasonally high-water table exceeds the minimum requirement.

- Unsaturated zone monitoring for benzene, chrysene, and selenium indicate that hazardous constituents have already migrated beyond the unit boundary, and are likely to continue to do so in the future.

- Your air modeling shows concentrations of benzene at the unit boundary that exceed the allowable health-based standard.

The details of our concerns are described below.

Ground-Water Monitoring System

We have concluded that ARCO has failed to meet the requirements of 40 CFR §268.6(a)(3) and (4). Specifically, we believe that ARCO has not adequately determined background conditions in both the ground water and soil-pore water underlying LTF-7. First, ARCO proposed well AW-45 as an upgradient well and wells AW-47, 48, 49, and 50 as downgradient wells. ARCO notes elsewhere in the petition, however, that because of the transient nature of the water table, wells 45 and 63 are considered downgradient as well as upgradient (V.1, page 5-30 and Section 6.6). We conclude, therefore, that ARCO's ground-water monitoring system at LTF-7 does not have an upgradient monitoring well that is capable of consistently providing samples of ground water unaffected by the treatment unit.

Second, we question whether ARCO can collect samples of soil-pore water which are representative of background conditions, as required by 40 CFR §264.278(b)(1). Specifically, ground-water contours shown in Figure 3-7 of the petition indicate a ground-water divide trending generally to the west across Plot-7C. Although ground water is shown to flow generally to the northwest under LTF-7, the presence of the ground-water divide, as well as the southwesterly ground-water flow shown for LTF-45 and LTF-47, indicate that ground water may flow to the southwest from LTF-7 to the background plot and, thus, to the background lysimeters located south of the southwest corner of Plot-7C, (Figure 5-1 on page 5-14). (This means that one of the background lysimeters may be downgradient of LTF-7.) We are concerned that this flow pattern may be present since only the general direction of ground-water flow is shown (e.g., an annual average) and not its seasonal patterns. If ground water periodically flows from LTF-7 to the background lysimeters for Plot-7C, soil-pore water samples taken from these lysimeters could not be reliably used to establish background concentrations.

Maintaining Minimum Separation

Federal regulations require that the depth to ground water at land treatment facilities should be no less than three feet from the bottom of the treatment zone to the seasonal high water table (see 40 CFR §§264.271(c)(2)). As ARCO acknowledged in its petition (V.1, page 3-12), the ground water beneath LTF-7 sometimes rises to a level that is within the lower treatment zone of LTF-7 (i.e., above a depth of five feet) due to the low permeability of the subsoil and the area's humid climate. Figure 3-8 of the petition displays the results of bi-weekly readings of water levels in three sets of paired, shallow piezometers

conducted from July 1988 to April 1989. These data show that ground water was present during this period at depths in the treatment zone as high as 2.8 feet below the ground surface and that, in general, ground water was present at depths at or above five feet below the ground surface between November and April of the sampling period.

ARCO's inability to maintain the minimum separation between the bottom of the treatment zone and the top of the seasonally high ground-water table is further supported by information presented in Table E-4 of ARCO's petition. Our evaluation of the data presented in Table E-4 revealed that between January and April 1987, ground water beneath LTF-7 was measured at depths ranging from 0.89 to 6.1 feet below "top of casing." Although, ARCO did not provide information on the distance between the ground surface and the "top of casing," typical distances from the ground surface to the top of the well casing are generally between one and three feet.[1] Thus, even if the distance between the ground surface and the "top of casing" was three feet, the water table would only have been 3.89 to 9.1 feet below the ground surface during the January - April 1987 period.

Presence of Constituents Below the Treatment Zone (BTZ)

Various data indicate that migration of hazardous constituents below the treatment unit has recently occurred. The petition noted (V.1, page 5-18), that chrysene was detected in ground-water monitoring well No. 43 in January, 1988 at 3.3 ppb, which is in excess of the health-based level (HBL) of 0.2 ppb used in no-migration decisions. Furthermore, correspondence between ARCO and Washington Department of Ecology (WDOE) (November 6, 1989 and January 24, 1990) that has been shared with us indicates that benzene, chrysene, and selenium have also been detected in soil-pore liquids beneath the treatment zone at hazardous concentrations. We present these data below in Table 1.

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[1] Table E-5 of Appendix A presents for monitoring wells other than those listed on Table E-4, elevation measurements made at the top of casing and surface grade. These data indicate that the distance between the ground surface and the top of the well casing ranged from a low of 0.59 feet (well number AP-46) to a high of 2.15 feet (well number AP-64).

TABLE 1

Soil-Pore Liquids Monitoring Data

Constituents	Lysimeter No.	HBL(ppb)	Concentration(ppb)	Date
Benzene	22	5	6.4	8/89
			7.4	9/89
			10.0	12/89 1/
Chrysene	Composite 2/	0.2	1.4	9/88
Selenium	Composite 3/	10	14.0	2/87

1/ Composite sample (Based on page 1-5 of ARCO's January 24, 1990 letter to Mr. Richard A. Burkhalter, Washington Department of Ecology).

2/ Composite sample containing samples collected from lysimeter numbers 21GB, 22GB, and 23GB.

3/ Composite sample containing samples collected from lysimeter numbers 21PC, 22PC, and 23PC.

As shown above in Table 1, benzene, chrysene, and selenium have migrated past the unit boundary at concentrations in excess of the HBL used in no-migration petition decision-making. We note that concentrations of the above constituents may actually have been detected at an individual lysimeter at concentrations higher than those reported, due to the averaging effect obtained from compositing the lysimeter samples.

ARCO's January 24, 1990 letter also stated that toluene, ethylbenzene, and xylene were detected in lysimeters, which "indicates a problem with the current operating practices for landfarm Plot-7B." ARCO indicates that hairline fractures in the clay may be aiding contaminant transport from Plot-7B (Attachment page 1-4) but also suggests that these hairline fractures are a local phenomenon because similar lithology was not detected in other borings. Because the petition states that fractures in the clay are a source of recharge for the underlying ground water, we conclude that future migration will continue to occur. ARCO believes it can address this concern by decreasing waste loadings made to Plot-7B. If this leads to an increase in waste loadings made to Plots-7C and 7A, we are concerned that this increase may cause additional migration.

Lastly, data presented in Table 5-8 of the petition, show that chrysene was detected below the treatment zone at

concentrations of 130 ppb for separate sampling periods in July, 1987 and January, 1988. We do not believe that ARCO can explain the presence of chrysene as resulting from a recent, one-time overapplication and the recurring presence of chrysene beneath the treatment unit at concentrations in excess of the health-based level of 55 ppb is a further basis for petition denial. The presence of chrysene beneath the treatment zone, will also obscure future determinations of whether chrysene is continuing to migrate.

Air Monitoring

In its petition, ARCO stated that the CHEMDAT6 model predicted concentrations of benzene at the unit boundary in excess of the health-based standard by a factor of 1.4; therefore, ARCO is "exploring waste minimization, pretreatment, and operation modifications which can effectively reduce the predicted emissions for benzene to meet appropriate standards if necessary" (V.1, Executive Summary, pages 6-7). In fact, the petition indicates (V.1, page 8-12) that the predicted annual average concentration of benzene in the air at the unit boundary is 1.0 ug/m^3, which exceeds the health-based level of 0.12 ug/m^3. Elsewhere in the petition (V.1, page 7-11), the average concentration of benzene in the air at the unit boundary is reported as 1.56 ug/m^3 (including a May 1985 waste sampling event), which also exceeds the health-based level. Therefore, ARCO's predicted benzene concentrations (1.0 ug/m^3) at the unit boundary fail to satisfy the no-migration standard of 0.12 ug/m^3.[2]

Finally, our review indicates that the petition is incomplete and that information and clarification in areas beyond those highlighted above, would be needed to complete the petition. However, because of the problems above, we believe we have enough information at this time to move toward a denial of your petition.

It is our practice to give petitioners the option of

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[2] Based on our review of Tables E-24 through E-27, it appears that the values of predicted maximum long-term ambient air concentrations in Table 7-3 were not corrected based on the results of the confirmatory monitoring program discussed in Appendix E. If corrected for monitored concentrations, the predicted concentrations of benzene at the unit boundary actually may be higher than reported in the petition. In addition, it is likely that ARCO's confirmatory monitoring program may not have been performed during worst-case emission and dispersion conditions. As a result, the concentration of benzene may actually be higher than measured and an even higher correction factor may be warranted.

withdrawing their petitions to avoid a negative publication in the Federal Register. If you prefer this option, you must send us a letter withdrawing your petition and acknowledging that the petitioned wastes are still considered to be restricted wastes subject to the Third Third Land Disposal prohibitions scheduled to be effective November 8, 1990. This letter should be forwarded to the following address within two weeks of the date of receipt of today's correspondence:

Elizabeth A. Cotsworth, Chief
Assistance Branch (OS-343)
Office of Solid Waste
U.S. Environmental Protection Agency
401 M Street, S.W.
Washington, D.C. 20460

If you choose not to withdraw your petition, we will recommend that a proposed denial decision be published in the Federal Register.

Any questions regarding our findings may be submitted in writing to Mr. James Michael of my staff.

Sincerely,

Jeffery D. Denit, Deputy Director
Office of Solid Waste

cc: Michael Gearheard, Region X
Carrie Sikorski, Region X
Dave Bartus, Region X
Kim Anderson, WDOE
Elizabeth Cotsworth, EPA HQ
James Michael, EPA HQ
Terry Keidan, EPA HQ

bcc: Newman Smith, AB, PSPD, OSW
Dave Reeves, WMD, OSW
Richard Kinch, WMD, OSW
Kathy Stein, OE
Wanda Levine, WMD, OSW
Howard Finkel, ICF Incorporated

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY 9551.1990(09)

NOV 6 1990

Mr. David R. Saad
Environmental Coordinator
Marathon Petroleum Company
Marathon Avenue
Robinson, Illinois 62454

Re: No-Migration Petition submitted for Marathon Petroleum Company's Robinson, Illinois Land Treatment Facility and Storage Surface Impoundments (F-90-NMPP-FFFFF)

Dear Mr. Saad:

I am writing in regard to your December 5, 1989 "no-migration" petition, which requests a variance under 40 CFR §268.6 to allow Marathon Petroleum Company (Marathon) to continue the land treatment and storage of restricted wastes (EPA Hazardous Waste Nos. K048 - K052) at Marathon's Robinson, Illinois land treatment facility (LTF) and storage surface impoundments. After a careful review of your petition, we have concluded that your facility does not meet the standard for a no-migration finding. Therefore, we will recommend to the Assistant Administrator for Solid Waste and Emergency Response that the petition be denied.

Our decision to recommend denial of the petition regarding the land treatment facility is based on several concerns:

> Ground water and unsaturated zone monitoring data indicate that hazardous constituents have already migrated beyond the unit boundaries.
>
> The ground-water monitoring system for the land treatment facility is inadequate for the purpose of a no-migration variance because it will not detect migration at the earliest practicable time due to the presence of hazardous constituents beneath the land treatment units.
>
> The separation between the bottom of the land treatment unit and the top of the seasonally high water table exceeds the minimum requirements.

We also recommend denial of the petition for the storage surface impoundments because Marathon will not be able to differentiate between past releases from the previously unlined surface impoundments and possible future releases from the retrofitted units. The details of our concerns are described below.

Land Treatment Facility

Presence of Constituents Below the Treatment Zone (BTZ)

Ground-water and soil-pore monitoring data provided in Marathon's petition indicate that migration of hazardous constituents below the treatment units has already occurred. Specifically, analyses of ground-water samples collected during May 1989 (Appendix C, V.3, Appendix E, Table E-14) have indicated the presence of bis(2-ethylhexyl)phthalate in three monitoring wells (P6B, P7C, and P12B) at concentrations ranging from 20 to 47 ug/l. These data indicate that bis(2-ethylhexyl)phthalate is present in the ground water at concentrations in excess of the health-based level of 3 ug/l used in no-migration petition decision-making. In addition, results from six other monitoring wells (P3D, P4C, P5C, P8B, P8C, and P12A) show the use of higher than normal detection limits (20 or 36 ug/l rather than 10 ug/l) for this same parameter, indicating this compound's possible presence at similar concentrations in the ground water at these other locations.

In addition, benzene was detected at a concentration of 33 ug/l in the soil-pore liquid collected from lysimeter L-3 on July 6, 1989 (Appendix C, V.3, Table E-14). (The health-based level for benzene is 5 ug/l.) Marathon infers that benzene is commonly found in the air at refineries, and therefore, spurious contamination of the sample may have occurred (Appendix C, V.1, page 2-16). However, Marathon did not provide the necessary data to support their speculation. Therefore, we can only conclude that these data provide evidence of migration from the unit.

Detecting Migration at the Earliest Practicable Time

We have also concluded that Marathon's groundwater monitoring system will not be able to detect migration at the earliest practicable time. Therefore, it failed to meet the requirements of 40 CFR §268.6(a)(4). Specifically, we are concerned that Marathon will be unable to differentiate between past releases from other sources and past, present, and future releases resulting from the operation of the LTF. We also are concerned that Marathon's unsaturated zone monitoring system will not be able to detect potential migration in the northern section of the West land treatment unit. We discuss our conclusions below.

Soil-core data provided by Marathon indicate that hazardous constituents are present below the West land treatment unit. Specifically, based on the presence of benzo(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, bis(2-ethylhexyl)phthalate, chrysene, and pyrene in below treatment zone (BTZ) soil cores, Marathon has concluded that a "historical waste body" which predates operation of the West land treatment unit, exists beneath the unit (see Attachment I). Of these constituents, benzo(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, and chyrsene were detected below the treatment zone at concentrations exceeding the health-based levels used in no-migration petition decision-making.

Marathon states that these data do not conclusively prove that constituents are migrating below the treatment zone. Rather, Marathon argues that the presence of the above constituents is due to past operations at this same site. Marathon, however, has not explained how and when this "historical waste body" was deposited. Therefore, we conclude that Marathon has not conclusively proven that the constituents detected below the treatment zone did not occur as a result of land treatment operations.

Regardless of whether the contaminants beneath the treatment unit resulted from a "historical waste body" or from current operations, we believe that Marathon will be unable to determine whether releases occurred because the waste constituents detected below the treatment zone have also been detected in the wastes managed at the land treatment unit. Due to Marathon's inability to differentiate between past releases from other sources and past, present, and future releases (if any) resulting from the operation of the LTF, we conclude that Marathon has failed to meet the requirements of 40 CFR §268.6(a)(4).

Lastly, in 1988, Marathon expanded the 17-acre West land treatment unit to include an adjacent three acres (the northern expansion). Run-off from both the East and West land treatment units drain into this area and are routed to storage tanks and the refinery's wastewater treatment system. During storms, however, the run-off does not drain as fast as it accumulates, and the northern expansion area floods. As a result of the ponding, a temporary hydraulic head is formed, increasing the potential for migration of hazardous constituents. Although Marathon recently installed new lysimeters in the northern expansion, samples have yet to be collected. Marathon has collected soil core samples from this area, but results have not been submitted. Marathon, therefore, is unable to demonstrate that there has been, or will not be migration of hazardous constituents from this area of the West land treatment unit.

Maintaining Minimum Separation

Federal regulations require that the depth to ground water at land treatment facilities should be no less than three feet from the bottom of the treatment zone to the seasonal high water table (see 40 CFR §§264.271(c)(2)). Data provided in the petition indicate there may be a seasonal high water table or perched water table within the till layer beneath the LTF, or at least near the northern part of the LTF, that encroaches into the three foot thick buffer zone required below the treatment zone. Specifically, some of the monitoring wells screened in the till and at the till/sandstone interface were found to have depth-to-water level measurements of less than eight feet. The water level measurements were taken during relatively dry months (August and November) in which ground water is at a low level. Marathon's inability to demonstrate that it is maintaining the minimum separation between the bottom of the treatment zone and the top of the seasonally high ground-water table is a basis for denial of the no-migration petition.

Surface Impoundments

We have concluded that Marathon has failed to demonstrate, to a reasonable degree of certainty, that constituent migration from the three storage surface impoundments will not occur. We note that it is difficult to evaluate the long-term performance of the liner system installed in the three surface impoundments for the storage of both liquid wastes and bulk dry wastes. Discussed below are the reasons why we have concluded that Marathon has failed to demonstrate that there will be no-migration of constituents at hazardous concentrations from the three impoundments.

First, we are concerned that Marathon will not be able to differentiate between past releases from the previously unlined impoundments and future releases (if any) from the new lined impoundments. Specifically, between 1980 and 1988, Marathon operated the three surface impoundments without liners and leak detection systems. After eight years of operating without liners, we believe that it is likely that some contamination of the subsoils has occurred beneath these impoundments. According to the Geological Engineering Report for the three surface impoundments (Appendix D, V.1, Attachment V, page 3-2), soil borings taken from areas near the pits showed a layer of soil with strong odor and appearance of hydrocarbons. The presence of contaminated soils beneath the impoundments will hinder Marathon's ability to determine whether constituents are migrating from the impoundments and affect Marathon's ability to detect constituent migration at the earliest extent practicable.

Second, on June 19, 1990, the Illinois Environmental Protection Agency (IEPA) conducted a site visit at the Robinson

Refinery. During the site visit, it was apparent that waste overtopping had occurred as evidenced by the dead vegetation and stained soil on the south side of the impoundment. In the petition, Marathon has claimed that, to prevent overtopping, they designed the impoundments with adequate freeboard (two-feet). As overtopping, induced by local meteorological conditions, recently occurred, Marathon's design of the impoundments is insufficient to prevent future occurrences of overtopping. As a result, Marathon has failed to prove, to a reasonable degree of certainty, that there will be no migration.

Third, Marathon stated that the Oily Sludge Pit had leaked due to a one-inch tear in the upper flexible membrane liner in the center of the pit, which "appeared to have been caused by some external mechanism and was not the result of material failure." Marathon does not know how the liner was damaged. Without this knowledge, Marathon can not guarantee that such an event would not occur in the future. In addition, the petition indicated that the bulk waste pit will be manually cleaned out every one-to-five years, depending on the waste accumulation rate. Without knowledge of how or why the impoundment liner was damaged, Marathon will not be able to guarantee that the bulk pit liner will not be damaged when personnel remove solids.

Completeness of Petition

Finally, our review indicates that the petition is incomplete and that information and clarification, in areas beyond those highlighted above, would be needed to complete the petition. However, because of the problems noted above, we believe we have enough information at this time to move toward a denial of your petition.

It is our practice to give petitioners the option of withdrawing their petitions to avoid a negative publication in the Federal Register. If you prefer this option, you must send us a letter withdrawing your petition and acknowledging that the petitioned wastes are still considered to be restricted wastes subject to the Third Land Disposal prohibitions scheduled to be effective November 8, 1990. This letter should be forwarded to the following address within two weeks of the date of receipt of today's correspondence:

Patricia Cohn, Acting Chief
Assistance Branch (OS-343)
Office of Solid Waste
U.S. Environmental Protection Agency
401 M Street, S.W.
Washington, D.C. 20460

If you choose not to withdraw your petition, we will recommend that a proposed denial decision be published in the Federal Register.

Any questions regarding our findings may be submitted in writing to Mr. James Michael of my staff.

Sincerely,

Jeffery D. Denit, Deputy Director
Office of Solid Waste

Attachment

cc: Karl Bremer, EPA Region V
George Hamper, EPA Region V
Gale Hruska, EPA Region V
Larry Eastep, Illinois EPA
Patricia Cohn, PSPD, OSW
James Michael, PSPD, OSW
Terry Keidan, PSPD, OSW

ATTACHMENT I

Summary of Constituents Detected in the BTZ (mg/kg)

Constituents	Date	Sample Number	Concentration	Health-Based Level
Benzo(a)anthracene	07/11/89	LTD-5-2	20	0.055
	07/11/89	LTD-5E-2	120	
	04/18/89	LTD-12D	0.63	
Benzo(a)pyrene	07/11/89	LTD-5E-2	63	0.055
Benzo(b)fluoranthene	07/11/89	LTD-5E-2	52	0.055
Bis(2EH)phthalate	08/10/88	RI-17D	0.68	50
Chrysene	08/10/88	RI-5D	0.41	15 1/
	07/11/89	LTD-5D-2	110	
	04/19/89	LTD-5E	0.095	
	07/11/89	LTD-5E-2	650	
	08/09/88	RI-10D	1.3	
	08/10/88	RI-12D	0.35	
	04/18/89	LTD-12D	3.4	
	04/18/89	LTD-12E	0.99	
Pyrene	07/11/89	LTD-5-2	27	32,000
	07/11/89	LTD-5E-2	160	
	04/18/89	LTD-12D	0.63	

1/ Calculated by Marathon using the RFI Guidance Manual.

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY 9551.1990(10)

NOV 7 1990

Mr. R. G. Soehlke
Plant Manager
Star Enterprise
Delaware City Refinery
2000 Wrangle Hill Road
Delaware City, Delaware 19706

Re: No-Migration Petition submitted for Star Enterprise's Delaware City, Delaware Land Treatment Unit (F-90-NSEP-FFFFF).

Dear Mr. Soehlke:

I am writing in regard to your December 26, 1989 "no-migration" petition, which requests a variance under 40 CFR §268.6 to allow Star Enterprise to continue the land treatment of restricted wastes (EPA Hazardous Waste Nos. K048 - K051) at Star's Delaware City, Delaware land treatment unit (LTU). After a careful review of your petition, we have concluded that your facility does not meet the standard for a no-migration finding. Therefore, we will recommend to the Assistant Administrator for Solid Waste and Emergency Response that the petition be denied.

Our decision to recommend denial of the petition is based on two main concerns:

- Unsaturated zone monitoring for lead and nickel indicate that hazardous constituents have already migrated beyond the unit boundary.

- Ground-water monitoring for arsenic, chromium, lead, selenium, and vanadium indicate that hazardous constituents have already migrated beyond the unit boundary.

The details of our concerns are described below.

<u>Presence of Constituents Below the Treatment Zone (BTZ)</u>:

Analyses performed on the soil-pore liquids indicate that lead and nickel have migrated out of the treatment zone. Soil-pore samples taken during the first three quarters of the land treatment demonstration (12/88 - 5/89) show the exceedance of lead and nickel above their respective health-based levels. Lead showed concentrations in excess of the health-based level of 0.05 mg/l for 13 out of the 34 samples taken, while nickel showed concentrations in excess of the health-based level of 0.1 mg/l

for 15 out of the 35 samples taken. These data demonstrate that both lead and nickel have migrated below the treatment unit at concentrations in excess of their respective health-based levels. (See Attachment, Table 1).

Presence of Constituents in the Ground Water

Results of ground-water monitoring analyses also indicate the presence above health-based levels of metals in the ground-water at the LTU boundaries. Specifically, arsenic (125 ppb), selenium (up to 50 ppb), lead (up to 208 ppb), chromium (up to 320 ppb), cadmium (up to 122 ppb), and vanadium (455 ppb) were shown to exceed their respective health-based levels. (The health-based level for arsenic, lead, and chromium is 50 ppb; for selenium and cadmium, the health-based level is 10 ppb; and for vanadium the health-based level is 240 ppb). While background may have contributed somewhat to the measured levels of the hazardous constituents, the differences between the upgradient monitoring well concentrations and the downgradient monitoring well concentrations exceeded the health-based levels. Therefore, these data demonstrate that arsenic, selenium, lead, chromium, cadmium, and vanadium have migrated to the ground-water above their respective health-based levels. (See Attachment, Table 2).

Incomplete Petition

Finally, our review indicates that the petition remains incomplete and that information and clarification in areas beyond those highlighted above would be needed to complete the petition. However, because of the problems above, we believe we have enough information at this time to move toward a denial of your petition.

It is our practice to give petitioners the option of withdrawing their petitions to avoid a negative publication in the Federal Register. If you prefer this option, you must send us a letter withdrawing your petition and acknowledging that the petitioned wastes are still considered to be restricted wastes subject to the Third Third Land Disposal prohibitions scheduled to be effective on November 8, 1990. This letter should be forwarded to the following address within two weeks of the date of receipt of today's correspondence:

Patricia Cohn, Acting Chief
Assistance Branch (OS-343)
Office of Solid Waste
U.S. Environmental Protection Agency
401 M Street, S.W.
Washington, D.C. 20460

If you choose not to withdraw your petition, we will recommend that a proposed denial decision be published in the Federal Register.

Any questions regarding our findings may be submitted in writing to Mr. James Michael of my staff.

Sincerely,

Jeffery D. Denit, Deputy Director
Office of Solid Waste

Attachment

cc: John Humphries, EPA Region III
David Turner, EPA Region III
Guy Lee, DNREC
Patricia Cohn, PSPD, OSW
James Michael, PSPD, OSW

bcc: Terry Keidan, AB, PSPD, OSW
Allyson Ugarte, AB, PSPD, OSW
Dave Reeves, AB, PSPD, OSW
Richard Kinch, WMD, OSW
Kathy Stein, OE
Nikki Roy, WMD, OSW
Howard Finkel, ICF Incorporated

ATTACHMENT

TABLE 1

Summary of Soil-Pore Monitoring Data
For Lead and Nickel

	First Quarter (12/15/88-3/6/89)		Second Quarter (3/13/89-5/1/89)		Third Quarter (5/8/89-7/3/89)	
Cell No.	Lead	Nickel	Lead	Nickel	Lead	Nickel
1	<0.1	0.29	0.17	0.07	0.1	0.05
2	<0.1	0.18	0.1	0.04	0.1	0.16
3	<0.1	0.08	<0.1	0.06	0.1	0.11
4	<0.1	0.2	<0.1	0.09	<0.1	0.1
5	<0.1	0.15	0.12	0.18	0.14	0.12
6	<0.1	0.08	<0.1	<0.04	<0.1	<0.04
7	<0.1	0.12	<0.1	0.05	<0.1	0.05
8	<0.1	0.08	0.12	0.14	0.17	0.16
9	<0.1	0.12	<0.1	<0.04	NA	NA
10	<0.1	<0.04	<0.1	<0.04	<0.1	<0.04
11	NA	0.31	0.21	0.25	0.17	0.25
12	<0.1	0.06	0.11	<0.04	0.1	0.05
BL-1	NA	NA	<0.1	0.06	<0.1	<0.04
Triple Blank	<0.1	<0.04	<0.1	<0.04	<0.1	<0.04

- All units are in ppm.
- The health-based level for lead is 0.05 ppm, and for nickel it is 0.1 ppm.
- No-Migration Petition, Volume 1, Tables 4-1 to 4-3.

TABLE 2

GROUND-WATER MONITORING DATA

YEAR	Arsenic	Selenium	Lead	Chromium	Cadmium	Vanadium
BKG*	<50	<10	<50	<50	90	130
HBL	50	10	50	50	10	240
1980		50				
1981						
1982	125	15				
1983						
1984			173		73	
1985			96		55	
1986			136		104	
1987			208	230	122	
1988				320		
1989			60			455

* Background values shown record the highest reported value. Background value for cadmium (well no. 26) was taken 9/86, and for vanadium (well no. 36D) was taken 6/89.

- Downgradient values are taken from well numbers 18, 19 and 41.
- All units are in ppb.
- Only the highest values detected are shown in this table.
- No-Migration Petition, Appendix B, Volume 3, Section E-2.

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY 9551.1990(11)

NOV 7 1990

Mr. D. D. Smart
Manager of Health, Safety, and Environment
Shell Oil Company
Anacortes Refinery
P.O. Box 700
Anacortes, Washington 98221

Re: No-Migration Petition submitted for Shell Oil Company's Anacortes, Washington Land Treatment Facility (F-90-NSAP-FFFFF).

Dear Mr. Smart:

I am writing in regard to your January 17, 1990 "no-migration" petition, which requests a variance under 40 CFR §268.6 to allow Shell Oil Company to conduct the land treatment of restricted wastes (EPA Hazardous Waste Nos. K049, K051, K052, and WP03) at Shell's Anacortes Refinery land treatment facility (LTF). After a careful review of your petition, we have concluded that your facility does not meet the standard for a no-migration finding. Therefore, we will recommend to the Assistant Administrator for Solid Waste and Emergency Response that the petition be denied.

Our decision to recommend denial of the petition is based on several concerns:

> Soil-pore and soil-core monitoring indicate that hazardous constituents have already migrated beyond the unit boundary.
>
> Shell will not be able to detect migration at the earliest time because Shell has indicated that ground-water monitoring wells will not be used to demonstrate no-migration.

The details of our concerns are described below.

<u>Presence of Hazardous Constituents Below the Treatment Zone (BTZ)</u>

Soil-pore and soil-core monitoring data provided in Shell's petition indicate that migration of hazardous constituents below the treatment unit has already occurred. Specifically, analyses of soil-pore data collected from 1987-1990 have indicated the presence of antimony, benzene, benzo(a)anthracene, benzo(b)fluoranthene, benzo(k)fluoranthene, and chrysene above

health-based levels used in no-migration decision-making. The results of these analyses are presented in Attachment 1.

In addition, several soil samples from beneath the treatment zone indicated the presence of antimony, benzo(a)anthracene, and benzo(b)fluoranthene above health-based levels. The results of these analyses are provided in Attachment 2. Shell personnel, in the course of a March 1990 site visit by EPA representatives, suggested that the presence of certain of these contaminants may be due to cross-contamination in the coring process. However, since these contaminants were found beneath several management sites within the land treatment facility, we question Shell's explanation. Furthermore, many of these contaminants are also present in the soil-pore water, which could not be attributed to cross-contamination during coring activities.

Detecting Migration at the Earliest Practicable Time

We have concluded that Shell has failed to meet the requirements of 40 CFR §268.6(a)(4). Specifically, Shell has stated in the petition that ground-water monitoring wells are not part of the no-migration monitoring plan. Shell's determination is inconsistent with 40 CFR §268.6(a)(4) which requires a monitoring plan that detects migration at the earliest practicable time. In addition, Shell has not provided any ground-water monitoring data more current than 1985. Due to Shell's failure to provide this data, the petition is incomplete and significant amounts of information and clarification would be needed to complete the petition. However, because the technical basis for denial already exists, we are not requesting you to provide further information.

It is our practice to give petitioners the option of withdrawing their petitions to avoid a negative publication in the Federal Register. If you prefer this option, you must send us a letter withdrawing your petition and acknowledging that the petitioned wastes are still considered to be restricted wastes subject to the Third Third Land Disposal prohibitions scheduled to be effective November 8, 1990. This letter should be forwarded to the following address within two weeks of the date of receipt of today's correspondence:

Patricia Cohn, Acting Chief
Assistance Branch (OS-343)
Office of Solid Waste
U.S. Environmental Protection Agency
401 M Street, S.W.
Washington, D.C. 20460

If you choose not to withdraw your petition, we will recommend that a proposed denial decision be published in the Federal Register.

Any questions regarding our findings may be submitted in writing to Mr. James Michael of my staff.

Sincerely,

Jeffery D. Denit, Deputy Director
Office of Solid Waste

Attachments

cc: Michael Gearheard, Region X
Carrie Sikorski, Region X
Kim Anderson, Washington DOE
Patricia Cohn, PSPD, OSW
James Michael, PSPD, OSW
Terry Keidan, AB, PSPD, OSW

Attachment 1

Soil–Pore Results

	Units	Lysimeter							
		1	2	3	4	5	6	7	8
April 11, 1987									
Antimony	mg/l			*0.65					
July 23, 1987									
Antimony	mg/l			*0.78					
Oct 19, 1987									
Antimony	mg/l					0.77			
Jan 20, 1988									
Antimony	mg/l					0.32			
May 1989									
Antimony	mg/l	0.047	0.012			0.7			
September 1989									
Antimony	mg/l	0.05				0.8			
December 1989									
Antimony	mg/l			0.4	0.3	0.5	0.3		
Benzene	mg/l		0.064						
Benzo(a)anthracene	mg/l	0.0017							
Benzo(b)fluoranthene	mg/l	0.0022							
Benzo(k)fluoranthene	mg/l	0.0022							
Chrysene	mg/l	0.0072							
March 1990									
Antimony	mg/l	1.2							
Benzene	mg/l		0.038						

*Composite sample with lysimeter 5

– Health-based levels:

Antimony = 0.01 mg/l
Benzene = 0.005 mg/l
Benzo(a)anthracene = 0.0002 mg/l
Benzo(b)fluoranthene = 0.0002 mg/l
Benzo(k)fluoranthene = 0.0002 mg/l
Chrysene = 0.0002 mg/l

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY 9551.1990(12)

NOV 8 1990

Mr. Joel Rich
Sinclair Oil Company
902 West 25th Street
Tulsa, OK 74107

Re: No-Migration Petition submitted for Sinclair Oil Company, Walnut Grove Land Treatment Facility, Tulsa, Oklahoma

Dear Mr. Rich:

I am writing in regard to your June 14, 1990 "no-migration" petition, which requests a variance under 40 CFR §268.6 to allow Sinclair Oil Company to continue the land treatment of restricted wastes (EPA Hazardous Waste Nos. K049, K050, K051 and K052) at the Walnut Grove land treatment facility in Tulsa, OK. We have completed an initial review of the petition for overall administrative and technical completeness. As you know, the statute establishes a very strict standard for no-migration variances. The standard to be met requires demonstration of no migration (to a reasonable degree of certainty) of hazardous constituents beyond the unit boundaries. Based on our evaluation of the petition, we have concluded that Sinclair's Tulsa facility does not meet that stringent standard. As a result, we intend to dismiss your petition.

It is our policy to dismiss petitions that contain deficiencies which require more than six months for the petitioner to correct, or that show evidence clearly indicating releases of hazardous constituents to environmental media have already occurred. Our decision to dismiss your petition is based on the present groundwater monitoring system not being able to detect migration at the earliest practicable time as required by the Agency's no-migration petition requirements (see 40 CFR §268.6(a)(4)) and that soil-pore data provided in the petition indicate that releases have already occurred at the land treatment facility.

First, EPA's review of the Groundwater Assessment Plan and the Third Quarterly Progress Report of the RFI Workplan revealed that the current groundwater monitoring system is inadequate to ~~detect the migration of hazardous constituents from the Walnut Grove land treatment unit at the earliest practicable time. The~~

CONCURRENCES

Groundwater Assessment Plan was required by a Consent Agreement between Oklahoma State Department of Health (OSDH) and Sinclair on April 9, 1990 because of non-compliance with the land treatment facility's (LTF) permit. The LTF's background groundwater monitoring well (WTP-4) is located in a solid waste management unit (SWMU-C) and is also being affected by a hydrocarbon plume. To come into compliance, Sinclair agreed to expand the groundwater sampling and analysis plan to meet the requirements of 40 CFR §270.14(c)(4). Specifically, Sinclair must develop a plan capable of determining the extent of migration of hazardous constituents into the groundwater and the background concentration of all Appendix IX constituents detected at the point of compliance. A plan has not yet been approved by OSDH. In addition, the Third Quarterly Progress Report states that the existing upgradient and downgradient monitoring wells at the Walnut Grove facility may not comply with EPA's Technical Enforcement Guidance Document (TEGD) well installation and completion requirements. Further investigation is required to determine if the wells are in compliance.

Second, lead has been detected in the soil-pore water monitored at the land treatment unit. Sampling analysis data from all the lysimeters at the Walnut Grove facility (WGL-1, WGL-2, WGL-3, WGL-4, WGL-5, and WGL-6) from 1981 through 1988 show concentrations above the health-based level (0.05 mg/L) for lead. More recent data were not provided in the petition. The sampling analysis data provide evidence that migration has already occurred beyond the unit boundary at hazardous concentrations.

The effect of our dismissal will be to close your petition file. If you disagree with our intent to dismiss your petition, you may submit a letter explaining why you believe a dismissal is not warranted. If we do not receive such correspondence within two weeks from the date you receive this letter, the dismissal of your petition will become effective. You may choose to submit a new petition for this land treatment facility in the future, once you have an approved plan for a groundwater monitoring system in compliance with 40 CFR §265 and §270 requirements. However, the evidence that releases of hazardous constituents have migrated beyond the unit boundary would serve as the technical basis for the development of a proposed Federal Register denial of the petition.

If you have any questions regarding the dismissal of your petition or require additional information, please contact Jim Michael of my staff at (202) 382-2231.

Sincerely,

Don R. Clay
Assistant Administrator

cc: Patricia Cohn, PSPD, OSW
James Michael, PSPD, OSW
Terry Keidan, PSPD, OSW
Bill Honker, Region VI
Bill Gallagher, Region VI

bcc: Athena Rodbell, PSPD, OSW
Richard Kinch, WMD, OSW
Kathy Stein, OW
Nikki Roy, WMD, OSW
Howard Finkel, ICF, Incorporated

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY 9551.1990(13)

NOV 8 1990

Mr. R. B. Sheldon
Manager
Amoco Casper Refinery
P.O. Box 160
Casper, Wyoming 82602

Re: No-Migration Petition submitted for Amoco's Casper Refinery Land Treatment Unit (F-90-NACP-FFFFF)

Dear Mr. Sheldon:

I am writing in regard to your October 24, 1989 "no-migration" petition, which requests a variance under 40 CFR §268.6 to allow Amoco Oil Company to continue the land treatment of restricted wastes (EPA Hazardous Waste Nos. K049 and K051) at Amoco's Casper Refinery land treatment unit (LTU). After a careful review of your petition, we have concluded that your facility does not meet the standard for a no-migration finding. Therefore, we will recommend to the Assistant Administrator for Solid Waste and Emergency Response that the petition be denied.

Our decision to recommend denial of the petition regarding the land treatment facility is based on two main concerns;

- Ground-water monitoring data indicate that hazardous constituents have already migrated beyond the unit boundaries.

- The ground-water monitoring system for the land treatment facility is inadequate for the purpose of a no-migration variance because it will not be able to detect migration at the earliest practicable time due to the presence of hazardous constituents beneath the land treatment units.

The details of our concerns are described below.

Presence of Hazardous Constituents Below the Treatment Zone

Our review of Amoco's 1989 ground-water monitoring report for the LTU submitted subsequent to its petition indicates that migration of hazardous constituents beyond the unit boundaries has already occurred. Attachment 1 indicates that exceedance criteria[1] values were surpassed on 54 occasions, and, on 11 occasions, concentrations surpassed both the exceedance criteria and the health-based level for the following analytes: antimony, beryllium, chromium, and lead. Respectively, the maximum downgradient concentration as compared to the health-based level for each metal is (in mg/l): 0.26 vs. 0.005, 0.03 vs. 0.002, 0.327 vs. 0.035, and 0.07 vs. 0.002. Therefore, we can only conclude that these data provide evidence of migration from the unit.

Benzene was also found above the health-based level of 5 ug/l in downgradient well LF-43 during the second and fourth quarters at concentrations of 17 and 6 ug/l, respectively. Because benzene was not reported in any of the upgradient wells, we have concluded that benzene has migrated beyond the unit boundaries.

Detecting Migration at the Earliest Practicable Time

We believe that Amoco is unable to detect migration from the treatment unit to the ground water at the earliest practicable time and therefore has failed to meet the requirements of 40 CFR §268.6(a)(4). Specifically, we are concerned that Amoco will be unable to determine the occurrence of migration directly beneath the LTU and that Amoco has not identified an acceptable method of differentiating between "background" contamination and releases from the LTU.

Analysis of ground-water monitoring data indicates the presence of contaminants in upgradient, as well as downgradient, wells near the LTU. In addition, Amoco has suggested that prior tank farm activities in the vicinity of the LTU, particularly on the eastern side, may contribute to downgradient contamination. Several problems arise from these conditions which contribute to the deficiency of Amoco's monitoring program.

Amoco speculates that petroleum contamination in the ground water and soils both upgradient and downgradient of the LTU (and

---

The RCRA permit for the facility establishes exceedance criteria for compliance purposes; these include "critical values" for metals and "reporting limits" for organics (page 6).

possibly beneath the plots as well) is derived from leakage from petroleum storage tanks that previously occupied the area. Amoco, however, has provided neither analytical results that describe the possible source(s) nor an adequate plan to differentiate releases from the LTU from such a source. Because the constituents of a weathered petroleum product plume would likely be very similar to a release from the LTU, it would be difficult to discern one from the other. Furthermore, since the concentration of a contaminant from an upgradient source would be higher closer to the source, the dilution effect as the plume moves downgradient would likely mask concentrations due to a release from the LTU, making a statistical comparison meaningless.

Amoco has suggested that because the ground-water samples show similar characteristics, they are most likely derived from a common, upgradient source. As noted by Amoco, similar characteristics are to be expected in the various fractions of crude and refined oil found within the refinery. However, the samples from the downgradient wells indicate a wider variety of benzene, ethylbenzene, toluene, and xylene than the upgradient samples, an observation that is contrary to what would be expected from a common source.

Completeness of Petition

Finally, we have found that the petition is incomplete and that information and clarification, in areas beyond those highlighted above, would be needed to complete the petition. However, because of the problems noted above, we believe we have enough information at this time to move toward a denial of your petition.

It is our practice to give petitioners the option of withdrawing their petitions to avoid a negative publication in the Federal Register. If you prefer this option, you must send us a letter withdrawing your petition and acknowledging that the petitioned wastes are still considered to be restricted wastes subject to the Third Third Land Disposal prohibitions scheduled to be effective November 8, 1990. This letter should be forwarded to the following address within two weeks of the date of receipt of today's correspondence:

Patricia Cohn, Acting Chief
Assistance Branch (OS-343)
Office of Solid Waste
U.S. Environmental Protection Agency
401 M Street, S.W.
Washington, D.C. 20460

If you choose not to withdraw your petition, we will recommend that a proposed denial decision be published in the Federal Register.

Any questions regarding our findings may be submitted in writing to Mr. James Michael of my staff.

Sincerely,

Jeffery D. Denit, Deputy Director
Office of Solid Waste

Attachment

cc: Carol Campbell, Region VIII
Felix Flechas, Region VIII
Patricia Cohn, PSPD, OSW
James Michael, PSPD, OSW
Terry Keidan, PSPD, OSW

Attachment 1

SUMMARY OF DOWNGRADIENT GROUND-WATER MONITORING DATA

ANALYTE	> EXCEEDANCE CRITERIA[1]	> EXCEEDANCE CRITERIA AND MCL[2]	INDETERMINATE[3]	LOW CONCENTRATION[4]
Antimony		3	20	
Arsenic	3			9
Beryllium		3	17	
Cobalt				5
Cadmium				
Chromium	1	1	9	4
Copper				5
Lead		4	21	
Mercury				1
Selenium	10			
Silver				1
Vanadium			8	
Zinc	13		7	3
Benzene	3			
Ethylbenzene	3			
Toluene	8			
Xylene	9			
2-Methyl naphthalene	2			
Naphthalene	2			
2,4-Dimethyl phenol	1			

1 The RCRA permit for the facility establishes 'exceedance criteria' for contaminants that include critical values for inorganics and reporting limits for organics. This column shows the number of samples collected from downgradient wells that violated the exceedence criteria for a particular analyte. Violations of both the exceedence criteria and the MCL are counted separately.

2 Numbers in this column reflect violations of both the exceedance criteria and the MCL.

3 Contaminant levels were reported only as 'less than (a given value),' and it cannot be determined whether they are higher or lower than the exceedence criteria and/or MCL.

4 Although not in violation of exceedence criteria or MCL, constituents were detected in the downgradient samples indicating that migration is taking place.

9551.1990(14)

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY 9551.1990(14)
WASHINGTON, D.C. 20460

DEC 11 1990

OFFICE OF
SOLID WASTE AND EMERGENCY RESPONSE

Mr. Garth Dull, Director
Department of Transportation
State of Nevada
1263 South Stewart Street
Carson City, Nevada 89712

Dear Mr. Dull:

Thank you for your letter of November 21, 1990, requesting a written confirmation that the asbestos/lead/soil/debris material on property intended for highway construction is classified as inorganic solids debris. In previous letters, you have described this material as lead dross, concrete hooker cell, metal drums, masonry and refractory bricks, scrap metal, carbon anode blades, and concrete pipes.

The Environmental Protection Agency (EPA) has defined "inorganic solids debris" as wastes contaminated with characteristic metals that are nonfriable and that do not pass through a 9.5-mm sieve tray. These wastes fall into eight classifications, such as bricks, metal cans, metal pipes, and scrap metal. Based on the description you provided, your waste falls under the inorganic solids debris treatability group. EPA has determined that this treatability group has a two-year capacity extension of the effective date of the land disposal restrictions. Therefore, this material currently does not need to be treated to comply with the treatment standard for lead, and can be disposed of in a Subtitle C landfill that meets minimum technological requirements.

If you have further questions, please do not hesitate to call Richard Kinch at (703) 308-8434.

Sincerely yours,

Sylvia K. Lowrance, Director
Office of Solid Waste

9551.1990(15)

DEC 20 1990

Mr. Douglas MacMillan, Director
Hazardous Waste Policy
National Solid Wastes Management Association
Suite 1000
1730 Rhode Island Ave., N.W.
Washington, DC 20036

Dear Mr. MacMillan:

This letter responds to your inquiry dated October 11, 1990 about several aspects of the Third Third land disposal restrictions final rule. Your letter includes questions about the following topics: lab packs, inorganic solid debris, certification/notification requirements, and the disposal of D001 ignitable wastes. Responses to the specific questions about each of these topics are presented below.

1. Lab Packs

Your question concerns the language in 40 CFR 264.316(f) and 40 CFR 265.316(f). You refer specifically to perceived contradictions between the first and second sentences of these paragraphs; however, it is assumed that you are actually concerned with the language of the second and third sentences which specifies that "[p]ersons who incinerate lab packs according to the requirements in 40 CFR 268.42(c)(1) may use fiber drums in place of metal outer containers. Such fiber drums must meet the DOT specifications in 49 CFR 173.12 and be overpacked according to the requirements in paragraph (b) of this section." In particular, you request clarification of whether this language requires fiber drums to be overpacked in metal drums. It is assumed that your confusion stems either from the DOT specifications in 49 CFR 173.12, or the overpacking requirements in 40 CFR 264.316(b) and 40 CFR 265.316(b). The language of the DOT specifications and the §§ 264.316(b) and

265.316(b) does not require overpacking of fiber drums in metal drums. The first sentence of §§ 264.316(b) and 265.316(b) ("[t]he inside containers must be overpacked in an open head DOT-specification metal shipping container") does not apply because §§ 264.316(f) and 265.316(f) clearly state that "[p]ersons who incinerate lab packs according to the requirements in 40 CFR 268.42(c)(1) may use fiber drums in place of metal outer containers." The §§ 264.316(b) and 265.316(b) language that does apply, however, is the requirement to pack a sufficient quantity of absorbent material around the inner containers to completely absorb all of the liquid contents of the inside containers, making the outer container full after packing.

As you mention in your letter, the preamble language on page 22631 of the Third Third final rule explains the Agency's decision to allow fiber drums to be used as outer containers for lab packs being incinerated according to the requirements in 40 CFR 268.42(c)(1). The language of §§ 264.316(f) and 265.316(f) does not eliminate this decision by otherwise requiring the fiber drums to be overpacked in metal drums.

2. Containers

You request clarification of why containers are included in the "inorganic solid debris" definition. You also ask when an empty container would be judged to carry a characteristic of hazardous waste.

By way of background, inorganic solid debris is defined in 40 CFR 268.2(g) as nonfriable inorganic solids contaminated with D004 - D011 hazardous wastes that are incapable of passing through a 9.5 mm standard sieve; and that require cutting, or crushing and grinding in mechanical sizing equipment prior to stabilization; and, are limited to certain types of debris specified in subsequent paragraphs. Paragraph (g)(6) of § 268.2 includes metal cans, containers, drums, or tanks in the definition of inorganic solid debris.

As a further point of background, the answers to your questions are impacted by whether the container being discussed is empty as defined at 40 CFR 261.7(b). Under the § 261.7(b) provisions, a container that has held hazardous waste (other than a compressed gas or an acute hazardous waste) is "empty" if it meets certain criteria. All wastes must have been removed that can be removed using the practices commonly employed to remove materials from that type of container. To assure that all waste has been removed, there may be no more than 2.5 centimeters (one inch) of residue remaining on the bottom of the container or inner liner; or no more than 3 percent by weight of the total capacity of the container remaining in the container or inner liner if the container is less than or equal to 110 gallons in size, or no more than 0.3 percent by weight of the total capacity

of the container remaining in the container or inner liner if the container is greater than 110 gallons in size.

In response to your first question, containers are included in the definition of inorganic solid debris to cover the possible scenario of a container that has been discarded by means of land disposal (as defined in § 268.2), that does not meet the § 261.7(b) definition of empty, and that is contaminated with a characteristic metal waste. This scenario could occur, for instance, during an excavation at a corrective action site. A container might be uncovered that is damaged (e.g., crushed) so that the hazardous waste within it cannot be removed sufficiently to meet the § 261.7(b) definition of empty. Such a container (i.e., including its contents) is a hazardous waste subject to the land disposal restrictions if it is subsequently land disposed. Furthermore, it is likely that the disposed container would be considered contaminated debris (such a determination may depend upon site-specific conditions best made by an authorized State or EPA Regional representative). If the waste contaminating this disposed container is a characteristic metal waste (D004 - D011), the container would likely meet the § 268.2(g)(6) criteria of inorganic solid debris, and would thus be subject to a national capacity variance until May 8, 1992 (see § 268.35(b)).

In response to your second question, a container meeting the § 261.7(b) definition of empty may be judged to be a characteristic metal waste under two scenarios. In the first scenario, a container that has never held any hazardous waste may be a characteristic waste if: (1) it is being discarded; and, (2) if the container is in itself a characteristic waste.

In the second scenario, an empty container (as defined in § 261.7(b)) may be a characteristic waste if: (1) it is being discarded; and, (2) if the container is in itself a characteristic waste. It should be noted, however, that any residue remaining in the container is exempt from regulation under the provisions of § 261.7(a) that states that "[a]ny hazardous waste remaining in either (i) an empty container or (ii) an inner liner removed from an empty container, as defined in paragraph (b) of this section, is not subject to regulation under Parts 261 through 265, and Parts 268..."

3. Certifications

You request clarification of the record keeping requirements for a particular scenario: A waste that the generator determines (based on process knowledge) does not meet the treatment standard is sent to a treatment facility. The treatment facility determines the waste does meet the treatment standard. You did not suggest how such a determination was made. Your question is, how would the record keeping requirements be affected?

In this particular scenario, the treatment facility should analyze the waste in order to determine that the waste meets the treatment standard according to the provisions of their waste analysis plan. It should be noted, however, that there is no requirement that treatment facilities analyze each shipment of waste received, except as specified in their waste analysis plan (see § 268.7(b). In this particular scenario, however, the generator has made the determination that the waste must be treated based on his knowledge of the waste. The treatment facility is countering the generator's determination with a determination that the waste meets the treatment standard as generated; therefore, the Agency believes that it is appropriate to ask the treatment facility to support their determination with analytical data. The treatment facility also must complete a certification that the waste met applicable treatment standards as generated (see § 268.7(a)(2)(ii), supported by the general principle expressed in § 268.7(b)(6) requiring treatment facilities to comply with notice and certification requirements applicable to generators).

The treatment facility must send the waste analysis data (see § 268.7(b)(4)(iv)), the certification, and a notification (either the generator's notification may be sent, or the facility may create a new notification) to the disposal facility. Copies of the waste analysis data, the generator's notification (as well as the treatment facility's notification if a new notification was created), and the certification must be kept as records in the treatment facility's files.

4. <u>Notification/Certification</u>

A scenario was presented of a TSD company that has a sister company on adjacent property that recycles "side-stream" and "off-spec" chemicals and other wastes containing recoverable amounts of organics by means of a custom distillation process. This process generates still bottoms and wash waters that are subject to the land disposal restrictions. These restricted wastes are piped directly back to tanks at the TSD facility, sometimes on an intermittent basis, sometimes continuously. The question is asked: How must these piped transfers of hazardous wastes from the recycler to the TSD be handled from the perspective of notification/certification compliance?

Even though the recycling facility and the TSD facility are sister companies on adjacent property, they would have been assigned different EPA identification numbers and are thus considered separate facilities. Therefore, the waste that is piped to the TSD facility (regardless of whether it is on a continuous or an intermittent basis) is subject to the record keeping requirements of § 268.7.

The recycling facility would be subject to the generator requirements of § 268.7(a), which specify that a notification must be sent with each shipment of waste (in this case, from the

recycling facility to the TSD facility). The TSD facility must comply with the requirements of § 268.7(b). Questions on how frequently the required paperwork should be sent from the recycling facility to the TSD (i.e., what constitutes a "shipment") should be directed to the EPA Regional land disposal restrictions contact.

5. D001

The question is whether 40 CFR 264.312 allows for the land disposal of a D001 waste. Until promulgation of the Third Third final rule on May 8, 1990, 40 CFR 264.312 (and § 265.312) set out special management requirements for ignitable or reactive wastes that were disposed in a surface impoundment, waste pile, land treatment unit, or landfill. On page 22553 of the final rule, however, the Agency explained that these management requirements are superseded by the treatment standards promulgated in the Third Third final rule. This means that "[f]acilities handling ignitable and reactive wastes will have to comply with the promulgated treatment standards for these wastes in order to land dispose them." The Agency made changes to the regulatory language of §§ 264.312 and 265.312 in the Third Third final rule to incorporate the requirement that the treatment standards for ignitable and reactive wastes must be met prior to land disposal. Furthermore, the Agency's intent is clearly expressed in the preamble (55 FR 22553).

Therefore, land disposal is allowed only for those D001 wastes that meet the treatment standard. (The treatment standard for D001 wastes containing less than 10% total organic carbon (TOC): deactivation; for D001 containing greater than 10% TOC: incineration or fuel substitution; see 40 CFR 268.42, Table 2.)

I hope you find these answers to be helpful. If you have any further questions, please feel free to contact Matthew A. Straus at (703) 308-8414.

Sincerely,

Sylvia K. Lowrance
Director
Office of Solid Waste

RCRA/SUPERFUND HOTLINE MONTHLY SUMMARY

DECEMBER 1990

1. LDR Requirements During National Capacity Variances

During a corrective action removal, a RCRA permitted treatment facility generates a contaminated soil that is characteristic for arsenic (D004). The generator determines that the waste has a treatment standard established in 40 CFR 268.41 of the Land Disposal Restrictions (LDR) Third Third Final Rule. (55 FR 22520) However, Section 268.35(e) of the final rule also establishes a 2-year variance from the land disposal prohibitions for D004 nonwastewaters due to insufficient treatment capacity. What LDR requirements remain in effect during the period in which a waste is granted a national capacity variance?

Section 3004(h)(2) of RCRA provides EPA with the authority to grant national capacity variances from the statutory effective dates upon which land disposal prohibitions become effective if there is insufficient alternative treatment, recovery or disposal capacity for the wastes subject to the prohibition. In determining whether a variance is warranted, EPA compares the nationally available treatment capacity that will be in operation on the prohibition effective date with the volume of wastes generated. If a significant shortage exists, an alternate effective date will be established based on the earliest date such capacity will become available. (55 FR 22526)

1. LDR Requirements During National Capacity Variances (Cont'd)

Although a national capacity variance temporarily extends prohibition effective dates, it does not supersede the requirements applicable to hazardous wastes that are "restricted". (see 55 FR 22592) Effective May 8, 1990, all hazardous wastes, except those identified or listed after the enactment of HSWA, are "restricted" and therefore subject to certain provisions. (55 FR 22521) These include three major requirements. First, generators of such restricted wastes must comply with applicable waste analysis and recordkeeping requirements established in Section 268.7, including the special notifications found at 268.7(a)(3) for wastes subject to a national capacity variance that are sent off-site for treatment, storage or disposal. (53 FR 31208)

Second, in addition to fulfilling relevant recordkeeping requirements, generators of hazardous wastes subject to a national capacity variance must evaluate their waste against the California List prohibitions. (55 FR 22529) The California List establishes treatment standards and land disposal restrictions for certain liquid wastes containing free cyanides, metals, corrosives and PCBs, and for HOCs in either solid or liquid form [See Section 268.32 and RCRA Section 3004(d)]. In the interim period in which a national capacity variance is in effect, the California List requirements apply. (53 FR 31118)

Finally, if the generator determines that no other land disposal prohibitions are applicable, the waste may be managed in a landfill or surface impoundment provided the waste is placed in a unit that meets the minimum technology requirements set out in 268.5(h)(2). After the national capacity variance has expired, such restricted hazardous waste may be land disposed only if the applicable treatment standard is attained or disposal occurs in a unit that satisfies the "no migration" demonstration found at 40 CFR 268.6. (55 FR 22521)

Please note, however, for wastes that are subject to more than one treatment standard, that during a national capacity variance for one of the wastes, the treatment standards for any of the other waste codes that have not received such a variance must be met. (55 FR 22660)

Source:	Rhonda Craig, OSW	(703) 308-8451
Research:	Stephen Buchanan	

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

9551.1991(01)

JAN 3 - 1990

Mr. John R. Kampfhenkel
Chief Environmental Engineer
Koch Refining Company
P.O. Box 2608
Corpus Christi, Texas 78403

Re: No-Migration Petition submitted for Koch Refining's Corpus Christi, Texas Land Treatment Unit (F-90-NKCP-FFFFF)

Dear Mr. Kampfhenkel:

I am writing in regard to your April 26, 1990 "no-migration" petition, which requests a variance under 40 CFR §268.6 to allow Koch Refining Company (Koch) to continue the land treatment of restricted wastes at Koch's Corpus Christi, Texas land treatment unit (LTU). After a careful review of your petition, we have concluded that your facility does not meet the standard for a no-migration variance. Therefore, we will recommend to the Assistant Administrator for Solid Waste and Emergency Response that the petition be denied.

Our decision to recommend denial of the petition is based on the following concerns:

- Soil-pore and soil-core monitoring indicate that hazardous constituents have already migrated beyond the unit boundary.

- Ground-water monitoring for vanadium indicates that this hazardous constituent has already migrated beyond the unit boundary.

Presence of Hazardous Constituents Below the Treatment Zone (BTZ)

Soil-pore and soil-core monitoring data provided in Koch's petition indicate that migration of hazardous constituents below the treatment unit has already occurred. Specifically, analyses of soil pore liquid samples collected during August and September of 1988 and in February, April, May, June, and October of 1989 indicate the presence of beryllium, cadmium, chromium, lead, nickel, selenium, toluene, benzene, styrene, 2-butanone, 1,2-dichloroethane, and ethyl benzene in excess of their respective

health-based levels used in no-migration decision-making. The results of these analyses are presented in Attachments 1 and 2.

Analyses of soil core monitoring data collected in December 1989 indicate that beryllium was detected at concentrations exceeding the health-based level (HBL) of 0.2 mg/kg for soil ingestion in Bores 1, 2, 3, 4, and 6. Antimony was also detected at a concentration exceeding the HBL of 30 mg/kg for soil ingestion in Bore 6 during December 1989.(See Attachment 3.)

Furthermore, Attachment 3 also shows that several organic constituents were detected in the BTZ. Concentrations of benzo(a)pyrene (6.5 mg/kg) and methyl chrysene (4.4 mg/kg) were detected in Bore 1 above their respective HBL's of 0.055 mg/kg for soil ingestion. Oil and grease levels in soil bores averaged 4,500 mg/kg for Bore 1 and 193 mg/kg for Bore 4 in December 1989. The individual values for the BTZ samples from Bore 1 were 1,900 mg/kg (5.0-5.5 feet); 7,000 mg/kg (5.5-6.5 feet); and 4,600 mg/kg (6.5-7.5 feet). The presence of benzo(a)pyrene and methyl chrysene and elevated levels of oil and grease beneath the treatment zone further demonstrate that hazardous constituents have migrated below the treatment unit.

Ground-Water Monitoring Data

Ground-water monitoring data presented in Koch's petition indicate that migration of hazardous constituents to the ground water has already occurred. Specifically, a review of the August 1988 ground-water monitoring data indicate the presence of vanadium in downgradient wells LE-3 (0.39 mg/l) and LE-5 (0.28 mg/l) in excess of the HBL (0.24 mg/l) used in no-migration petition decision-making. (See Attachment 4.)

In addition, total organic carbon (TOC) levels were significantly higher in downgradient wells LE-3, LE-4, LE-5, and LE-6 than in upgradient wells in September of 1988. However, we are unable to determine whether organics are present at levels of concern because Koch did not provide a fractional analysis of the constituents in the TOC samples. Lastly, although the difference between the downgradient and upgradient monitoring wells did not exceed the health-based levels, the downgradient concentrations for arsenic (LE-3 and LE-4), mercury (LE-6), and selenium (LE-6) did exceed the upgradient concentrations during August of 1988.

Incomplete Petition

Finally, our review indicates that the petition is incomplete and that information and clarification in areas beyond those highlighted above would be needed to complete the petition. However, because of the problems discussed above, we believe we have sufficient information at this time to move toward a denial of your petition.

health-based levels used in no-migration decision-making. The results of these analyses are presented in Attachments 1 and 2.

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Furthermore, Attachment 3 also shows that several organic constituents were detected in the BTZ. Concentrations of benzo(a)pyrene (6.5 mg/kg) and methyl chrysene (4.4 mg/kg) were detected in Bore 1 (December 1989) above their respective HBL's of 0.055 mg/kg for soil ingestion. Oil and grease levels in two of the soil bores averaged 4,500 mg/kg for Bore 1 and 193 mg/kg for Bore 4 in December 1989. The individual values for the BTZ samples from Bore 1 were 1,900 mg/kg (5.0-5.5 feet); 7,000 mg/kg (5.5-6.5 feet); and 4,600 mg/kg (6.5-7.5 feet). The presence of benzo(a)pyrene and methyl chrysene and elevated levels of oil and grease beneath the treatment zone further demonstrate that hazardous constituents have migrated below the treatment unit.

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Incomplete Petition

Finally, our review indicates that the petition is incomplete and that information and clarification in areas beyond those highlighted above would be needed to complete the petition. However, because of the problems discussed above, we believe we have sufficient information at this time to move toward a denial of your petition.

It is our practice to give petitioners the option of withdrawing their petitions to avoid a negative publication in the Federal Register. If you prefer this option, you must send us a letter withdrawing your petition and acknowledging that the petitioned wastes are still considered to be restricted wastes subject to the Third Third Land Disposal prohibitions. This letter should be forwarded to the following address within two weeks of the date of receipt of today's correspondence:

Patricia Cohn, Acting Chief
Assistance Branch (OS-343)
U.S. Environmental Protection Agency
401 M Street, S.W.
Washington, D.C. 20460

If you choose not to withdraw your petition, we will recommend that a proposed denial decision be published in the Federal Register.

Any questions regarding our findings may be submitted in writing to Mr. James Michael of my staff.

Sincerely,

Jeffery D. Denit, Deputy Director
Office of Solid Waste

Attachments

cc: Bill Honker, EPA Region VI
Tony Robledo, EPA Region VI
Minor Hibbs, Texas Water Commission
Patricia Cohn, PSPD, OSW
James Michael, PSPD, OSW

bcc: Terry Keidan, AB, PSPD, OSW
Jeffrey Gaines, AB, PSPD, OSW
Dave Reeves, AB, PSPD, OSW
Richard Kinch, WMD, OSW
Kathy Stein, OE
Nikki Roy, WMD, OSW
Howard Finkel, ICF Incorporated

ATTACHMENT 1

Soil-Pore Liquids - Inorganic Constituents (mg/l)

	As	Ba	Be	Cd	Cr	Pb	Hg	Ni	Se	TOC
8/88										
LY-1	0.89						0.13			
LY-5N	0.0072						0.0055		0.019	31
9/88										
LY-1	0.19			0.03			0.053		0.09	
LY-2N	0.013		0.021				0.0034		0.018	54
LY-3N	0.021		0.0093	0.19	0.11	0.36	0.0045	0.51		
LY-4N	0.02			0.13	0.075	0.17	0.0057	0.34		
LY-5N	0.013			0.046		0.076	0.0069	0.13		19
LY-5S	0.069		0.0093	0.12		0.099				
11/88										
LY-2N	0.029			0.03			0.0016		0.011	57
LY-5S										31
2/89										
LY-2N		0.04								29
LY-4N		0.23			0.097			0.12		33
LY-5N		0.07			0.055					13
3/89										
LY-2N		0.16								80
LY-3N										
LY-4N		0.24			0.092			0.086		
LY-5N		0.14			0.059					15
LY-5S		0.19						0.037		
4/89										
LY-4N		0.018						0.11		38
LY-5N		0.021								
6/89										
LY-2N										
LY-3N										
LY-5N										
LY-5S	0.047	0.047		0.013				0.29	0.0061	
10/89										
LY-3S		0.066								10
HBLs	0.05	1	0.001	0.01	0.05	0.05	0.002	0.1	0.01	

*LY-1 is the background lysimeter

ATTACHMENT 2

Soil-Pore Liquids - Organic Constituents (ug/l)

	Xylenes	Toluene	Benzene	Styrene	2-Butanone	1,2-Dichloroethane	Ethylbenzene
9/88							
LY-2N	4,200	2,100	1,600	110	14,000	950	2,800
LY-3N	28	6					13
LY-5N		7					
11/88							
LY-2N	9	5	6				
6/89							
LY-2N	8	6					
LY-3N	5						
LY-5N	19	6					
HBLs	10,000	2,000	5	5	2,000	5	700

* Organic Constituents have not been found in the Background Lysimeter (LY-1)

ATTACHMENT 3

Soil Core Data from the BTZ - LTU Expansion[a,b]

	Bore 6 (6/29/89)	Bore 1 (12/14/89)	Bore 2 (12/13/89)	Bore 3 (12/13/89)	Bore 4 (12/13/89)	Bore 6 (12/13/89)
pH (range)	9.1-9.4	8.1-8.2	7.9-8.0	8.1-8.2	7.8-8.0	---
Oil and Grease (mean)	<10	4,500	<10	<10	193	<10
Beryllium	---	0.51/0.68[c]	0.5/0.8	0.36/0.46	0.57/0.72	2.5/0.65
Antimony	---	---	---	---	---	16.8/32[c]
Benzene	13.0	---	---	---	---	---
Toluene	13.0	---	---	---	---	---
1-Methylnapthalene	---	4.3	---	---	---	---
Anthracene	---	4.2	---	---	---	---
Benzo(a)Pyrene	---	6.5	---	---	---	---
Methyl Chrysene	---	4.4	---	---	---	---
Phenanthrene	---	24.0	---	---	---	---

a These data are summarized from three samples from three BTZ depths at each soil boring: 5.0-5.5 feet; 5.5-6.5 feet; and 6.5-7.5 feet. A total of 12 soil bores were taken during 1989 in the LTU Expansion. Six cores were collected in June 1989, and six cores were collected in June 1989.

b Although units are not specified in Table 4-1 of the petition (V.1, page 4-5 through 4-13), it is assumed that the data are reported in units of mg/kg, with the exception of pH and organics. Organic concentrations were apparently reported as µg/kg in Table 4-1 and were converted to mg/kg for this exhibit.

c The values in this row represent the BTZ mean from the three depths, followed by the maximum value from the three BTZ depths.

ATTACHMENT 4

Ground-Water Monitoring Data (mg/l)

	TOC	Be	Cd	Ni	Se	V	As	Hg
8/88								
LE-0	9.1	0.014	0.027	0.12			0.01	0.0007
LE-1	14		0.027	0.12	0.014		0.0076	0.0008
LE-3	13	0.009		0.055	0.0056	0.39	0.011	0.0008
LE-4	12				0.0059		0.012	0.0009
LE-5	8.8		0.018	0.12	0.0092	0.28	0.0093	0.001
LE-6	8.9			0.055	0.019		0.009	0.0008
9/88								
LE-0	5.4			0.11				
LE-1	8.8			0.078				
LE-3	48							
LE-4	54							
LE-5	29			0.078				
LE-6	9.8			0.05				
1/89								
LE-0	5.2			0.17				
LE-1	4.9			0.063				
LE-3	5.1			0.084				
LE-4	2.7			0.084				
LE-5	2.6			0.15				
LE-6	4.4			0.084				
3/89								
LE-0	1.9					0.029		
LE-1						0.044		
LE-3						0.044		
LE-4						0.057		
LE-5	1					0.029		
LE-6						0.018		
6/89								
LE-0	1.5							
LE-1								
LE-3	1.3							
LE-4	1.5							
LE-5	1.2							
LE-6								
12/89								
LE-0	2.1							
LE-1								
LE-3	3.4							
LE-4	1.5			0.073				
LE-5	1							
LE-6	2.4							
HBL		0.001	0.01	0.1	0.01	0.24		

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

9551.1991(02)

JAN 17 1991

Mr. W. Thomas McCollough
Refinery Manager
Sun Refining and Marketing Company
P.O. Box 2039
Tulsa, Oklahoma 74102

Re: No-Migration Petition submitted for Sun Refining and Marketing Company's Tulsa, Oklahoma Land Treatment Facility (F-90-NMSP-FFFFF)

Dear Mr. McCollough:

I am writing in regard to your March 16, 1990 "no-migration" petition, which requests a variance under 40 CFR §268.6 to allow Sun Refining and Marketing Company (Sun) to continue the land treatment of restricted wastes at Sun's Tulsa, Oklahoma land treatment facility (LTF). After a careful review of your petition, we have concluded that your facility does not meet the standard for a no-migration variance. Therefore, we will recommend to the Assistant Administrator for Solid Waste and Emergency Response that the petition be denied.

Our decision to recommend denial of the petition is based on the following concerns:

Soil-pore monitoring indicates that benzene has already migrated beyond the unit boundary.

Ground-water monitoring indicates that hazardous constituents have already migrated beyond the unit boundary.

The required minimum separation between the bottom of the treatment unit and the top of the seasonally high water table has not been demonstrated.

Air modeling shows concentrations of arsenic at the unit boundary that exceed the allowable health-based standard.

The details of our concerns are described below.

Presence of Hazardous Constituents Below the Treatment Zone (BTZ)

Soil-pore liquids monitoring data collected from lysimeter 14 indicate the presence of benzene (33.4 ppb) beneath the treatment zone at concentrations above the health-based level (HBL) of 5 ppb used in no-migration decision-making. Sun explained that during the installation of lysimeter 14 (in March 1987), the borehole had been contaminated by a load of spent jet fuel filter clay dumped nearby. We, however, question whether the contamination can be attributed to nearby applied spent jet fuel filter clay for the following reasons.

First, it stands to reason that if the borehole were contaminated during the installation process, then the first-quarter soil pore-water sample taken between March and April of 1987 should have shown high levels of benzene (which is very mobile). However, elevated levels showed up only after the third-quarter samples were taken in October 1987. (No second-quarter data was provided in the tables.) Thus, the contamination occurred at a later date rather than during initial installation.

Secondly, the results from analyses of the spent jet fuel filter clay reported benzene as "NP" (not present) and the petition stated that "the other [non-hazardous, including the spent jet fuel filter clay] wastes, in comparison, are insignificant in oil/organic content and/or annual quantity disposed of; the presence of various specific organic compounds in these wastes would have little or no impact on the overall soil/waste system at the LTF" (V.1, pages 4-11 and 4-15). Therefore, Sun, in one instance claimed that they did not have to analyze the non-hazardous wastes for organic constituents, yet in another instance, claimed that the bore hole was contaminated by the spent jet fuel filter clay.

Lastly, benzene has been detected in both background and active LTF area lysimeters. (See Attachment I.) The continuous detection of low levels of benzene, especially at lysimeter 15, indicate that benzene has migrated below the treatment zone. We, therefore, believe both that Sun has failed to demonstrate that the benzene detected at lysimeter 14 is due to contamination and that the presence of benzene in the soil-pore liquids clearly demonstrates that this constituent has migrated below the LTF at hazardous concentrations.

Ground-Water Monitoring and Detecting Releases at the Earliest Extent Practicable

As shown in Attachment II, ground-water monitoring between May 1984 and January 1990 indicate that barium, chromium, mercury, lead, and benzene were detected at concentrations above their respective health-based levels. Sun claims that these

exceedences are attributable to naturally occurring levels, laboratory error, or broken product lines running beneath the LTF. We believe that Sun has failed to prove conclusively that the migration did not, in part, result from LTF operations.

Additionally, we believe that Sun has failed to meet the requirements of 40 CFR §268.6(a)(4). Specifically, Sun has not demonstrated that the ground-water monitoring system at the LTF is capable of detecting (and differentiating) releases at the earliest extent practicable. Sun's 1990 annual report on ground-water monitoring (dated July 19, 1990) presented a map showing three pipelines buried approximately three feet below the ground surface within the treatment zone of the Central treatment area of the LTF. These pipelines transport a wide range of petroleum products from crude oil to gasoline, jet fuel, and diesel. The map also showed that the downgradient wells of the Central and West areas are located adjacent to these pipelines. Sun stated that these pipelines could leak and that several leaks, which were indeed identified during 1989, could have influenced ground-water monitoring results, as with MW32 where the concentration of total organic carbon (TOC) has consistently increased from 20 ppm in 1986 to 79 ppm in 1988.

The ramifications of the contamination from ruptured product lines in regard to ground-water monitoring of the LTF are unclear. Sun has not provided detailed analytical results that describe the known contamination, nor have they proposed an adequate plan whereby releases from the LTF can be differentiated from the known contamination. Because the constituents of a weathered petroleum product plume would be very similar to a release from a LTF that contains petroleum wastes (e.g., benzene, toluene, and xylene), it will be difficult to differentiate between the two releases and therefore, conclude that Sun's ground-water monitoring system will be able to detect constituent releases at the earliest extent practicable.

Maintaining Minimum Separation

Federal regulations require that the depth-to-ground water at land treatment facilities be no less than three feet from the bottom of the treatment zone to the seasonal high water table (40 CFR 264.271(c)(2)). Based on the discussion below, we do not believe that Sun has demonstrated that the required minimum separation is maintained throughout the entire year.

Sun stated that the ground-water table can fluctuate up to four feet in elevation in a year, and that the seasonal high water table is more than eight feet below ground surface at the LTF. Although Sun supported its claim by providing the ground-water elevation profiles in Exhibits 3.3-1 to 3.3-3 (V.1, pages 3-28 to 3-30), the changes in ground-water table, as reported in Exhibit 3.3-1, were based on observations recorded in a period

from 1983 to 1984. We believe that data taken in this relatively short period is not sufficient to represent the long-term, temporal variation of the water table beneath the LTF. In addition, the average depths to ground-water table at MW15 and MW17 were shown to be 8.2 feet and 8.5 feet, respectively (V.1, Exhibit 3.3-2, page 3-29). Since Sun has stated that the potential fluctuations of the water table could be four feet over the course of a year (or roughly ± two feet from the mean), it is possible for the water table at these two wells to rise to an elevation within six feet of the ground surface.

Furthermore, Exhibit 3.3-2 (V.1, page 3-29) presents average depths to ground water using measurements made in August 1984, May 1985, and December 1986. As stated above, the depth to ground water during this period in the East LTF ranges between 8.2 and 8.5 feet. We note, however, that the petition stated that the ground-water table is at the highest levels during April - June (V.1, page 3-27). The petition also stated that the level of the ground-water table fluctuates with rainfall. Because the greatest amount of precipitation generally occurs during May, June, and September, ground-water table elevation measurements collected during these three months may show that the minimum required separation of three feet between the bottom of the treatment unit and the top of the seasonal high water table is not maintained (V.1, page 3-33).

We are also concerned that the aquifer beneath the LTF is hydraulically linked to the Arkansas River, and the ground-water table can be further affected by the water level variations in the river. A 100-year flood could cause "underground flooding" at the LTF due to its proximity to the river and the moderately permeable alluvial soils in the unsaturated zone. That is, the excessive hydraulic head generated outside the levee by flood waters could reverse the ground-water flow direction and cause the water table to further rise beneath the LTF. Our concerns are supported by Sun's acknowledgment that during heavy flooding in October of 1986, the Arkansas River level was at the same elevation as an abandoned waste site adjacent to the West unit for at least a week, temporarily reversing the ground-water flow. We, therefore, conclude that the minimum separation between the treatment zone and the water table is affected by water level variations occurring in the Arkansas River.

<u>Air Modeling for Arsenic</u>

Sun performed air modeling to predict the airborne concentrations of arsenic at the unit boundary. This modeling, based on historic and projected data, showed that arsenic would be found at the unit boundary at a concentration of 1.2×10^{-4} $\mu g/m^3$ and 1.0×10^{-3} $\mu g/m^3$, respectively. Sun compared these predicted concentrations to a health-based level (HBL) for arsenic of 2.3×10^{-3} $\mu g/m^3$ (for inhalation) as reported in Table

).5-3 of the petition. However, the HBL value cited in the petition by Sun is higher than that found in EPA's IRIS database (7.0×10^{-5} $\mu g/m^3$). Since both the historic and projected concentrations modeled for arsenic exceed the HBL of 7.0×10^{-5} $\mu g/m^3$, Sun has failed to demonstrate that this constituent will not migrate at hazardous concentrations beyond the unit boundary.

Incomplete Petition

Finally, our review indicates that the petition is incomplete and that information and clarification in areas beyond those highlighted above would be needed to complete the petition. However, because of the problems discussed above, we believe we have sufficient information at this time to move toward a denial of your petition.

It is our practice to give petitioners the option of withdrawing their petitions to avoid a negative publication in the Federal Register. If you prefer this option, you must send us a letter withdrawing your petition and acknowledging that the petitioned wastes are still considered to be restricted wastes subject to the Third Third Land Disposal prohibitions. This letter should be forwarded to the following address within two weeks of the date of receipt of today's correspondence:

Patricia Cohn, Acting Chief
Assistance Branch (OS-343)
U.S. Environmental Protection Agency
401 M Street, S.W.
Washington, D.C. 20460

If you choose not to withdraw your petition, we will recommend that a proposed denial decision be published in the Federal Register.

Any questions regarding our findings may be submitted in writing to Mr. James Michael of my staff.

Sincerely,

Jeffery D. Denit, Deputy Director
Office of Solid Waste

Attachments

cc: Patricia Cohn, PSPD, OSW
James Michael, PSPD, OSW
Fenton Rood, Oklahoma State Department of Health
Bill Honker, Region VI

ATTACHMENT 1

Soil-Pore Monitoring where Benzene was Detected at Background and Active Area Lysimeters

Benzene Concentration (ppb)

	Background Lysimeters				
Monitoring Period	LY-1	LY-5	LY-6	LY-16	LY-17
March-April 1987	0.97	12	0.5	0.6	0.8

	Active Area Lysimeters								
Monitoring Period	LY-2	LY-3	LY-4	LY-7	LY-8	LY-11	LY-14	LY-15	LY-18
March-April 1987	0.8		0.8		0.7			1.2	0.6
June 1988							33.4		
June 1989		4.0				3.0		5.0	
August 1989					3.6			2.6	
October 1989				4.0				5.0	

ATTACHMENT I

Soil-Pore Monitoring where Benzene was Detected at Background and Active Area Lysimeters

Benzene Concentration (ppb)

	Background Lysimeters				
Monitoring Period	LY-1	LY-5	LY-6	LY-16	LY-17
March-April 1987	0.97	12	0.5	0.6	0.8

	Active Area Lysimeters								
Monitoring Period	LY-2	LY-3	LY-4	LY-7	LY-8	LY-11	LY-14	LY-15	LY-18
March-April 1987	0.8		0.8		0.7			1.2	0.6
June 1988							33.4		
June 1989		4.0				3.0		5.0	
August 1989					3.6			2.6	
October 1989				4.0				5.0	

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

9551.1991(03)

JAN 29 1991

Mr. David R. Chapman
Exxon Research and Engineering Company
P.O. Box 101
Florham Park, NJ 07932-0101

Re: Exxon, Baytown, TX No-Migration Petition (F-91-NMEP-FFFFF)

Dear Mr. Chapman:

At our meeting, September 26, 1990, to discuss EPA's technical evaluation of the no-migration petition submitted for the Baytown Refinery's North Landfarm, you requested some documents and further clarifications of a few issues. In response, I have enclosed copies of the Federal Register notices for the §3004(n) rule (June 21, 1990, 55 FR 25454) and the Benzene NESHAP (March 7, 1990, 55 FR 8292) and provided below additional information on static fracturing and the use of indicator chemicals in risk assessment. We are presently developing information that will address the third issue, metals mobility, and will provide it to you as soon as it is completed.

Static Fracturing

The term "static fracturing," although not a formal term, is used to describe the cracking of earthen materials without significant movement along the crack (plane of failure). It is used in contrast to dynamic fracturing (e.g., faults) where the fracture is related to shear or slip along the plane of fracture. The terms are not mutually exclusive as many small fractures with only slight movement can make up zones of slip (e.g., shear zones) that are associated with dynamic processes.

Static fracturing in relation to no-migration petitions is usually limited to shrinkage cracks. Three examples of static fractures are described below for your information. However, the first (desiccation cracks) is the only one that would possibly apply to the Baytown landfarm.

Desiccation cracks - These cracks form as a result of shrinkage from drying. The simplest example is the formation of mud cracks. Soils and sediments that contain ~~expandable clays routinely expand during rainy periods and shrink and crack (fracture) during dry periods. Although,~~ in most cases, the fractures extend only a foot or so in depth, depending on the makeup of the soil and underlying

CONCURRENCE

sediments, they are reported to exist at depths in the tens of feet. In areas where montmorillonitic shales weather from surface soils, desiccation cracks can be exceptionally deep.

Cooling fractures - These fractures are common in basalts and are almost characteristic of plateau basalts. Commonly referred to as "joint sets" or "columnar jointing," fracture patterns developed in cooled lava, are widespread. These fractures result from shrinkage in the lava as it cools to basalt rock, and often penetrate the entire layer.

Tension fractures - Any rock unit subjected to structural tension may fracture in a direction perpendicular to the tension. This is very typical of folded units where rock layers on the outside of the fold undergo tension relative to rocks along the inside of the fold. Subsequent leaching by downward movement of surface waters can enlarge fractures. This is typical of limestone terrains.

Indicator Chemicals in Risk Assessment

EPA's recent guidance - *Risk Assessment Guidance for Superfund - Volume 1: Human Health Evaluation Manual (Part A) Interim Final* (EPA/540/1-89/002) - defines the indicator chemical approach in more detail than the 1986 *Superfund Public Health Evaluation Manual*, which was used by Exxon in its environmental risk assessment. The methods used to select indicator chemicals for a no-migration petition are similar to risk assessments performed for Superfund sites. However, it appears that Exxon did not completely apply the Superfund approach. EPA's position is described below and an example of how this approach could be applied to the environmental risk assessment in your no-migration petition is presented.

Most Superfund sites have a few chemicals that are usually present in concentrations that present much higher risks (i.e., three or more orders of magnitude or higher) than the remaining chemicals at the site. Based on this experience, EPA suggested, at Superfund sites, that between 5 and 10 chemicals with the highest individual risk factors would be manageable and *possibly sufficient* for a human health risk assessment. The selection of indicator chemicals is not a process of selecting a single chemical to represent each class of chemicals that may be expected to exhibit similar fate and transport characteristics and similar toxicities, but rather, it is a process to exclude from further consideration, those chemicals that are unlikely to contribute significantly to risk. Use of the Superfund approach with wastes placed at refinery landfarms may result in a list of more than 5 or 10 indicator chemicals, but it is likely to eliminate from further consideration some of the chemicals that have been detected in the waste.

The selection of indicator chemicals is optional; it is often prudent to consider all chemicals. If there are clear reasons to believe that not all chemicals are likely to contribute significantly to the total risks, the number of chemicals carried through the risk assessment modeling may be reduced using a concentration-toxicity screen.

The indicator chemical selection procedure is a quantitative approach that requires an evaluation of each chemical detected at concentrations above background levels: specifically, one must compare the concentration of the chemical in a medium to a toxicity benchmark for that medium. Other considerations such as persistence, solubility and bioaccumulation are included in the final selection of chemicals.

To select indicator chemicals, each chemical is assigned a score by dividing the concentration (C) of the chemical in a medium by the toxicity benchmark (TB). The medium may be a source medium (e.g., applied wastes), or a transport medium (e.g., surface water), depending on the availability of measurement data. The source of the toxicity benchmarks are dependent on the potential receptors (e.g., recommended criteria values for the protection of freshwater aquatic life can be calculated from Ambient Water Quality Criteria documents). The scores are then summed for all chemicals to estimate a "total risk factor" to serve as an initial screen. After consideration of other factors (e.g., persistence, bioaccumulation), one may eliminate from the risk assessment chemicals with C/TB values that are very low compared with C/TB values for other chemicals of the same class in that medium. "Very low" may be defined as a lower limit to the percentage of the total risk factor accounted for by a single chemical. For Superfund sites, the remedial project manager may choose a "cutoff" for "very low" of one percent of the total risk factor screen, or a lower value if the site risks are expected to be high.

In the no-migration petition, it appears that Exxon did not follow the indicator chemical selection approach as described above. The concentrations of the chemicals in the composite waste sludge were discussed with qualitative statements about relative aquatic toxicity of the chemicals rather than comparing them to numeric toxicity benchmarks. When the appropriate application of the indicator chemical approach is followed, there appears to be no justification for Exxon's exclusion of any of the VOCs and most of the PAHs from further analysis. To assist Exxon, we have prepared a couple of exhibits applying the suggested indicator chemical selection approach using the same organic waste constituents information provided in the risk assessment section of the no-migration petition. The same principles also apply to inorganic constituents, but are not illustrated in the example. Note that Exxon should begin the

risk assessment by evaluating comprehensive waste characterization data from all the wastes applied to the landfarm, not just the listed hazardous wastes.

Exhibit 1 shows the aquatic toxicity values that are recommended for the particular organic constituents in the waste as identified by Exxon in the petition. Please contact EPA if you need assistance in determining appropriate toxicity benchmark values for additional chemicals if they are detected in the waste. Calculations for the indicator chemical selection process are presented in Exhibit 2. In this exhibit, column 1 is the reported concentration of the chemical in the composite sludge waste that Exxon used to select waterborne indicator chemicals for the no-migration petition; column 2 lists the aquatic toxicity benchmarks shown in Exhibit 1; and column 3 is the ratio of waste constituent concentration to the aquatic toxicity benchmark, or the chemical-specific risk score. The chemical-specific risk scores are then summed for all chemicals within a chemical class to estimate a "total risk factor" for the medium and the chemical class. The chemical classes are evaluated separately because they are likely to exhibit different fate and transport characteristics.

In this example, if one follows the guidance for Superfund sites, four chemicals (anthracene, benzo(b)fluoranthene, pyrene, and fluoranthene) each have a total risk factor of less than one percent (1%). These chemicals could probably be eliminated from further consideration if there are no other reasons for retaining the chemical (e.g., high bioaccumulation potential). However, we need to stress that the risk assessment report should include a discussion of each chemical that is eliminated from further modeling, indicating that other characteristics of the chemical, such as bioaccumulation and persistence, have been considered.

I hope this information will be useful in the preparation of Exxon's response to EPA's technical evaluation of the no-migration petition. If you need additional assistance, please contact Athena Rodbell of my staff at (202) 382-4519.

Sincerely,

James F. Michael, Chief
Disposal Technology Section (OS-343)
Office of Solid Waste

Attachments (2)

cc: Dave Reeves, PSPD, OSW
Athena Rodbell, PSPD, OSW
Terry Keidan, PSPD, OSW
Howard Finkel, ICF

Exhibit 1

Recommended Criteria Values for the Protection of Aquatic Life

Chemical	Toxicity Value (mg/L)	Type of Value	Recommended Criterion (mg/L)	Rationale
benzene	5,300	EPA LC_{50}	110	(a)
ethylbenzene	32,000	EPA LC_{50}	640	(a)
toluene	17,500	EPA LC_{50}	350	(a)
xylene	3,185	LIT LC_{50}	64	(a)
anthracene			800	(b)
benzo(a)anthracene	1.2	EPA CC sed	1.2	(c)
benzo(b)fluoranthene	300	EPA PAH LOEL	60	(d)
benzo(a)pyrene	1.2	EPA CC sed	1.2	(c)
chrysene	1.2	EPA CC sed	1.2	(c)
1-methylnapthalene			120	(e)
naphthalene	620	EPA LOEL	120	(f)
phenanthrene	300	EPA PAH LOEL	60	(d)
pyrene	300	EPA PAH LOEL	60	(d)
fluoranthene	3,980	EPA LOEL	800	(f)

EPA values are those identified in the chemical-specific Ambient Water Quality Criteria Documents. "CC sed" is EPA's chronic criterion for PAHs in pore water of sediments as identified by Exxon.

(a) EPA or literature (LIT) LC_{50} value divided by a factor of 10 to extrapolate from an acute to chronic value and a factor of 5 for variation in species sensitivity.

(b) Assume toxicity value equal to that of fluoranthene (could use a more conservative assumption than this).

(c) EPA chronic criterion for benzo(a)pyrene in water pore of sediments, as identified by Exxon

(d) EPA LOEL (Lowest Observable Effect Level) identified for PAHs in general, divided by a factor of 5 for variation in species sensitivity.

(e) Assume toxicity value equal to that of naphthalene.

(f) EPA LOEL (Lowest Observable Effect Level) divided by a factor of 5 for variation in species sensitivity.

Exhibit 2

Indicator Chemical Approach Examples for Exxon, Baytown, TX

Constituent	Waste Concentration (mg/kg) [C] (1)	Aquatic Toxicity Benchmark (mg/L) [TB] (2)	Chemical Specific Risk Factor [C/TB] (3)	Percent of Total Risk (4)
Indicator Chemical Selection Applied to VOCs				
benzene	16	0.11	145	6.5 %
ethylbenzene	19	0.64	30	1.3 %
toluene	87	0.35	249	11.1 %
xylene	116	0.064	1813	81.1 %
		VOC TOTAL =	2236	None < 1 %
Indicator Chemical Selection Applied to PAHs				
anthracene	39	0.8	49	0.05 %
BaA	81	0.0012	67500	64.2 %
BbF	12	0.06	200	0.2 %
BaP	16	0.0012	13333	12.7 %
chrysene	21	0.0012	17500	16.6 %
1-methylnapth.	267	0.12	2225	2.1 %
naphthalene	138	0.12	1150	1.1 %
phenanthrene	134	0.06	2233	2.1 %
pyrene	45	0.06	750	0.7 %
fluoranthene	141	0.8	176	0.17 %
		PAH TOTAL=	105117	Four < 1 %

(1) From Exxon, Baytown, TX, Table 9.5-2: sludge composite waste concentrations.

(2) Aquatic toxicity values from Exhibit 1 (expressed in mg/L instead of µg/L)

(3) (1) divided by (2), i.e., concentration in the waste divided by aquatic toxicity values assuming 1 kg waste equivalent to 1 liter (i.e., 1 kg) of water.

(4) Percent of total risk factor for all chemicals contributed by the specified chemical.

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

9551.1991(04)

JAN 30 1991

Mark J. Lupo, Ph.D.
Manager, Applied Sciences
K. W. Brown & Associates, Inc.
500 Graham Road
College Station, TX 77845

RE: Standards for Air Pathway for Metals and Organic Chemicals

Dear Dr. Lupo:

We have reviewed Tables 1 and 2 and the information you provided in your letter of January 11, 1991. In the tables, three of the columns (TWA, STEL, and Ceiling) are only applicable to OSHA standards. Although a petitioner does not have to make a demonstration of no-migration for the short term events, they must still certify compliance with the OSHA requirement. Attached are the most current levels for metals in the air phase.

The Health Based Level (HBL) for chromium is based on hexavalent chromium which is carcinogenic when inhaled. EPA determines exceedance based on the total volume of chromium using the hexavalent HBL. If BP Oil is to use only the amount of hexavalent chromium to determine exceedance, they must substantiate how these values are separated from total chromium.

Also attached are the most current standards for organics in the air phase. Three of the compounds in Table 2 do not relate to no-migration and have been deleted. 1-Methylnaphthalene and Indene are not Appendix VIII or IX compounds and 3-Methyl-cholanthrene, while an Appendix VIII compound, is not on the Modified Skinner List. These three compounds do not have Health Based Levels (HBL). Although Benzidine is not on the Modified Skinner List, it is an Appendix VIII constituent and has a HBL and is therefore included in the attachment.

Sincerely,

Newman Smith
Disposal Technology Section
Office of Solid Waste

cc: Terry Keiden, AB, OSW
Athena Rodbell, AB, OSW

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

9551.1991(05)

FEB - 5 1991

Mr. Gregg L. Lorimor
Refinery Manager
Kerr-McGee Refining Company
P.O. Box 305
Wynnewood, Oklahoma 73098

Re: No-Migration Petition submitted for Kerr-McGee Refining Company's Wynnewood, Oklahoma Land Treatment Facility (F-91-NWOP-FFFFF)

Dear Mr. Lorimor:

I am writing in regard to your June 22, 1990 "no-migration" petition, which requests a variance under 40 CFR §268.6 to allow Kerr-McGee Refining Company (KMRC) to continue the land treatment of restricted wastes at KMRC's Wynnewood, Oklahoma land treatment facility (LTF). After a careful review of your petition, we have concluded that your facility does not meet the standard for a no-migration variance. Therefore, we will recommend to the Assistant Administrator for Solid Waste and Emergency Response that the petition be denied.

Our decision to recommend denial of the petition is based on the following concerns:

- Soil-pore monitoring indicates that hazardous constituents have already migrated beyond the unit boundary;
- The ground-water monitoring system is inadequate for the purpose of a no-migration variance, because it will be unable to detect constituent migration at the earliest time practicable; and,
- The required minimum separation between the bottom of the treatment unit and the top of the seasonally high water table has not been demonstrated.

We discuss our concerns below.

Presence of Hazardous Constituents Below the Treatment Zone (BTZ)

Soil-pore liquids monitoring data collected from the active LTF and from the land treatment demonstration (LTD) plot indicate that constituents have already migrated beyond the unit boundary at hazardous concentrations. As shown in Attachment 1, soil-pore monitoring data collected during the LTD (November, 1988 - February, 1989) indicate that antimony, arsenic, barium, benzene, and 2,4-dimethylphenol were detected at concentrations in excess of their respective health-based levels. Additionally, as shown by Attachment 2, soil-pore monitoring data collected from the LTF between December 8, 1983 and November 12, 1986 indicate that lead has migrated beyond the unit boundary at hazardous concentrations above the health-based level (0.05 mg/l). We, therefore, conclude that the presence of these constituents in the soil-pore liquids clearly demonstrates that these contaminants have already migrated below the LTF at hazardous concentrations.

Ground-Water Monitoring Data and Detecting Releases at the Earliest Time Practicable

As shown by Attachment 3, benzene was detected in shallow well LMW-5-0 at concentrations exceeding the health-based level of 0.005 mg/l during four ground-water sampling events between February and November, 1989. KMRC claims that the benzene detected in this well was attributable to a soil-core sampling event in January, 1989, when LTD soil-core samples were augered through nine inches of standing water (precipitation). KMRC states that this enabled water to run down the boreholes, carrying hazardous constituents to a depth of at least 5.5 feet below the surface. However, KMRC has failed to prove conclusively that the soil-core sampling event is directly related to the presence of benzene in shallow well LMW-5-0. For example, the benzene levels found in the sampling events have fluctuated (0.310 mg/l in February, 1989; 0.130 mg/l in May, 1989; 0.240 mg/l in August, 1989; and, 0.130 mg/l in November, 1989). If the soil-core sampling event was directly related to the presence of benzene in the shallow well, it would stand to reason that the benzene concentrations would have peaked, then tapered off. However, since the benzene concentration has fluctuated, we have concluded that the operations at the LTF are contributing to the to the presence of benzene in shallow well LMW-5-0.

Additionally we believe that KMRC has failed to meet the requirements of 40 CFR §268.6(a)(4). Specifically, KMRC has not demonstrated that the ground-water monitoring system at the LTF is capable of detecting (and differentiating) releases at the earliest extent practicable.

KMRC's current ground-water monitoring system consists of seven pairs of wells, each pair consisting of a shallow well

(indicated by a "-0" suffix) and a deep well. Free hydrocarbon products were detected in the ground water at LWM-1 during the first sampling event on November 17, 1981 (LMW-6 replaced LMW-1 in 1984). According to KMRC, this was the first indication of the existence of a liquid hydrocarbon plume on the refinery property. Ground-water monitoring between November 1988 and November 1989 at deep wells LMW-2, LMW-4, LMW-5, LMW-6, and RW-2 indicated the presence of benzene above health-based levels, which KMRC attributed to impacts from the hydrocarbon plume.

We believe that the locations of the monitoring wells are generally adequate, provided that the local ground-water flow pattern will not change in the future. However, given the proposed free oil recovery and ground-water remediation to be carried out in the next few years by KMRC, the local hydrogeologic regime may be drastically altered because of the hydraulic drawdown (to remove free products) in the currently upgradient processing area. In response to the planned remediation activities, some of the upgradient wells may become temporarily downgradient (e.g., RW-2 and RW-2-O) to those wells that are currently downgradient.

Lastly, the ramifications of the contamination resulting from the underlying hydrocarbon plume in regard to ground-water monitoring of the LTF are unclear. KMRC has not provided detailed analytical results that describe the extent of the known contamination beneath the LTF and KMRC is relying on the shallow wells to differentiate between releases from the LTF and the underlying hydrocarbon plume. Shallow well LMW-5-O, however, is already contaminated with benzene. We, therefore, believe that KMRC will be unable to differentiate between the two releases and therefore, conclude that the ground-water monitoring system will not be able to detect constituent releases at the earliest extent practicable.

Maintaining Minimum Separation

Federal regulations require that the depth-to-ground water at land treatment facilities be no less than three feet from the bottom of the treatment zone to the seasonal high water table (see 40 CFR 264.271(c)(2)). Based on the discussion below, we have concluded that KMRC has not demonstrated that the required minimum separation of three feet between the bottom of the treatment unit and the top of the seasonally high water table is consistently maintained.

KMRC stated that during the LTD in 1988-89, the water table beneath the LTF averaged from 9.2 to 11.9 feet, with seasonal fluctuations ranging from 1.22 to 1.82 feet. Given this range, the water table can rise to 7.38 feet of the surface, or 2.88 feet below the treatment zone. Historically, however, the water table at the LTF has shown much more fluctuation than observed

during the LTD. In June, 1985, a depth of 4.92 feet was recorded at well RW-1, and in March, 1987, depths of 5.03, 5.82, and 6.01 feet were recorded at LMW-3, LMW-6, and LMW-2, respectively (Part B Permit Application, pages E-38 to E-41). These data indicate that fluctuations ranging from 0.42 to 1.51 feet of separation between the treatment zone (4.5 feet deep) and the water table have occurred, showing that the required three foot separation is not maintained.

Incomplete Petition

Finally, our review indicates that the petition is incomplete and that information and clarification in areas beyond those highlighted above would be needed to complete the petition. However, because of the problems discussed above, we believe we have sufficient information at this time to move toward a denial of your petition.

It is our practice to give petitioners the option of withdrawing their petitions to avoid a negative publication in the Federal Register. If you prefer this option, you must send us a letter withdrawing your petition and acknowledging that the petitioned wastes are still considered to be restricted wastes subject to the Third Third Land Disposal prohibitions. This letter should be forwarded to the following address within two weeks of the date of receipt of today's correspondence:

Patricia Cohn, Acting Chief
Assistance Branch (OS-343)
U.S. Environmental Protection Agency
401 M Street, S.W.
Washington, D.C. 20460

If you choose not to withdraw your petition, we will recommend that a proposed denial decision be published in the Federal Register.

Any questions regarding our findings may be submitted in writing to Mr. James Michael of my staff.

Sincerely,

Jeffery D. Denit, Deputy Director
Office of Solid Waste

Attachments

cc: Bill Gallagher, Region VI
Fenton Rood, OSDH
Patricia Cohn, PSPD, OSW
James Michael, PSPD, OSW

bcc: Terry Keidan, AB, PSPD, OSW
Jeffrey Gaines, AB, PSPD, OSW
Dave Reeves, AB, PSPD, OSW
Richard Kinch, WMD, OSW
Kathy Stein, OE
Nikki Roy, WMD, OSW
Howard Finkel, ICF Incorporated

ATTACHMENT 1

Summary of Soil-Pore Liquids Monitoring Data
For Constituents Detected Above Health-Based Levels (mg/l)

(Data from LTD Final Report, Appendix C)

Constituents	Sampling Dates	Lysimeter Numbers	Concentrations	Health-Based Levels
Antimony 1/	11/88	3	0.036	0.01
Arsenic 1/	11/88	3	0.06	0.05
Barium 1/	11/88	3	1.7	1.0
Benzene	11/88	2	1.3	0.005
		3	2.3	
	01/89	3	2.1	
		4	0.014	
	02/89	2	1.5	
		4	0.32	
		bkgrnd	0.011	
	04/89	2	2.6	
		4	0.36	
	07/89	1	0.71	
		4	0.42	
	08/89	4	0.43	
2,4-Dimethyl Phenol	11/88	2	0.044	0.02
	04/89	2	0.029	

1/ Analyses for inorganics only performed on 11/88 samples due to limited volume of soil-pore liquids collected during subsequent sampling events.

ATTACHMENT 2

Summary of Soil-Pore Liquids Monitoring Data
For Constituents Detected Above Health-Based Levels (mg/l)

(Data from LTF, Recon. Report, Table 3-4)

Constituents	Sampling Dates	Lysimeter Numbers	Concentrations	Health-Based Levels
Chromium	06/05/84	1 (bkgrnd)	0.2	0.05
		2	0.05	
		3	0.16	
		4	0.05	
	06/12/85	2	0.08	
	05/16/86	2	0.07	
		5	0.05	
Lead	12/08/83	2	0.19	0.05
		4	0.18	
		5	0.14	
	05/16/86	1 (bkgrnd)	0.29	
		2	0.45	
		3	0.5	
		4	0.37	
		5	0.4	
	11/12/86	1 (bkgrnd)	0.06	
		3	0.05	
		4	0.09	

ATTACHMENT 3

Summary of Ground-Water Monitoring Data For Benzene Found at Concentrations Above the Health-Based Level[a]

	Concentration (mg/l)													
	Downgradient Wells								Upgradient Wells					
Date	LMW-3	LMW-3-0	LMW-4	LMW-4-0	LMW-5	LMW-5-0	RW-1	RW-1-0	LMW-2	LMW-2-0	LMW-6	LMW-6-0	RW-2	RW-2-0
Nov., 1988	LD[b]	LD	0.049	LS[c]	0.056	LD	LD	LD	0.034	LD	0.049	LD	0.500	LD
Feb., 1989	LD	LD	0.033	LD	0.036	0.310	LS	LD	0.0047	LD	0.022	LD	0.150	LS
May, 1989	LS	LD	0.0073	LD	0.064	0.130	LS	LD	0.0061	LD	0.023	LD	0.180	LD
Aug., 1989	LD	LD	LS	LD	0.023	0.240	LS	LD	LD	LD	0.025	LD	0.220	-[d]
Nov., 1989	LD	LD	0.018	LD	0.140	0.130	LD	LD	LD	LD	0.017	LD	0.190	LD

Footnote:

a. The current health based level for benzene is 0.005 mg/L.
b. "LD" means a concentration lower than the detection limit.
c. "LS" means a concentration greater than the detection limit but less than the drinking water standard.
d. "-" means data was not available.

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

9551.1991(06)

APR 22 1991

Mr. J. R. McIntire
Refinery Manager
Atlantic Refining & Marketing Company Corporation
3144 Passyunk Avenue
Philadelphia, Pennsylvania 19145

Re: No-Migration Petition submitted for Atlantic Refining & Marketing Company Corporation's Philadelphia, Pennsylvania Land Treatment Facility (F-91-NARP-FFFFF)

Dear Mr. McIntire:

I am writing in regard to your May 16, 1990 "no-migration" petition, which requests a variance under 40 CFR §268.6 to allow Atlantic to continue the land treatment of restricted wastes at the Philadelphia, Pennsylvania land treatment facility (LTF). After a careful review of your petition, we have identified three major technical problems. These are:

- Evidence of releases from the LTF in excess of health-based levels;
- Inadequate ground-water and soil-pore monitoring systems for no-migration purposes; and,
- Apparent non-compliance with other regulatory requirements.

Therefore, we have concluded that the Atlantic facility does not meet the standard set by the statute for a no-migration variance. We will, therefore, recommend to the Assistant Administrator for Solid Waste and Emergency Response that a no-migration variance for Atlantic be denied.

Each of the major technical deficiencies identified from our evaluation of your petition is discussed in detail below. Any questions concerning any of our technical analyses and findings may be submitted in writing to Mr. James Michael of my staff.

Presence of Hazardous Constituents in the Ground-Water

Atlantic states that "ground-water will not be used for the purposes of no-migration" (Vol.1, section 5.3.1.2.2, page 138), and no quantitative analysis of ground-water was provided in the petition. Therefore, in order to conduct a complete evaluation of

Atlantic's no-migration petition, we sought ground-water data from the Pennsylvania Department of Environmental Resources (PADER).

Hazardous constituents above health-based levels were detected in the 1987 and 1990 sampling events.[1] Specifically, in 1987, PADER detected benzene, chlorobenzene, 1,4-dichlorobenzene, and ethyl benzene above their respective health-based levels in the downgradient monitoring wells. In 1990, PADER again detected benzene and 1,4-dichlorobenzene above their respective health-based levels in the downgradient monitoring wells (see Table 1).

TABLE 1 - GROUND-WATER CONTAMINATION

HAZARDOUS CONSTITUENT (mg/l)	HEALTH-BASED LEVEL (mg/l)	1987: MAXIMUM CONCENTRATION DETECTED (mg/l)	1990: MAXIMUM CONCENTRATION DETECTED (mg/l)
BENZENE	0.005	3.652	2.990
CHLOROBENZENE	0.100	0.675	
1,4-DICHLOROBENZENE	0.075	0.425	0.140
ETHYL BENZENE	0.700	1.825	

Although Atlantic argues that the underlying ground-water has been contaminated from other pre-existing sources, Atlantic's petition has failed to demonstrate that the existing ground-water contamination did not result, even in part, from LTF operations. A comparison of PADER data for the LTF's upgradient and downgradient wells shows in all cases that concentrations of hazardous constituents in the downgradient monitoring wells exceed the concentrations of the same constituents, if detected at all, in the upgradient monitoring well. This indicates to us that migration has already occurred that may be attributable to the wastes in the LTF unit and not the hydrocarbon plume underlying the general area where the LTF is located. Furthermore, we do not believe that Atlantic's ground-water monitoring system is capable of differentiating the source of the constituents already detected (see discussion below). As a result, we cannot definitively conclude that the contamination which is already evident is not due to migration of constituents from the LTF unit. This finding is

---

[1]PADER performed only a qualitative analysis of organic constituents in 1988, and did not perform any analyses for organic constituents in 1989.

necessary to satisfy the no-migration standard for land disposal of restricted hazardous wastes.

Presence of Hazardous Constituents in the Soil-Pore Liquids

We understand that the LTF is divided into eight plots, A-H, with one lysimeter located on each plot, and that Atlantic has not applied wastes to plots G and H since 1985. The RCRA Permit specifies that Atlantic should conduct soil-pore monitoring for each plot on a semi-annual basis for the principal hazardous constituents (PHC's) identified, which include volatile and semi-volatile organics and inorganics. In contrast to this requirement, Atlantic's petition included soil-pore monitoring data from only a few plots. Specifically, soil-pore liquid samples were collected from only three plots in April 1989, four plots in July 1989, and three plots in October 1989. Moreover, even though plot H has been inactive since 1985, only the soil-pore liquids collected from plot H were analyzed for the inorganic indicator constituents. These limited data showed that benzene was detected above the health-based level of 0.005 mg/l (see Table 2). The instances of benzene in the soil pore liquids above the health-based level indicates that this contaminant has migrated below the LTF at concentrations considered hazardous by EPA.

Furthermore, because the soil-pore monitoring data provided by Atlantic are so limited, we consider them insufficient to demonstrate, to a reasonable degree of certainty, that inorganic and other organic constituents have not migrated from the LTF.

TABLE 2 - SOIL-PORE CONTAMINATION OF BENZENE (mg/l)

	5/21/89	7/19/89	10/24/89
PLOT H	0.013	0.010	0.007
Health-based level	0.005 mg/l		

Detecting Releases at the Earliest Practicable Time

In its petition, Atlantic has not demonstrated that the ground-water and soil-pore monitoring systems at the land treatment facility (LTF) are capable of detecting releases from the LTF at the earliest practicable time, as is required by 40 CFR §268.6(a)(4). Of particular concern is the inability to clearly differentiate between past and present releases.

Ground-Water Monitoring System

Atlantic stated that it developed its ground-water detection monitoring program "in light of well-documented, pre-existing ground-water contamination associated with the general area where the LTF is located" (Vol. 1, section 6, page 55). We note that during the 1989 and 1990 compliance monitoring evaluation (CME) inspections, approximately three feet of standing oil was observed in the downgradient monitoring well (W6), preventing collection of ground-water samples with a three foot bailer. In addition, older CME monitoring results indicated the presence of significant levels of contamination, particularly total organic carbon (TOC) in the underlying ground-water, up to 98,000 mg/l.

Although Atlantic attributes this contamination to pre-existing site conditions and argues the LTF has not affected ground-water quality, we are not aware of any assessment monitoring program conducted by Atlantic during interim status, nor did the petition describe any facility attempt to locate the sources of the ground-water contamination. In addition, the constituents of a weathered petroleum product plume would be very similar to those detected in a release from your LTF managing wastes from petroleum refining activities. Clear differentiation between the sources of releases is necessary to support a finding of no-migration. However, your petition does not provide this level of certainty.

In order to determine whether migration of hazardous constituents has occurred, Atlantic plans to perform a trend analysis on each of the constituents detected in the ground water. We believe, however, that the elevated levels of constituents contributed by the "free-product plume" will mask all but massive releases from the LTF. We are concerned that, Atlantic intends to rely on a <u>significant</u> increase in the concentrations of the volatile aromatic organic indicator compounds to provide early detection of migrating hazardous constituents. For the purposes of no-migration, we require petitioners to clearly demonstrate that their facility is not contributing contaminants at concentrations in excess of the applicable health-based levels. We do not believe that a trend analysis will enable Atlantic to identify releases at low concentrations which are frequently used as health-based levels (e.g., 0.005 mg/l of benzene). We, therefore, conclude that Atlantic's ground-water monitoring system is inadequate for the purposes of detecting constituent releases from the LTF at the earliest practicable time.

Soil-Pore Liquids Monitoring System

Similarly, Atlantic has not demonstrated that its soil-pore monitoring program will allow for the detection of constituent migration at the earliest practicable time.

Atlantic's soil-pore monitoring program does not appear to adequately monitor the effect of accumulated waste on localized migration of hazardous constituents (i.e., hot-spots). Atlantic's petition indicated that it dumps wastes at the access ramps of each plot and does not distribute these on the plots until several loads have accumulated. The wastes spread over the plot may not be evenly distributed, as evidenced by the "long-term accumulation of treated waste residues in the proximity of waste off-loading ramps" (App.1, page LTP-18). The placement of the lysimeters was chosen using a random number approach and are not placed near the access ramps where the wastes are placed. It is, therefore, likely for hot-spots to exist within the LTF, for which Atlantic's soil-pore monitoring program does not adequately account.

Second, in the petition, Atlantic described the physical and chemical consistency of the soils as being highly variable over short distances. We believe that the physical heterogeneity of soil texture in the lower treatment zone (LTZ), as described, may establish pathways of reduced resistance to migration of hazardous constituents. We expect these pathways of reduced resistance to "short-circuit" the land treatment processes and facilitate the migration of hazardous constituents below the treatment zone. In addition, if slag, ash, bricks, large chunks of concrete, wood timbers, wires, and construction debris are present within the LTF, as the petition states, we are concerned that these materials also will form pathways of reduced resistance to soil water flow, or themselves be a source contributing hazardous constituents. Neither Atlantic's placement of lysimeters, nor its predictive computer modeling, accounted for the potential effects of such soil variability or foreign material on the physical and chemical processes within the treatment zone. We conclude, therefore, that Atlantic's soil-pore monitoring system is not capable of detecting constituent migration at the earliest practicable time.

Maintaining Minimum Separation

Federal regulations require that the depth-to-ground water at land treatment facilities should be at least three feet from the bottom of the treatment zone to the seasonal high water table (see 40 CFR 264.271(c)(2)). Specific depth-to-ground-water measurements beneath the LTF have not been provided in this petition. However, based upon topographic maps provided by Atlantic, it appears that most of the Atlantic's LTF is at an elevation of about 20 feet above sea level. In addition, seven to thirteen feet above sea level was cited as the water table elevation range (Vol.1, section 4.5.1, page 4-21), therefore, we estimated the depth of the water table as also being between seven and thirteen feet below ground surface. This estimate indicates that portions of the LTF may not be three feet above the seasonal high water table as is required by 40 CFR §264.271(c)(2).

In addition, Pennsylvania State regulations define the seasonal high water table as "the presence of mottling" (see 25 Pa.Code §75.264 (u)(5)). As is shown by Attachment I, mottles were reported at various depths within the LTF. The presence of mottles in the LTF indicates that there may be an insufficient separation between the LTZ and upper saturated zone (i.e., the presence of saturated soil conditions). We believe, therefore, that the presence of mottles within the LTF soils further supports our determination that Atlantic has failed to demonstrate compliance with 40 CFR §264.271(c)(2).

Incomplete Petition

Finally, our review indicates that the petition is incomplete and that information and clarification in areas beyond those highlighted above would be needed to complete the petition. However, because of the problems discussed above, we believe we have sufficient information at this time to move toward a denial of your petition.

It is our practice to give petitioners the option of withdrawing their petitions to avoid a negative publication in the Federal Register. If you prefer this option, you must send us a letter withdrawing your petition and acknowledging that the petitioned wastes are still considered to be restricted wastes subject to the Third Third Land Disposal prohibitions. This letter should be forwarded to the following address within two weeks of the date of receipt of today's correspondence:

Elizabeth Cotsworth, Chief
Assistance Branch (OS-343)
U.S. Environmental Protection Agency
401 M Street, S.W.
Washington, D.C. 20460

If you choose not to withdraw your petition, we will recommend that a proposed denial decision be published in the Federal Register.

Sincerely,

Jeffery D. Denit, Deputy Director
Office of Solid Waste

cc: Elizabeth Cotsworth, PSPD, OSW
James Michael, PSPD, OSW
Paul Gotthold, Region III
Hon Lee, Region III
Larry Lunsk, PA DER

bcc: Terry Keidan, AB, PSPD, OSW
Allyson Ugarte, AB, PSPD, OSW
Dave Reeves, AB, PSPD, OSW
Kathy Stein, OE
Bill Kline, WMD, OSW
Douglas Donor, Region III
Howard Finkel, ICF Incorporated

ATTACHMENT I

Depth to Uppermost Occurrence of Mottles (inches)

Plot	Horizon	Depth	BTZ	Separation
A	2F1	37-48	37	None
B	2F	39-51	39	None
C	ZOI2	11-40	40	None
D	2F2	35-44	28	7
E	ZOI2	10-35	35	None
F	ZOI2	10-38	38	None
G	2F1	28-32	28	None
H	4F3	48-53	28	20
Background	F1	0-28		

Note: BTZ is the depth to the control area (clean fill zone)

Source: App.3, Attachment 5-2

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

9551.1991(07)

APR 23 1991

OFFICE OF
SOLID WASTE AND EMERGENCY RESPONSE

MEMORANDUM

SUBJECT: Applicability of the Land Disposal Restrictions to Exported Wastes

FROM: Sylvia K. Lowrance, Director
Office of Solid Waste (OS-300)

TO: Gerald M. Levy, Chief
MA Waste Management Branch
Region I

This memorandum responds to your March 8, 1991, request for clarification concerning the applicability of the Part 268 Land Disposal Restrictions (LDR) program to wastes to be exported for treatment and/or recovery; in particular, the testing and recordkeeping requirements of Part 268.7.

The requirements of Part 268 are applicable to hazardous wastes (as stated at 40 CFR 268.1(b)) unless specifically provided otherwise in Part 261 or Part 268. Neither Part 261 nor Part 268 generically exclude the export of hazardous wastes from the LDR requirements. Therefore, the requirements of Part 268.7(a) are applicable. However, this is not meant to imply that the treatment standards must be met prior to disposal in another country.

As a secondary matter, the description "corrosive, metal-containing wastes" used in your March 8, 1991 correspondence is insufficient to make a determination regarding the regulatory status of the secondary material when destined for reclamation. Specifically, as presented in Table 1 of Part 261.2, a characteristic by-product or sludge that is reclaimed is not a solid waste (and therefore not subject to the part 268 requirements); however, a characteristic spent material that is reclaimed is a solid waste (and therefore must comply with the Part 268 requirements). In addition, scrap metal that is hazardous solely due to a characteristic is not subject to the LDR Part 268 paperwork requirements (See 40 CFR 261.6(a)(3)(B)(iv)).

Should you have further questions, or need more information, please contact Charles Hunt, of my staff, at FTS 475-8551.

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

9551.1991(08)

MAY 29 1991

Mr. Glenn A. Weiss
Refinery Manager
Texaco USA
Puget Sound Plant
P.O. Box 622
Anacortes, Washington 98221

Re: No-Migration Petition submitted for Texaco's Anacortes, Washington Land Treatment Facility (F-91-NTAP-FFFFF)

Dear Mr. Weiss:

I am writing in regard to your May 18, 1990 "no-migration" petition, which requests a variance under 40 CFR §268.6 to allow Texaco to continue the land treatment of restricted wastes at its Anacortes, Washington land treatment facility (LTF). After a careful review of your petition, we have identified three major technical problems. These are:

Evidence of releases from the LTF in excess of health-based levels;

Inadequate ground-water monitoring system for purposes of no-migration; and,

Apparent non-compliance with other regulatory requirements.

Based on these technical deficiencies, we have concluded that the Texaco facility does not meet the standard set by the statute for a no-migration variance. We will, therefore, recommend to the Assistant Administrator for Solid Waste and Emergency Response that a no-migration variance for Texaco be denied.

Each of the major technical deficiencies identified from our evaluation of your petition is discussed in detail below. Any questions concerning any of our technical analyses and findings may be submitted in writing to James Michael of my staff.

Presence of Hazardous Constituents Below the Treatment Zone

Our review of Texaco's 1988 soil-pore monitoring data for the LTF indicate that chromium, benzene and nickel have already migrated beyond the unit boundary above their respective health-based levels (HBLs). See Table 1.

TABLE 1 - EVIDENCE OF MIGRATION BEYOND UNIT BOUNDARY

HAZARDOUS CONSTITUENT	HEALTH-BASED LEVEL	1988: MAXIMUM CONCENTRATION DETECTED
BENZENE	0.005 mg/l	0.019 mg/l
NICKEL	0.01 mg/l	0.263 mg/l
CHROMIUM	0.01 mg/l	0.121 mg/l

Furthermore, the analysis of soil core monitoring data collected in 1989 indicates that benzo(a)-anthracene, benzo(a)pyrene, and benzo(b)fluoranthene were detected below the treatment unit in excess of their respective HBLs. See Table 2. In addition, chrysene, fluoranthene, naphthalene, 1-methyl-naphthalene, phenanthrene, and pyrene were detected in the soil cores at statistically significant concentrations. Although the concentrations detected do not exceed HBLs, statistically significant concentrations below the treatment zone indicate that these constituents are migrating and further add to our concern (see Attachment 1).

TABLE 2 - EVIDENCE OF MIGRATION BEYOND UNIT BOUNDARY

HAZARDOUS CONSTITUENTS	HEALTH-BASED LEVELS	LYSIMETER SAMPLE DATE AND NUMBER	1989: MAXIMUM CONCENTRATION DETECTED
BENZO(A) ANTHRACENE	0.055 mg/l	Jun/89	1.361 mg/l
		Oct/89	0.993 mg/l
BENZO(A) PYRENE	0.055 mg/l	Jun/89	0.454 mg/l
		Oct/89	0.310 mg/l
BENZO(B) FLUORANTHENE	0.055 mg/l	Jun/89	0.784 mg/l
		Oct/89	1.676 mg/l

Another indication of the migration of hazardous waste constituents is the increase in the concentration of total organic carbon (TOC) at the base of the treatment zone. Attachment 2 shows the concentrations of TOC in samples collected from the 1988 lysimeter monitoring events. The average concentration of the background lysimeter samples in plot BG-SE is 13 mg/l. A significant increase in TOC concentration is considered to be the average background value plus two standard deviations, or 27 mg/l. As can be seen from Attachment 2, the average concentration of TOC detected from the 1988 lysimeter system exceeds the significance level of 27 mg/l. These data indicate to us that the LTF is not successfully degrading or immobilizing all wastes and further support our conclusion that the migration of hazardous constituents is occurring.

In the petition (Section 1, page 5), Texaco attributes the detection of constituents at the base of the treatment zone in the West LTF (WLTF) plot #8 to wastes buried during the terracing of the plot. There is no explanation in the petition of how this could occur. Lacking this explanatory information, we cannot evaluate your statement, particularly since the plot is situated in a relatively flat area, only portions of the surface layer were modified, and buried wastes are located 7.5 feet below the surface of the plot (i.e., plot #8 would have required very little cut and fill). Furthermore, Texaco's petition did not explain the presence of hazardous constituents detected in the other plots, such as plot #9, also in the WLTF (see Attachment 2).

Detecting Releases at the Earliest Practicable Time

In its petition, Texaco has not demonstrated that the ground-water system at the land treatment facility (LTF) is capable of detecting releases at the earliest practicable time, as is required by 40 CFR §268.6(a)(4).

According to the petition, the depth to ground water is too great to deem it an important factor in determining subsurface contaminant migration (Volume 1, Table Exec-1). Texaco based this conclusion on the historic absence of contaminants in ground-water monitoring samples. Consequently, Texaco does not recommend monitoring of the primary aquifer. The petition indicated elsewhere, however, that perched water tables are present at the facility and that saturated conditions are present through most of the geologic units. Based on this facility description, we consider ground-water monitoring to be important for the purposes of a no-migration variance for the LTF.

Based on our evaluation of some of the features of Texaco's ground-water monitoring system, we believe this system is inadequate for early detection of migration because of well screen location. Attachment 3 illustrates well-screen position

for twenty monitoring wells at the East and West LTFs, nine of which are down-gradient wells. Of those nine, six are screened between six and twenty one feet below the top of the water table making it possible for a shallow plume to be missed by monitoring. In addition, as illustrated in Attachment 3, two monitoring wells have been screened over an interval that does not intercept ground water, and well 17 is screened above the ground-water depth.

Maintaining Minimum Separation

Federal regulations require that the depth-to-ground water at land treatment facilities should be at least three feet from the bottom of the treatment zone to the seasonal high water table (see 40 CFR §264.271 (c)(2)). We believe that Texaco has failed to demonstrate that either the West or East Field of Texaco's LTF has successfully maintained this minimum separation.

Unfortunately, the petition did not present a comprehensive data set showing depths to the water table. Attachment 4, however, displays that a sufficient amount of data was compiled from the no-migration petition to indicate that a water table exists within three feet of the treatment zone in the East LTF (ELTF). If an accumulated waste layer is assumed, we estimate the minimum acceptable depth to the seasonal high water table to be 9.5 to 11.5 feet below the soil surface (depending on waste accumulation). Attachment 4 shows that at the ELTF, a separation in that range occurs infrequently in any piezometer or monitoring well.

Texaco indicates that the observed "perched" water table is seasonal and confined to a shallow surface soil layer (App. I, Vol.5, pages XIX-27 and XIX-32). Texaco, therefore, does not consider this to be a perched water table, but rather a temporary condition of excessive soil wetness. Texaco further associates high water table readings with leakage around the piezometer casing allowing surface water to enter the piezometers (App. I, Vol.5, page XIX-38). Only two of the five piezometers tested, however, showed any immediate response to a rainfall event. The data shown in Attachment 4 indicate that this condition persists throughout the year with slight fluctuations in level. The hydrology section of Texaco's permit application also indicates that saturated conditions appear continuous through zone E (App.I, Vol.3, page XV-20) and are not restricted to a shallow surface layer. We, therefore, do not believe that the data support a zone of restricted downward flow. Instead, we conclude that the data support the existence of a perched water table and that continuous saturated conditions exist throughout the treatment zone, particularly at the ELTF.

Data supplied with the petition does not indicate that sufficient depth to the water table exists under the West LTF (WLTF). In fact, mottling, indicating saturated soil conditions, was reported in the WLTF soil descriptions in all profiles and within 9 to 34 inches from the soil surface (Sec.4, page 8). Saturated conditions in the WLTF surface layer is also reported in the hydrology section of the permit application (App.I, Vol.3, page XV-35). In light of this information, Texaco did not provide sufficient piezometric data for the WLTF to substantiate that depth to the seasonal high water table meets the requirements. Therefore, in regard to both the ELTF and WLTF, the minimum separation required by 40 CFR §264.271(c) is not being maintained. This is a deficiency that precludes granting a no-migration variance to the facility.

Incomplete Petition

Finally, our review indicates that the petition is incomplete and that information and clarification in areas beyond those highlighted above would be needed to complete the petition. However, because of the technical nature of the problems discussed above, we believe a technical basis already exists that is sufficient to support a denial of your petition.

It is our policy to give petitioners the option of withdrawing their petitions to avoid a negative publication in the Federal Register. If you prefer this option, please send us a letter withdrawing your petition and acknowledging that the petitioned wastes are still considered to be restricted wastes subject to the Third Third Land Disposal prohibitions. This letter should be forwarded to the following address within two weeks of the date of receipt of today's correspondence:

Elizabeth Cotsworth, Chief
Assistance Branch (OS-343)
U.S. Environmental Protection Agency
401 M Street, S.W.
Washington, D.C. 20460

If you choose not to withdraw your petition, we will recommend that a proposed denial decision be published in the Federal Register.

Sincerely,

Jeffery D. Denit, Deputy Director
Office of Solid Waste

ATTACHMENT 1

Summary of Significant BTZ Soil-Core Detections (µg/kg)

Constituent/Plot	Jun 89 8	Jun 89 8 Dup	Oct 89 9	Oct 89 9 Dup	Health- Based Levels
Benzo(a)Anthracene	1361.4	1464.5	1464.5	993.4	55
Benzo(a)Pyrene	660.1	453.8	453.8	310.4	55
Benzo(b)Fluoranthene	783.8	2475.2	2475.2	1676.4	55
Chrysene	3465.3	1382.0	1382.0	910.6	--
Fluoranthene	ND	2681.5	2681.5	1821.3	3.2+E7
Naphthalene	ND	206.3	206.3	ND	3.2+E7
1-Methylnaphthalene	5775.6	742.6	742.6	476.0	1.6+E6
Phenanthrene	3259.1	4744.2	4744.4	3311.4	3.2+E7
Pyrene	2681.5		391.9	248.4	3.2+E7

Note: E^n represents 1×10^n

ATTACHMENT 2

TOC Concentrations in Samples Collected
From the 1988 Lysimeter System (mg/l)

	11/3/88		12/21/88		
Plot	PCUP	GBRICK	PCUP	GBRICK	AVERAGE
1	32	44	53	57	46
3	70	91	101	96	89
4	47	75	115	102	85
6E	82	15	106	61	66
6EC	23	28	81	79	53
6W	256	261	185	203	226
7	114	189	190	236	182
8	384	348	293	289	329
9		287			287
10W	168	248	116	194	182
11	58	47	142	60	77
BG-SE	6	24	12	19	13
BG-T1		18	4	5	9
BG+2STD					27

ATTACHMENT 3

Distances From Top of Well Screen to Water Table (feet)

Well No.	Outer Ground Ground Surface	Depth of Well Ground Bottom of Screen	Feet to Depth to Top of Screen	Top of Water From Ground	Screen to Water
1	1.49	70.79	60.79	56.49	4.3
2	1.79	45.27	35.27	30.12	5.15
3	2.25	75.01	65.01	43.13	21.88
4	Abandoned - July 1986				
11	2	51.14	41.14	13.09	28.05
12	1.5	39.51	29.51	NA	NA
13	1.92	30.06	20.06	3.22	16.84
14	1.92	33.03	23.03	18.34	4.69
15	2.03	51.53	41.53	22.77	18.76
16	1.3	59.96	47.96	51.66	-10.13
17	2.01	46.1	36.1	59.14	-23.04
21	2.06	25.21	15.21	1.71	13.5
22	2.12	25.28	15.28	0.91	14.37
23	2.07	24.78	14.78	8	6.78
24	2.26	40.13	30.13	Bottomed Out	
25	1.92	36.03	26.02	34.8	-8.78
26	1.25	50.02	40.02	Bottomed Out	
31	1.82	27.08	17.18	16.23	0.95
32	1.9	45.79	35.89	38.44	-2.55
33	2.28	58.12	48.22	52.37	-4.15

ATTACHMENT 4

Distance from the Soil Surface to the Piezometric Surface

Date	p4	p5	p6	p7	p8	p10a	p12a	w13	w21	w22	w23	w41
Mar-85	2.4	2.1	2.3	3.2	2.7			3.8	4.1	1.4	2.3	
Jun-85	2.2	1.8	2.0	2.9	2.2			5.5	3.5	1.4	2.7	
Jul-85	3.4	3.3	3.7	4.4	3.2			7.6	4.9	3.2	5.0	
Sep-85	3.4	3.2	3.7	3.9	2.8			9.0	4.6	2.8	5.7	
Nov-85	1.8	1.9	2.6	3.6	2.6			2.2	1.4	0.6	0.7	
Dec-85	1.8	2.0	2.6	3.6	2.6			2.2	1.4	0.6	0.7	
Apr-86	1.7	1.3	1.6	2.3	1.9			2.5	1.7	0.5	0.7	
Aug-86	3.4	3.3	3.4	2.8	2.3			7.2	4.6	2.8	4.8	
Oct-86	3.2	3.1	3.5	3.5	3.1			8.0	3.5	2.5	4.4	
Dec-86	6.2	6.6	7.3	4.7	2.5			2.8	2.6	0.8	1.2	
Jan-87	6.4	6.7	8.3	4.5	2.0			2.1	1.2	0.4	0.8	
Apr-87	7.4	8.4	9.8	6.1	3.5			3.8	3.2	1.0	1.2	
Jun-87	8.3	8.1	9.9	6.1	3.9			6.1	4.1	2.7	3.8	
Sep-87	9.3	9.2	10.2	7.3	5.2			9.5	5.2	3.9	6.2	
Nov-87	7.5	10.2	11.6	8.9	5.2			11.0	4.1	3.2	6.2	
Apr-88	5.0	8.1	10.4	5.4	2.0	2.7	0.8	2.9	3.2	0.9	1.9	4.9
May-88	6.3	8.6	10.3	6.1	2.5	2.5	0.0					1.2
Jun-88	6.2	8.6	10.3	6.0	2.8	2.3	0.8	3.3	1.7	0.9	8.0	3.8
Jul-88	7.4	8.5	10.3	6.6	3.4	3.6	2.9	7.0	3.9	2.6	4.4	3.6
Aug-88	8.3	8.8	10.2	7.0	4.5	4.1	3.7	7.5	4.4	3.1	5.3	4.3
Sep-88	8.8	9.2	10.5	7.3	4.9	4.2	4.2	8.6	4.7	3.6	5.9	4.3
Nov-88	7.5	10.2	11.6	8.9	5.2			2.5	1.9	0.5	0.9	2.6
Dec-88	4.6	7.6	10.6	6.0	1.6	2.3	0.2					
Dec-89	6.0	7.9	11.6	4.3	0.2	2.3	0.3	2.0	2.3	3.8	0.9	2.7

Where: the letter prefix to the label (p,w) denotes whether it is a piezometer or a monitoring well.

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

9551.1991(09)

MAY 29 1991

Robert A. Olsen
Senior Process Engineer
Conoco Billings Refinery
P. O. Box 2548
Billings, MT 59103-2548

Re: No Migration Petition for Conoco's Land Treatment Facility (LTF), Billings, MT (F-91-NCBP-FFFFF)

Dear Mr. Olsen:

The purpose of this letter is to respond to issues raised by Conoco during EPA's site visit on May 7, 1991. Specifically, Conoco requested guidance on how they should address bioaccumulation in the assessment of environmental impacts at the Billings land treatment facility. To address this issue, Conoco should first assess the environmental threat that exists at the LTF. An environmental threat can be assumed to exist at a LTF only if three criteria are met. These are:

1) Sensitive environmental receptors are within the vicinity of the site (such as aquatic ecosystems or endangered or threatened species located within 1000 feet);

2) There is an exposure pathway by which these receptors may be exposed to contaminants from the site (is there hydraulic connection between ground water and receptors or airborne transport of contaminants); and,

3) The receptor could be exposed to the contaminants at hazardous levels.

If any of these three conditions does not hold, then no significant ecological threat is presumed to exist and the issue of bioaccumulation does not need to be addressed. If these conditions do exist, Conoco should:

1) Determine and state which substances present in Conoco's hazardous waste have a bioconcentration factor (BCF) over 1000, particularly mercury, cadmium, lead, and zinc. The most reliable source of peer-reviewed BCF values are EPA ambient water quality criteria documents;

2) Acknowledge those substances present in the waste and their potential for bioaccumulation; and,

3) And dismiss possibilities (no hazardous constituents leaving the treatment zone, no environmental receptors, no surface runoff).

If you have any additional questions on this issue or related issues, please call me at (202) 475-9712.

Sincerely,

Newman Smith
Office of Solid Waste
Disposal and Technology Section (OS-343)

cc: Mike Gansecki, Region VIII
Stephanie Wallace, Region VIII Montana Office
Duane L. Robertson, DHES
James Michael, PSPD, OSW
Terry Keidan, PSPD, OSW
Howard Finkel, ICF, Inc.

UN ' .D STATES ENVIRONMENTAL PROTEC. .JN AGENCY

9551.1991(10)

JUN 5 1991

Mr. Allen P. Lusby
Safety/Environmental Director
EFCO Corporation
County Road & Bridle Lane
Monett, Missouri 65708

Dear Mr. Lusby:

We have received your letter of May 16, 1991, concerning certification/notification for multiple-constituent wastes subject to the land disposal restrictions.

As you stated in your letter, EFCO Corporation generates F019 sludge waste and thus must make a determination if the waste is restricted from land disposal under 40 CFR 268. F019 waste is listed in 40 CFR Part 261, Subpart D. Pursuant to 40 CFR 267.7(a), based on knowledge and testing of the extract, the waste is determined to be restricted from land disposal under Part 268.

Under 40 CFR 268.7(a)(1), if the waste does not meet the applicable treatment standards or exceeds applicable prohibition levels, EFCO is required to notify, in writing, the treatment, storage, or disposal facility (TSD) what the appropriate treatment standards and applicable prohibition levels, as set forth in Subpart D, are.

EFCO makes notification to the TSD that it is managing a restricted waste under 40 CFR 268 and that the waste does not meet the applicable treatment standards for Chromium (total), EPA Waste Code D007 (268.41, Table CCWE).

According to 40 CFR 268.41, Table CCWE, and 40 CFR 268.43, Table CCW, F019 waste (nonwastewater) contains three regulated hazardous constituents. EFCO's F019 waste does not meet the applicable treatment standards for the Chromium (total) waste constituents, but it does meet the applicable treatment standards for the Cyanides (total) waste constituent.

The Agency's position on the question of multiple-constituent waste in which some constituents meet the treatment standards and others do not is that the waste--not individual constituents--must be certified to meet the standards. The phraseology is specific regarding "waste" in 268.7(a)(1) and (a)(2)(ii). Thus, in your case, even though the Cyanides (total) component meets the standard, you must notify the TSD that your waste as a whole does not meet the standard because of the Chromium (total) component. The TSD should, therefore, be told to treat all constituents of the waste to the treatment standards.

Should you need additional information, you may contact Pat Fox at (703) 308-8458.

Sincerely,

Sylvia K. Lowrance
Director
Office of Solid Waste

SEP 27 1991

T.L. Nebrich, Jr.
Waste Technology Services, Inc.
640 Park Place
Niagara Falls, New York 14301

Dear Mr. Nebrich:

I am writing in response to your letter of September 18, 1991 regarding the land disposal restrictions program. In particular, you raise two questions concerning the applicability of California list prohibitions following promulgation of the Third Third.

First, you ask what treatment standards must be met to land dispose of soils or other wastes that are granted a national capacity variance but must meet California list prohibitions? The treatment standard that must be met depends on which California list waste is present. Under 40 CFR 268.42(a)(1), liquid and nonliquid PCBs of certain concentrations must be incinerated or burned in high efficiency boilers. Under 40 CFR 268.32 and 268.43(a), numerical concentrations are specified as prohibition levels or treatment standards. Any appropriate technology may be used to meet numerical treatment standards.

Second, you ask whether the California list prohibitions remaining in effect for HOCs apply only to characteristic wastes or also to listed wastes containing HOCs? EPA specified in the preamble to the California list final rule that California list HOC standards "are only applicable to those HOCs that are not covered by other Agency rulemakings..." 52 Fed. Reg. 25760 at 25773. Similarly, the regulations specify at 40 CFR 268.42(a)(2) that California list HOC standards "do not apply where the waste is subject to a part 268, subpart D treatment standard for a specific HOC (such as a hazardous waste chlorinated solvent for which a treatment standard is established under [section] 268.41(a))."

The California list HOC standards apply only to characteristic wastes because all listed wastes either have their own treatment standards or, because they are newly listed wastes, the California

list prohibitions do not apply; more specific (i.e., waste code-specific) standards have now been promulgated for all wastes listed prior to November 1984, and the California list prohibitions do not apply to wastes listed after November 1984. 55 Fed Reg. at 22674-22675.

I hope you find this discussion helpful. Please feel free to contact me at 703-308-8434 if you have any further questions.

Sincerely,

Richard J. Kinch, Chief
Waste Treatment Branch

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

9551.1991(12)

DEC 10 1991

Mr. John R. Kampfhenkel
Chief Environmental Engineer
Koch Refining Company
P.O. Box 2608
Corpus Christi, Texas 78403

Re: No-Migration Petition submitted for Koch Refining's Corpus Christi, Texas Land Treatment Unit (F-91-NKCP-FFFFF)

Dear Mr. Kampfhenkel:

We have reviewed the information Koch Refining Company (Koch) submitted on February 1, 1991 regarding the no-migration petition for the Corpus Christi Refinery land treatment unit (LTU), and found the additional information on unsaturated zone and ground-water monitoring useful in answering some of the earlier questions we had about the petition. However, the information from Koch did not resolve some of the critical deficiencies noted in the original petition submission. These include the presence of hazardous constituents in soil-pore liquids, below the treatment zone, and in the ground water.

PRESENCE OF HAZARDOUS CONSTITUENTS IN THE SOIL-PORE LIQUIDS

Your letter suggests that the detection of benzene in soil-pore liquids was most likely caused by using a pump contaminated with oil and grease. However, after our review of the type of lysimeter used by Koch, we do not consider this explanation to be convincing. Specifically, our examination of the mechanics of the pressure-vacuum type lysimeter indicates that the pressure-vacuum pump and the connecting tube do not come in contact with the liquid sample. Therefore, any contamination occurring from the pump would be limited to the air pumped into the lysimeter during the evacuation phase.

During the September 1988 sampling event, 2-butanone and ethyl benzene were detected at higher levels than was benzene. Since benzene is a relatively volatile constituent, and is expected to degrade at a faster rate than 2-butanone or ethyl benzene, the absence of these more persistent constituents during subsequent sampling events does not support pump lubricants as the source of the lysimeter contamination. If the benzene detected during the November 1988 monitoring event was caused by

residual contamination from the September 1988 sampling event, 2-butanone and ethyl benzene also should have continued to be present. Your letter also fails to provide any alternative source or explanation for the detection of 1,2-dichloroethane, toluene, and styrene in the soil-pore liquids at concentrations exceeding the health based levels.

In regard to the inorganic constituents, your letter concludes that "because there are no data available from LY-1 since September 1988, it cannot be determined whether the concentrations of heavy metals from the LTU soil-pore liquid samples are the result of a release from the LTU or due to other factors (e.g., varying background conditions, laboratory inaccuracies)." Koch's inability to collect background monitoring data after September 1988 is unfortunate for the showing you are attempting to make. However, for the purposes of EPA's data evaluation, a sample was successfully collected from the background lysimeter (LY-1) during the September 1988 monitoring event when the bulk of the data showing migration also were collected. Those data show that beryllium, chromium, lead, and nickel were detected in the active area lysimeters, at concentrations exceeding the HBLs, but not in the background sample. The lack of background data from other monitoring events does not affect the validity of the data obtained from the September 1988 sample. Without supportive comparative background data, we are obliged to discount other factors for the contamination. We, therefore, continue to conclude from Koch's petition data that hazardous constituents have already migrated beyond the unit boundary.

PRESENCE OF HAZARDOUS CONSTITUENTS BELOW THE TREATMENT ZONE

Your letter claims that because background soil-core data have not been collected, EPA cannot assume that data showing antimony and beryllium below the treatment zone indicate migration. While it is unclear why Koch did not collect background soil cores (i.e., the permit stipulates that Koch must collect background soil-core samples within 30 days of permit issuance - August 31, 1988), in their absence it is impossible to make a conclusive showing that migration has not occurred. We also consider the detection of beryllium in soil-pore liquids in the active area lysimeters to strengthen our conclusion that beryllium detected in the soil-core sample is from the LTU.

In addition, Koch claims that the detection of organics and oil and grease below the treatment zone was caused by waste migrating from Carson's Pit and not the LTU. Koch supports their claim by stating that concentrations of the organic constituents increased with depth below the lower treatment zone, and organic constituents were not detected in any of the soil-core samples

collected from the three sampling intervals ranging from 1.5 to 5.5 feet.

Although it may be possible for organic constituents and oil and grease to have originated from Carson's Pit, due to either mounding or as a direct result of a portion of Carson's Pit extending beneath the LTU, we do not believe that Koch has clearly demonstrated that Carson's Pit accounts for the observed contamination levels and patterns. Your suggestion of Carson's Pit as the contamination source provides no explanation of the various data in the petition showing detection of the following constituents in the 1.5 to 3.25 foot interval in one or more locations and/or occasions:

benzene, ethyl benzene, xylenes, 1-methylnaphthalene, 3-methylphenol, 7,12-dimethylbenz(a)anthracene, chrysene, methyl chrysene, naphthalene, phenanthrene, benzo(a)pyrene, 2,4-dinitrophenol, fluoranthene, pyrene, and toluene.

Your claim that organic constituents were not detected in any of the soil-core samples collected from the three sampling intervals ranging from 1.5 to 5.5 feet is at odds with these petition data. We, therefore, continue to believe that wastes are moving through the unit, and that Koch has failed to demonstrate to a reasonable degree of certainty that there will be no migration of hazardous constituents from the disposal unit.

PRESENCE OF HAZARDOUS CONSTITUENTS IN THE GROUND WATER

Finally, the presence of vanadium above its health based level in the ground water, as detected in August 1988, remains a primary concern. Koch claims that the August 1988 monitoring data may be unreliable and nonrepresentative of the ground water because inorganic constituents were found in all of the monitoring wells, but were not found during subsequent events.

Koch's conclusion that the August 1988 monitoring data may be invalid is not supported by the fact that low levels of other inorganic constituents (beryllium, cadmium, nickel, arsenic, and mercury) were only found during the August event. Rather, the presence of the inorganic constituents could indicate that contamination plumes occur sporadically. We note that vanadium was detected in two of the four downgradient monitoring wells, but not in the upgradient monitoring wells during the August 1988 sampling event.

Furthermore, based on the petition, we disagree with Koch's assertion that inorganic constituents were not detected during subsequent monitoring events. Although not found above its health-based level, vanadium was detected during the March 1989 monitoring event at concentrations ranging from 0.018 mg/l to

0.057 mg/l. In addition, nickel was detected during September 1988, January 1989, and December 1989 sampling events at concentrations ranging from 0.055 mg/l to 0.15 mg/l.

In order to help support a claim regarding unreliable ground-water data, analytical data (e.g., QC data) indicating field or laboratory contamination would be necessary. We, therefore, continue to believe that the petition data show that vanadium has already migrated beyond the unit boundary.

As a result of our review of your supplementary information, we have concluded that the technical basis still exists for proposing to deny your petition. After making our recommendation to EPA's Assistant Administrator for Solid Waste and Emergency Response, we will proceed to publish a proposed denial in the Federal Register. If you wish to avoid a negative publication, you may send a letter withdrawing your petition and acknowledging that Koch Refining Company considers the petitioned wastes to be restricted wastes subject to the Third Third Land Disposal prohibitions. You should forward this letter to:

James Michael, Acting Chief
Assistance Branch (OS-343)
Office of Solid Waste
U.S. Environmental Protection Agency
401 M Street, S.W.
Washington, D.C. 20460

Any questions regarding our findings may be submitted in writing to Mr. Chris Rhyne of my staff.

Sincerely,

Jeffery D. Denit, Deputy Director
Office of Solid Waste

cc: James Michael, PSPD, OSW
Chris Rhyne, PSPD, OSW
Bill Honker, Region VI
David Neleigh, Region VI
Minor Hibbs, Texas Water Commission

Summary of Soil-Core Monitoring Data for Oil and Grease (mg/kg)

Soil- Core #	0' - 1.5'	1.5' - 3.25'	3.25' -5.0'	5.0' - 5.5'	5.5' - 6.5'	6.5' - 7.5'
06/29/89						
1	75,000	160	58	51	<10	<10
2	29,000	256	74	<10	18	<10
3	120,000	340	1,000	34	26	<10
4	190,000	46,000	100	50	<10	<10
5	42,000	34	<10	<10	<10	<10
6	110,000	520	18	<10	<10	<10
12/19/89						
1	11,000	290	92	1,900	7,000	4,600
2	110,00	290	<10	<10	<10	<10
3	<10	<10	<10	<10	<10	<10
4	110,000	50,000	31,000	170	160	250
5	69,000	92	94	50	<10	<10
6	940	<10	<10	<10	<10	<10

9551.1991(13)

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

DEC 20 1990

OFFICE OF
SOLID WASTE AND EMERGENCY RESPONSE

Mr. Douglas MacMillan, Director
Hazardous Waste Policy
National Solid Wastes Management Association
Suite 1000
1730 Rhode Island Ave., N.W.
Washington, DC 20036

Dear Mr. MacMillan:

This letter responds to your inquiry dated October 11, 1990 about several aspects of the Third Third land disposal restrictions final rule. Your letter includes questions about the following topics: lab packs, inorganic solid debris, certification/notification requirements, and the disposal of D001 ignitable wastes. Responses to the specific questions about each of these topics are presented below.

1. Lab Packs

Your question concerns the language in 40 CFR 264.316(f) and 40 CFR 265.316(f). You refer specifically to perceived contradictions between the first and second sentences of these paragraphs; however, it is assumed that you are actually concerned with the language of the second and third sentences which specifies that "[p]ersons who incinerate lab packs according to the requirements in 40 CFR 268.42(c)(1) may use fiber drums in place of metal outer containers. Such fiber drums must meet the DOT specifications in 49 CFR 173.12 and be overpacked according to the requirements in paragraph (b) of this section." In particular, you request clarification of whether this language requires fiber drums to be overpacked in metal drums. It is assumed that your confusion stems either from the DOT specifications in 49 CFR 173.12, or the overpacking requirements in 40 CFR 264.316(b) and 40 CFR 265.316(b). The language of the DOT specifications and the §§ 264.316(b) and 265.316(b) overpacking requirements will be examined below.

The language specifying that fiber drums must meet the DOT specifications in 49 CFR 173.12 does not require fiber drums to be overpacked in metal drums. In fact, paragraph (b) of 49 CFR 173.12 states: "The outside packaging must be a DOT specification metal <u>or</u> fiber drum" [emphasis added].

Moreover, the language specifying that fiber drums must be overpacked according to the requirements in §§ 264.316(b) and

265.316(b) does not require overpacking of fiber drums in metal drums. The first sentence of §§ 264.316(b) and 265.316(b) ("[t]he inside containers must be overpacked in an open head DOT-specification metal shipping container") does not apply because §§ 264.316(f) and 265.316(f) clearly state that "[p]ersons who incinerate lab packs according to the requirements in 40 CFR 268.42(c)(1) may use fiber drums in place of metal outer containers." The §§ 264.316(b) and 265.316(b) language that does apply, however, is the requirement to pack a sufficient quantity of absorbent material around the inner containers to completely absorb all of the liquid contents of the inside containers, making the outer container full after packing.

As you mention in your letter, the preamble language on page 22631 of the Third Third final rule explains the Agency's decision to allow fiber drums to be used as outer containers for lab packs being incinerated according to the requirements in 40 CFR 268.42(c)(1). The language of §§ 264.316(f) and 265.316(f) does not eliminate this decision by otherwise requiring the fiber drums to be overpacked in metal drums.

2. Containers

You request clarification of why containers are included in the "inorganic solid debris" definition. You also ask when an empty container would be judged to carry a characteristic of hazardous waste.

By way of background, inorganic solid debris is defined in 40 CFR 268.2(g) as nonfriable inorganic solids contaminated with D004 - D011 hazardous wastes that are incapable of passing through a 9.5 mm standard sieve; and that require cutting, or crushing and grinding in mechanical sizing equipment prior to stabilization; and, are limited to certain types of debris specified in subsequent paragraphs. Paragraph (g)(6) of § 268.2 includes metal cans, containers, drums, or tanks in the definition of inorganic solid debris.

As a further point of background, the answers to your questions are impacted by whether the container being discussed is empty as defined at 40 CFR 261.7(b). Under the § 261.7(b) provisions, a container that has held hazardous waste (other than a compressed gas or an acute hazardous waste) is "empty" if it meets certain criteria. All wastes must have been removed that can be removed using the practices commonly employed to remove materials from that type of container. To assure that all waste has been removed, there may be no more than 2.5 centimeters (one inch) of residue remaining on the bottom of the container or inner liner; or no more than 3 percent by weight of the total capacity of the container remaining in the container or inner liner if the container is less than or equal to 110 gallons in size, or no more than 0.3 percent by weight of the total capacity

of the container remaining in the container or inner liner if the container is greater than 110 gallons in size.

In response to your first question, containers are included in the definition of inorganic solid debris to cover the possible scenario of a container that has been discarded by means of land disposal (as defined in § 268.2), that does not meet the § 261.7(b) definition of empty, and that is contaminated with a characteristic metal waste. This scenario could occur, for instance, during an excavation at a corrective action site. A container might be uncovered that is damaged (e.g., crushed) so that the hazardous waste within it cannot be removed sufficiently to meet the § 261.7(b) definition of empty. Such a container (i.e., including its contents) is a hazardous waste subject to the land disposal restrictions if it is subsequently land disposed. Furthermore, it is likely that the disposed container would be considered contaminated debris (such a determination may depend upon site-specific conditions best made by an authorized State or EPA Regional representative). If the waste contaminating this disposed container is a characteristic metal waste (D004 - D011), the container would likely meet the § 268.2(g)(6) criteria of inorganic solid debris, and would thus be subject to a national capacity variance until May 8, 1992 (see § 268.35(b)).

In response to your second question, a container meeting the § 261.7(b) definition of empty may be judged to be a characteristic metal waste under two scenarios. In the first scenario, a container that has never held any hazardous waste may be a characteristic waste if: (1) it is being discarded; and, (2) if the container is in itself a characteristic waste.

In the second scenario, an empty container (as defined in § 261.7(b)) may be a characteristic waste if: (1) it is being discarded; and, (2) if the container is in itself a characteristic waste. It should be noted, however, that any residue remaining in the container is exempt from regulation under the provisions of § 261.7(a) that states that "[a]ny hazardous waste remaining in either (i) an empty container or (ii) an inner liner removed from an empty container, as defined in paragraph (b) of this section, is not subject to regulation under Parts 261 through 265, and Parts 268..."

3. Certifications

You request clarification of the record keeping requirements for a particular scenario: A waste that the generator determines (based on process knowledge) does not meet the treatment standard is sent to a treatment facility. The treatment facility determines the waste does meet the treatment standard. You did not suggest how such a determination was made. Your question is, how would the record keeping requirements be affected?

In this particular scenario, the treatment facility should analyze the waste in order to determine that the waste meets the treatment standard according to the provisions of their waste analysis plan. It should be noted, however, that there is no requirement that treatment facilities analyze each shipment of waste received, except as specified in their waste analysis plan (see § 268.7(b). In this particular scenario, however, the generator has made the determination that the waste must be treated based on his knowledge of the waste. The treatment facility is countering the generator's determination with a determination that the waste meets the treatment standard as generated; therefore, the Agency believes that it is appropriate to ask the treatment facility to support their determination with analytical data. The treatment facility also must complete a certification that the waste met applicable treatment standards as generated (see § 268.7(a)(2)(ii), supported by the general principle expressed in § 268.7(b)(6) requiring treatment facilities to comply with notice and certification requirements applicable to generators).

The treatment facility must send the waste analysis data (see § 268.7(b)(4)(iv)), the certification, and a notification (either the generator's notification may be sent, or the facility may create a new notification) to the disposal facility. Copies of the waste analysis data, the generator's notification (as well as the treatment facility's notification if a new notification was created), and the certification must be kept as records in the treatment facility's files.

4. <u>Notification/Certification</u>

A scenario was presented of a TSD company that has a sister company on adjacent property that recycles "side-stream" and "off-spec" chemicals and other wastes containing recoverable amounts of organics by means of a custom distillation process. This process generates still bottoms and wash waters that are subject to the land disposal restrictions. These restricted wastes are piped directly back to tanks at the TSD facility, sometimes on an intermittent basis, sometimes continuously. The question is asked: How must these piped transfers of hazardous wastes from the recycler to the TSD be handled from the perspective of notification/certification compliance?

Even though the recycling facility and the TSD facility are sister companies on adjacent property, they would have been assigned different EPA identification numbers and are thus considered separate facilities. Therefore, the waste that is piped to the TSD facility (regardless of whether it is on a continuous or an intermittent basis) is subject to the record keeping requirements of § 268.7.

The recycling facility would be subject to the generator requirements of § 268.7(a), which specify that a notification must be sent with each shipment of waste (in this case, from the

recycling facility to the TSD facility). The TSD facility must comply with the requirements of § 268.7(b). Questions on how frequently the required paperwork should be sent from the recycling facility to the TSD (i.e., what constitutes a "shipment") should be directed to the EPA Regional land disposal restrictions contact.

5. D001

The question is whether 40 CFR 264.312 allows for the land disposal of a D001 waste. Until promulgation of the Third Third final rule on May 8, 1990, 40 CFR 264.312 (and § 265.312) set out special management requirements for ignitable or reactive wastes that were disposed in a surface impoundment, waste pile, land treatment unit, or landfill. On page 22553 of the final rule, however, the Agency explained that these management requirements are superseded by the treatment standards promulgated in the Third Third final rule. This means that "[f]acilities handling ignitable and reactive wastes will have to comply with the promulgated treatment standards for these wastes in order to land dispose them." The Agency made changes to the regulatory language of §§ 264.312 and 265.312 in the Third Third final rule to incorporate the requirement that the treatment standards for ignitable and reactive wastes must be met prior to land disposal. Furthermore, the Agency's intent is clearly expressed in the preamble (55 FR 22553).

Therefore, land disposal is allowed only for those D001 wastes that meet the treatment standard. (The treatment standard for D001 wastes containing less than 10% total organic carbon (TOC): deactivation; for D001 containing greater than 10% TOC: incineration or fuel substitution; see 40 CFR 268.42, Table 2.)

I hope you find these answers to be helpful. If you have any further questions, please feel free to contact Matthew A. Straus at (703) 308-8414.

Sincerely,

Sylvia K. Lowrance
Director
Office of Solid Waste

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

9551.1991(14)

MAY 1 1991

Mr. David R. Saad
Environmental Coordinator
Illinois Refining Division
Marathon Petroleum Company
Robinson, IL 62454

Re: No Migration Petition for the Robinson, Illinois Land Treatment Facility and Storage Surface Impoundments (F-91-NMPP-FFFFF)

Dear Mr. Saad:

I understand from Jim Michael and Dave Eberly that the EPA - Marathon meeting on April 30 was very productive. Your interest in discussing the proposed response to the Notice of Deficiency for Robinson's No-Migration petition was welcomed by us. One procedural question hanging over from that meeting concerns the best approach for revising Marathon's petition to cover only the East land treatment unit.

In our judgment, the most efficient approach would be for you to withdraw your petition for the three surface impoundments and the two land treatment units and to submit a new petition limited to the East land treatment unit. That approach would simplify four related tasks for Marathon and EPA. First, it would close out the administrative record on your current petition. Our recommendation for denial is still on the record, and your withdrawal would eliminate any need to publish a decision or to maintain a docket. Second, Marathon would not have to respond to our Notice of Deficiency, but could instead use it as a guide in preparing a new petition for the East unit. Third, a new petition would be easier to prepare than a revision to the existing petition which would involve excising or editing discussion of all areas except as they pertain to the East unit. Finally, a new petition for the East unit would, we believe, be consistent with any required permit modifications.

We, therefore, recommend a letter of withdrawal for the existing petition in response to our letter of November 6, 1990 and submission of a new petition for the East unit as soon as possible. As we stated at our meeting on April 30, we will focus our review of the new petition on those technical concerns in the November 6 letter related to the East unit.

Please be assured that Marathon's withdrawal of its original petition and subsequent submission of the new petition would not affect Marathon's position in the queue for review and decision-making by EPA.

If you have any questions on implementing this approach, please call Dave Eberly on 202-382-4691.

Sincerely,

Elizabeth Cotsworth, Chief
Assistance Branch (OS-343)

cc: Ronald Andes, Marathon
Jim Michael, AB, PSPD, OSW
Dave Eberly, AB, PSPD, OSW
Gail Hruska, EPA Region V
David Deisher, IEPA

9553 – LAND DISPOSAL RESTRICTIONS

Subpart C

RCRA/SUPERFUND HOTLINE MONTHLY SUMMARY

APRIL 86

6. Land Disposal Ban

A petrochemical company generates a solid waste that contains traces of naturally occurring benzene and toluene [The waste is quenching oil]. Would the presence of these hazardous constituents prohibit the generator from land-disposing this waste?

Section 3004(e) of the Solid Waste Disposal Act, as amended by Section 201 of the Hazardous and Solid Waste Amendments of 1984, prohibits land disposal of certain RCRA hazardous wastes. On January 14, 1986, (51 FR 1602), EPA proposed that the spent solvents, F001 through F005, be among those wastes banned from land disposal (§268.30(b), 51 FR 1763). Both spent toluene and spent benzene (added to F005 on February 25, 1986, 51 FR 6537) are listed in the F005 group, but only when they meet the listing as spent solvents.

The quenching oil does contain the hazardous constituents of concern, namely benzene and toluene, but does not meet the listing of F005. The oil does not contain spent benzene or toluene used for solvent purposes. Accordingly, the oil would not be banned from land disposal by the proposed §280.30. The spent quenching oil, however, would be subject to other bans on the disposal of bulk and noncontainerized hazardous (if it exhibited a characteristic) and non-hazardous liquid wastes in landfills (§264.314(a), 50 FR 28748, and §264.314(e), 50 FR 28749; §265.314(b), and (f), 50 FR 28750). In the future, the quenching oil may also be listed as RCRA hazardous waste F030, depending on the outcome of the rule proposed on November 29, 1985 (50 FR 49170). Within six months of that listing, EPA would have to make a decision on whether used oil should be banned from land disposal per §3004(g)(4).

Source: Alan Corson (202) 382-4770
Research: Jim Ginley

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

9553.1986(03)

DEC 11 1986

Honorable Thomas S. Foley
House of Representatives
Washington, DC 20515

Dear Mr. Foley:

Thank you for October 27, 1986, letter on behalf of your constituent, Mrs. Eleanore Cole. Mrs. Cole is concerned about the regulations governing disposal of dry cleaning cartridge filters containing fluorocarbons.

The fluorocarbon solvent used by Mrs. Cole is probably Valclene®, a product commonly used in drycleaning operations. Valclene, which is a trade name, is also known as fluorocarbon 113 or trichlorotrifluoroethane. Trichlorotrifluoroethane is listed as a hazardous waste in 40 CFR Part 261, Subpart D. It has been assigned the Environmental Protection Agency (EPA) Hazardous Waste Number F002.

As you know, in the Hazardous and Solid Waste Amendments of 1984 (HSWA), Congress required EPA to restrict the land disposal of dioxin-containing and spent solvent wastes by November 8, 1986. These waste streams were singled out for immediate action because of the special hazards they pose when land disposed. Solvents, in particular, easily destroy landfill liners and help to mobilize other hazardous constituents in landfills. Valclene is an F002 solvent. The F002 solvents are among those which the Agency was required to restrict from land disposal by November 8, 1986.

In implementing the land disposal restrictions program, however, EPA is authorized to grant extensions to the effective date of the restrictions if insufficient national alternative treatment capacity exists. EPA is granting a nationwide two-year variance to the effective date for certain solvent wastes due to capacity shortfalls. The solvent wastes which have been granted the variance include:

- solvent waste generated by a small quantity generator of 100 to 1000 kilograms of hazardous waste per month, and

- solvent waste which is a solvent-water mixture containing less than one percent total F001 - F005 solvent constituents or containing less than one percent total organic carbon.

Consequently, any of Mrs. Cole's plants that generate between 100 and 1000 kilograms (220 to 2200 pounds) per month will not be prohibited from land disposal until November 8, 1988. In addition, some plants may fall within the conditional exclusion for generators that generate less than 100 kg (or 220 pounds) of hazardous waste in a calendar month. Under this exclusion, these generators need only ensure that their wastes are managed at legitimate recycling facilities or at facilities permitted, licensed, or registered by the State to manage municipal or industrial solid waste.

EPA is aware of the impact that our regulations, including these land disposal restrictions, will have on small businesses, and we have taken a number of steps to help these businesses cope. Please find enclosed a copy of a new handbook for small business explaining the small quantity generator hazardous waste regulations, and a brief question-and-answer brochure on the land disposal restrictions. Also included is a dry cleaning and laundries "fact sheet" we had developed to assist various industries in identifying their wastes.

The Agency is currently reviewing a rulemaking petition submitted on behalf of the Alliance of Textile Care Associations which seeks to have EPA establish a level of spent solvent below which a drycleaning cartridge filter could be considered nonhazardous. At this time, however, any amount of a listed solvent is considered to be of regulatory concern and a hazardous waste. The Agency hopes to complete an initial review of the petition within the next few weeks. At that time we will either recommend a decision on the petition or request additional information and clarification as necessary.

I hope this information will be helpful to you in responding to your constituent. If I can be of any further assistance, please let me know.

Sincerely,

J. Winston Porter
Assistant Administrator

Enclosures

UN[ ] STATES ENVIRONMENTAL PROTECT[ ] AGENCY

9553.1986(04)

DEC 30 1986

MEMORANDUM

SUBJECT: Technical Support Document for BDAT

FROM: Eileen D. Claussen, Director
Characterization and Assessment Division

TO: Regional Waste Management Division Directors

As you know, the treatment standards for land disposal of F001-F005 spent solvents were promulgated on November 7, 1986. The technical support for the development of these standards is contained in the three volume document titled Best Demonstrated Available Technology (BDAT) Background Document for F001-F005 Spent Solvents. Two copies of the three volume set have been attached.

In addition to detailing the development of treatment standards, there is a significant amount of data and information which you may find helpful in implementing the land disposal restrictions program. These data and information include:

- Summary of characterization data on spent solvents affected by this rule.

- Identification of industries which generate these solvents and locations of these industries by region and state.

- Complete data sets used in developing BDAT. These data sets show all constituents contained in the waste as well as various pollutant parameters.

- Discussion of applicable technologies as well as design and operating parameters that need to be taken into account in determining how well these technologies can treat particular wastes.

With regard to the last item above, we would like to emphasize that the treatment standards promulgated do not require the use of a particular technology; as a consequence, you should be aware that, in certain instances, some of the other technologies discussed may provide less expensive alternatives to comply with the land disposal restrictions. Batch distillation, for example, may be an alternative to incineration for some spent solvents with high solid concentrations, if the temperature and duration of the batch result in a residue that complies with the TCLP leachate concentration for the particular solvent.

You should be aware that the BDAT background document will provide the basis for Agency decisions regarding treatment variances. We are currently developing a guidance document for treatment variances which will more fully discuss this process. Other areas where the BDAT document may be of help is in various permitting activities especially as related to treatment design and operation, corrective action treatment, and helping states determine resources required for implementing the land disposal restriction program.

If you have any questions on how the standards were developed or the application of the technologies, please call Stephen R. Weil at 202-382-4770 or James R. Berlow at 202-382-7917.

cc: Robert Dellinger
Stephen Weil
Bruce Weddle
Joseph Carra
David Pepson

9553.1987(01)

January 12, 1987

Ray D. McIntosh, Manager
Environmental Engineering
IBM General Products Division
Department 04C
Tucson, Arizona 85744

Dear Mr. McIntosh:

The Environmental Protection Agency (EPA) has completed a detailed review of your July 10, 1986, application for an extension of the effective date of the land disposal restrictions for the solvent-bearing wastewater, sludge, and brine treated and stored in surface impoundments at your IBM facility in Tucson, Arizona. The EPA did not take final action on your petition until promulgation of the land disposal restrictions final rule (51 FR 40572, November 7, 1986) which provides, among other things, a 2-year national variance extending the effective date of the land disposal restrictions for wastewaters and sludges containing less than 1 percent total F001-F005 solvents to November 8, 1988. Because the wastes treated and stored in the surface impoundments at the Tucson facility meet this criterion, these wastes are subject to the variance. Thus, your petition is mooted by the November 7, 1988, final rule.

While the variance is in effect, you may continue to treat and store restricted wastes in the surface impoundments, provided that each new, expanded, or replacement surface impoundment meets the minimum technological requirements specified in section 3004(o) of RCRA. Any wastes containing F001-F005 solvents which meet or exceed the 1 percent cutoff are restricted from placement in these impoundments and must be treated to the applicable levels in Table CCWE of 40 CFR 268.41, or be the subject of a successful case-by-case extension of the effective date.

According to the information provided in your application, on-site construction of treatment and storage tanks is expected to be underway by February 1987, and completed by the November 8, 1988, effective date. If you anticipate that the tanks will not be completed by the effective date, you may pursue one of two options. You can submit an application for an extension of the effective date pursuant to the provisions in 40 CFR 268.5, or you may continue to treat and store in the impoundments after the effective date in accordance with the exemption for treatment surface impoundments (40 CFR 268.4).

This document has been retyped from the original.

If you choose to submit an application for an extension of the effective date, please submit the application at least six months in advance of the effective date to allow the Agency lead time to review the application. If the Agency approves the application and grants an extension of the effective date, you may continue treating and storing restricted wastes in the impoundments for an additional 1-year period (renewable once).

If you pursue the exemption for treatment in surface impoundments, you may continue to treat and store the solvent wastes in the impoundments provided that the following requirements are met (see 40 CFR 268.4 for details):

1) treatment occurs in the impoundments,
2) treatment residuals that do not meet the treatment standards in Subpart D of Part 263, or are not delisted must be removed at least annually,
3) the impoundments must meet the requirements of section 3004(o), unless exempted pursuant to the provisions in §268.4(a)(3)(i), (ii) or (iii), and
4) a written certification is submitted to the Regional Administrator stating that the requirements of §268.4(a)(3) have been met along with a copy of the waste analysis plan required under §268.4(a)(2).

If you have any questions, you may contact Stephen R. Weil or Jacqueline Sales of my staff at (202) 382-4770.

Sincerely,

Alan Corson, Acting Director
Characterization and
Assessment Division

cc: Mark Kamiya, Region IX
Alan Roesler, Arizona Department of Health

This document has been retyped from the original.

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

9553.1987(02)

JAN 13 1987

John H. Fasto
Stone Industrial Division
J. L. Clark Manufacturing
51st Avenue & Cree Lane
College Park, Maryland 20740

Dear Mr. Fasto:

In your letter of October 10, 1986, you requested an exemption to the "Schedule for Land Disposal Restrictions" published in the Federal Register on May 28, 1986, (51 FR 19300). Since you have that notice, you are aware of the prohibitions on the land disposal of untreated hazardous wastes, and the requirement that EPA set treatment standards by certain dates.

On November 7, 1986, the final Land Disposal Restrictions Rule for Solvents and Dioxins was published in the Federal Register (51 FR 40572). In this rule, EPA has established treatment standards for land disposal of certain solvent- and dioxin-containing hazardous wastes, including the F005 waste stream generated by your company. I have enclosed a copy of this regulation for your information. The treatment standards do not require incineration. The standards are set as a concentration of a solvent constituent in an extract from a waste or a waste treatment residual. It is possible that your waste stream, the solid polyester type adhesive, may meet these treatment standards, which are measured by use of the toxicity characteristic leaching procedure (TCLP) (Appendix I in the regulation, page 40643). You should have a laboratory qualified to do this procedure (there are quite a few) test your waste material to see if it meets the treatment standards without treatment such as incineration.

There are some exceptions to the requirement that the wastes meet the treatment standards. The first of the exceptions requires that a petition be submitted to EPA and approved based on a showing that there will be no migration of hazardous constituents for as long as the waste remains hazardous. The standard for approval of this type of petition was specified by Congress in the Hazardous and Solid Waste Amendments of 1984 (HSWA). In reality this is a very limited exception and may not be of much use to you.

A second exception is more accurately described as an extension of the effective date. If the waste contains less than one percent F001-F005 solvents, the waste can be land disposed, subject to certain limitations, without meeting the treatment standards until November 8, 1988. EPA has used its authority under HSWA to extend the effective date for these wastes based on a lack of adequate alternative treatment capacity. The EPA has also extended the effective date for generators of between 100 and 1000 kilograms per month of hazardous waste. While I do not know the density of your waste, a generation rate of 17 drums every three months might put you in this small quantity generator category, which would at least temporarily solve your problem.

EPA is aware that these requirements may significantly raise the waste disposal costs for industry. However, we are limited by the law in our ability to consider such factors in setting treatment standards.

If you have any further questions, please feel free to write or call Stephen R. Weil at (202) 382-4770.

Sincerely,

/S/

Marcia E. Williams
Director
Office of Solid Waste

Enclosure

January 20, 1987

Mr. B.B. Meyer
Aerojet-General
Sacramento Environmental Operations
Post Office Box 15699c
Department 1520, Building 46010
Sacramento, California 95813

Dear Mr. Meyer:

This is in response to your December 15, 1986 letter to Eileen Claussen requesting that the Agency clarify its regulatory interpretation of voluntary treatment prior to land disposal. Your example is that of having a waste which contains less than 1 percent F001-F005 spent solvents and is eligible for the two-year variance, but the generator voluntarily treats the waste prior to land disposal, either to reduce the solvent content or to reduce other hazardous properties of the waste. Your question is then, would the treatment residual then be required to meet the treatment standards of 40 CFR 268 Subpart D prior to land disposal?

In general, the answer to the question above is yes; by the ban effective dates all hazardous wastes not treated to the specified treatment levels are prohibited from land disposal. Specifically, if the generator voluntarily treats the F001-F005 spent solvents using the best demonstrated available technology (BDAT), and the treatment residual contains less than 1 percent F001-F005 spent solvents, the treatment residual can be land disposed until November 8, 1988. After November 8, 1988, however, if the treatment residual does not meet the treatment standard as specified in 40 CFR 268 Subpart D, Aerojet-General can either apply for a treatability variance, submit a no-migration petition or continue to treat your wastes to the specified treatment levels prior to land disposal.

Similarly, if the "other hazardous properties", i.e. ignitability, are treated and the treatment residual somehow is concentrated and thus contains more than one percent F001-F005 spent solvents, the treatment residual must be either treated to the specified treatment levels prior to land disposal, or Aerojet-General can apply for a treatability variance, or submit a no-migration petition. If the treatment residual contains less

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This document has been retyped from the original.

than one percent F001-F005 spent solvents, land disposal can occur until November 8, 1988. On the other hand, if through the use of BDAT the treatment residual is rendered noncharacteristic, i.e. nonignitable, and thus is nonhazardous, the waste will no longer be subject to the land disposal restrictions.

If you have any further questions please call either Jacqueline Sales or myself at (202) 382-4770.

Sincerely,

Stephen Weil, Chief
Land Disposal Restrictions Branch

This document has been retyped from the original.

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

9553.1987(07)

APR 27 1987

Mr. Robert Fixter
Assistant Environmental Manager
S & W Waste Inc.
115 Jacobus Avenue
South Kearny, New Jersey 07032

Dear Mr. Fixter:

This is in response to your letter of February 25, 1987, concerning the applicability of §268.30(a)(3) to any solid or sludge that contains less than 1% of the listed F001-F005 solvent constituents. Specifically, you referred to solvent contaminated rags which have been analyzed and determined to contain less than 1% listed solvents.

The land disposal restrictions final rule (51 FR 40572, November 7, 1986) does not apply immediately to those F001-F005 spent solvent wastes that contain less than 1% solvents. These wastes are subject to a two-year extension of the effective date based on insufficient national capacity. The solvent wastes covered by the extension include solvent-water mixtures, solvent-containing sludges, solvent contaminated soils (non- CERCLA or RCRA corrective action) and solids. However, in the November 7, 1986 final rule, the Agency inadvertently omitted the reference to "solids" from the regulatory language in §268.30(a)(3). As you correctly noted in your letter, the Agency intended for solvent-containing solids (e.g., rags, pipes, paper) to be included with those materials covered under §268.30(a)(3). "Solvent-containing sludges and solids" are correctly identified in the preamble to the November 7, 1986 final rule as among the wastes granted a two-year national variance (51 FR 40615). As such, solvent contaminated rags are subject to the two-year nationwide variance provided they contain less than 1% total F001-F005 solvent constituents.

We are currently working on a technical correction notice that will correct errors contained in the preamble and regulatory language of the final rule, including the revision to §268.30(a)(3) to include "solids". We expect to publish this notice in the FEDERAL REGISTER within the next couple months.

I hope this information adequately addresses your concerns. Please feel free to contact me at (202) 475-6715, if you have further questions.

Sincerely,

William R. Fortune
Environmental Protection Specialist
Land Disposal Restrictions Branch

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

9553.1987(09)

JUN 18 1987

Mr. Kenneth W. Kubofcik
President
The Branford Companies
Post Office Box 1056
Branford, Connecticut 06405

Dear Mr. Kubofcik:

This is in response to your letter of May 11, 1987, concerning the applicability of the California list land disposal restrictions to lead-plastic bags manufactured by your company. As you stated, these bags are used to line drums and containers for the storage, containment, and disposal of low level radioactive waste.

The California list prohibitions restrict the land disposal of hazardous wastes containing California list constituents above specified concentration levels. With the exception of hazardous wastes containing halogenated organic compounds (in total concentration greater than or equal to 1000 mg/kg), the restricted wastes are in liquid form. Although the California list covers lead-containing wastes, it is confined to liquid hazardous wastes, that contain lead or lead compounds. Based on the information provided in your letter, the lead-plastic radiation shielding bags are not liquid hazardous wastes, nor do the bags appear to meet any other California list waste criteria. As such, the lead-plastic bags would not be subject to the California list prohibitions when discarded.

I hope this information adequately addresses your concerns. Please feel free to contact Bill Fortune, of my staff at (202) 475-6715, if you have any further questions.

Sincerely,

Stephen R. Weil, Chief
Land Disposal Restrictions Branch

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

9553.1987(11)

JUL 16 1987

Mr. John B. Slemmer
Environmental Manager
SolidTex Systems, Inc.
5371 Cook Road
Post Office Box 888
Morrow, Georgia 30260-0888

Dear Mr. Slemmer:

This letter responds to your letter to Matt Straus, dated April 21, 1987, in which you request clarification of the regulatory status of drums generated from the solvent recovery process at your facility. In particular, your letter requests clarification of the less than 1% total F001-F005 solvents determination for purposes of the 2-year national capacity variance from the effective date of the solvents land disposal restrictions (51 FR 40572 November 7, 1986). I apologize for the delay in responding to your inquiry; however, we have been using all available resources to meet the July 8, 1987 land disposal restrictions statutory deadline.

As described in your letter, SolidTek's process recovers as much solvent from a drum as possible, leaving one-half to eight inches of nonrecoverable sludge containing restricted solvent wastes. At this point, liquids in the sludge are solidified and the drum is crushed, along with the solidified sludge, to reduce the overall volume. The crushed drums are then shipped to a RCRA hazardous waste landfill. In order to determine whether the crushed drums can be land disposed without further treatment, you ask if the weight of the drum should be included when determining whether the waste is eligible for the 2-year national capacity variance for solvent wastes containing less than 1% total solvents.

You may be unaware of a fundamental issue raised by your letter which supersedes the questions you asked. The determination as to the applicability of the 2-year nationwide variance for wastes which contain less than 1% total F001-F005 solvent constituents is to be made by the initial generator of the waste before the waste has been treated; therefore, the variance is not applicable to the residual from the recovery of restricted waste. For purpose of the variance, treatment residuals are not considered newly generated wastes.

Furthermore, the preamble to the solvents final rule (51 FR 40575, 40615) states the general principle that once a hazardous waste is prohibited, it must be treated until it meets the applicable treatment standards in Table CCWE. Therefore, the solidified residual from the recovery of F001-F005 solvents must meet the applicable treatment standard before disposal at a Subtitle C landfill. These issues are clarified in a notice published on June 4, 1987 (52 FR 21012) which corrects and clarifies various parts of the solvents land disposal restrictions final rule.

I hope this letter clearly answers your questions regarding the land disposal restrictions. You may contact me at (202) 382-4770, if you have additional questions.

Sincerely,

Jacqueline Sales, Chief
Regulation Development Section

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

9553.1987(12)

AUG 10 1987

OFFICE OF
SOLID WASTE AND EMERGENCY RESPONSE

Mr. Michael Steinberg, Esq.
Morgan, Lewis, & Bockius
1800 M Street, N.W.
Washington, D.C. 20036

Dear Mr. Steinberg:

On June 9, 1987, your client, the Safety-Kleen Corporation, requested that the Environmental Protection Agency (EPA) stay a portion of its June 4 correction notice to the initial land disposal prohibition rule for solvents. After careful consideration, I have decided to deny your request. My reasons are as follows:

1. Safety-Kleen had adequate notice that the distillation bottoms it produces while treating solvents would be subject to the treatment requirements established by the prohibition rule. The rule at issue states that if an initial generator's waste contains greater than 1% prohibited solvent, then any residues from treating that waste must be treated to the Resource Conservation and Recovery Act (RCRA) Section 3004(m) treatment level unless the initial waste is exempt from some independent reason, such as being generated by a small quantity generator. We think that a careful reading of the November 7 final rule shows that it includes this requirement. For example, only generators can certify to a disposal facility that the waste is subject to a variance. Treatment facilities, by contrast, must certify that the residues they generate meet the treatment standards (see §§268.7(a)(1) and 268.7(b)(2)). Section 268.40 likewise states that treatment residues must be treated to meet the applicable treatment standard.

The preamble to the final rule confirms that this was the Agency's intent. The Agency stated explicitly that the determination of whether a waste is prohibited must be made by the initial generator, (see 51 Federal Register at 44620). The Agency also provided a series of flow charts illustrating the rule's operation which again indicate without ambiguity that only the initial generator, and not a treatment facility, determines if a waste is prohibited (see 51 Federal Register 40622, 40624). As EPA explained in the preamble to the proposed rule, Safety-Kleen cannot consider itself to be a generator. In that preamble, EPA clearly stated that it does not consider persons who produce distillation bottoms while treating solvents to be generators of hazardous waste.

Finally, EPA explicitly addressed distillation bottoms from spent solvent reclamation in the Background Document to the final rule on capacity determinations. EPA noted that solvent reclamation would produce distillation bottoms, and stated that these distillation bottoms would require treatment to the levels set under Section 3004(m). EPA included the expected volume of distillation bottoms in its estimate of the total volume of solvent wastes requiring treatment.

2. The principle at stake here is an important one. It is that the 1% capacity variance level not become the de facto treatment level (see 51 FR 44,620). EPA would stay a rule illustrating this principle only under the most compelling circumstances.

I feel it necessary to mention that Safety-Kleen could have participated much more actively in the rulemaking and alerted the Office of Solid Waste about its situation. Your only comment to the Agency's proposed rule was filed long after close of the comment period, and indicated that Safety-Kleen realized it would have to treat its treatment residues before they could be land disposed. Safety-Kleen's participation seems particularly incumbent because the issue of capacity to treat solvent reclamation treatment residues was raised specifically by EPA for public comment (see 51 Federal Register 1724, 1727 (Jan. 14, 1986)).

I regret that Safety-Kleen apparently received incorrect advice from an EPA official regarding the scope of the November 7 rule, but the most reliable indication of what a rule means is the regulatory language itself, and the explanatory preamble. As mentioned earlier, both the preamble and the regulatory language indicate that Safety-Kleen's residues must be treated to the applicable treatment standards.

I have decided to deny your request for these reasons. If the facts are as you state, Safety-Kleen could be eligible for a case-by-case variance under §268.5. The Agency will process any such applications expeditiously. Please contact Rhonda Craig at 382-4800 if you have any questions regarding the case-by-case variances.

Sincerely,

J. Winston Porter

J. Winston Porter
Assistant Administrator

RCRA/SUPERFUND HOTLINE MONTHLY SUMMARY

SEPTEMBER 87

5. Land Disposal Restrictions - Halogenated Organic Carbons

An F001/F002 waste subject to the November 7, 1986 Federal Register land disposal restrictions meets the criteria for the 1% national variance specified in Section 268.30. In the July 8, 1987 Federal Register, treatment standards were set for most HOCs. F001 and F002 wastes are also HOCs. Would the F001 F002 wastestream be subject to the newly-promulgated HOC treatment standards even though it has been granted a two-year variance F005 solvent wastes?

The solvent would only be subject to the treatment standards and effective date in the November 7, 1986 rule. In 52 FR 25762, it says that "where treatment standards and prohibition effective dates are promulgated for California list waste constituents that are also covered under the November 7, 1986 rule, the treatment standards and effective dates from the prior rule apply."

The general rule is that where a constituent is subject to more than one treatment standard, the treatment standard (and effective date) for the more specific constituent applies. Example: the F001-F005 treatment standard/effective date presides because, as a subset of the HOCs, it is more specific.

Also, for a waste where two or more treatment standards apply because of different constituents (e.g., F001 and Lead), both would apply with respective effective dates. In the case above mixed with lead, the F001/F002 treatment standards and effective date would apply for the solvent constituents (rather than the HOC standard) and would get a variance until 11/8/88. However, the lead would be subject to the requirements effective 7/8/87.

Source: Mitch Kidwell (202) 382-4770
Research: Mark Janaskie

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460
OCT 15 1987

OFFICE OF
SOLID WASTE AND EMERGENCY RESPONSE

Honorable Alan Cranston
United States Senate
Washington, D.C. 20510

Dear Senator Cranston:

Thank you for your letter of September 11, 1987, forwarding the concerns of your constituent, Ms. Beverly Full. The primary focus of Ms. Full's letter relates to the December 11, 1986, (51 FR 44714) proposal to prohibit land disposal of hazardous wastes containing California list constituents at or above statutory concentration levels.

Several events have occurred regarding the land disposal restrictions program since Ms. Full's February 1987 correspondence. Ms. Full requested that a hearing be held to address the concerns identified in her letter. Such a hearing (Oversight Hearing on RCRA Land Disposal Ban) was conducted before the Subcommittee on Hazardous Waste and Toxic Substances of the Senate Committee on Environment and Public Works on June 5, 1987. At this hearing, I had the opportunity to discuss the Agency's progress in implementing the land disposal restrictions program. Shortly after this Senate hearing, on July 8, 1987, (52 FR 25760), the Agency promulgated treatment standards and corresponding effective dates for the California list waste containing PCB's and Halogenated Organic Compounds, and codified the statutory prohibition levels for certain corrosive wastes. Furthermore, this final rulemaking established testing requirements for determining compliance with the prohibition, an aspect of the regulatory framework which effects the character of those wastes that are considered restricted.

The Resource Conservation and Recovery Act (RCRA) Section 3004(d) directs the Environmental Protection Agency (EPA) to substitute more stringent concentration levels for those in the statute when necessary to protect human health and the environment. In considering the protectiveness of the concentration levels for California list wastes, the Agency examined both the toxicity of the California list constituents and the potential for exposure to these waste in the context of their management. As a result of such considerations, the Agency published a Notice (August 12, 1987, 52 FR 29992) requesting information and comment on issues related to

lowering the prohibition levels for California list metal-bearing cyanide-containing wastes. The suggested prohibition levels are similar to those requested by Ms. Full -- levels 100 times current EPA drinking water standards. As indicated in the Notice, the Agency is considering promulgating prohibitions on the California list metal and cyanide wastes at levels 100 times the National Interim Primary Drinking Water Standards, or in the case of nickel, thallium, and cyanide (for which no drinking water standards exist), 100 times alternative health-based levels.

Ms. Full expressed concern about the design features required of units receiving wastes that are subject to a variance. Under the current regulatory framework, wastes that are covered by a national variance or case-by-case extension of the effective date must be placed in a facility that is in compliance with the minimum technological requirements of RCRA Section 3004(o). These requirements, including double liner, leachate collection system, and ground water monitoring system, apply to new units, replacement units, or lateral expansions of existing landfills or surface impoundments at existing facilities. With respect to "no migration" petitions, it must be demonstrated, to a reasonable degree of certainty, that land disposal of restricted wastes will not allow migration of hazardous constituents from the disposal unit or injection zone for as long as the wastes remain hazardous.

EPA shares Ms. Full's concern about the timing involved in identifying appropriate treatment technologies for metal wastes. The Agency did not establish prohibition levels or treatment standards for California list metal and cyanide wastes in the July 8, 1987, final rule. Instead, in the August 12, 1987 Notice, the Agency has requested further comment on lowering the statutory levels for these wastes to levels 100 times drinking water standards or alternative health-based levels. The Agency believes that further evaluation of the statutory prohibition levels is warranted based on a number of concerns including these wastes' mobility and toxicity, and the land disposal practices employed for these wastes. The Agency evaluated technologies used to treat these wastes and provides treatment performance data corroborating that the California list metals and cyanides can be treated to achieve the suggested prohibition levels. Because of the potential variability of these California list waste categories, the Agency does not

believe it possible at this time to establish more specific treatment standards. Therefore, the Agency is evaluating treatment standards that would be achievable by a wide group of wastes. Based upon this evaluation, the Agency will make more specific treatment standard determinations in accordance with the final schedule for implementing the land disposal restrictions (51 FR 19300).

If I can be of any further assistance, please let me know.

Sincerely,

J. Winston Porter
Assistant Administrator

9553.1987(15)

December 3, 1987

Honorable Max Baucus
United States Senate
Washington, D.C. 20510

Dear Senator Baucus:

Thank you for your November 3, 1987, letter concerning the prohibitions on land disposal of California list metal-bearing and cyanide-containing wastes.

The statutory language in the Resource Conservation and Recovery Act (RCRA) Section 3004(d) identifies California list wastes containing free cyanides and metals as waste groups that include "liquid hazardous waste, including free liquids associated with any solid or sludge." In consideration of this language, the Agency believed it appropriate to require that the concentration of restricted constituents in the filtrate, generated from the Paint Filter Liquids Test, be evaluated in determining compliance with the statutory prohibition levels. However, as noted in the August 12, 1987, Notice of Data Availability (52 FR 29998), serious consideration will be given to the adoption of treatment standards expressed as constituent concentrations using the Extraction Procedure (EP) toxicity test or Toxicity Characteristic Leaching Procedure (TCLP). Such an approach more closely reflects the analytical methodology used for the data presented in the Notice. Conversely, the Agency must also take into account that a number of commenters to the December 11, 1986, California list proposed rule were opposed to the use of a leach test, specifically the TCLP, to develop a waste extract for further testing.

The public comment period for the August 12, 1987, Notice was extended an additional 30 days and recently closed on November 12, 1987. The Agency is currently in the process of reviewing comments and analyzing the submitted data. After considering all public comments received on the issues addressed in this Notice, the Agency plans to proceed aggressively toward promulgation of a final rule.

If I can be of further assistance, please let me know.

Sincerely,

Lee M. Thomas
Assistant Administrator

TROL

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

9553.1987(16)

NOV 18 1987

Mr. Douglas W. Jackson
Project Manager
Rollins Environmental Services (FS) Inc.
9000 Gulf Freeway, Suite 240
Houston, Texas 77017

Dear Mr. Jackson:

This is in response to your letter of October 15, 1987, concerning your questions on appropriate treatment methods for elemental mercury that were addressed in a telephone conversation with William Fortune of my staff. Specifically, you asked whether broken mercury thermometers might be treated with sulfur to form mercuric sulfate, followed by encapsulation of the mercuric sulfate/glass mixture in concrete prior to being land disposed.

As you are aware, the Agency did not establish treatment standards in the July 8, 1987 final rule for liquid hazardous wastes containing metals (including mercury and/or compounds). As a result, California list wastes containing mercury are currently subject to the statutory prohibitions [redacted] and thus are prohibited from land disposal unless treated to concentrations below the prohibition level or rendered nonliquid. The Agency has indicated (see 52 FR 25776) that certain solidification technologies may be considered appropriate treatment for California list metals, at least until treatment standards are adopted for these wastes. Solidification techniques, where reagents (i.e., substances that take part in reactions or processes) are added that produce physical or chemical changes, or otherwise immobilize the hazardous constituents, would be considered legitimate treatment (rather than dilution).

With respect to hazardous waste management practices in general, it has been the Agency's preference that waste minimization methods (e.g., reclamation, use or reuse of a waste) be utilized over treatment and land disposal options. Since the broken thermometers contain mercury in its elemental form, this waste would appear to have considerable potential for recovery and reuse. Prior to treating and disposing of

these broken thermometers, we suggest that you investigate the availability of facilities (such as secondary mercury firms) willing to accept these wastes. If a recovery and reuse option is not feasible, your proposed solidification technique - treat the liquid elemental mercury with sulfur to produce mercuric sulfate (note: any reaction would likely form mercuric sulfide), encapsulate in concrete, and dispose in a landfill - would be in compliance with the prohibitions on California list metals provided it immobilizes or chemically fixes the mercury, and thereby legitimately renders the waste nonliquid, or if it reduces the concentrations below the specified prohibition levels.

I hope this information addresses your concerns. Please feel free to contact William Fortune, of my staff at (202) 475-6715, if you have further questions.

Sincerely,

Stephen R. Weil, Chief
Land Disposal Restrictions Branch

5. Land Disposal Restrictions

The November 7, 1986 Federal Register (51 FR 40572) codified the land disposal restrictions for solvent and dioxin wastes identified in 40 CFR 261.31. At that time all of these solvent and dioxin wastes were restricted from surface land disposal unless they met the appropriate treatment standards set forth in Section 268.41. There was a national variance from the effective date (November 8, 1986) for these requirements which was given to generators of 100-1000 kilograms of hazardous waste per month (small quantity generators). This variance was granted because EPA believed there was not enough capacity to handle this waste (see 51 FR 40615). Small quantity generators (SQGs) would be subject to the treatment standards on November 8, 1988 (see 40 CFR Section 268.30(a) & (b)). The August 27, 1987, Federal Register (52 FR 32446) proposed to codify the solvent and dioxin land disposal restrictions for Underground Injection Control (UIC) Class I wells which are regulated under the Safe Drinking Water Act (SDWA) and by a RCRA permit by rule (see 40 CFR 268.30(a) &(b)). The August 27, 1987, proposal does not contain a SQG national variance. Does the variance granted to SQG solvent and dioxin waste also apply to the same wastes injected into Class I wells after August 8, 1988?

No. The November 7, 1986, SQG national variance granting an extension to the effective date to the solvent and dioxin restrictions applies only to wastes which will be placed in land units other than UIC Class I wells. The August 27, 1987, proposal did not address a national variance for SQG waste specifically. It does however propose to grant an extension of the effective date for solvent wastes which are solvent-water mixtures or solvent-containing sludges containing less than 1 percent (1%) total F001-F005 solvent constituents (see 40 CFR 148.10(a)). Therefore, small quantity generator solvent wastes must meet the applicable treatment standards prior to injection into a Class I well unless they contain less than one percent (1%) total solvents after generation. This will result in a three (3) month "lag time" when SQGs may place their untreated (greater than one percent) solvent wastes in all land units except UIC Class I wells.

EPA did not propose a special SQG variance granting an extension to the effective date of the UIC restrictions because it is believed there are currently few SQGs disposing of their wastes by injection who will not also be eligible for the one percent (1%) total solvent variance. It is believed there is adequate treatment capacity for all SQGs and other generators who generate solvent wastes above one percent (1%).

Source: John Atcheson (202) 382-5508
Research: Deborah McKie

MAR 8 1988

Ms. Mary Elizabeth Slevin
Lombardi, Reinhard, Walsh,
and Harrison, P.C.
5 Computer Drive West
Albany, NY 12205

Dear Ms. Slevin:

This is a response to your January 21, 1988 letter to the Office of Solid Waste in which you request an interpretation concerning the regulatory status of a process wastewater. The waste of concern is a rinsewater containing some carried-over 1,1,1-trichloroethane from a metal degreasing operation.

As you have described the operation, the solvent-contaminated water in the rinse tank constitutes a process waste and not a spent solvent. (See Hazardous Waste Listing Background Document, p.81, May 1980; letter from Steve Silverman to Michael Rodbury, December 16, 1982.) This process waste would be considered hazardous only if it were determined to exhibit one or more of the hazardous waste characteristics; namely, ignitability, corrosivity, reactivity, or extraction procedure (EP) toxicity. (See 40 CFR 261.20-261.24.)

In your letter, you also mention an exemption that exists regarding solvent-water mixtures containing less than one percent organic solvents. You appear to be confusing two different regulations. This particular provision applies to wastes that are hazardous and therefore, subject to the land disposal restrictions rule. Under the land disposal restrictions (specifically, 40 CFR 268.30(c)(3)), spent solvent hazardous wastes that contain less than one percent total F001-F005 solvent constituents are subject to a two-year extension of the effective date based on insufficient capacity. The solvent wastes covered by the extension include solvent-water mixtures. Also, at 40 CFR 261.3(a)(2)(iv)(B) there is an exemption for solvent-contaminated wastewaters that are managed in units subject to regulation under Sections 307(b) or 402 of the Clean Water Act. To qualify

for this exemption, the maximum total weekly usage of the 1,1,1-trichloroethane discharged to the wastewater must be less than 25 parts per million of the average weekly fl w of wastewater into the headworks of the facility's wastewater treatment or pretreatment system. However, since your waste is not a spent solvent, neither of these exemptions would apply.

If you have any further questions, please contact Ron Josephson on my staff at (202)475-6679.

Sincerely,

Jeffery D. Denit
Acting Director
Office of Solid Waste

JUL 28 1989

Mr. B.W. Morse
Petroleum Advisor
Department of Commerce
and Consumer Affairs
Private Bag 00252
Gaborone
Botswana

Dear Mr. Morse:

Thank you for your letter of June 21, 1989, requesting information about environmental protection regulations, promulgated by the U.S. Environmental Protection Agency (EPA). Our response primarily focuses on the disposal of TEL gasoline sludge, a particular concern raised in the letter.

EPA lists tank bottoms (leaded) from the petroleum refining industry as a hazardous waste. As such, this waste must be managed in accordance with the U.S Environmental Protection Agency standards published in the Code of Federal Regulations (Title 40), under Parts 260-272 (enclosed). Several of the relevant sections, i.e., standards for storage/treatment tanks and standards for landfills will be found in this document (see pages 556-567 and pages 581-586, respectively).

On August 17, 1988, EPA promulgated standards restricting the land disposal of certain hazardous wastes, including leaded tank bottoms from petroleum refining. The intent of this rulemaking is to minimize the quantity of hazardous waste being land disposed in the United States along with minimizing the toxicity of the waste when land disposal is necessary. Enclosed for your review, is a copy of this rulemaking, as well as the background document that contains information justifying the land disposal restrictions. These rules require that wastes be treated to levels achieved by the "Best Demonstrated Treatment Technology," (BDAT) prior to being land disposed. You will find that EPA considers solvent extraction and incineration to be the BDAT for gasoline sludge waste. A temporary variance to the treatment technology can be granted for certain wastes because inadequate treatment capacity is available. These wastes are then land disposed in a landfill that has double liners and leachate collection above and between the liners.

9553.1990(01)

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

MAY 11 1990

OFFICE OF
SOLID WASTE AND EMERGENCY RESPONSE

C. Michael Swindoll
Conoco Inc.
P.O. Box 1267
Ponca City, OK 74603

Dear Mr. Swindoll:

This is in response to your letter of February 5, 1990 in which you presented your interpretations of the RCRA Part B permits at Conoco's three land treatment facilities located at Conoco refineries in Ponca City, Oklahoma; Billings, Montana; and Lake Charles, Louisiana. Specifically, you have interpreted these permits to mean that (1) continued operation of the landfarms for the application of non-hazardous waste can occur after August 8, 1990 and (2) permit modifications for delay of closure and closure are not required until the no-migration petition is denied. In response to your specific issues we have described below procedures pursuant to Federal rules and regulations. Since Conoco's facilities are located in authorized States and those States may have their own additional requirements, the Federal procedures may or may not apply. Therefore, we recommend that you work closely with these States to ensure applicable requirements are met.

On August 8, 1990 the current two year national capacity variance for the continued land disposal of petroleum refinery hazardous wastes (K048-K052) is scheduled to expire. However, on May 8, 1990 the Administrator signed the Third Third Land Disposal Restrictions Rule. The rule provides for an extension, until November 8, 1990, of the national capacity variance for the K048-K052 wastes.

At the expiration of the revised national capacity variance, in order for a facility to continue the land disposal of these restricted hazardous wastes final approval must be obtained for either a no-migration petition, a case-by-case extension or a treatability variance. Pending a decision on a no-migration petition for a land disposal unit, Federal regulations allow owners and operators to continue to dispose of non-hazardous waste in that unit after the expiration of the variance under the provisions of 40 CFR 264.113(b) and 265.113(b). These regulations state that the owner or operator must complete partial and final closure activities in accordance with the approved closure plan within 180 days after receiving the final volume of hazardous waste at the unit or facility. However, they further state that the Regional Administrator may approve an extension of the closure period if the owner or operator complies with all applicable requirements for requesting a

modification to the permit and that he makes certain demonstrations. For example, if the owner or operator can demonstrate that the hazardous waste management unit or facility has the capacity to receive additional hazardous waste; and that there is a reasonable likelihood that he or another person will recommence operation of the hazardous waste management unit or facility within one year; and the closure of the unit or facility would be incompatible with continued operation of the site; and he continues to comply with all applicable permit requirements, just cause exists for extension of the closure period. See 40 CFR 264.113(b)(1)(ii) and 265.113(b)(1)(ii). Procedures for making these demonstrations are addressed in 40 CFR 264.113(c) and 265.113(c). Procedures for modifying the closure plan are addressed in 40 CFR 264.112 and 265.112. Therefore, if the State in which the unit is located has procedures equivalent to the Federal requirements at 40 CFR 264.113 (b) and 265.113(b) then closure can be extended as discussed above. Please note, however, that States can be more stringent or impose additional requirements.

If the no-migration petition is approved, the owner or operator can resume the receipt of the restricted hazardous waste (K048-K052). If the petition is denied, demonstrations made under 40 CFR 264.113(b)(1)(ii) and 265.113(b)(1)(ii) would no longer apply (e.g., there no longer exists a reasonable likelihood that the owner or operator will recommence operation of the hazardous waste management unit or facility) and the owner or operator must proceed with closure unless they are eligible to continue to receive non-hazardous waste under the "delay of closure" regulations.

These Federal "delay of closure" provisions as set forth in 40 CFR 264.113(d) and 265.113(d) allow the owner or operator to receive <u>only</u> non-hazardous waste in a landfill, land treatment unit or surface impoundment after the <u>final</u> receipt of hazardous waste if certain conditions are met. See enclosed copy of 54 <u>FR</u> 33376, August 14, 1989.

Since the "delay of closure" final rule was promulgated pursuant to RCRA, it is effective only in those States that do not have interim or final authorization (i.e., Alaska, California, Connecticut, Hawaii, Iowa, Puerto Rico, Virgin Islands, Wyoming, American Samoa and the Northern Marianas Islands) and in those authorized States that have modified their programs to reflect this regulation. In addition States may choose to adopt "delay of closure" provisions more stringent then the Federal. In order to determine the applicability of the "delay of closure" provisions, you should contact the States in which your refineries are located.

If the "delay of closure" is available you should carefully note any deadlines for submission of permit modification requests and required demonstrations. For example, under the Federal "delay of closure" provisions the request to modify the permit and the demonstrations referred to in 40 CFR 264.113(d)(1) and (2) and 265.113(d)(1) and (2) are required to be submitted to the Regional Administrator no later than 120 days prior to the date on which the owner or operator of the facility receives the known final volume of hazardous waste or no later than 90 days after the effective date of the "delay of closure" rule in the State in which the unit is located, whichever is later. Under the Federal program, denial of the petition would constitute a date certain after which hazardous waste would not be applied to the facility.

If you have any further questions regarding the above information please call Jim Michael of my staff at (202) 382-2231.

Sincerely,

Sylvia K. Lowrance, Director
Office of Solid Waste

Enclosure

cc: William K. Honker, Region VI
Karen Dihrberg, Oklahoma State Department of Health
Elizabeth Cotsworth, OSW
Jim Michael, OSW
Barbara Foster, OSW

9554 – LAND DISPOSAL RESTRICTIONS

Subpart D
Treatment Standards

9554.1986(01)

MAR 27 1986

MEMORANDUM

SUBJECT: Responses to additional questions raised by Senator Mitchell from the Land Disposal Restriction hearing on February 24, 1986

FROM: Eileen M. Claussen, Director
Characterization and Assessment Division (WH-562B)

TO: Lynn Piroozoli
Office of the Assistant Administrator
for Solid Waste and Emergency Response

Attached are the additional questions and responses for Senator Mitchell concerning the hearing before the Subcommittee on Environmental Pollution of the Senate Committee on Environment and Public Works.

We are also submitting the necessary documentation in support of these answers. Since this documentation is so voluminous, please advise Senator Mitchell that we will delegate a staff person to assist him and Committee staff in reviewing and interpreting the data, if he so desires.

Attachments

Q: What is the basis for EPA's estimate that 95 percent of the solvents and dioxins will need to be treated prior to land disposal using the EPA proposed methodology?

A: Solvents

EPA's listing program (managed by OSW) has collected qualitative and quantitative characteristic data for wastes generated by various industries to determine which new wastes should be considered hazardous under RCRA. While this program does not collect data on existing waste codes, the data collected for this program is the best information available to EPA on the concentration of constituents in wastes and therefore was the basis for estimating the characteristics of wastes subject to the ban.

Based on extrapolations of these data, EPA believes that virtually all of the solvent wastes currently land disposed exceed the screening levels and would require treatment. These data are described in detail in Volume III of the "Background Document for Solvents to Support 40 CFR Part 268, Land Disposal Restrictions." As Table C-1 on page 26 indicates, the mean of the total solvent concentrations exceeds 3,000 parts per million (0.30% by weight) for all solvent-containing wastes, managed by all management techniques. Because this number is so much higher than the proposed regulatory levels, we believe now all solvent-containing wastes will be treated. Because of the limitations of these data, the Agency is taking a conservative approach in

assessing capacity demands for setting effective dates and thus is assumming that 5 percent of all solvent wastes will not require treatment.

Dioxins

In considering the quantity of dioxin-containing waste subject to treatment before land disposal, the Agency excluded dioxin-contaminated soils. There are approximately 500,000 MT of these soils; however, these wastes do not become subject to restriction until 1988 since they are contaminated soils resulting from CERCLA response actions (see Section 3004(e)(3)). Mr. Porter's statement addresses only dioxin-containing wastes that will be subject to restriction on November 8, 1986.

Agency data in support of the dioxin listings indicate that 6,650 metric tons on dioxin-containing waste (excluding soils) have been generated as of mid 1985. These wastes include the following non-aqueous, relatively non-solid wastes:

- still bottoms from herbicide manufacture
- non-aqueous liquid leachate
- spent carbon from aqueous phase treatment
- wastewaters and
- still bottoms from PCP product purification.

The existing data show total dioxin concentrations of 0.6 - 110,000 ppm in these wastes. These data are summarized in Exhibit 6-1 of the draft "Regulatory Analysis of Proposed Restrictions on Land Disposal of Certain Dioxin-Containing Wastes."

Since dioxin-containing wastes, for the most part, are liquids, the dioxin concentration in the leachate will equal the total dioxin concentration in the waste. Dioxin-contaminated still bottoms which often are sludges typically contain organic solvents such as toluene and methanol. Since solvents, when co-disposed with other hazardous wastes, are known to mobilize organic constituents which otherwise may be immobile or relatively non-mobile, a similar effect can be expected for dioxin-contaminated still bottoms containing solvents. Thus, the leachate from these wastes can reasonably be expected to contain dioxins in concentrations well above the 1 ppb screening level. Agency data support a conclusion that all dioxin-containing wastes (excluding soils) will require treatment before land disposal. However, the Agency again is taking a conservative approach in determining capacity demand by stating that 95 percent of these wastes will require treatment.

EPA does believe that most dioxin-contaminated soils (subject to the November 1988 deadline) will not require treatment under the proposed treatment standards. Extraction procedure testing conducted on six samples of dioxin contaminated soils

(ranging from 3 to 1,200 ppb of 2,3,7,8 - TCDD) indicated that none of the samples leached detectable (i.e., 1 ppb) levels of dioxins. (See Evaluation of Dioxin Extraction in the Toxicity Characteristic Leaching Procedure, attached.)

Q: What percentage of the solvents would need to be pretreated under EPA's proposed methodology if there was no adjustment in the screening levels for liner protection?

A: To respond to this question, it would be necessary to have detailed waste characterization data indicating the distribution of constituent concentrations in waste streams by volume of waste. The data relied on in response to the previous question is, unfortunately, not detailed enough to enable us to respond to this question.

RCRA/SUPERFUND HOTLINE MONTHLY SUMMARY

DECEMBER 86

11. Treated Wastes

Must restricted wastes which have been treated to meet treatment standards promulgated under §268.41 still be managed as hazardous wastes under RCRA?

The treatment standards set forth in Table CCWE of §268.41 [51 FR 40642] specify the maximum concentrations at which restricted wastes may be land disposed. If listed hazardous wastes are treated, they will remain hazardous wastes until or unless they have been delisted according to §260.22. Characteristic wastes that no longer exhibit the characteristic after treatment do not need to be managed as hazardous wastes.

RCRA/SUPERFUND HOTLINE MONTHLY SUMMARY

DECEMBER 86

10. Treatment Standards

How were the treatment standards established for the land ban rule?

The treatment standards set forth in the Constituent in Concentration in Waste Extract (CCWE) Table of §268.41 [51 FR 40642] are technology-based standards. These standards are based on the efficiencies that can be achieved using the Best Demonstrated Available Technology (BDAT). As is explained on pages 40588-40589, a technology may be "demonstrated" if it is currently used to treat wastes within the group of wastes judged to be similar. The following criteria must be met for a technology to be "available": (1) the technology does not present a greater total risk than land disposal; (2) if the technology is a proprietary or patented process, it can be purchased from the proprietor; (3) the technology provides substantial treatment; and (4) treatment technologies prohibited under §3004(n) because of air emissions will be excluded as "available" technologies for the purposes of establishing treatment standards. The Agency performed a statistical analysis on the available treatment data to identify the BDAT and determine the treatment standard.

RCRA/SUPERFUND HOTLINE MONTHLY SUMMARY

DECEMBER 86

15. Dilution to Meet Treatment Standards

Can a generator dilute his restricted wastes to meet the treatment standards of Table CCWE of §268.41?

No, as explained in §268.3 [51 FR 40639], "No generator, transporter, handler, or owner or operator of a treatment, storage, or disposal facility shall in any way dilute a restricted waste or the residual from treatment of a restricted waste as a substitute for adequate treatment to achieve compliance with Subpart D of this part".

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

9554.1987(02)

FEB 3 1987

Honorable Esteban Torres
House of Representatives
Washington, D.C. 20515

Dear Mr. Torres:

Thank you for your letter of January 12, 1987, in which you requested clarification of the hazardous waste management regulations governing wastes generated by the metal finishing/electroplating industry. Specifically, you enclosed a copy of correspondence from Mr. Larry D. Foss of Foss Plating Company Inc. in which he addressed concerns regarding the effect of the land disposal restrictions upon the metal finishing industry.

The 1984 Hazardous and Solid Waste Amendments (HSWA) to the Resource Conservation and Recovery Act (RCRA) prohibit the continued land disposal of untreated hazardous wastes unless the Agency determines that the prohibition is not required in order to protect human health and the environment (RCRA sections 3004(d)(1), (e)(1), and (g)(5)). However, hazardous wastes that meet the treatment standards established by EPA under section 3004(m) of RCRA are not subject to the restrictions and may be land disposed.

As you are aware, the legislation established a series of deadlines for Agency action. At certain deadlines, further land disposal of a particular group of hazardous wastes is prohibited unless the wastes meet treatment standards established by the Agency, or a facility has been granted a petition under 40 CFR 268.6 ("no-migration petition"), or an extension to the effective date has been granted under 40 CFR 268.5 (case-by-case extensions). As Mr. Foss correctly indicated, F006 wastes (wastewater treatment sludges from electroplating operations) are included among the wastes scheduled to be evaluated by August 8, 1988 (40 CFR 268.10). The Agency plans to propose treatment standards for the first third of the scheduled listed wastes, including F006 wastes, in the early fall of 1987. Concurrently, EPA is gathering information on the performance of various technologies

used for treating F006 wastes that reduce the toxicity or mobility of these wastes. After considering the public comments we receive on the proposed rule we will set the final treatment standards for these wastes by the August 8, 1988 deadline. The land disposal of the F006 waste will be prohibited (by statute) only if EPA does not meet the deadline specified in the law. Wastes meeting the treatment standards may continue to be land disposed.

Under RCRA section 3004(h)(2), the Agency has the authority to grant a nationwide variance of up to 2 years from the statutory effective date if adequate alternative treatment, recovery, or disposal capacity does not exist. Calculations of alternative capacity are utilized in determining whether to grant variances and the length of any variance from the effective dates of the restrictions. The Agency will be proposing capacity determinations at the same time as we propose treatment standards for the first third of the scheduled listed wastes.

We are sympathetic to the problems potentially faced by Mr. Foss and Foss Plating Company Inc. However, failure of the Agency to promulgate final regulations setting treatment standards for these wastes would mean that such wastes could be disposed of in a landfill or surface impoundment only if (i) the facility is in compliance with the minimum technological requirements of RCRA §3004(o) (double liners, groundwater monitoring) and (ii) the generator has certified that he has investigated the available treatment capacity and has determined that the use of such a landfill or surface impoundment is the only practical alternative. After May 9, 1990, RCRA would completely ban the land disposal of any hazardous waste for which EPA has not specified treatment standards. Allowing these provisions to take affect would likely result in an even greater regulatory impact on the metal finishing/ electroplating industry than promulgating final regulations restricting land disposal.

We appreciate the opportunity to provide you with information regarding prohibitions on the land disposal of hazardous waste. Please feel free to contact Stephen Weil, Chief of our Land Disposal Restrictions Branch, at (202) 382-2770 if you have further questions on this matter.

Sincerely,

J. Winston Porter
Assistant Administrator

RCRA/SUPERFUND HOTLINE MONTHLY SUMMARY

JULY 87

1. California List

The land disposal restrictions in RCRA Section 3004(d) requires that the California List wastes be banned from land disposal by July 8, 1987. Concentrations of nickel greater than 134 mg/l are subject to the ban. Is hazardous wastewater containing nickel dispersed by agitation, but not chemically in solution, included in the restriction?

Yes. It does not matter whether the nickel is chemically or physically contained in the wastewater. The ban applies to the total concentration of nickel in the filtrate as determined by subjecting a representative sample of wastewater to the Paint Filter Liquids Test. If the facility were to settle out the pieces of nickel and lower the concentration of nickel below 134 mg/l, the wastewater would no longer be subject to the ban. Until treatment standards are finalized, this method of lowering the concentration is allowable.

Source: Mitch Kidwell (202) 382-4805
Research: Laurie Huber

9554.1988(03)

MAY 13 1988

Dr. Paul Palmer, Ph.D.
Onscreen Directories Inc.
7345 Healdsburg Avenue
Suite 524
Sebastopol, California 95472

Dear Dr. Palmer:

This letter is in response to your March 1, 1988 and April 19, 1988, letters requesting an interpretation of 40 CFR 268.7 requirements. Your letter of April 19, 1988 expresses a general frustration with EPA's seemingly meaningless recordkeeping and certificating requirements. EPA believes that these requirements are necessary, and I will try to explain the rationale behind the rules.

EPA is responsible for enforcing the prohibitions on land disposal of untreated hazardous wastes imposed by Congress. A determination that a waste is a listed hazardous waste (40 CFR 261.31, and 261.32) is, in general, based on how the material is used or the process by which it was generated, not on the constituents in the wastes. Thus, only the original generator can determine what the applicable waste codes are. This information is frequently, but not always, on the manifest. Waste codes have also been subdivided for the purpose of setting treatment standards. The treatment, storage, or disposal facility must be informed of the applicable standard. In cases where no land disposal is anticipated, the notice is still required to insure that the waste is not disposed of by a facility not realizing that such disposal for that particular waste is prohibited.

All restricted wastes, whether treated and disposed on site, or sent off-site to a RCRA treatment or disposal facility or to a non RCRA recycling facility, are subject to testing and recordkeeping requirements. Please note that although recycling facilities may be exempt from RCRA regulation, the wastes they receive and the resulting residues are regulated by RCRA and are

subject to the land disposal restrictions. We believe that the notifications are necessary to assure that the information for insuring compliance with the statute is available to both the handlers of the hazardous waste and to EPA.

Certification is a necessary tool for tracking restricted wastes from generation to final disposal. This law clearly puts the burden on the generator to see that the waste is properly managed and disposed of. Thus, the certification operates to protect the generator in addition to providing EPA information needed to efficiently enforce these regulations.

In response to the specific questions in your March 1 letter, I hope the following discussion will be helpful. After a generator makes a determination that he is managing a restricted waste which does not meet the appropriate treatment standards, or where the waste does not comply with the applicable prohibitions in section 268.32 or RCRA Section 3004(d), the generator must notify the treatment or storage facility in writing of the appropriate treatment standards and applicable prohibitions in section 268.32 or RCRA section 3004(d). This notification must accompany each shipment of the waste.

As a treatment and storage facility that ships restricted wastes off-site for further management, you must comply with the notice requirements applicable to generators in section 268.7(a)(1). You must also comply with the manifest requirements of section 264.71(c) or section 265.71(c).

In the case of the operator of a cement kiln receiving restricted wastes for further management (for use as a fuel supplement), the treatment residues from these restricted wastes are subject to all requirements under section 268.7(b)(2), (i) and (ii) prior to land disposal.

Your interpretation of 40 CFR 268.7 certification requirement is correct. A certification is required that the waste meets the applicable treatment standards before the restricted waste may be land disposed. When the restricted waste is not destined for land disposal a certification is not required. However, a written notification must accompany each shipment of restricted waste where further management is appropriate before land disposal.

I hope this information adequately addresses your concerns. If you have further questions, please feel free to contact Jim Thompson, at (202) 382-7438.

Sincerely,

Sylvia K. Lowrance, Director
Office of Solid Waste

cc: Region IX

9554.1988(04)

JUN 13

Mr. Kerry Bennert
Coordinator Special Projects
E.I. du Pont de Nemours & Co. (Inc.)
Medical Products Department
331 Treble Cove Road
No. Billerica, MA. 01862

Dear Mr. Bennert:

I received your letter of April 18, 1988 in which you commented that regulatory events limiting mixed waste disposal have impacted your radioactive materials manufacturing operations. Specifically, you cited as examples, the absence of disposal capacity for "small-volume mixed waste laboratory generated (organic solvents) materials" and lead.

As you know, EPA promulgated regulations which appeared in the Federal Register of November 7, 1986 prohibiting land disposal of certain spent solvent wastes unless they meet specific concentration based treatment standards. Some solvent containing mixed wastes may not lend themselves to incineration, the best demonstrated available technology (BDAT) for solvent wastes. Such wastes could conceivably be delisted and disposed in a low-level waste disposal facility following treatment.

Enclosed is a copy of a letter to Mr. Terry Husseman, Chair, Northwest Interstate Compact Committee which details the Agency's position on disposal of lead. As the Husseman letter points out, EPA has not evaluated specific containerization or encapsulation methodologies using the EP toxicity test. Such approaches to managing lead mixed waste may be viable in certain circumstances. Of course, States may adopt a more stringent position with regard to regulation of lead or any other hazardous waste. We recommend disposal of lead in a mixed waste unit.

Also, I share your concern that neither of the three existing commercial low-level radioactive waste disposal facilities have applied for a RCRA permit although U.S. Ecology has expressed a strong interest in filing such an application. EPA and NRC developed a series of guidance documents last year aimed at facilitating the State and compact effort in siting and designing a low-level waste disposal unit that could also accept mixed waste. As a regulatory agency, EPA believes this level of involvement is consistent with its mandate. The Agency is available to review alternate waste management proposals developed by industry. However, until such time as disposal capacity becomes available or treatment technologies are identified, storage, an activity which also requires a RCRA permit, may be the only waste management option available to generators of mixed waste.

Although mixed wastes are not subject to Federal hazardous waste regulations until the State applies for and obtains authorization to regulate the hazardous component of the mixed waste, State law is applicable in the interim. The deadline for filing mixed waste authorization applications is July of this year. You may want to contact Paul Bedrosian, the mixed waste coordinator for EPA Region I (617-833-1792) to discuss your concerns. Further, I will apprise you of any future developments on management of solvent containing mixed wastes.

Sincerely,

Bruce R. Weddle, Director
Permits and State Programs Division

cc: Paul Bedrosian, Region I

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

9554.1988(05)

AUG 11 1988

Mr. Mark N. Griffiths
Director of Government Relations
National Association of Metal Finishers
Suite 700
1101 Connecticut Avenue, Northwest
Washington, D.C. 20036

Dear Mr. Griffiths:

I am writing in response to your recent letter requesting information on waste treatment facilities which can and will accept F006 electroplating wastes for stabilization.

The enclosed list gives the names and EPA ID numbers of 41 facilities which reported to EPA that they offered the type of stabilization used to establish the land disposal treatment standards for F006 sludges. I have also enclosed a copy of the Directory of Commercial Hazardous Waste Management Facilities which includes contact information for hazardous waste facilities. You asked that we supply you with the names of facilities that would be willing to take your members' F006 wastes on August 8, 1988. EPA has not attempted to obtain such specific data on waste treatment facilities.

As I discussed with you on the phone several weeks ago, the difficulty you members experienced in finding waste treaters willing to commit to treatment before the standards for F006 wastes were final is typical of what has occurred with past land disposal restrictions rules. Waste treatment and disposal facilities are subject to more restrictive standards on storage of wastes than are the generators of the wastes. As a result, these facilities are reluctant to accept wastes that they cannot treat and dispose of fairly quickly. When a new treatment requirement is imminent, these facilities routinely inform their customers not to ship wastes after a certain date. Then, after the final treatment standards are known, the disposal facilities have time to determine the correct process changes or mixes required and make other operating adjustments which are necessary. Typically, treatment and disposal facilities begin accepting wastes again within two to four weeks of the promulgation date of the final rule.

While this lag time is unsettling for generators, particularly when they have limited on-site storage capacity, it is a predictable side effect of the statutory requirement that land disposal restrictions become effective immediately upon promulgation.

I hope this information has been helpful.

Sincerely,

Barbara J. McGuinness, Chief
Regulation Development Section

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY 9554.1989(02)

MAY 5 1989

Mr. Richard Pastor
Director, Government Relations
Envirosafe Management Services, Inc.
P.O. Box 833
Valley Forge, Pennsylvania 19482-0833

Dear Mr. Pastor:

This letter is in response to your April 15, 1989, correspondence requesting a clarifying rule or guidance that would allow placement of stabilized wastes that do not meet land restrictions requirements at the time of placement. Your justification for this clarification is that EPA based its BDAT treatment standards on a 28 day curing period without clearly stating where the curing was to occur.

As Jim Berlow explained to you when you met with him on March 9, 1989, it is EPA's policy that wastes must meet treatment standards prior to placement in land disposal units. This policy is founded on our reading of the statutory intent. Because EPA must be concerned that wastes may be exposed to rainfall or other sources of leachate at any point in the life of the disposal unit, it is necessary that Envirosafe establish the effectiveness of its technology immediately upon placement.

Your letter suggests that Envirosafe believes its process for in-place curing can be demonstrated to be superior to the existing basis for BDAT standards, but provides no data. If you have data that shows your process is superior, then you should submit those data if you pursue a BDAT variance or petition for rulemaking. These data should demonstrate the effectiveness of the process in reducing mobility of hazardous constituents both at placement and once fully cured. As Mr. Berlow mentioned in your discussions, you should submit this data in the form of Toxicity Characteristic Leaching Procedure data to describe the effectiveness of your process. This will allow us to determine the degree to which your process relies on simply encapsulation rather than chemical fixation to bind the hazardous constituents. If your process can be judged equivalent or better than the current technology basis for our standards, then a variance would be appropriate.

Many of our standards are based on the leachability achieved by stabilizing waste and curing it for 28 days prior to placement. It is our understanding, however, that several companies have been able to comply with the standards using processes that achieve the limits after an initial curing of far less than 28 days, in some cases within about 24 hours. EPA views this issue as a matter of cost optimization, storage capacity for curing versus possibly more expensive chemical costs for stabilization. We do not believe that achieving the standards based on 28 day curing strength has been shown to represent a significant technical problem. However, any such problems that you can document should be addressed in a BDAT variance submission.

Your letter also mentions the possibility of a "temporary" no migration petition for the period of curing; we have not completed our consideration of this idea. I hope to inform you of our analysis within the next several weeks. However, I believe that there are several interim points for you to consider.

HSWA requires that a no migration variance be based on an analysis of the period over which the waste remains hazardous. I suspect that a petitioner would have to demonstrate that no migration would occur for as long as the waste remains hazardous within the disposal unit, and not necessarily only for the period within which the stabilized waste will achieve a particular curing endpoint.

More significant, however, may be Section 3004(c)(1) of RCRA. This section prohibits "...the placement of bulk or non-containerized liquid hazardous waste or free liquids contained in hazardous waste (whether or not absorbents have been added) in any landfill...". The Agency issued a Statutory Interpretive Guidance on June 11, 1986 (enclosed) for this provision. In effect, the Agency's policy is that bulk and non-containerized wastes must pass the "Paint Filter Liquids Test" prior to placement in a landfill. You may wish to consider whether the treated wastes that you wish to landfill prior to complete curing can pass such a free-liquids test. As explained in the Statutory Interpretive Guidance, the statute provides for no variance opportunity.

I appreciate your interest in this matter. If you wish to pursue a BDAT variance, you should continue to contact Jim Berlow and his staff.

Sincerely,

JD For SKL

Sylvia K. Lowrance
Director
Office of Solid Waste

Enclosure

RCRA/SUPERFUND HOTLINE SUMMARY

OCTOBER 1989

4. Land Disposal Restrictions: Point of Generation

Effective July 8, 1987, liquid hazardous wastes containing PCBs in concentrations greater than or equal to 50 ppm are restricted from land disposal (40 CFR 268.32(a)(2)). The July 8, 1987, Federal Register states that for the purpose of characterizing a waste as "restricted" the "initial generators are to determine if their hazardous wastes are prohibited at the point of generation." (52 FR 25766) This policy is reiterated in the August 17, 1988, Federal Register by stating "generators must determine whether their wastes are 'restricted' at the point of initial generation, i.e. when the waste is first considered a hazardous waste subject to RCRA regulation." (53 FR 31200)

An electrical transformer released oil onto a concrete containment pad. The oil contains PCBs at concentrations greater than 50 ppm. The spill response team used mineral spirits to loosen the oil from the concrete pad. Then an absorbent was added to the oil/mineral spirit mixture and the entire mixture was removed from the concrete. Is this mixture subject to the land disposal regulations?

In this case a waste was generated when the transformer oil was released onto the concrete. In order for the oil to be a California list waste it must be a hazardous waste. The oil will not be subject to the land disposal restrictions regulations as a California list waste because typically it is not a hazardous waste (i.e., listed or characteristic). However, after the mineral spirits are used to loosen the oil from the concrete, the oil/mineral spirit mixture might meet the definition of a hazardous waste by exhibiting the characteristic of ignitability. Therefore, the generator must use the following criteria to determine if the oil/mineral spirit mixture is restricted from land disposal: (1) does the waste exhibit a characteristic (e.g., ignitability); (2) is it a liquid; and (3) does it contain PCBs in concentrations greater than or equal to 50 ppm? The waste must meet all three criteria to be deemed a restricted waste, specifically a California list waste per Section 268.32.

This particular California list waste has specific treatment standards per 40 CFR 268.42. The preamble to the July 8, 1987, Federal Register states "where treatment standards are expressed as specified technologies, the Agency has stated in the November 7, 1986 final rule that such specified technologies must be employed. See e.g., 51 FR 40628. For example, in today's final rule, the California list wastes containing PCBs must be treated in accordance with the standards specified in Section 268.42 (i.e., thermal destruction in incinerators or high efficiency boilers) and may not be rendered non-liquid in order to avoid the Section 268 requirements." (52 FR 25766) In this case if the oil/mineral spirit mixture meets the three criteria the waste is still subject to the land disposal restrictions even if the absorbent renders the waste non-liquid.

Source: Andrea McLaughlin (202) 382-6946

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Mr. Jon Greenberg
Manager of Environmental Policy
Browning-Ferris Industries
Suite 500
1150 Connecticut Avenue, Northwest
Washington, DC 20036

OCT 28 1989

Dear Mr. Greenberg:

This letter is in response to your two letters dated October 10, 1989, requesting clarification of the California list HOC land ban regulations, and the applicability of Federal land disposal restrictions (LDR) regulations regarding household hazardous waste (HHW) and hazardous waste from generators of less than 100 kg/month, what you are calling "very small quantity generator waste" (VSQG). We are providing answers or clarifications in response to all of your inquiries except for two, which we would like additional time to consider. We do not wish to delay providing answers to the other questions raised in your letters, so we are responding to those at this time.

Your first question concerned California list HOCs, specifically a non-liquid waste containing only one HOC (at levels greater than or equal to 1000 mg/kg) listed in Appendix III of Part 268. As stated in 40 CFR 268.42(a)(2), a waste is prohibited from land disposal unless it has been incinerated in accordance with Subpart O of either Part 264 or 265. (The treatment standard of incineration does not apply when there is an established treatment standard specified for the HOC in Subpart D of Part 268). You stated, however, that 40 CFR 268.42(a)(2) is less clear when there is a mixture of more than one listed HOC in a non-liquid waste. You gave as your understanding that in this case, if there is an established treatment standard in Part 268 for at least one of the listed HOCs, then that treatment standard, and not the incineration standard of 40 CFR 268.42(a)(2), applies. This is a correct interpretation; as stated in previous rulemakings, California list prohibitions are superseded by more specific prohibitions and treatment standards (see 52 FR 29993, August 12, 1987; and 52 FR 25773, July 8, 1987).

You also requested confirmation of your understanding of the effects of the Court-ordered stay on multi-source leachate, when it is derived from a waste as described above. You stated that the effect of the stay is to remove the treatment requirements

established under Part 268 as they apply to multi-source leachate and, therefore, the incineration treatment standard applies. The Agency would like additional time to further consider your interpretation before providing a response.

Your final question in the first letter dealt with a non-liquid waste containing less than 1000 mg/kg HOCs when initially generated. This waste is de-watered for further treatment, which results in the concentration of the HOCs being increased to above 1000 mg/kg. With further treatment, the concentration of the HOCs in the waste again drops to below 1000 mg/kg. You stated that your understanding is that, because the waste did not meet the California list criteria when it was initially generated nor when it eventually was disposed, it does not have to meet the requirements of 40 CFR 268.42. The Agency would also like additional time to consider the issues involved in this question, and so is deferring a response at this time.

Your second letter is concerned with the applicability of the Federal land disposal restrictions to wastes that are not hazardous by Federal hazardous waste definitions, i.e., household hazardous waste and hazardous waste from generators of less than 100 kg/month, but are hazardous by a State's definition. You wished to know if the Federal land disposal restrictions apply in these cases.

States with approved hazardous waste programs that regulate generators and handlers of less than 100 kg of hazardous waste in a calendar month have a larger regulated universe than is required under Federal law. The program components that include these classes of hazardous waste handlers are "broader in scope" than the Federal requirements. "Broader in scope" provisions are not considered part of the State authorized program and are not subject to EPA oversight and enforcement (40 CFR 271.1 (i)(2)). Therefore, State regulated household hazardous waste and "very small quantity generator" waste handlers are not subject to the Federal land disposal restrictions unless the Federal regulations are adopted and enforceable under State law.

If you have any further questions, please call Robert Scarberry, Chief, Land Disposal Restrictions Branch, at 382-4770.

Sincerely,

Sylvia K. Lowrance
Director
Office of Solid Waste

2. Land Disposal Restrictions - Lab Packs

Lab packs are containers holding a variety of wastes generated by laboratories. If a lab pack contains a waste restricted under RCRA's Land Disposal Restrictions, how is it regulated?

The disposal of lab packs containing restricted wastes is initially addressed in the Land Disposal Restrictions final rule of November 7, 1986 (51 FR 40572). If a lab pack contains any restricted wastes, the entire lab pack is prohibited from land disposal "unless the solvents or other restricted wastes are removed before land disposal, the solvents in the lab pack meet the treatment standard, or a successful petition demonstration has been made under Section 268.6." (51 FR 40585)

The proposed rule for the Third Third wastes in the November 22, 1989 Federal Register (54 FR 48372) also includes a discussion of lab packs. The Agency proposes alternate treatment standards expressed as technologies for those lab packs meeting certain criteria. Lab packs containing certain characteristics and listed organic hazardous waste may be incinerated according to this proposed rule, and stabilization is proposed to be the treatment technology for certain EP toxic metal wastes. However, this proposed approach would not be mandatory and generators of lab packs who choose instead to comply with current land disposal restrictions, would be free to do so.

Source: Andrea McLaughlin, OSW (202) 382-6946
Research: Anne Kennerley

9554.1990(02)

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

FEB 22 1990

FILE COPY

OFFICE OF
SOLID WASTE AND EMERGENCY RESPONSE

William McDonald
Chemical Compliance Manager
Wellcraft Marine
Sarasota, Florida

Dear Mr. McDonald:

This letter is in response to your question concerning the impact of the proposed Third Third Land Disposal Restrictions rule on D001 characteristic wastes.

The 1984 Hazardous and Solid Waste Amendments to the Resource Conservation and Recovery Act directed EPA to set levels and methods of treatment for hazardous wastes which substantially reduce the toxicity of the waste. Wastes or residuals from the treatment that meet treatment standards established by EPA may be land disposed.

Land disposal of these hazardous wastes are prohibited unless 1) the wastes are treated to a level or by a method specified by EPA, 2) it can be demonstrated there will be no migration of hazadous constituents from the land disposal unit for as long as the wastes remain hazardous, or 3) the wastes are subject to an exemption or variance from meeting the treatment standards.

D001 is an ignitable waste which is currently subject to some restrictions on placement in surface impoundments, waste piles, land treatment units, and landfills. These restrictions can be found in 40 CFR 264.229, 264.256, 264.281, 264.312, 265.229, 265.256, 265.281, and 265.312.

There are four categories of D001 ignitable waste. The first, ignitable liquids such as solvents and paint thinners, must, according to the proposed rule, be treated through thermal destruction technologies such as incineration and fuel substitution before they can be land disposed. The second, ignitable compressed gasses, are generally recovered by direct use or are vented into an incinerator. The third, ignitable reactives, are primarily inorganic solids or wastes containing reactive materials such as alkali metals or metalloids. These wastes must be deactivated, according to the proposed rule, before being land disposed. The final category is oxidizers,

which include such wastes as peroxides, perchlorides, and permanganates. These wastes must also be deactivated, according to the proposed rule, before being land disposed.

The treatment of D001 waste raises some policy issues which EPA is still resolving, as to when dilution is a permissible form of treatment, and if characteristic wastes, such as D001, must be treated to levels below which they exhibit a characteristic. See 54 FR 48490-48494. Unfortunately, EPA cannot discuss these matters at this time, due to restrictions concerning the rulemaking process. EPA's decision on these two issues will appear in the Third Third Land Disposal Restrictions final rule on May 8.

If you have questions concerning specific aspects of EPA's proposals for D001 wastes, please give Robert Burchard a call at 202-475-6775.

Sincerely,

Robert Scarberry

Robert Scarberry
Chief, Land Disposal Restrictions Branch

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

9554.1990(03)

MAR 7 1990

Mr. Donald Stone
Regional Environmental Manager
GSX Chemical Services, Inc.
121 Executive Center Drive
Congaree Building, Suite 100
Columbia, South Carolina 29221

Dear Mr. Stone:

This letter is in response to your September 18, 1989 letter to Mike Petruska of the EPA's Waste Characterization Branch, requesting confirmation of a conversation you had with Mary Stevens of the RCRA Hotline, concerning the application of waste codes to treatment residues. Your letter asks which waste codes would apply to scrubber water from the incineration of hazardous wastes for the purpose of complying with the land disposal restrictions.

If listed wastes are burned, all residues that are generated carry the waste codes of the listed wastes from which they were derived. For characteristic wastes that are burned, the residuals are characteristic only if the residues themselves exhibit a characteristic.

When deciding which Land Disposal Restriction standard applies to residuals such as scrubber water (assuming that the treated residues are destined for some form of land disposal), your decision must be based on the hazardous waste designation before incineration. That is, you must know whether the waste incinerated exhibits any characteristic, meets the California List criteria, and contains or is derived from any listed wastes. Potentially, any or all of the treatment standards associated with these different classifications of hazardous waste may apply. In situations where multiple treatment standards apply, the ensuing general rules should be followed:

1. If the standards are for similar treatability groups (e.g., all chlorinated organics), all the standards must be met, and for common constituents, the most stringent standard applies.

2. If they are not similar (e.g., one is for metals and the other is for chlorinated organics), then both standards

I have enclosed an excerpt from the LDR Third Third proposed rule which explains these concepts further. This excerpt also provides several examples with regard to the California List prohibitions and clarifies when these treatment standards would be superseded by more specific treatment standards.

If you have any questions about these issues, please call Robert Burchard at 475-6775.

Sincerely,

Devereaux Barnes, Director
Characterization and Assessment Division

cc Mike Petruska
Robert Scarberry

Enclosure

3. Treatment Standards for Methanol Which Does Not Meet the F003 Listing

A generator uses xylene for cleaning purposes. At the point of generation the generator determines that he has generated a F003 spent solvent waste, subject to the land disposal restrictions. The F003 listed waste has traces of methanol in it where the methanol was used as a fuel. Would the notification sent by the generator in 268.7(a)(1) to the treatment, storage or disposal facilities (TSDFs) have to include the corresponding treatment standards for methanol as well as for xylene?

No. The generator would only have to include the treatment standards for the xylene and not for the methanol to be in compliance with Section 268.7(a)(1). The methanol in this case was not used for its solvent properties and would not meet any of the spent solvent listings, which are prohibited from land disposal without first meeting the treatment standards in 40 CFR 268, Subpart D. The spent solvent listings cover only those solvents that are used for their solvent properties; which is to solubilize, dissolve or mobilize other constituents (51 FR 40606). A solvent is considered spent when it is no longer fit for use without being regenerated, reclaimed or otherwise reprocessed. Where solvents were used as reactants or ingredients in the formulation of commercial chemical products, they are not included in the listing (see December 31, 1985 Federal Register; 50 FR 53315 and the original solvent listing background document, November 14, 1980).

Supporting data should be maintained on-site in the generator's files.

Sources:	Rhonda Craig, OSW	(202) 382-7926
	Ron Josephson, OSW	(202) 382-4792
	Thomas Ovenden, OSW	(202) 475-6715
Research:	Renee T. LaValle	

9554.1990(05)

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

JUN 25 1990

OFFICE OF
SOLID WASTE AND EMERGENCY RESPONSE

Mr. Kevin J. Igli
Regulatory Affairs Manager
Chemical Waste Management, Inc.
1155 Conn. Ave., N.W.
Suite 800
Washington, D.C. 20036

Dear Mr. Igli:

Thank you for your letter of May 23, 1990, requesting clarification of the effective date promulgated in the Third Third final rule (55 Fed. Reg. 22520, June 1, 1990) for F024. The Third Third final rule revised treatment standards for F024 that were originally promulgated as part of the Second Third rulemaking. The revised standards eliminate concentration standards for chlorinated dibenzo-dioxins and furans, and require incineration as a specified method of treatment.

Your letter suggests that EPA may not have intended to include F024 in the 90 day national capacity variance granted to all waste codes covered by the Third Third because the revised standard for F024 grants relief rather than imposing new requirements. Your point is well taken. An immediate effective date for F024 may be included in the technical correction notice for the Third Third. Until such a correction notice is published, however, or until August 8, 1990, the Second Third standard remains in effect for F024.

If you have any questions, or would like to discuss this issue further, please feel free to contact Matthew Straus of my staff at (202) 382-6972.

Sincerely,

Sylvia K. Lowrance, Director
Office of Solid Waste

UNITED STATES ENVIRONMENTAL PRO
WASHINGTON, D.C. 204

9554.1990(06)

JUN 25 1990

OFFICE OF
SOLID WASTE AND EMERGENCY RESPONSE

Lynn L. Bergeson
Weinberg, Bergeson and Neuman
1300 Eye Street, N.W.
Suite 600 East
Washington, D.C. 20005

Dear Ms. Bergeson:

Thank you for your letter of June 8, 1990 concerning the use of the Extraction Procedure (EP) leach test for determining compliance with the treatment standards for lead-bearing wastes beyond September 25, 1990, when the Toxicity Characteristic Leaching Procedure (TCLP) replaces the EP.

Your reading of the preamble discussion in the Third Third land disposal restrictions rule is correct; the Agency is allowing the continued use of the EP beyond September 25, 1990 for the limited purpose of determining compliance with the treatment standard for lead-bearing wastes. Lead-bearing wastes that fail the TCLP, but pass the EP, will be deemed to meet the treatment standard for D008.

On the effective date of the Toxicity Characteristic rule, Federal regulations no longer allow the use of the EP to determine if your waste exhibits the toxicity characteristic. Please note, however, that if, as a matter of state law in a RCRA authorized state, the EP is required, that requirement is not superseded by the TC rule.

Please note that the second footnote on page 2 of your letter, which states that the TC effective date for small quantity generators is March 29, 1991, is incorrect. The TC effective date is September 25, 1990. There are two compliance dates: September 25, 1990 for large quantity generators (generators producing over 1000 kg/month of hazardous waste) and TSDFs, and March 29, 1991 for small quantity generators.

We will address the continued applicability of the EP in a future land disposal restrictions rulemaking on wastes that exhibit the new toxicity characteristic. We plan to propose this rule within a year, and will provide opportunity for comment.

If you have further questions on this matter, please contact Robert Burchard of my staff at 475-6775.

Sincerely,

Sylvia K. Lowrance, Director
Office of Solid Waste

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C.

9554.1990(07)

JUL 30 1990

OFFICE OF
SOLID WASTE AND EMERGENCY RESPONSE

Richard A. Guida
Associate Director
Naval Nuclear Propulsion Program
Department of the Navy
Naval Sea Systems Command
Washington, D.C. 20362-5101

Dear Mr. Guida:

This letter is in response to your letter dated May 24, 1990, concerning the Land Disposal Restrictions for defueled submarine reactor compartments. In this letter, your primary question was whether the Navy's program for disposal of these reactor compartments falls within the "Macroencapsulation" standard for these wastes as promulgated on May 8, 1990 as part of the Land Disposal Restrictions Rule for Third Third Wastes.

EPA points out that while EPA concurred on this disposal practice as part of an extensive Environmental Impact Statement issued in May of 1984, the Hazardous and Solid Waste Amendments of November, 1984, required EPA to establish treatment standards for all hazardous wastes prior to land disposal. Thus, EPA promulgated regulations covering such wastes on May 8, 1990. While the June 1, 1990 Federal Register Notice which listed these regulations did not provide a specific response to your comments, your questions were answered in the administrative record for the rule in a document entitled the "Response to BDAT Related Comments Document, Volume I-J", (as comment number 15-A-1).

In summary, EPA determined that the practice of direct land disposal of these compartments <u>may</u> meet the "Macroencapsulation" BDAT treatment standard for D008 radioactive lead solids. The key to assuring compliance with the standard is the stipulation in the regulatory language that the "jacket of inert inorganic materials" (i.e., the steel surrounding the lead) "substantially reduce(s) surface exposure to potential leaching media". Since the information in your letter and your comments appears to indicate that this is true, the Agency believes that the practice probably complies with the BDAT standard for D008 radioactive

lead solids. The compartments probably are considered to meet BDAT "as generated", because the lead shielding (as originally constructed) is surrounded in a thick, sealed steel jacket. The key to this decision is whether the steel is indeed sealed and thereby minimizing potential exposure to any leaching material.

EPA chose to establish "Macroencapsulation" as BDAT for D008 radioactive lead solids in order to reduce the potential for radiation exposure during both treatment and testing. It is important to point out that because the standard is a technology-based standard (i.e., specified technology), compliance does not require that the waste undergo a TCLP analysis for lead. The TCLP analysis would have required crushing or grinding of the material in order to verify compliance and would have gone against the whole purpose of establishing this standard.

EPA purposely modified the proposed standard for D008 radioactive lead solids to include "jackets of inorganic materials" in order to specifically account for the submarine reactor compartments. However, EPA felt that it was necessary to add the language to the definition of macroencapsulation to prevent the "jacket of inorganic material" from being interpreted as including materials that are merely containers or drums. Thus, we concur with your interpretation that the submarine compartment does not meet the definition of either a drum or a container.

I hope that this information clarifies your concerns as well as any potential concerns that may arise with the State of Washington over the applicability of "Macroencapsulation" as BDAT for your decommissioned reactor compartments. If you, or the State of Washington, need further clarification or if you feel a meeting is necessary, please call Richard Kinch, Chief of the Waste Treatment Branch, at (202) 382-7917. Thank you for your patience in receiving your response. The Third Third Land Disposal Restrictions Rule has generated a significant amount of questions. For your information, we will be reiterating the above discussion concerning your situation in a Federal Register Notice covering corrections to the rule. This notice should be out by early fall.

Sincerely,

Sylvia K. Lowrance
Director
Office of Solid Waste

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C.

9554.1990(08)

JUL 31 1990

OFFICE OF
SOLID WASTE AND EMERGENCY RESPONSE

Mr. Douglas MacMillan, Director
Hazardous Waste Policy
National Solid Wastes Management Association
1730 Rhode Island Ave., N.W. Suite 1000
Washington, DC 20036

Dear Mr. MacMillan:

This letter responds to your inquiry dated June 13, 1990, to Richard Kinch, of my staff, concerning several aspects of the Third Third land disposal restrictions final rule. Your letter included questions about the following topics: multisource leachate, treatment verification, the dilution prohibition, the applicability of specified technology standards, effective dates, identification of applicable waste restrictions, inorganic solid debris, waste tracking, lab packs, underground injection, surface impoundments, and treatment in tanks and containers. Responses to the specific questions are presented in the same order as included in your letter.

Please note that responses are not provided for questions 21, 23, 30, 34, 35, and 36, and the first part of question 42. Responses to these questions will be provided in the near future.

A. MULTISOURCE LEACHATE

1. In response to your question whether multisource leachate must be manifested now as F039 -- that is, before August 8, 1990 -- the answer is no. Please see the Third Third final rule preamble discussion at 55 FR 22650. However, it should also be noted that the manifest under the federal hazardous waste program only includes the Department of Transportation waste description, not EPA's Hazardous Waste Number.

2. The question points out a discrepancy between the regulatory language of 40 CFR Part 268 where multisource leachate nonwastewaters were granted a two-year national capacity variance for surface disposed wastes, and the regulatory language of 40 CFR Part 148 which failed to grant such a capacity variance to the waste when destined for underground injection. The Agency found, upon reexamination of this apparent typographical error, that other waste types destined for underground injection were also omitted from the regulatory language by mistake (although

they were included in the preamble). The effective dates for these classifications are as follows: for F039 nonwastewaters that are sent offsite for underground injection, the effective date is August 8, 1990; for F039 nonwastewaters that are being injected onsite, the effective date is November 8, 1990; and for all F039 wastewaters, whether being injected onsite or offsite, the effective date is May 8, 1992. These omissions will be addressed in a correction notice that is expected to be published in the Federal Register in September 1990.

3. Confirmation is requested on the applicability of the F039 nonwastewater capacity variance as it applies to contaminated soil. The Agency agrees that soil that is contaminated with F039 is a nonwastewater that is subject to the two-year national capacity variance until May 8, 1992, even if some of the sources of the multisource leachate are from waste-codes for which any capacity variance has expired. Please see 40 CFR 268.35(b) and (e).

4. In response to your question of what mechanism will be allowed for adopting the F039 waste code into a permit, page 22621 of the Third Third final rule preamble explains that the procedures that should be followed are those found in 40 CFR 270.42(g). The Agency has made the determination that if a permit is simply being changed by substituting the F039 waste code for the multiple waste codes that heretofore were carried through with the leachate, then only a Class 1 permit modification is necessary. The procedures require the submission of a Class 1 modification by the date on which the waste becomes subject to the new requirements, August 8, 1990.

5. The question asked is what is required for adoption of the F039 waste code at a facility with a final Part B permit in an authorized State which has not adopted the new F039 waste code. The Agency points out that the new waste code is considered a HSWA regulation immediately effective in authorized States and implemented by EPA. Thus, the facility should submit a Class 1 modification as described in question number four above. This serves as a "HSWA rider" to the RCRA permit. (The RCRA permit may have been issued by the State, EPA, or jointly by both Agencies.) The Class 1 modification enables the facility to manage multisource leachate under the Federal HSWA program; therefore, the State need not take any action to recognize the effectiveness of the modification.

6. In response to the question of whether a final disposal facility must test for all F039 constituents even though the generator has certified, based on his knowledge of the waste, that certain parameters are not present, the Agency addressed the waste analysis requirements in the Third Third final rule preamble on page 22669. Treatment and disposal facilities may generally rely on information provided to them by generators.

Treatment and disposal facilities, however, must conduct periodic detailed physical and chemical analyses of their waste streams to assure that the appropriate Part 268 treatment standards are being met. Even though the Agency does not specify the frequency of such corroborative testing, this implies that a treatment or disposal facility must test for all F039 constituents at some time, even though the generator has certified, based on his knowledge, that certain parameters are not present. The Agency recognizes that waste analysis parameters and the frequency of testing are best established on a site-specific basis. Thus, a streamlined permit modification procedure was established in the Third Third final rule to allow appropriate testing requirements and frequencies to be incorporated into permits. Permit modifications and implementation procedures are discussed at page 22621 of the Third Third preamble.

7. The scenario presented in this question is analogous to that in question number 6. The disposal facility may generally rely on treater-supplied information, but is also required to perform periodic corroborative testing.

8. The question presented is whether a TSDF may dispose of its own solidified leachate in an onsite, non-MTR cell during the two-year national capacity variance. The Agency set out the requirements for wastes disposed of during a national capacity variance in the First Third final rule on August 8, 1988. These requirements include that wastes disposed in a landfill or surface impoundment during the period of a national capacity variance may only be placed in a unit meeting the minimum technological requirements (see 40 CFR 268.5(h)(2)).

9. In response to the question of whether the F039 waste code is immediately effective on May 8, 1990, the answer is no. The Agency delayed the effective date for the new F039 designation until August 8, 1990. This period of time, as indicated previously, should have been used by facilities to modify their permits to include the new waste code and their waste analysis plans to specify the constituents and the frequency of waste analyses. Please see the preamble discussion at page 22650. In response to the question of notifying and certifying requirements for F039 going for partial treatment, the Agency requires that all constituents and applicable treatment standards be included on the notification and certification, regardless of whether it is sent to a facility for partial or total treatment.

B. <u>TREATMENT VERIFICATION</u>

10. Under 40 CFR 264.13(a)(1), certain testing must occur prior to hazardous waste management; thus, owners or operators of treatment, storage, and disposal facilities must obtain detailed chemical and physical analyses of representative waste samples.

In addition, corroborative testing is now required on occasion even where testing data is supplied. Approved waste analysis plans will eventually specify the frequency of all testing.

11. In response to your question regarding the certification in 40 CFR 268.7(b)(5)(iii), if the analysis is performed by an off-site independent lab, who makes the certification that "I have been unable to detect the inorganic hazardous constituents...", such a certification can be made by the laboratory as an authorized representative. The laboratory would include this certification with the laboratory results to become part of the TSD's required paperwork under section 268.7.

12. This question concerns the use of the TCLP versus the EP for measuring compliance with the characteristic lead treatment standard and the characteristic and associated arsenic treatment standards. The TCLP may be used to measure compliance for these wastes. If the waste meets the treatment standard through analysis of the TCLP leachate, there is no requirement that the EP must also be used. If the waste does not meet the treatment standard through analysis of the TCLP leachate, the EP may be used. If the treatment standard is met according to the analysis of the leachate from use of the EP, then the waste complies with the treatment standards.

13. This question asks for an example of the new "referencing provision" for notifications. The preamble discussion on page 22668 and the regulatory language of amended section 268.7 specifies the information that is required on the notification when referencing treatment standards. In particular, the hazardous waste number (e.g., D003), the subcategory of the waste (e.g., reactive cyanide subcategory), the treatability group of the waste (e.g., nonwastewater), and the CFR Part, section, and paragraph where the treatment standard appears (e.g., section 268.42(a)) should all be on the notification when using the referencing provision. When the treatment standard is expressed as a specified technology, the applicable five-letter treatment code (e.g., INCIN) found in Table 1 of section 268.42 must also be listed on the notification.

C. DILUTION PROHIBITION

14. The scenario presented is that of a waste which has both organics and metals (for which treatment standards have been established) which is blended in a tank with other wastes prior to incineration. The resultant incinerator residues meet all organic and metal treatment standards. In response to the question of whether further treatment of the metals is required, the answer is no.

15. The scenario presented is that of an F006 waste containing both metals and cyanides above the treatment standards that is treated by stabilization. The treatment standards are met for both the metallic constituents and the cyanide. The question is whether this is considered to be impermissible dilution of the cyanide. The objectives of the dilution prohibition are to assure that prohibited wastes are actually treated rather than diluted, and to assure that prohibited wastes are treated by methods that are appropriate for that type of waste. The Agency considers stabilization of cyanide to be impermissible dilution -- that is, stabilization is not an appropriate method of treatment for cyanide. Stabilization reduces the leachability of the cyanide but does not destroy it. In the Second Third final rule, the Agency stated that stabilization is not an applicable technology for the treatment of the majority of cyanide wastes (54 FR 26609). This is supported by the legislative history of RCRA section 3004(m) which indicates that Congress intended that the "destruction of total cyanides would be required as a precondition to land disposal" (130 Congressional Record S9179, July 25, 1984, statement of Senator Chafee). The BDAT for cyanide is based on the performance of alkaline chlorination. This technology destroys the cyanide constituents and converts cyanides to carbon dioxide and nitrogen.

16. The question is what are the administrative requirements for characteristic wastes that are blended for fuel substitution, and in the course of blending, the characteristic is lost. Whenever a characteristic hazardous waste loses its characteristic (and thus its classification as a hazardous waste), for each shipment of blended fuel, a notification and certification must be sent to the appropriate EPA Regional Administrator or State authorized to implement the Part 268 requirements (see 55 FR 22688, section 268.9(d)).

17. The first question is whether cyanide is considered to be an "other inorganic." The answer is no. The Agency does not consider cyanide to be an other inorganic and thus suitable for stabilization (see response to question 15). The next question is whether a facility may stabilize cyanide wastes to meet treatment standards if they show that there is more than just dilution occurring. EPA maintains that merely reducing the leachability of cyanide is inadequate treatment; the destruction of cyanide is a precondition of land disposal. Stabilization, therefore, would not be allowed because there is no evidence of destruction of cyanide. An example is presented of treatment of a waste containing 5900 ppm total cyanide that is stabilized using a waste to additive ratio of one part waste to four parts additive. After stabilization, the waste meets the 590 ppm total cyanide treatment standard. The assertion is made that a ten fold reduction in cyanide concentration has occurred, and a maximum of less than half of that reduction is attributable to

dilution. The question is whether this is permissible. As has been established in this answer, and in answer number 15 above, this is not permissible because stabilization is not an applicable technology for the treatment of cyanide wastes.

18. The question asked is what is the difference between aggregation by the treater of a waste and aggregation by the generator; the example provided in the question concerns aggregation of EP toxic metals in industrial sewer systems. The answer is that there is no difference. In particular, toxic characteristic wastes ordinarily may not be impermissibly diluted (either by a generator or a treater) to meet the treatment standards if such wastes will be land disposed in a RCRA Subtitle C or D facility. However, if toxic characteristic wastes are treated or disposed of in certain systems regulated under the Clean Water Act or Safe Drinking Water Act, the dilution prohibition does not apply. Please see the preamble discussion at pages 22651-22659.

D. APPLICABILITY OF SPECIFIED TECHNOLOGY STANDARDS

19. The Agency agrees with the interpretation that the specified technology of "INCIN" does not include units such as boilers, furnaces, and cement kilns that burn hazardous waste for their fuel value or material recovery (units not regulated by the performance standards imposed on permitted incinerators). On the other hand, Subpart O includes among those considered to incinerate hazardous waste, owners or operators who burn hazardous waste in boilers or in industrial furnaces in order to destroy it or who burn hazardous waste in boilers or industrial furnaces for any recycling purpose and elect to be regulated under the subpart. Thus, the specified technology of "INCIN" does apply in these circumstances.

20. The Agency intended that the requirements of section 268.42(c)(3) (the requirement that lab packs are incinerated in accordance with the requirements of 40 CFR Part 264, Subpart O, and Part 265, Subpart O), not allow burning in boilers and industrial furnaces. The Agency intends that such lab packs be incinerated in units subject to the performance standards of 40 CFR 264.343 or 265.343.

22. The question seems to center around the fact that incineration is required for certain P and U codes, but when these specific wastes are constituents in listed wastes, incineration may not be required. The question asked is whether a performance standard (concentration-based standard) automatically exempts a waste from incineration (treatment standard expressed as a method). The fact that a concentration-based standard is specified does not automatically "exempt" a waste from incineration; in many cases, incineration may be the only technology that will achieve the concentration levels. When

a concentration level is specified, however, there is no requirement that incineration must be used. As far as the concern about air emissions, for the P and U wastes for which incineration was specified, the Agency has reason to believe that they will pose a significant air emission risk. Very few of these P and U wastes are found as constituents in listed wastes; when they are, it is much more difficult to determine the air emission risk for the listed waste matrix than it is for the listed P and U waste which is more likely to be an industrial grade chemical.

E. EFFECTIVE DATES

24. The question is when is the TCLP allowed for characterizing wastes for purposes of the land disposal restrictions. The EP should be used to characterize wastes for purposes of hazard determination in order to see if they are restricted under the Third Third final rule. This is true even after the TC final rule becomes effective on September 25, 1990. EPA interprets the statute such that wastes that exhibit the toxicity characteristic by the TCLP but not by the EP are not presently prohibited because such wastes are newly identified pursuant to RCRA section 3004(g)(4).

25. The question is whether RCRA corrective action wastes and CERCLA cleanup wastes should be granted a national capacity variance in the Third Third final rule, because such capacity variances were granted in the First and Second Third rules. The questioner is mistaken that national capacity variances were granted for RCRA/CERCLA actions in the First and Second Third final rules; no such variances were granted. Rather, national capacity variances were granted for soil and debris contaminated with First and Second Third wastes for which BDAT was incineration. A similar national capacity variance was granted in the Third Third final rule for soil and debris contaminated with Third Third wastes for which BDAT is incineration, vitrification, or mercury retorting.

26. The request is for an update on the status of K061 high zinc waste, as to whether it received an additional one-year variance in the Third Third final rule. Please see the discussion in the preamble at page 22599. Stabilization remains a permissible way of treating this waste for one additional year. If stabilization is used, the concentration-based standard must be met.

F. IDENTIFICATION OF APPLICABLE WASTE RESTRICTIONS

27. The questioner believes that there is an inconsistency between amended 40 CFR 262.11 (that indicates, it is asserted, a generator must determine if his waste is characteristic UNLESS it is listed), and amended 40 CFR Part 261 (which requires that the

determination of hazardous characteristic be made for all waste). There is no actual inconsistency between these parts of the regulation. Amended section 262.11 actually states two circumstances that will indicate whether the determination of hazardous characteristic must be made: (1) for purposes of compliance with 40 CFR Part 268 (since no further conditions are specified, the determination must be made for all solid wastes regardless of whether or not they are listed hazardous wastes) or, (2) if the waste is not a listed hazardous waste (this includes wastes that are not subject to the land disposal restrictions so the determination must be made only for solid wastes, not listed wastes).

28. An issue is raised in regard to a perceived discrepancy between the requirements of 40 CFR 268.35(j) and 268.9(b) regarding the rule that when a waste is a listed waste and a characteristic waste, the more specific treatment standard applies. The Agency has determined that treatment standards that are in effect for listed wastes are more specific than treatment standards in effect for characteristic wastes. The perceived discrepancy arises when the treatment standard for the listed waste is less stringent than the treatment standard for the characteristic waste, as is the case in the example of chromium in F006 (for which the treatment standard is 5.2 ppm) and EP toxic chromium (for which the treatment standard is the characteristic level of 5.0 ppm). The question is which treatment standard should be met for chromium in F006, the more specific, or the more stringent. The rule that the more specific treatment standard is applicable takes precedence, thus the treatment standard for chromium in F006 is 5.2 ppm, because it is the treatment standard for the listed (more specific) waste. Thus, the Agency sees no discrepancy between section 268.9(b) and section 268.35(j).

29. A request is made for an explanation of how to classify wastes as either characteristic wastes or listed wastes (when the waste is considered both characteristic and listed) for purposes of the notifications required under 40 CFR Part 268.7. In the case of a listed waste that is classified as a characteristic waste, the most specific treatment standard applies (55 FR 22659) and should be included on the notification. This means that if both the treatment standard for a listed waste and the treatment standard for a characteristic waste are in effect, then the treatment standard for the listed waste applies because it is more specific.

An example is presented of the listed waste K061, which contains lead. Since the treatment standards for K061 are currently in effect, the lead is subject to the K061 treatment standard rather than the treatment standard for EP toxic lead. The question is asked whether only the K061 waste code is included on the generator's biennial report and manifests, or

should both K061 and D008 (EP toxic lead) be included. Only the K061 waste code should be included on the generator's biennial report because the K061 treatment standard is more specific. Also, since K061 includes a treatment standard for lead, including the D008 waste code on the biennial report would cause a double-counting of the volume of lead waste actually being generated. Only the K061 waste code would be included on the notification required under 40 CFR 268.7 (as well as all other information required under section 268.7(a)(1)). Only the U.S. Department of Transportation (DOT) description is required on the manifest; there is no Federal requirement to list the EPA Hazardous Waste Number.

If the treatment standard for the listed waste is subject to an extension of the effective date (through a national capacity variance or case-by-case extension) and the treatment standard for the characteristic waste is in effect, then the treatment standard for the characteristic waste applies because it is the only standard that it is currently in effect. An example is presented of the listed wastes K048 - K052, which contain chromium. K048 - K052 wastes are subject to a six-month national capacity variance; consequently, the treatment standards would not be in effect until November 8, 1990. The treatment standard for EP toxic chromium is effective on August 8, 1990. During the period from May 8, 1990 until August 8, 1990, the waste is not subject to any treatment standards due to the three-month national capacity variance that was granted for all Third Third wastes. Therefore, the notification would include the applicable K048 - K052 waste code and the date upon which the waste is subject to the prohibitions (November 8, 1990), and all other information required under section 268.7(a)(3). The notification would also include the D007 waste code and the date upon which the waste is subject to the prohibitions (August 8, 1990), and all other information required under section 268.7(a)(3).

During the period from August 8, 1990 until November 8, 1990, the waste is subject to the treatment standard for EP toxic chromium since the effective date for this waste has passed (the K048 - K052 treatment standard is still not in effect). The notification would include the applicable K048 -K052 waste code and the date upon which the waste is subject to the prohibitions (November 8, 1990) as well as the D007 waste code and all other information required under section 268.7(a)(1). The waste, of course, must be treated to meet the D007 treatment standard prior to land disposal. When the effective date for the K048 - K052 wastes has passed (November 8, 1990), the waste will be governed by the waste code and treatment standards for the K048 - K052 wastes, since these treatment standards are now more specific, and the D007 waste code may be omitted from the notification.

EPA points out, however, that when the listed waste displays a characteristic that is not addressed as a constituent of

concern in the listed waste, the treatment standard for both the listed waste and the characteristic waste must be met (55 FR 22659). EPA applies this principle at the point of generation. Therefore, both the characteristic and the listed waste codes must be included on the notification.

31. Please see answer number 29.

32. The question is whether on September 25, 1990 (the effective date of the TC final rule for large quantity generators) a waste that becomes hazardous solely due to the change from EP testing to TCLP testing is subject to the treatment standards. Wastes that exhibit the TCLP characteristic but not EP toxicity are considered to be newly identified wastes. Newly identified hazardous wastes are not subject to the land disposal restrictions until treatment standards and prohibitions are promulgated by the Agency. This should not be considered an 'exemption' that one may or may not take advantage of; rather, newly identified wastes are a category of wastes that are subject to the schedule for promulgation of regulations found at RCRA section 3004(g)(4).

33. The question concerns the status under the land disposal restrictions of wastes that were previously exempted from the definition of hazardous wastes under the Bevill amendment. These wastes are considered to be newly identified wastes no matter when they may be generated. See also answer number 32. Both of these matters were discussed explicitly in the preamble to the final Third Third rule at pages 22660 and 22667.

G. INORGANIC SOLID DEBRIS

37. This question asks whether a material that is mixed with nonwastewater materials (such as soil) and defined as inorganic solid debris is subject to the treatment standard for the nonwastewater material. An example is given of a soil and cement debris mixture that carries the D006 waste code. In the example, the material is stabilized such that the solid fraction meets the treatment standard. In response to the question of whether the inorganic debris portion would be subject to the D006 treatment standard, it is difficult to determine from the example provided how the waste is being treated, so it is difficult to formulate an answer. It is unclear how this mixture of soil and debris could be stabilized to meet the treatment standard for D006 unless the cement debris was first crushed and mixed with the soil and then the soil/debris mixture was stabilized. If that is the case, then the debris is subject to the D006 treatment standard because it has become part of the soil matrix and the soil is subject to the D006 treatment standard.

The next question is whether the inorganic solid debris is subject to enforcement grab sampling for the purpose of testing the mix for meeting the treatment standards. Here again, the debris portion would of course be subject to grab sampling for purposes of enforcing the treatment standards (because the stabilized soil would be subject to grab sampling for enforcement purposes). It should be remembered, however, that if the debris portion is separated from the soil, the debris is subject to a two-year national capacity variance as "inorganic debris." Inorganic debris is not required to meet the D006 treatment standard until the effective date of May 8, 1992 (however, the notification requirements of 268.7(a)(3) apply, and if the debris is disposed in a landfill or surface impoundment, the unit must meet the minimum technological requirements).

38. The question posed is whether any organics (hazardous or nonhazardous) may be included in the classification of inorganic solid debris. Nonhazardous organic materials are not precluded from inclusion in the waste matrix, provided the material meets the definition of "inorganic solid debris" in section 268.2.

H. WASTE TRACKING

39. A scenario is presented where a characteristic waste is treated to below the characteristic level but the treated waste is sent to a Subtitle C land disposal facility. The question posed is whether the generator must notify the Agency as would be required if the waste were disposed at a Subtitle D facility. The answer is no; the notification should only be sent to the Subtitle C facility. Please see the preamble discussion at page 22662.

40. The Agency is presuming that in the scenario presented, a facility has a permit that includes a narrative description that allows disposal of incinerator ash. If this is the case, then the facility should be able to take any incinerator ash, whether it is from the incineration of Third Third wastes or not. In fact, EPA has encouraged the appropriate use of narrative descriptions in permits to address situations just like the one presented here. The question, however, is somewhat vague and would actually depend upon the wording of the specific permit language.

41. The question asked is how often must notifications for treated characteristic wastes (presumably that are disposed of in a Subtitle D facility) be sent to the Regional Administrator. Such notifications must be sent with each shipment. Please see section 268.9(d). As to whether the notification is waste stream specific, it is unclear exactly what is being asked. The information that must be provided in the notification is specified in section 268.9(d), and includes a description of the

waste as initially generated, including the applicable EPA Hazardous Waste Numbers and treatability group; in this sense, the notification is waste stream specific.

I. LAB PACKS

42. Clarification is requested on whether the simplified lab pack procedures set out in the Third Third final rule include burning in cement kilns. Cement kilns are not included under the new lab pack procedures. Rather, the simplified lab pack procedures only apply if the lab pack is burned in an incinerator in accordance with the performance standards set out in 40 CFR 264.343 (see section 268.42, Table 1, under "INCIN").

J. UNDERGROUND INJECTION

43. Since this question pertains to the land disposal restrictions program for underground injected waste, we will be working with the Office of Water to prepare a response. Should you need guidance in the meantime, please contact Bruce Kobelski at 382-7275.

K. SURFACE IMPOUNDMENTS

44. In response to the question of when a prohibited waste may be placed into a surface impoundment meeting minimum technology requirements (MTR), such a waste may be placed in a MTR unit if it: (1) meets all applicable treatment standards; (2) is subject to a national capacity variance or case by case extension; or, (3) is subject to the treatment surface impoundment exemption of 40 CFR Part 268.4. The next question is whether a restricted waste not meeting the treatment standards may be stored in a such a surface impoundment for up to one year provided that all residuals not meeting the treatment standards are removed within that year. The answer is no. Storage of hazardous wastes is only allowable in tanks or containers; placement of untreated hazardous waste into a unit for purposes of storage is actually land disposal and is therefore prohibited (unless section 268.4 is complied with). Please see RCRA section 3005(j)(11).

45. In response to the question of whether F039 that is placed in a permitted tank and is then pumped to a carbon adsorption unit and then back to the tank is considered treatment in a tank, the answer is yes. The treatment process described may be subject to the requirements of section 262.34, including the new waste analysis requirements of section 268.7, rather than the requirements of 40 CFR Part 264. A determination of how to classify this treatment process would best be made by Regional or State permit writers who are familiar with the specifics of the site.

I trust these answers will be helpful in dealing with the concerns of your membership. Since these answers were developed in a short period of time, the answers provided in this document represent the Agency's initial interpretation of the situation described by each question, and do not necessarily reflect the Agency's final position. Answers to many of your questions will appear in the forthcoming corrections notice to the Third Third final rule. If you have any further questions, please feel free to call Matthew A. Straus of my staff at (202) 382-6972.

Sincerely,

Sylvia K. Lowrance, Director
Office of Solid Waste

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

9554.1990(09)

AUG 13 1990

Mr. Phillip L. Comella
Senior Counsel
Chemical Waste Management, Inc.
3001 Butterfield Road
Oak Brook, Illinois 60521

Dear Mr. Comella:

This letter is in response to your letter dated July 13, 1990, concerning the final Third Third Rule. In your letter, you presented an example of a soil that is contaminated with U059, P093, and K001 and that exhibits the characteristic of lead (D008). As you stated in your letter, U059 and P093 are Third Third wastes and are subject to a technology-based standard of incineration. K001 is a First Third Waste with a numerical treatment standard based on incineration followed by stabilization of the ash. D008 is a Third Third waste with a numerical treatment standard based on stabilization. You have asked the following questions:

1. Because no capacity variance exists past August 8, 1990 for D008 wastes, must the soil be stabilized to meet the D008 treatment standard?

2. Because the K001 soil and debris variance expires August 8, 1990, must the soil be incinerated and then the resulting ash stabilized after that date?

3. If the soil did not contain K001, must the soil be stabilized?

The response to your first question is that the soil would not need to be stabilized in order to meet the treatment standard for D008 wastes. On page 22650 of the June 1, 1990 Federal Register notice, the Agency specifically states that if soil and debris are contaminated with Third Third prohibited wastes whose treatment standard is based on incineration (for example U059 and P093) and also with other prohibited waste whose treatment standard is based on an available type of technology (for example D008), the soil and debris would remain eligible for the national capacity variance. Therefore, in your example the soil would remain eligible for a capacity variance.

In response to your second question, the soil would have to be treated to meet the K001 treatment standard for the organics and metals after August 8, 1990. In response to your third question, if the soil was not contaminated with K001, then the soil would not have to be treated and would remain eligible for the national capacity variance. During a national capacity variance, if these wastes are disposed of in a landfill that unit would have to meet the minimum technological requirements as described in 3004(o).

Also, in your letter, you requested a clarification of whether the contaminated soil in question remains eligible for only the U059 and P093 variance or whether it also has a variance from the D008 treatment standard. You asked this question due to the preamble language on page 22660 stating that, for wastes that are subject to more than one treatment standard, during the period of a national capacity variance for one of the wastes, the treatment standards for any other waste codes that have not received such a variance must be met. The answer is that the Agency does distinguish between a contaminated soil and debris and other prohibited wastes. The example the Agency presents on page 22660 is only for listed wastes not for contaminated soil and debris. The Agency does not believe that adequate capacity exists to treat soil and debris. Therefore, a soil contaminated with U059, P093, and D008 would be eligible for the capacity variance but a sludge or listed waste that is contaminated with U059, P093, and D008 would have to be treated in order to comply with the treatment standard for D008.

If you should have any further questions, please do not hesitate to call Monica Chatmon-McEaddy, of my staff, at 475-7243.

Sincerely,

Sylvia K. Lowrance
Director
Office of Solid Waste

9554.1990(10)

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

AUG 23 1990

OFFICE OF
SOLID WASTE AND EMERGENCY RESPONSE

Mr. Douglas MacMillan, Director
Hazardous Waste Policy
National Solid Wastes Management Association
Suite 1000
1730 Rhode Island Ave., N.W.
Washington, D.C. 20036

Dear Mr. MacMillan:

In light of a question that has arisen about the responses to questions 21 and 42 in our letters to you of July 31 and August 8, 1990, I am sending this clarification to ensure that no misunderstanding exists about EPA's current position. Our responses to questions 21 and 42 indicated that where EPA has specified a particular technology as the treatment standard, wastes governed by that standard must be treated using that method. If the specified method is incineration, this requires treatment in a device subject to the 40 CFR Part 264 Subpart O regulations, or a device that makes the equivalency demonstration under 40 CFR 268.42.

This response is consistent with prior EPA pronouncements, such as the preamble to the Third Third rule (see, for example, 55 FR 22536, June 1, 1990). However, our responses to questions 21 and 42 may be misinterpreted because our statement on treatment standards and equivalency demonstrations addresses only prohibited waste; it does not address restricted waste sent to a device that is exempt under the Bevill amendment. A restricted waste sent to a Bevill device would not be prohibited so long as the residues from the waste processing remain within the scope of the Bevill amendment (55 FR 22660-61).

As EPA indicated in the proposal to regulate boilers and industrial furnaces (54 FR 43718, Oct. 26, 1989), we will examine the issue of how to determine if residues from co-processing Bevill raw materials and hazardous waste remain within the scope of any Bevill amendment exclusion. Also, please note that wastes sent to a Bevill device are still subject to the administrative tracking requirements for restricted wastes under the land disposal restrictions, but would not have to meet a specified BDAT standard before land disposal (55 FR 22662).

I trust that this clarification removes any uncertainty that may have arisen from our earlier responses. If you have further questions, please feel free to call Matthew A. Straus of my staff at (202)382-6972.

Sincerely,

Sylvia K. Lowrance, Director
Office of Solid Waste

9554.1990(11)

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

AUG 24 1990

OFFICE OF
SOLID WASTE AND EMERGENCY RESPONSE

Mr. Keith D. Colamarino
Senior Project Engineer
REMCOR, Inc.
701 Alpha Drive
P. O. Box 38310
Pittsburgh, PA 15238-8310

Dear Mr. Colamarino:

In your letter of August 10, 1990, you expressed concern with regard to the correction notice in the August 2, 1990 Federal Register (55 FR 31387). The statement which you quoted from page 31388 of the August 2 notice is somewhat misleading. The statement should have said that the Extraction Procedure (EP) will no longer be used for hazardous waste identification purposes.

As you are aware, the treatment standards for certain lead and arsenic waste were based on the EP, and therefore, either the EP or the Toxicity Characteristic Leaching Procedure (TCLP) can currently be used to demonstrate compliance under Land Disposal Restrictions (LDR) for D006 (arsenic) and D008 (lead) wastes. Since the EP can still be used for this purpose, it is so noted in the regulatory language of the LDR regulation.

Currently, the Waste Treatment Branch is amending the regulatory language of the May 8, 1990 Third Third final rule (55 FR 22520, June 1, 1990) to resolve this issue. This will be done as part of a correction notice that will state that Appendix I of Part 268 (TCLP) or SW-846 test method 1310 (EP) may be used for measuring compliance. This correction notice is expected to be published in the Federal Register before the end of the year. Until the CFR is revised, the EP can be found in current CFR (Part 261, App. II) and as Method 1310 in SW-846, "Test Methods for Evaluating Solid Waste (Physical/Chemical Methods)," Third Edition; thereafter, the EP can readily be found only in SW-846.

I hope that this letter resolves any inconsistencies created by the August 2 correction notice. If you would like to discuss this further or have other concerns, please contact the Characteristics Section of the Office of Solid Waste at (202) 475-8551.

Sincerely yours,

Sylvia K. Lowrance
Director
Office of Solid Waste

2. Point of Generation

Two process units, one producing a strong acidic solution with a pH less than 2.0 and another producing a strong basic solution with a pH greater than 12.0, are individually joined by short lengths of pipe to a common collecting pipe. These solutions, upon contact, neutralize one another. This co-mingled wastestream no longer exhibits the characteristic of corrosivity. Would this waste be considered hazardous and subject to land disposal restrictions or, due to its neutral status only be subject to RCRA Subtitle D regulation?

The facts as given show two hazardous wastes with the characteristic of corrosivity. The points of generation are both upstream of the combination in the common collecting pipes. These wastes are subject to the land disposal restrictions. Removing the characteristic of corrosivity by combining these wastes can satisfy the treatment requirement of deactivation set out in 40 CFR 268.42, Table 2. Dilution may not be appropriate if there are other treatment requirements for the waste matrices. See 55 FR 22549, 22659 (June 1, 1990). The commingled wastestream, if not otherwise hazardous, is not subject to any other Subtitle C regulations, including permitting.

Contact: Debbie Wood, OSW (202) 382-7937
Research: Steve Baker

NOV 20 1990

Mr. William J. Ziegler
Vice President of Health,
Safety and Environmental Affairs
ThermalKEM, Inc.
454 S. Anderson Rd.
BTC 532
Rock Hill, SC 29730

Dear Mr. Ziegler:

I am writing in response to your letter, dated October 19, 1990, requesting clarification of the wording in the Third Third final rule regarding the alternative treatment standards for lab packs. The point requiring clarification is found at 40 CFR 264.316(f) and 40 CFR 265.316(f) which specifies that "persons who incinerate lab packs according to the requirements in 40 CFR 268.42(c)(1) may use fiber drums in place of metal outer containers. Such fiber drums must meet the DOT [Department of Transportation] specifications in 49 CFR 173.12..." You requested clarification of whether the word "drum" precludes the use of other acceptable DOT container types, such as fiber and wooden boxes.

The Agency added this provision allowing use of fiber (rather than metal) drums for overpacking lab packs based on several comments received on the Agency's proposed approach (see, for instance, comment number LD12-00110 from ThermalKEM/CyanoKEM, comment number LD12-00124 from Rollins Environmental Services, and comment number LD12-00172 from the Hazardous Waste Treatment Council). Commenters stated that lab packs destined for incineration are usually packaged in fiber packs that are DOT approved under 49 CFR 173.12. These fiber packs are utilized since the container can be incinerated without opening or emptying the container. Commenters urged EPA to accept this DOT allowance for fiber packages for lab packs, and to reference the citation to 49 CFR 173.12 instead of, or in addition to, the 40 CFR 264.316 and 265.316 citations which refer to requirements for lab packs overpacked in metal drums that were primarily designed for landfilling untreated wastes.

The DOT requirements at 49 CFR 173.12 presents criteria to be used in selecting a proper outside package. Paragraph (b) of 49 CFR 173.12 states:

> The outside packaging must be a DOT specification metal or fiber drum. It may also be a polyethylene drum capable of withstanding:
>
> 1. The vibration and compression tests specified in 178.19-7(c)(1) and (2), and
>
> 2. A four foot drop test as specified in 178.224-2(b).

The Agency found the commenters' argument about the danger posed by opening metal drums and emptying inner containers prior to incineration persuasive. The Agency agreed that if fiber drums were used, the entire lab pack unit could be incinerated. Furthermore, the Agency agreed that the DOT requirements for the structural integrity of fiber drums would assure that lab packs were transported in a safe container to incinerators. Therefore, the provision was made in 40 CFR 264.316(f) and 265.316(f) that fiber drums were acceptable, and the reference to 49 CFR 173.12 was incorporated into these sections.

As to a clarification of 49 CFR 173.12, it is the Agency's understanding that when DOT regulations specify <u>drums</u>, that is indeed what is meant. Thus, fiber or wooden boxes or other containers not meeting the DOT specifications in 49 CFR Parts 178 -- 199 for <u>fiber drums</u> may not be used as outer containers for lab packs. The DOT specifications, however, include several types of fiber drums, and any of these would be acceptable as outer containers for lab packs.

Additionally, you request clarification of the effect the performance packaging specifications proposed in HM181 will have on lab packs when they are implemented in December of 1990. Based on the Agency's understanding of the proposed specifications, they should have very little impact on the lab pack requirements. The performance-oriented packaging provisions will specify criteria for fiber drums (as well as other DOT outer containers) based on the DOT hazard classification of the materials being transported (e.g., flammable liquids). The DOT expects that such criteria will add flexibility to the requirements for outer containers inasmuch as they may be built in any design, or of various materials, so long as they meet the criteria for that particular hazard classification. As to the expected effect the performance-oriented packaging provisions will have on lab packs, the Agency foresees that the generator may be required to give additional attention to packing only wastes that fit within one DOT hazard classification in the lab pack; however, given that all the wastes included in the Appendices to 40 CFR 268 are capable of being incinerated, the

Agency expects that most of these wastes will fall within one or two of the DOT hazardous classifications (i.e., flammable liquids, flammable solids).

I hope this letter clarifies the meaning of "fiber drum" as it pertains to lab packs regulated under the land disposal restrictions. If additional information is needed about current DOT specifications for fiber drums, the DOT hazard classifications, or proposed HM181, please contact DOT directly. If additional information is needed about the alternative treatment standards for lab packs, please call Rhonda Craig of EPA's Waste Treatment Branch at (703) 308-8434.

Sincerely,

Sylvia K. Lowrance
Director
Office of Solid Waste

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY 9554.1990(14)
WASHINGTON, D.C. 20460

OFFICE OF
SOLID WASTE AND EMERGENCY RESPONSE

DEC 27 1990

Mr. Kevin S. Dunn
Project Manager
Environmental Policy Center
Law Companies Environmental Group
1828 L Street, N.W., Suite 711
Washington, D.C. 20036

Dear Mr. Dunn:

This letter is in response to your letter dated November 16, 1990 requesting clarification on certain issues regarding treatment standards for certain mixed radioactive wastes.

With regards to Question 1 (as referred to in your letter), "placement in a heavy stainless steel box and welding the box closed" would not be considered to comply with the standard identified as "MACRO" in 268.42 Table 1 (55 FR 22693 (June 1, 1990). This standard is quite clearly described in regulatory language in Table 1 as "Macroencapsulation with surface coating materials such as polymeric organics (e.g., resins and plastics) or with a jacket of inert inorganic materials to substantially reduce surface exposure to potential leaching media. Macroencapsulation specifically does not include any material that would be classified as a tank or container according to 40 CFR 260.10" (emphasis added). Paraphrasing the regulatory language, compliance with the macroencapsulation standard explicitly prohibits containerization of wastes or materials in a tank or container meeting the regulatory criteria under the 40 CFR 260.10.

This is not the same situation as where the U.S. Naval Nuclear Propulsion Program wanted to land dispose defueled submarine reactor compartments. The information provided by the Navy indicated that the "jacket of inert inorganic materials" (i.e., the steel surrounding the lead) could "substantially reduce surface exposure to potential leaching media" and that due to their size and structure these compartments would not be classified as a tank or container according to the definitions in 40 CFR 260.10. EPA purposely modified the proposed standard for D008 radioactive lead solids to include "jackets of inorganic materials" in order to specifically account for these submarine reactor compartments. EPA felt that it was necessary

to add the language to the definition of macroencapsulation to prevent the "jacket of inorganic material" from being interpreted as including materials that are merely containers or drums.

With regards to the plastic coated, lead lined gloves in Question 2 of your letter, they would be considered to comply with the standard identified as "MACRO" provided that none of the lead is exposed (i.e., the entire surface of the lead is coated) and provided that the coating provides a substantial reduction in surface exposure to potential leaching media (i.e., the gloves should not be expected to be exposed to physical, chemical, or thermal conditions where the integrity of the surface coating could likely be breached). With regards to the lead weights in Question 2, the wastes may be considered to meet the specified method of "MACRO", as generated, provided the stainless steel surrounding the lead weights does not meet the definition of a tank or container and provided a substantial reduction in surface exposure to potential leaching media can be determined.

The standard identified as "MACRO" currently applies only to D008 wastes fitting the description of "Radioactive Lead Solids" as defined in Table 3 of 268.42 (55 FR 22700, (June 1, 1990)) (e.g., those wastes containing elemental lead forms of lead or that act specifically as radioactive shielding). This standard is currently not applicable to the D006 wastes referred to in Question 3. These D006 wastes would have to comply with the concentration-based standard for D006 which is based on a TCLP analysis. Verification of compliance with this standard would require crushing or grinding of the material and compliance cannot be achieved by dilution. Thus, macroencapsulation processes would not comply with existing BDAT standards for metals.

Other than a treatability variance your D006 waste may be macroencapsulated if a no-migration petition is granted. As of today, EPA had only granted a two-year capacity variance for mixed wastes from the statutory deadline prohibiting the disposal of mixed wastes scheduled in the First, Second, and Third Third wastes. Previous capacity variances issued for mixed wastes scheduled in the Solvent and Dioxin Rule and the California List Wastes Rule had expired and thus, these mixed wastes are banned from land disposal units unless they meet the promulgated treatment standards.

I trust this letter addresses all your concerns and clarifies any outstanding issues you may have had on the applicability of the treatment standard identified as "MACRO". If you need further clarification, please contact Richard Kinch, Chief of the Waste Treatment Branch, at (703) 308-8434.

Sincerely,

Sylvia K. Lowrance
Director
Office of Solid Waste

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

9554.1991(01)

JAN 8 1991

Richard J. Pastor
Director, Government Relations
Envirosafe Mgt. Services, Inc.
P.O. Box 833
Valley Forge, Pennsylvania 19482-0833

Dear Mr. Pastor:

This letter is in response to your letter dated October 25, 1990, concerning a possible inconsistency in the Agency's policy on the regulation of cyanides under the Land Disposal Restrictions Program of RCRA. In particular, you indicated specific instances where you believe the Agency has been inconsistent in its position on the use of stabilization for wastes containing cyanides. I hope that this letter will help to clarify this matter. In that vein, I would like to review the points you raised in some detail, and to provide an explanation of our views, particularly as to the full meaning of preamble language in the Land Disposal Restriction rules.

First, you referred to the promulgation of the First Third Land Disposal Restrictions (53 FR 31152) for F006 wastes, where the Agency stated that the treatment standards for F006 were based on stabilization using cement kiln dust and that the use of other agents in the stabilization process is not precluded. Then you noted the statement that EPA does not consider stabilization an appropriate BDAT for cyanides. While you did not discuss these references any further, you seemed to imply that when compared to each other, an inconsistent policy on cyanides could be seen.

However, a closer examination of the First Third Land Disposal Restrictions shows that the Agency did establish treatment standards based on stabilization, <u>but only for the metals</u> contained in F006. (Note: The First Third LDR rule

promulgated treatment standards for cyanides in F006 wastes as "reserved"). The preamble for F006 wastes (53 FR 31152, column 3) specifies the Agency's position on stabilization of cyanides in F006 wastes versus stabilization of metals by stating; "EPA does not consider stabilization--BDAT for the metals in this waste--to be a demonstrated technology for the treatment of cyanide." This statement is, to my reading, an accurate reflection of EPA's current position.

Your letter also emphasized some of the Agency's language in the Second Third LDR rule (54 FR 26609) as follows: "The Agency does not agree with commenters that stabilization is an applicable technology for the treatment of the majority of cyanide wastes. While some data may indicate that stabilization processes appear to reduce the leachability of some forms of cyanides, the Agency contends that destruction of cyanide is clearly a preferred treatment method." Your added emphasis appears to imply that the Agency was trying to indicate a degree of uncertainty about its position. Your letter then quotes a later section of the preamble as follows: "... based on the review of the available treatment data, the Agency believes that the conventional cyanide treatment technologies provide substantial treatment of both the amenable and total cyanide concentrations as measured by the cyanide amenable to chlorination test in method 9010 (EPA Publication SW-846."

Emphasis of these passages appears to give the impression that the Agency was stressing the use of the test method to meet the numerical treatment standard as being more important than destroying the cyanide. However, the language that directly precedes the emphasized phrase sheds light on how to read the quoted passage, i.e., that the Agency believes that conventional cyanide treatment technologies provide the necessary treatment to achieve these standards. This is in agreement with the legislative history (cited in our preamble and your letter) that "destruction of total cyanides would be required as a precondition to land disposal."

Certainly, the Agency is on record as saying that "other technologies that can achieve these concentration based standards are not precluded from use." However, this statement cannot be taken alone, and all other applicable regulatory language must be considered. In particular, section 268.3(a) states that "... no generator, transporter, handler, or owner or operator of a treatment, storage, or disposal facility shall dilute a restricted waste as a substitute for adequate treatment to achieve compliance

with subpart D of this part, ..." Given the Agency's firm position that cyanides must be destroyed and that stabilization, as cyanide treatment, is considered impermissible dilution based on the current lack of substantive evidence of cyanide destruction in the stabilization process, use of general statements to contradict specific determinations on BDAT standards is not the appropriate reading of our intentions.

Your letter also refers to a letter dated June 13, 1990, from Douglas Mac Millan of NSWMA to Richard Kinoh of EPA. The example referred to in your letter as question number 15 is really NSWMA's question number 17, a hypothetical situation for stabilization of cyanides not supported by any submitted data. Our July 31, 1990, response was that "destruction of cyanides is a precondition for land disposal" and that the situation presented in question number 17 "is not permissible because stabilization is not an applicable technology for the treatment of cyanide wastes." I have enclosed a copy of EPA's response.

The Agency has established a treatment standard for the majority of cyanide wastes at 590 mg/kg total cyanides based on data from well-designed, well-operated cyanide destruction technologies. (Lower standards have been established for a few cyanide wastes.) As noted in the administrative record for the Second Third LDR Rule, data from certain land disposal facilities indicate that the majority (85%) of F006 wastes were below the original proposed treatment standard of 110 mg/kg total cyanides. In fact very few wastes that were treated for cyanides indicated total cyanides of 5,900 mg/kg (as in question 17) or as much as 1% (as in your intended waste acceptance policy). Perhaps these cyanide wastes that you were considering for stabilization did not receive efficient cyanide treatment in the first place.

Your reference to the "on-going" stabilization of F001, F002, F003, F004, and F005 solvents does not really bear upon the Agency's position on cyanides. Given what we consider to be a clear indication of our position on the stabilization of cyanides in regulatory discussions, the determinations of BDAT for these solvents should not raise any indirect ambiquities on our separate decisions for cyanide.

I trust that the fuller explanations above will assist you in working with the treatment standards for cyanides as a precursor to land disposal. I encourage you to continue to discuss this matter more fully with members of my staff if any questions

still remain. In that event, I suggest that you contact Richard Kinch, Acting Chief of the Waste Treatment Branch (703-308-8434). I am certain that Envirosafe shares our concern about the safe and effective treatment and disposal of cyanides. We look forward to continued mutual efforts in this regard.

Sincerely,

/S/

Sylvia K. Lowrance
Director
Office of Solid Waste

Enclosure

RCRA/SUPERFUND HOTLINE MONTHLY SUMMARY

JANUARY 1991

1. Classification of Leachate Contaminated Ground Water

Hazardous waste migration from an active Subtitle C landfill has resulted in local ground water contamination. As part of a corrective action at the facility, 400-gallons of contaminated ground water are withdrawn from the uppermost aquifer and will be sent off-site for underground injection. During the course of the clean-up, the facility determined that a leachate resulting from the disposal of a variety of listed hazardous wastes is responsible for the contamination. In accordance with the EPA "contained-in" policy, the ground water must be managed as a hazardous waste, namely the leachate from the landfill. For the purposes of compliance with the Land Disposal Restrictions in 40 CFR Part 268, what hazardous waste classification and treatment standard would apply to the ground water?

The leachate meets the definition of a multi-source leachate that is derived from the treatment, storage or disposal of more than one listed waste, excluding F020-F023 and F026-F028. In the Third Third Land Disposal Restrictions rule promulgated on June 1, 1990 (55 FR 22520), EPA announced its decision to eliminate the practice of classifying multi-source leachate according to the various listed wastes from which it was derived. In this rule, the Agency established a separate treatability group for multi-source leachate, classified by a single waste code, F039. (55 FR 22619) The effective date for this new designation was August 8, 1990, at which time the landfill facility was required to classify its ground water, or more precisely, the multi-source leachate contained in the ground water, as F039. (55 FR 22650)

Although the F039 waste classification became effective August 8, 1990, EPA granted a two-year national capacity variance until May 8, 1992, for F039 wastewaters that are destined for underground injection (40 CFR Part 148.16). The extension of the effective date was based upon EPA's assessment that current treatment capacity for underground injected F039 wastewaters was insufficient to require an immediate LDR prohibition effective date. (55 FR 22646) During the period in which the variance is in effect, the F039 ground water mixture, if disposed in a landfill or surface impoundment, must be managed in a unit that satisfies the minimum technological standards in RCRA Section 3004(o)(1)(A) [see 40 CFR 268.5(h)(2)]. After May 8, 1992, the F039 ground water must meet the F039 treatment standards for all applicable constituents as described in 40 CFR Part 268.43, Table CCW, prior to underground injection. (55 FR 22623-22626)

Source: Rhonda Craig, OSW (703) 308-8462
Research: Karen Alex

RCRA/SUPERFUND HOTLINE MONTHLY SUMMARY

APRIL 1991

1. Treatment of Reinjected Ground Water Resulting from RCRA Corrective Action

For the purposes of RCRA corrective action, must all contaminated groundwater that is withdrawn from an underlying drinking water aquifer be treated to BDAT standards established in the land disposal restrictions (40 CFR Part 268) prior to reinjection of the water into the same aquifer?

No. There are two provisions which potentially restrict or prohibit injection of contaminated groundwater: the Land Disposal Restrictions(LDRs) under RCRA Section 3004 and the injection prohibited under RCRA Section 3020(a).

Groundwater which is not contaminated with "hazardous waste" is not subject to either LDRs or Section 3020. Groundwater which contains hazardous waste, but for which there is no LDR standards, is subject only to Section 300.

RCRA Section 3020(a), prohibits the injection of a hazardous waste by underground injection into or above an aquifer formation which contains an underground source of drinking water. Section 3020(b) specifies that such prohibition does not apply to contaminated groundwater which is reinjected into the aquifer from which it was withdrawn if three criteria are met: 1) it is part of corrective action required under RCRA or CERCLA intended to clean-up such contamination; 2) the contaminated groundwater is treated to substantially reduce hazardous constituents prior to reinjection; and 3) the proposed corrective action will be sufficient to protect human health and the environment upon completion.

Groundwater which is contaminated by a hazardous waste for which there are promulgated LDRs are also sub ject to the prohibition in Section 3020(a). Moreover, EPA has interpreted the waiver provision under Section 3020(b) to also be available for these wastes. See OSWER Directive #9234.1-06. Under this interpretation, the Section 3004 LDRs otherwise applicable to disposal of contaminated groundwater have been superceded, where the waste is disposed by underground injection, by the restrictions on such disposal under Section 3020. Thus, if the implementing agency at a particular site finds that the treatment of groundwater as part of the response action has "substantially reduced" the hazardous consituents and the response action is "sufficient to protect human health and the environment," then the groundwater may be reinjected even if it does not meet otherwise applicable BDAT requirements.

Source: Dave Fagan, OSW (202) 382-4497
Research: Karen R. Alex

RCRA/SUPERFUND HOTLINE MONTHLY SUMMARY

DECEMBER 1991

2. SW-846 Test Methods

Are the test methods published in "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," known as SW-846, required to show compliance with 40 CFR Part 268 land disposal restrictions (LDR) in situations where the treatment standard is expressed as a concentration? Are SW-846 methods required to show compliance with Part 261, Subpart C hazardous waste characteristics?

Generally, the test methods found in SW-846 are not required but are intended to serve as guidance. EPA recommends these methods for evaluating solid waste and the Agency will use the recommended methods in enforcement situations. There are a handful of exceptions to this rule where specific test methods are required.

Compliance with LDR for wastes that have a treatment standard expressed as constituent concentrations in wastes (CCW, §268.43) can be shown using any appropriate method. This section does not specifically require the use of SW-846 methods. If the waste treatment standard is expressed as constituent concentrations in waste extracts (CCWE, §268.41), then the Toxicity Characteristic Leaching Procedure (TCLP), which is specifically referenced in §268.41(a), must be performed. Following that, however, any appropriate method may be used to determine concentrations of hazardous constituents in the extract and to show compliance with LDR.

Similarly, in identifying Part 261, Subpart C characteristics, §262.11 provides that a generator has the option of applying knowledge of the hazardous characteristics of the waste in light of the materials or the processes used, or testing the material to determine whether or not it is a hazardous waste. If the generator chooses to test, he must use the method prescribed in Subpart C of 40 CFR Part 261. The toxicity characteristic, for example, references method 1311, the TCLP, which must be used to obtain an extract of the waste. Following that, as with LDR, any appropriate method may be used to analyze the extract for hazardous constituents. In determining the characteristic of ignitability, the regulations reference two specific test methods, the Pensky-Martens (method 1010) and the Setaflash (method 1020), either of which must be employed when testing. The characteristic of corrosivity also references a specific test method. If the generator chooses to test the pH of a given waste stream, method 9040 must be used.

Several other regulatory sections also require the use of SW-846 test methods. For example, in completing a petition to delist a waste from a specific facility, SW-846 methods must be used in accordance with §260.22.

9555 – LAND DISPOSAL RESTRICTIONS RESERVED

OVERVIEW OF THE EFFECT OF THE LAND DISPOSAL RESTRICTIONS ON RADIOACTIVE MIXED WASTE

The 1984 Hazardous and Solid Waste Amendments (HSWA) to the Resource Conservation and Recovery Act (RCRA) restrict the land disposal of hazardous wastes, including mixed waste. This overview outlines the major aspects of the land disposal restrictions as they apply to mixed wastes. A more detailed analysis is found in the attached guidance document.

WHAT IS MIXED WASTE?

Mixed waste is defined as a waste mixture that contains both radioactive materials subject to the Atomic Energy Act (AEA) and a hazardous waste component regulated under RCRA. The hazardous waste (i.e. the non-AEA material) can be either a listed hazardous waste in Subpart D of 40 CFR 261 or a waste that exhibits any of the hazardous waste characteristics identified in Subpart C of 40 CFR Part 261.

WHAT MIXED WASTES ARE CURRENTLY SUBJECT TO THE LAND DISPOSAL RESTRICTIONS (LDRS)?

The LDR regulations currently apply to all hazardous waste, including mixed waste, listed or identified as of November 8, 1984 under RCRA 3001. They also apply to several hazardous wastes newly listed after November 8, 1984 for which treatment standards have been developed. Treatment standards for radioactive waste mixed with solvents (F001 - F005), dioxins (F020 - F023 and F026 - F028) and California list wastes are currently effective. EPA deferred issuing treatment standards for radioactive waste mixed with scheduled hazardous waste until the promulgation of the last scheduled LDR rule on May 8, 1990 (the so-called Third Third rule). After May 8, 1990, all mixed wastes were restricted from land disposal. However, for all mixed waste addressed in the Third Third rule, EPA granted a two-year national capacity variance based on the lack of treatment capacity. This variance delays the imposition of treatment requirements for land disposal until May 8, 1992. (See 55 FR 22660, June 1, 1990.)

AFTER MIXED WASTES BECOME SUBJECT TO THE LDRS CAN THEY BE STORED?

After the effective date, the HSWA amendments prohibit any storage of a land disposal restricted waste, including mixed waste, except for the sole purpose of accumulating sufficient quantities in a tank or container to facilitate proper recovery, treatment, or disposal of that waste. (See 40 CFR 268.50, the storage prohibition.) There are, however, a few instances where continued storage of LDR waste is allowed in tanks or containers:

(1) Continued storage of wastes first placed in storage prior to the applicable LDR date for that waste, until the waste is removed from storage.

Variance petitions should be sent to the U.S. EPA Administrator and the Office of Solid Waste (see 40 CFR 268.44).

(For further discussion on the extensions and variances, see pages six through eight of the attached document.)

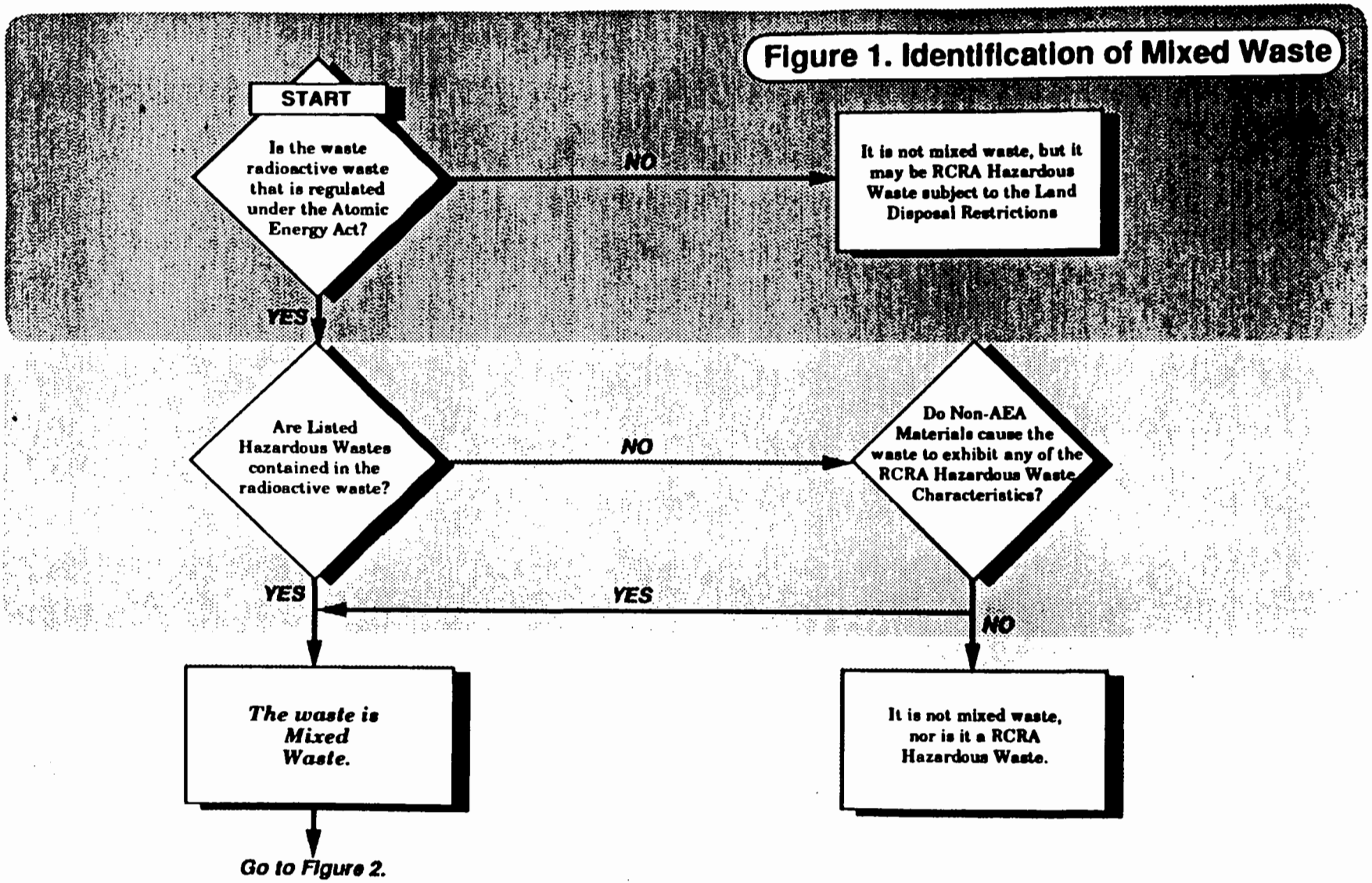
HOW DOES STATE LAW APPLY TO MIXED WASTE?

Like other RCRA requirements related to mixed waste, the LDRs will apply only in States where EPA administers the RCRA program (unauthorized States) or in States that have adopted mixed waste requirements as part of their authorized State programs. In other States, the LDRs will not apply to mixed waste until the State becomes authorized for mixed waste. States may implement their own disposal restrictions as a matter of State law if such actions are more stringent or broader in scope than the actions of Federal programs (RCRA section 3009 and 40 CFR 271.1(i)). In States with more stringent or broader in scope restrictions, State law would govern. Twenty-two States were RCRA authorized for mixed waste as of September 1, 1990. For a list of States with mixed waste authorization refer to pages twelve and thirteen of the attached document.

FURTHER INFORMATION

1. See flow chart on the following page
2. Look at attached guidance document
3. Call your Regional EPA or State contact

Defining Mixed Radioactive and Hazardous Waste for the Purposes of Complying with the Land Disposal Restrictions (40 CFR Part 268)



NOTE

This flowchart is a simplified version of the Land Disposal Restriction regulations of 40 CFR Part 268, and should not be used in lieu of those regulations.

Regulation of Mixed Wastes Under the RCRA Land Disposal Restrictions Program

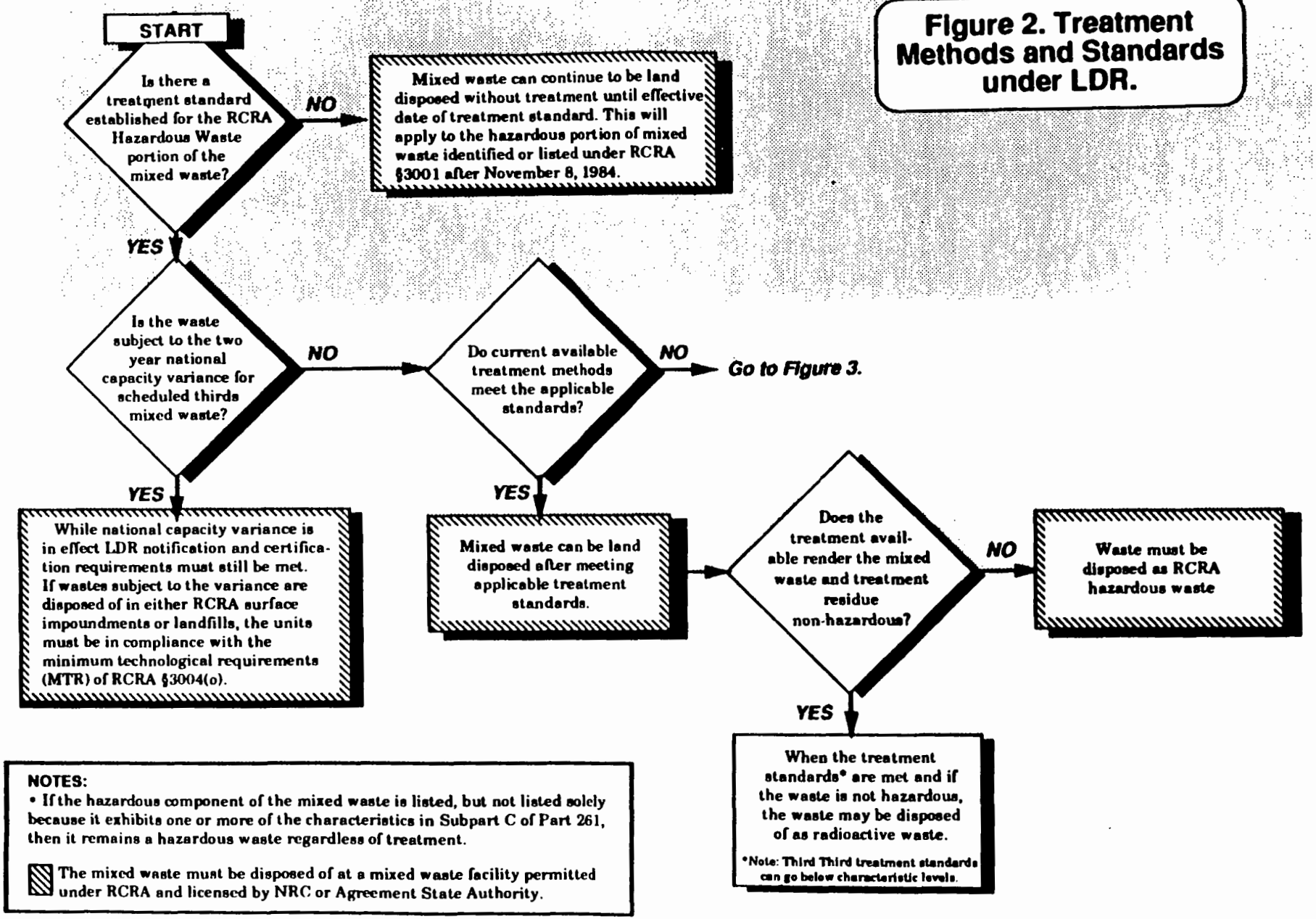
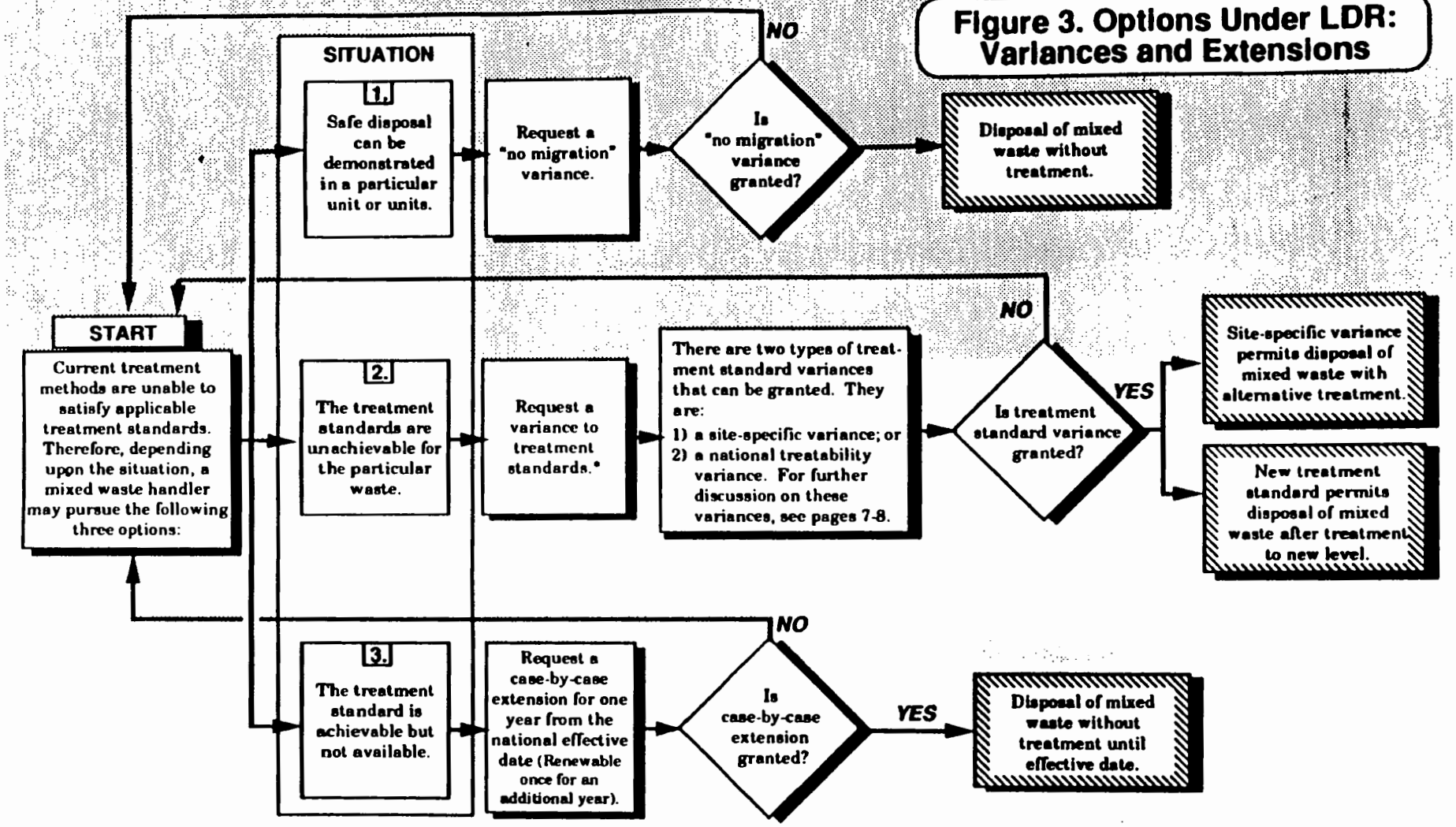


Figure 2. Treatment Methods and Standards under LDR.

Figure 3. Options Under LDR: Variances and Extensions



NOTES:
While the case-by-case and national capacity variances are in effect, LDR notification and certification requirements must still be met. Also, if wastes subject to the exemptions are disposed of in either surface impoundments or landfills, the units must be in compliance with the minimum technological requirements (MTR) of RCRA, Section 3004(o).

The mixed waste must be disposed of at a mixed waste facility permitted under RCRA and licensed by NRC or Agreement State Authority.

* NOTE: If the treatment standard is technology-based then apply for an equivalent treatment method pursuant to 40 CFR §268.42(b). If the treatment standard is concentration-based then pursue a treatment standard variance (40 CFR §268.44).

GUIDANCE

RESOURCE CONSERVATION AND RECOVERY ACT LAND DISPOSAL RESTRICTIONS EFFECTS ON STORAGE AND DISPOSAL OF COMMERCIAL MIXED WASTE

Executive Summary

The 1984 Hazardous and Solid Waste Amendments (HSWA) of the Resource Conservation and Recovery Act (RCRA), through the land disposal restrictions (LDR), prohibit disposal of hazardous wastes that have not been pretreated to standards required by EPA, unless the wastes are subject to an exemption. The HSWA amendments also prohibit any storage of a land disposal restricted waste, except for the sole purpose of accumulating sufficient quantities to facilitate proper recovery, treatment, or disposal of that waste.

The LDRs may impact the day-to-day management of mixed waste by generators. Mixed waste is defined as a waste that satisfies the definition of radioactive waste subject to the Atomic Energy Act and contains hazardous waste that is either listed as a hazardous waste in Subpart D of 40 CFR Part 261 or exhibits any of the hazardous waste characteristics identified in Subpart C of 40 CFR Part 261. The hazardous component of mixed waste is regulated under RCRA.

LDR regulations currently apply to all mixed radioactive and RCRA hazardous wastes. The first group of mixed wastes subject to the LDR regulations were mixed radioactive and RCRA hazardous wastes that contain spent solvents, dioxins, or California list wastes. The remaining RCRA hazardous wastes were placed in three groups known as the First, Second, and Third Thirds. EPA deferred issuing treatment standards for radioactive waste mixed with First Third and Second Third hazardous wastes until the statutory effective date for the Third Third, May 8, 1990. On May 8, 1990, all mixed wastes containing hazardous wastes listed or identified as of November 8, 1984 were restricted from land disposal. However, mixed wastes that contain scheduled third wastes were granted a two-year national capacity variance which is explained later in the discussion. (Please note that mixed wastes granted a capacity variance are still considered restricted since scheduled third mixed wastes disposed in RCRA surface impoundments or landfills during the two-year period can only be placed in units that meet certain minimum technological requirements. Also during the variance, these wastes are subject to 40 CFR 268.7 waste analysis and recordkeeping requirements, and California list prohibitions if applicable.)

When the variance expires on May 8, 1992, all mixed wastes will be prohibited from storage except to accumulate sufficient quantities to facilitate proper recovery, treatment or disposal. (See 40 CFR 268.50, the storage prohibition.) There are, however, a few exceptions to the storage prohibition as indicated later in the discussion. Mixed wastes containing spent solvents, dioxins or California list wastes are currently subject to the storage prohibition.

EPA is aware that there is currently a shortage of treatment and disposal capacity for mixed waste which may cause mixed waste handlers to be out of compliance with the storage prohibition. Therefore, EPA plans to issue a policy statement regarding this matter in the fall of 1990.

greater than or equal to 50 ppm, and both liquid and nonliquid hazardous wastes containing designated concentration levels of halogenated organic compounds (HOCs).

(Most of these wastes are subsumed by other waste codes in the scheduled thirds (i.e., if a treatment standard has been promulgated for a California list waste in the scheduled thirds then the more waste-specific treatment standard takes precedence over the California list prohibition), and so the California list prohibitions were largely superseded on May 8, 1990, although the California list prohibitions may continue to apply during the period of a national capacity variance for scheduled waste. For example, if a Third Third mixed waste also meets the definition of a California list waste, it must be treated to prohibition levels specified for the California list waste prior to land disposal, although it is subject to a two-year national capacity variance.)

(3) At least one-third of all listed hazardous wastes--August 8, 1988 (First Third).

(4) At least two-thirds of all listed hazardous waste--June 8, 1989 (Second Third).

(5) Remaining wastes that were identified or listed as of November 8, 1984--May 8,1990 (Third Third).

To find the complete list of all scheduled thirds wastes refer to 40 CFR 268, Subpart B-Schedule for Land Disposal Prohibition and Establishment of Treatment Standards.

Newly Identified and Listed Waste

EPA is required to make land disposal determinations for any hazardous waste identified or listed after November 8, 1984 within six months of the effective date of identification or listing. Unlike currently listed and characteristic wastes, the statute does not impose an automatic land disposal prohibition if EPA misses a deadline for issuing treatment standards for any newly listed or identified waste.

In the Third Third rule, EPA promulgated treatment standards for five wastes newly listed after November 8, 1984. Four of these wastes are within the F002 and F005 spent solvent listing and the other is F025 light ends and spent filters/aids and desiccants subcategory. (EPA also promulgated treatment standards for several newly listed wastes in the Second Third rule.) Examples of newly listed wastes where treatment standards have not been established are the wastes newly promulgated under the TC rule. Mixed radioactive TC wastes are therefore currently not subject to the LDRs.

Soft Hammer

HSWA established "soft hammer" provisions which are regulations for the management of wastes scheduled in the First and Second Thirds for which EPA failed to promulgate treatment standards by the scheduled deadlines (RCRA 3004(g)(6)). These did not include First and Second Third wastes that EPA rescheduled to the Third Third such as mixed wastes. These provisions applied only until May 8, 1990 when the "hard hammer" provisions described below superseded them. Before May 8, 1990, soft hammer wastes could be land disposed in a landfill or surface impoundment, only if:

(1) The generator determined that placement in a landfill or surface impoundment was the only practical alternative to currently available treatment, and

Once a treatment technology is determined to be demonstrated and available, EPA collects and analyzes performance data from the specific treatment. EPA then analyzes how each treatment technology substantially diminishes the toxicity of the waste or substantially reduces the likelihood of migration of hazardous constituents from the waste. Finally, EPA chooses the "best" treatment technology based on performance data (e.g., the levels to which the technologies can treat specific hazardous constituents in the waste), and sets a performance standard based on this specific technology. Where constituent specific performance data cannot be obtained or is deemed unnecessary, EPA considers specifying that a technology must be used for the waste.

It is important to note that, in some cases, the specific technologies identified as the basis for BDAT are simply those technologies which EPA used to develop the waste-specific performance standard. Any technology or combination of technologies not otherwise prohibited can be used to achieve these standards. **In other words, a specific treatment technology does not have to be used unless the specific method of treatment is specified as the treatment standard.**

A treatment standard can be expressed as:

(1) Concentration Levels - any treatment technology may be used, as long as hazardous constituents in the waste are treated to specific concentration levels

(2) Treatment Technologies - the standard specifies which technology must be used to treat the waste before land disposal.

(3) Deactivation - the treatment standard for a number of subcategories of D001-D003 wastes which specifies the removal of the characteristic of ignitability, corrosivity or reactivity. Recommended technologies that may be used to achieve deactivation are referenced in Appendix VI of Part 268.

To date, EPA has set special treatment standards for four categories of mixed waste. They include:

(1) radioactive lead solids with a BDAT treatment standard of macrocapsulation;

(2) radioactive elemental mercury with a BDAT treatment standard of amalgamation;

(3) radioactive hydraulic oil contaminated with mercury and a BDAT standard of incineration and,

(4) radioactive high level wastes generated during the reprocessing of fuel rods with a BDAT standard of vitrification,

The remaining mixed wastes are subject to those promulgated treatment standards that apply to the hazardous portion of the waste unless EPA publishes specific standards for mixed waste treatability groups in the future. (For further discussion on mixed waste treatment standards see 55 FR 22532 and 22626, June 1, 1990.)

Effective Dates for Land Disposal Restrictions

As soon as EPA sets a treatment standard, wastes subject to that standard are automatically prohibited from land disposal, unless the wastes meet the treatment standard or are disposed in an EPA approved no-migration unit (3004(h)(1)). EPA may through rulemaking revise a treatment standard after the statutory date. If no treatment capacity is available, EPA may defer the effective date of the standard, as explained below. Also, if wastes are generated that cannot be treated to the

Variances From the Prohibition

No Migration Petition

In carrying out the directives of RCRA Sections 3004(d)(1), (e)(1), and (g)(5), EPA will consider petitions to allow land disposal of untreated restricted waste, provided the petitioners demonstrate "to a reasonable degree of certainty that there will be no migration of hazardous constituents from the disposal unit or injection zone for as long as the wastes remain hazardous". For underground injection wells, EPA has interpreted this to mean the concentration of hazardous constituents must not exceed safe levels at the unit boundary. (EPA has not yet formally interpreted the statutory standard with respect to surface disposal units, although regulations for non-migration petitions currently exist at 40 CFR 268.6.) This demonstration can be made through site-verified modeling and monitoring, and must include an evaluation of air, surface water, ground water and soil exposure scenarios.

EPA expects that there will be relatively few cases in which this demonstration can be made, however; EPA is proposing to grant a conditional variance for ten years to the Department of Energy's (DOE) Waste Isolation Pilot Plant (WIPP) in Carlsbad, New Mexico. This is the first such proposal to grant a no-migration petition to a unit other than an underground injection well. If granted, the conditional variance will allow DOE to place transuranic or alpha-emitting mixed radioactive waste in the WIPP (an underground salt formation) without regard to LDR treatment standards for testing and experimentation purposes only.

Petitions for surface land disposal units are to be submitted to EPA Headquarters and petitions for underground injection wells to the Regional Administrator. EPA draft interim final guidance on no migration petitions for surface units is available for petition applicants.[2] A notice of availability for this document will be published around October 1990 concurrently with a proposed rule on no-migration variances for surface units. A final version of the guidance is scheduled for release around October 1991 concurrently with the final rule on no migration variances.

Variance From the Treatment Standard

EPA recognizes that wastes may exist that cannot be treated to the levels specified as the treatment standard (or, in some cases, by the method specified). In such cases, a petition may be submitted requesting a variance from the treatment standard. EPA envisioned that wastes may be subject to a treatability variance in cases where the treatment standard for a particular waste cannot be met because the waste does not fit into one of the BDAT treatability groups. A particular waste, such as a mixed waste stream, may be significantly different from the wastes considered in establishing treatability groups because the waste contains a more complex matrix, making it more difficult to treat. Variance petitions must demonstrate that the treatment standard established for a given waste cannot be met. This demonstration can be made by showing that attempts to treat the waste by available technologies were not successful, or through appropriate analyses of the waste, which demonstrate that the waste cannot be treated to the specified levels. Variances are **not** granted based on a showing that adequate BDAT treatment capacity is unavailable.

Treatability variances can be divided into two categories; a national treatability variance and a site-specific variance. A **national treatability variance** must be based on a demonstration that the waste is significantly different (physically or chemically) from the waste or treatability group used to set the treatment standard, such that the existing treatment standard cannot be met. The national treatability variance:

(1) Establishes a new treatability group and treatment standards for a waste and all similar wastes.

Dilution as Treatment

Under the LDRs, dilution is prohibited as treatment for both listed and characteristic wastes (see 40 CFR 268.3). However, exceptions to the prohibition were made for:

(1) Certain characteristic wastes generated and managed in waste treatment systems regulated by the Clean Water Act (See 40 CFR 268.3(b)). (Note that prohibited wastes treated by inappropriate methods are considered impermissibly diluted.)

(2) Listed and characteristic wastes that are aggregated for legitimate treatment in centralized treatment systems. (Note that centralized treatment of incompatible wastestreams is not considered legitimate treatment and is viewed as impermissible dilution.)

(3) Characteristic wastes that are disposed into hazardous or non-hazardous Class I injection wells regulated under the Safe Drinking Water Act and do not exhibit any prohibited characteristic of hazardous waste at the point of injection.

(4) Prohibited non-toxic ignitable, reactive and corrosive wastes that are treated by dilution to meet a treatment standard.

Storage Prohibition

In addition to prohibiting the land disposal of hazardous wastes, Congress also prohibited the storage of any waste which is prohibited from land disposal unless "such storage is solely for the purpose of the accumulation of such quantities of hazardous waste as are necessary to facilitate proper recovery, treatment, or disposal" [RCRA Section 3004(j)]. The intent of Congress was to ensure that long-term storage was not used as a means of avoiding a land disposal prohibition. Currently a capacity shortage exists for treatment and disposal of mixed wastes that may cause mixed waste handlers to be in violation of the storage prohibition. As a result, EPA plans to issue a policy statement regarding this matter in the fall of 1990. (For further discussion on storage issue see 55 FR 22673, June 1, 1990.)

The implementing regulations that address the prohibitions on storage of LDR waste are found in 40 CFR 268.50. This regulation essentially restates the statutory language.

Allowed Storage Times

It is apparent from the language in HSWA that Congress wished to prohibit extended storage of a LDR waste in lieu of treatment. There are, however, a few instances that allow for the storage of LDR waste in tanks or containers:

(1) Continued storage of wastes first placed in storage prior to the applicable effective date of a LDR, until the wastes are removed from storage.

(2) Placement of wastes in storage after the applicable effective date, only if the untreated wastes are stored solely for accumulation in the amounts necessary to facilitate proper treatment, recovery or disposal.

(3) Storage of restricted wastes that are not prohibited from land disposal because they are exempt from the land disposal restrictions by statute or EPA regulation. (see 54 FR 36968, September 6, 1989.)

compounds, and codified the statutory prohibitions on liquid corrosive wastes. Also on this date, statutory prohibitions went into effect for liquid hazardous wastes containing certain metals and free cyanides. The California list standards were set up as interim treatment standards until more waste-specific standards could be established.

These two rules prohibit the land disposal of mixed waste that contains RCRA solvents or dioxins or California list wastes unless treatment standards developed for the hazardous waste portion are met. In other words, a spent solvent, dioxin or California list mixed waste must be treated to those concentrations or using the treatment method specified for its hazardous component prior to land disposal. For example, if a non-liquid mixed waste is identified as hazardous under 40 CFR Part 261 and it contains greater than 1000 mg/kg halogenated organic compounds (i.e., it is a California list waste), it must be incinerated as specified in Section 268.42.

HSWA also required EPA to prepare a schedule for restricting the land disposal of all hazardous waste listed or identified as of the date of the enactment of HSWA, excluding solvent- and dioxin-containing wastes. On May 28, 1986, EPA published a schedule (51 FR 19300) for setting treatment standards for the listed and identified hazardous waste. This schedule placed each of the listed and identified wastes in one of the "Thirds".

EPA promulgated the final rule addressing the First Third wastes on August 17, 1988 (53 FR 31137). In the First Third rulemaking, EPA postponed establishing treatment standards for mixed waste to the Third Third. (See 53 FR 31137 and amended Section 268.12.) The final rule establishing treatment standards for the Second Third wastes was published on June 23, 1989 (54 FR 26594). As was the case for mixed waste in the First Third, EPA postponed establishing treatment standards for mixed waste covered under the Second Third until the Third Third.

The Third Third rule was published on June 1, 1990 (55 FR 22520). In the rule, EPA granted mixed wastes containing scheduled third hazardous wastes a two-year national capacity variance. EPA also established treatment standards for four categories of mixed waste outlined on page five. After May 8, 1992, the hazardous portion of all mixed waste must meet the appropriate treatment standard for all applicable waste codes prior to disposal.

Effects of the LDR on the Storage and Disposal of Mixed Waste

Consistent with the intent of these regulations, the major impact of the land disposal restrictions on mixed waste disposal is that, on May 8, 1990, all waste must meet treatment standards prior to land disposal unless a variance or extension to the effective date is granted. It may be difficult or impossible to treat land disposal restricted mixed waste because a shortage of mixed waste treatment capacity exists; therefore, variances may be necessary.

Restricted wastes that are exempt from (e.g., wastes granted a national capacity variance) or not subject to a land disposal prohibition (e.g., wastes that meet specified treatment standards) are also exempt from or not subject to the storage prohibition. Wastes that do not meet a specific treatment standard and are not exempt from LDR by statute or regulation are prohibited from storage unless such storage is solely for the purpose of accumulation of such quantities of hazardous waste as are necessary to facilitate proper recovery, treatment, or disposal. The storage prohibition does not affect those scheduled third mixed wastes that are disposed or stored prior to May 8, 1992. Instead, the prohibition addresses storage of scheduled third mixed wastes first placed into storage after May 8, 1992 unless these wastes are granted an additional variance.

It is important to note that mixed waste is not the only category of waste where treatment capacity is or may not be available on an LDR effective date. For example, no incinerators are currently permitted to treat already-stored prohibited dioxin wastes.

Summary

All mixed waste was subject to the RCRA land disposal restrictions on May 8, 1990 unless it was disposed of in land based units prior to that date stored, without being removed from storage after the effective date, is in a State that is authorized for RCRA's base program but has not yet received authorization for mixed waste, or is a newly identified or listed waste after November 8, 1984 for which treatment standards have not yet been promulgated. Currently, solvent- and dioxin-containing mixed wastes and California list mixed wastes have to be treated to the treatment standard for the hazardous portion of the waste. Treatment standards for radioactive mixed waste that contains scheduled third wastes are not effective due to a two-year national capacity variance; however, if these wastes are disposed of in RCRA surface impoundments or landfills the units must meet minimum technological requirements. These wastes are also subject to 40 CFR 268.7 reporting and recordkeeping requirements and the California list prohibitions if applicable.

The first step in dealing with LDRs is to determine whether the waste is a RCRA hazardous waste. Next, it must be established whether a treatment standard has been promulgated for the waste. If so, it is a restricted waste and subject to certain recordkeeping requirements of 40 CFR 268.7. Third, it must be determined whether the waste is destined for a prohibited form of land disposal and whether the treatment standard is in effect for the waste. If so, then the waste is a prohibited waste subject to all LDR requirements unless the generator or treater has obtained a variance or extension from the LDRs. However, each mixed waste handler needs to identify the types and quantities of mixed waste he or she currently generates and stores to evaluate the present and future treatment capacity for the waste(s).

1 U.S. EPA, "Case-By-Case Extensions: A Guidance Document to Support the Land Disposal Restrictions"

2 U.S. EPA, "No Migration Variance to the Hazardous Waste Land Disposal Prohibition: A Guidance Manual for Petitioners, Draft Interim Final", March 1990, NTIS No. PB 90-204-736.

3 U.S. EPA, "Joint EPA/NRC Guidance on the Definition and Identification of Commercial Mixed Low Level Radioactive and Hazardous Waste", January 7, 1987, OSWER Directive Number 9432.00-2.

U.S. EPA, "Guidance on the Definition and Identification of Commercial Mixed Waste Low-Level Radioactive and Hazardous Waste and Answers to to Anticipated Questions", October 4, 1989.

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

9555.1987(01)

October 2, 1987

Mr. H. Wayne Hibbitts, Director
Environmental Protection Division
Department of Energy
Oak Ridge Operations
Post Office Box E
Oak Ridge, Tennessee 37831

Dear Mr. Hibbitts:

I am responding to your letter to Lee Thomas, dated August 18, 1987, requesting an extension of the effective date of the storage prohibition imposed by the land disposal restrictions. The solvent wastes for which the extension is requested are generated at sites in Tennessee, Ohio, and Kentucky. They pose an unusual problem because they are co-contaminated with radionuclides and we are not aware of any disposal facilities that accept low-level radioactive mixed wastes. An incinerator to dispose of these wastes is being built and a draft permit has been issued for public comment. The requested extension covers the time needed to bring the incinerator to operational readiness and conduct trial burns. The incinerator is expected to be operational by January of 1988.

The Agency realizes that low-level radioactive mixed wastes pose a special problem for generators, since there are no facilities at this time permitted to treat or dispose of these wastes. Unfortunately, the Resource Conservation and Recovery Act (RCRA) contains no provision authorizing extension of the effective date of the section 3004(j) storage prohibition, (42 U.S.C. 6924(j)), so we are unable to grant your request.

As our staffs have discussed, however, RCRA section 3004(h)(3) provides for an extension of the land disposal restrictions effective date for specific wastes on a case-by-case basis. We are thus treating this petition as one for a case-by-case extension of the effective date. To reiterate the telephone conversation held by our staffs on September 29, 1987, we need the following information:

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

SEP 28 1990

OFFICE OF
SOLID WASTE AND EMERGENCY RESPONSE

TO ALL NRC LICENSEES:

SUBJECT: GUIDANCE ON THE LAND DISPOSAL RESTRICTIONS' EFFECTS ON STORAGE AND DISPOSAL OF COMMERCIAL MIXED WASTE

The purpose of this letter is to announce the availability of guidance on the land disposal restrictions (LDR) for NRC licensees. The 1984 Hazardous and Solid Waste Amendments (HSWA) to the Resource Conservation and Recovery Act directed EPA to develop regulations restricting the land disposal of RCRA hazardous wastes. The intent of the LDR provisions is to minimize the potential risk to human health and the environment by requiring treatment of wastes before land disposal. Since the hazardous component(s) of radioactive mixed waste is RCRA regulated, mixed radioactive waste handlers may now or soon will manage waste subject to the RCRA land disposal restrictions.

The attached guidance is intended to provide a general overview of the land disposal restriction regulations as well as to provide information on areas of the regulations that may particularly affect mixed waste handlers.

As identified in the guidance, the land disposal restrictions have created new responsibilities for mixed waste handlers. Therefore, it is important that mixed waste handlers take the time to develop a good understanding of the land disposal regulations. This guidance should not be used as a substitute for the land disposal restriction regulations found at 40 CFR 268 or the Federal Register rules that contain the promulgated LDR regulations. (See list of major rules at the end of guidance). Instead it should be used as a general guidance to familiarize the mixed waste handler with the land disposal restriction regulations.

Sincerely,

Sylvia K. Lowrance, Director
Office of Solid Waste
U.S. Environmental Protection Agency

Administrative Information

1. Specify the amount of time needed to complete alternative capacity for the waste.

2. Provide information about the process generating the waste and about the physical/chemical properties of the waste, including:

   - A description of the process generating the waste.
   - The EPA Hazardous Waste Number.
   - A description of the composition and physical form of the waste stream.
   - The quantity of waste generated per year.
   - The certification that the information is true, accurate, and complete, signed by an authorized representative.

Demonstrations

1. Submit capacity figures for the incinerator.

2. Submit capacity figures for the maximum quantity of waste that would be subject to the extension.

3. Submit descriptions and RCRA permit numbers of the storage facilities where the waste will be stored prior to incineration.

Although we have initiated action on your request, we will not be able to propose our decision until we receive the requested information. You should be aware that a case-by-case extension of the effective date is a rulemaking procedure, requiring publication of the Agency's tentative decision to allow the public an opportunity to comment on your request. After considering their comments, the final decision must also be published in the Federal Register.

We will make every effort to process your application in a timely manner. In the interim, if you have further questions or problems, feel free to contact Rhonda Craig at (202) 382-4900.

Sincerely,

/S/

Marcia Williams
Director
Office of Solid Waste

Waste Minimization

9560 – MISCELLANEOUS

SEP 11 1985

MEMORANDUM

SUBJECT: Waste Minimization: Permit Certification and Joint Permitting

FROM: Bruce R. Weddle, Director
Permits and State Programs Division (WH-563)

TO: Hazardous Waste Division Directors
Regions I-X

The purpose of this memorandum is to provide guidance to permit writers for incorporating the §3005(h) waste minimization certification requirement of the Hazardous and Solid Waste Amendments of 1984 (HSWA or the Amendments) into RCRA permits. It is also intended to clarify joint permitting of this requirement. Waste minimization has a unique effect on the joint permitting process which was described in RCRA Statutory Interpretation (RSI) #5 dated July 1, 1985, because it does not mandate any technical efforts or substantive judgments.

Permit Certification

RCRA §3005(h), as amended by HSWA §224, requires that all RCRA permits for on-site treatment, storage or disposal issued after September 1, 1985, include a condition requiring the permittee to certify in the facility operating record that:

- The generator of the hazardous waste has a program in place to reduce the volume or quantity and toxicity of such waste to the degree determined by the generator to be economically practicable; and

- The proposed method of treatment, storage or disposal is that practicable method currently available to the generator which minimizes the present and future threat to human health and the environment.

The legislative history of these provisions clearly indicates that HSWA waste minimization requirements are not meant to impose a significant new burden to generators, nor are they meant to form the basis for specific waste minimization standards or regulations at this time. Rather, Congress intended that the substantive

judgments as to what is "economically practicable" and what is the most "practicable method currently available" are to be made by the generator in light of his or her own particular circumstances.

In addition, RCRA §8002 requires that the Administrator submit a Report to Congress by October 1, 1986, on the feasibility of establishing standards or taking other actions to ensure that hazardous waste generators are taking steps to minimize the waste they produce.

The new waste minimization permit certification requirements are intended to be an interim measure pending delivery of the Report to Congress in October, 1986. The conclusions reached in the Report will in large part determine whether specific, substantive waste minimization standards or regulations are necessary or feasible.

Permit Writers' Guidance

The Final Codification Rule published in the Federal Register on July 15, 1985, added a new provision to §264.73(b) requiring the permittee to record at least annually a waste minimization certification statement in the written operating record kept at the facility. Pursuant to this requirement, permit writers should incorporate into any on-site treatment, storage or disposal permit issued after September 1, 1985, a condition requiring that a waste minimization certification statement be included in the facility operating record.

We recommend incorporating this condition into the permit by adding to Module II(L)(1) (General Facility Conditions, Recordkeeping and Reporting, Operating Record) the language "and (9 [on-site only])". The revised model permit condition will read as follows:

MODULE II--GENERAL FACILITY CONDITIONS

* * * * * * *

L. Recordkeeping and Reporting

1. Operating Record. The Permittee shall maintain a written operating record at the facility in accordance with 40 CFR 264.73(a), (b)(1), (2), (3), (4), (5), (6), (7 [off-site only]), (8), and (9 [on-site only]).

Joint Permitting

The joint permitting guidance (RSI #5) states that where facilities are affected by HSWA, joint Federal-State permits will be issued for those provisions for which the State has not yet been authorized. This implies that there are some facilities that will not be affected by HSWA at all. However, the waste minimization certification is required for all on-site facilities even where no other provisions of the Amendments apply. This leads to the question of how the waste minimization requirement will be addressed in permits.

The guidance states that in those cases where permits are not issued simultaneously (see RSI #5 for those exceptions), EPA must issue a public notice when it determines the applicability of HSWA. The State-issued permit will become a full RCRA permit only after EPA issues a permit addressing the waste minimization requirement and any other applicable HSWA requirements.

In all other permitting situations, EPA and the State will issue permits simultaneously. However, when it is clearly determined that §3005(h) is the only applicable HSWA requirement, and the State has the authority to impose permit conditions requiring this certification, EPA does not intend to issue a separate Federal permit (or offer separate public notice).

The procedure for implementing this approach is for EPA to write a generic letter to the State on how to proceed whenever this situation occurs. Specifically, the letter must explain that the State has authority to address §3005(h) and that the State will use its authority to include this requirement. This letter will apply to waste minimization only; where other HSWA requirements are applicable to a particular facility a joint Federal-State permit must still be issued. Finally, the letter must explain that EPA always has the authority to insert additional permit conditions as necessary to protect human health and the environment. Where information becomes available to EPA which demonstrates the need for such additional permit conditions, EPA will exercise that authority.

The State should place a copy of EPA's generic letter in the public docket of each facility permit for which this approach is used. In this way, the public will have access to information about EPA's decision. Following these procedures will allow for States to issue RCRA permits by incorporating the waste minimization requirements without the need for a separate Federal permit.

If you have questions or require further information regarding waste minimization, please contact Dave Pagan of the Permits branch at FTS 382-4497.

cc: Hazardous Waste Branch Chiefs, Regions I-X
Hazardous Waste Permits Section Chiefs, Regions I-X

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

SEP 28 1990

OFFICE OF
SOLID WASTE AND EMERGENCY RESPONSE

TO ALL NRC LICENSEES:

SUBJECT: GUIDANCE ON THE LAND DISPOSAL RESTRICTIONS' EFFECTS ON STORAGE AND DISPOSAL OF COMMERCIAL MIXED WASTE

The purpose of this letter is to announce the availability of guidance on the land disposal restrictions (LDR) for NRC licensees. The 1984 Hazardous and Solid Waste Amendments (HSWA) to the Resource Conservation and Recovery Act directed EPA to develop regulations restricting the land disposal of RCRA hazardous wastes. The intent of the LDR provisions is to minimize the potential risk to human health and the environment by requiring treatment of wastes before land disposal. Since the hazardous component(s) of radioactive mixed waste is RCRA regulated, mixed radioactive waste handlers may now or soon will manage waste subject to the RCRA land disposal restrictions.

The attached guidance is intended to provide a general overview of the land disposal restriction regulations as well as to provide information on areas of the regulations that may particularly affect mixed waste handlers.

As identified in the guidance, the land disposal restrictions have created new responsibilities for mixed waste handlers. Therefore, it is important that mixed waste handlers take the time to develop a good understanding of the land disposal regulations. This guidance should not be used as a substitute for the land disposal restriction regulations found at 40 CFR 268 or the Federal Register rules that contain the promulgated LDR regulations. (See list of major rules at the end of guidance). Instead it should be used as a general guidance to familiarize the mixed waste handler with the land disposal restriction regulations.

Sincerely,

Sylvia K. Lowrance, Director
Office of Solid Waste
U.S. Environmental Protection Agency

Administrative Information

1. Specify the amount of time needed to complete alternative capacity for the waste.

2. Provide information about the process generating the waste and about the physical/chemical properties of the waste, including:

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Although we have initiated action on your request, we will not be able to propose our decision until we receive the requested information. You should be aware that a case-by-case extension of the effective date is a rulemaking procedure, requiring publication of the Agency's tentative decision to allow the public an opportunity to comment on your request. After considering their comments, the final decision must also be published in the Federal Register.

We will make every effort to process your application in a timely manner. In the interim, if you have further questions or problems, feel free to contact Rhonda Craig at (202) 382-4900.

Sincerely,

/S/

Marcia Williams
Director
Office of Solid Waste

Subtitle D

9571 – MINING WASTES

Subtitle D

ATK1/1104/71 kp

OCT 3

Mr. Donald A. Robbins
Department of Environmental Sciences
ASARCO Incorporated
3422 South 700 West
Salt Lake City, Utah 84119-4191

Dear Mr. Robbins:

Thank you for your recent letter and suggestions on approaches to the difficult problem of regulating the management of those mining wastes which pose a hazard if improperly managed. We share your concerns both with respect to the suitability of using the Toxicity Characteristic Leaching Procedure (TCLP) to identify which mining wastes warrant RCRA regulatory control and the need for tailored management standards for hazardous mining wastes.

The TCLP was developed primarily to simulate the leachability of an industrial waste co-disposed with sanitary refuse or other putrescible materials. Mining wastes, because of the relatively large volumes of material involved, are not likely to encounter such disposal conditions even if not regulated. However, although mining wastes are generally not acidic, many mining wastes contain pyritic minerals which generate an acidic leachate upon exposure to air. Thus, the acidic environment modeled by the EP/TCLP may be appropriate for mining wastes even if the model environment used to develop the TCLP is not. In fact, the leachate generated by mining wastes can often be more acidic than the refuse derived leachate. Thus, a different leach procedure (which, for some mining wastes, could be more aggressive than the TCLP) might be appropriate.

No decision has yet been made as to what type of test procedure to use in identifying which mining wastes require regulation under Subtitle C of RCRA. A decision tree process is one approach that is being considered. Any such decision tree will require a method for determining the waste's acid generation potential. While we do not presently have any work ongoing to develop test methods for determining a waste's acid generating potential, we welcome your thoughts on this problem. We would also be willing to work with you and other interested parties in a cooperative effort to develop such a test.

As to your request for tailored management standards, we agree with the need to develop tailored management standards for mining wastes before subjecting them to Subtitle C control and will indicate same in the 1986 Report to Congress.

I appreciate ASARCO's offer of assistance in developing protocols to assess the leaching potential of mining wastes. I would suggest that you contact Alan Corson or David Friedman (202/382-4770) to follow up on developing a cooperative program in this area.

Sincerely yours,

Marcia E. Williams
Director
Office of Solid Waste

WH-562B/DFRIEDMAN/ma/rm SE 248/382-4770/10-1-85
Disk MA:7:20 OSWER-07135

RCRA/SUPERFUND HOTLINE MONTHLY SUMMARY

JULY 86

4. Mining Waste, K064, and §3004(x)

EPA published a proposed rule in the October 2, 1985 Federal Register (50 FR 40292). The proposed rule would reinterpret the mining waste exclusion at 40 CFR 261.4(b)(7) as it applies to processing wastes. Only large volume, relatively low toxicity processing wastes would be excluded, specifically phosogypsum, bauxite refining muds, primary metal smelting slags, and slag from elemental phosphorus reduction. The reinterpretation also proposed to relist six smelting wastes previously listed as hazardous. One of the six smelting wastes proposed to be relisted is K064, acid plant blowdown slurry/ sludge resulting form the thickening of blowdown slurry form primary copper production.

If EPA finalizes the listing of K064, can EPA modify existing Subtitle C requirements under Section 3004(x) of RCRA for units handling K064? Section 3004(x) authoriizes EPA to modify existing Subtitle C requirements to take into account the special characteristics of mining wastes, the practical difficulties associated with implementation of such requirements, and site-specific characteristics.

Only large volume, relatively low toxicity processing wastes would be excluded, specifically, phosphogypsum, bauxite refining muds, primary metal smelting slags, and slag from elemental phosphorus reduction. The reinterpretation also proposed to relist six smelting wastes previously listed as hazardous. One of the six smelting wastes proposed to be relisted is K064, acid plant blowdown slurry/ sludge resulting from the thickening of blowdown slurry from primary copper production.

If EPA finalizes the listing of K064, can EPA modify existing Subtitle C requirements under §3004(x) of RCRA for units handling K064? Section 3004(x) authorizes EPA to modify existing Subtitle C requirements to take into account the special characteristics of mining wastes, the practical difficulties associated with implementation of such requirements, and site-specific characteristics.

No; §3004(x) authority would not apply to K064. Section 3004(x) authority only applies to wastes temporarily excluded under §3001(b)(3)(A)(ii) (the "Bevill Amendment"), i.e., solid waste from the extraction, beneficiation, and processing of ores and minerals, that subsequently become subject to Subtitle C of RCRA based on the results of a §8002 study. If finalized, the proposed reinterpretation would narrow the scope of the "Bevill Amendment." Wastes that are no longer encompassed by the exclusion, including this primary copper smelting waste (if listed in the final rule), would not be mining wastes (solid wastes from the extraction, beneficiation, and processing of ores and minerals). Therefore §3004(x) would not apply.

Source: Meg Silver (202) 382-7706
Research: Kevin Weiss

OCT 8 1987

MEMORANDUM

SUBJECT: Decision Deadlines for Retrofitting Waiver Requests

FROM: Marcia E. Williams, Director /S/
Office of Solid Waste

TO: Robert Greaves, Acting Chief
Waste Management Branch, Region III

In your memorandum of April 20, 1987, you raised two issues concerning the applicability of RCRA section 3004(u) to coal combustion fly ash units, and on decision deadlines for retrofitting waiver requests. This memorandum provides guidance on retrofit waiver requests deadlines; we expect resolution of the applicability of 3004(u) issue within the next few weeks, and will provide separate guidance on that issue.

The issue raised in your memorandum concerns the deadline for making a decision on interim status surface impoundment retrofitting waiver requests filed under section 3005(j)(13). EPA no longer needs to address this issue for the SCM Corp. facility you describe because it has been determined that the wastes SCM manages in its impoundment are "mining wastes" excluded from Subtitle C under the "Bevill" amendment, section 3001(b)(3). We are responding, however, in case other facilities apply for waivers under section 3005(j)(13). While procedural deadlines in section 3005(j)(5) address waiver requests filed in accordance with section 3005(j)(2), (3), and (4), no reference is made to requests filed under section 3005(j)(13). However, as stated on page 1-5 of the July 1986 Interim Status Surface Impoundment Retrofitting Variances Guidance Document, EPA believes it is appropriate to establish deadlines and procedures for (j)(13), including public notice and comment procedures, equivalent to the other exemptions. The reason for this policy is that the November 7, 1988 deadline for retrofitting applies to those facilities seeking a section 3005(j)(13) waiver as well as to those seeking the other waivers. Therefore, as a matter of policy, you should make a final decision on any request for a variance under section 3005(j)(13) by November 7, 1987, in order to provide the facility with adequate time to retrofit, if the waiver request is denied. However, since the November 7, 1987 date is not required as a statutory condition

for waivers under section 3005(j)(13), you do have some flexibility not provided under sections 3005(j)(2), (3), and (4). If you find that you are unable to make a final decision on a section 3005(j)(13) request by November 7, 1987, due to compelling reasons (e.g., the need for additional monitoring data), some minor slippage (such as a few weeks) could be acceptable, as long as it does not jeopardize the facility's ability to retrofit by the 1988 deadline. The owner/operator should be made aware that delaying the final decision will not affect the 1988 deadline.

If you have any further questions on this issue, please contact Dave Eberly at FTS 382-4497.

cc: Dave Eberly
Paul Cassidy

RCRA/SUPERFUND HOTLINE MONTHLY SUMMARY

JANUARY 89

1. Ore and Mineral Extraction, Beneficiation and Processing Exclusion Applicability

The owner/operator of a taconite ore mining and processing facility uses several different processes to increase the taconite ore's concentration. These processes include a grinding and magnetic separation process that constitutes beneficiation. This beneficiation process incorporates the use of Whitmore grease for mechanical lubrication. The Whitmore grease is removed once every ten years and is sent for disposal. Is this grease, which exhibits the characteristic of EP toxicity, exempt from being a hazardous waste pursuant to 40 CFR Section 261.4 (b)(7)?

In the November 19, 1980 Federal Register (45 FR 76620), the EPA promulgated regulations excluding solid waste from the extraction, beneficiation, and processing of ores and minerals from the definition of hazardous waste. The preamble to this Federal Register stated this exclusion applied to wastes produced in, and unique to the exploration, mining, milling, smelting and refining of ores and minerals. The exclusion did not apply to solid wastes, such as spent solvents, pesticide wastes, and discarded commercial chemical products, that were not unique to the mining and processing operations (45 FR 76619).

Since 1960, common mining and processing operations have included the long-term application of Whitmore grease to heavily used machinery, gears and other difficult to access equipment. However, Whitmore grease is not limited to the mining industry, but can be used on any industrial equipment where short term grease applications are limited by difficult access and heavy use. Therefore, because the Whitmore grease is not unique to mining operations, it is not excluded pursuant to 40 CFR Section 261.4 (b)(7). The grease that can no longer be used for its intended purpose and that is going for disposal would be a solid waste pursuant to 40 CFR Section 261.1 (c)(1) and 40 CFR Section 261.2, respectively [see January 4, 1985 Federal Register (50 FR 663)]. This solid waste will be a hazardous waste if it meets a listing under 40 CFR Part 261 Subpart D or exhibits any characteristic under 40 CFR Part 261 Subpart C.

Source:	Bob Hall	(202) 475-8814
Research:	Jace Cuje	(202) 382-3000

RCRA/SUPERFUND HOTLINE SUMMARY

OCTOBER 1989

5. Notification Requirements for New Wastes Not Covered by the Bevill Exclusion

In the September 1, 1989 Federal Register (54 FR 36592), EPA significantly modified the Bevill Exclusion. (40 CFR 261.4(b)(7)) This final rule narrows the scope of the exclusion by identifying, under Section 3001 of RCRA, additional substances as hazardous wastes subject to Subtitle C. Since these regulations are not being imposed pursuant to HSWA, they will not be effective in authorized States until the States revise their programs to adopt equivalent requirements. In an authorized State, when must a generator or transporter of such substances or an owner/operator of a facility which treats, stores, or disposes of such substances notify under Section 3010 of RCRA?

Under Section 3010(a) of RCRA, "not later than ninety days after promulgation of regulations under Section 3001 identifying any substance as hazardous waste subject to this subtitle, any person generating or transporting such substance or owning or operating a facility for treatment, storage, or disposal of such substances shall notify the implementing agency of their activity." However, also under this section, EPA was given the option of waiving the notification requirements following the revision of any regulation promulgated under Section 3001, at the discretion of the Administrator.

Since the final rule published in the September 1, 1989, Federal Register (54 FR 36592) revises regulations promulgated pursuant to Section 3001, the Administrator may use the provided waiver option. The Administrator did, in fact, use the option (see 54 FR 36592) as it was intended; persons who have previously notified of their hazardous waste activity and have received an EPA I.D. number need not re-notify. All other persons, regardless of the authorization status of their State, who generate, transport, treat, store, or dispose of any substance now subject to Subtitle C as a result of this final rule, must notify under section 3010; that is, not later than November 30, 1989 (ninety days after the promulgation of the final rule).

Source: Dan Derkics (202) 382-3608
Research: Kevin Dunn

9571.1990(01)

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

MAR 15 1990

Mr. Richard Davis
Brush Wellman, Inc.
1200 Hanna Building
Cleveland, Ohio 44115

Dear Mr. Davis:

On November 30, 1989, at Brush Wellman's request, representatives of EPA's Office of Solid Waste (OSW) met with representatives of Brush Wellman at EPA Headquarters. At this meeting, Brush Wellman requested clarification of the Bevill status of each of the three wastes addressed in the September 1 final rule, and provided additional information on the nature of the beryllium production operations conducted at the Delta, Utah plant. (Meeting minutes and a copy of Brush Wellman's written statement may be found in the docket for the September 1, 1989, final rule.)

At the November, 1989 meeting Brush Wellman requested that beryl plant discard and raffinate discard (processing raffinate) be reclassified as beneficiation wastes, and provided several statements supporting this position. First Brush Wellman reasoned that, in an operational sense, the beryl ore and bertrandite ore circuits produce identical intermediate products and very similar waste streams; to subject them to different regulatory requirements would therefore be arbitrary and unreasonable. Second, the key production steps that distinguish the beryl and bertrandite circuits (melting and fritting) involve only physical changes to the ore; nothing is added to or removed from the beneficiated ore during these operations, and they do not generate any waste streams (except for APC dusts). Indeed, it was stated that the purpose of the melting-fritting sequence is merely to change the crystalline structure of the mineral to make it more amenable to the leaching (beneficiation) that follows, rather than to purify or refine the mineral value. Finally, Brush Wellman contended that the two wastes that were removed from the Bevill exclusion by the September 1 final rule had been explicitly studied in the Report to Congress on extraction and beneficiation wastes, and hence were de facto beneficiation wastes; i.e., their regulatory status had already been established.

In the September 1, 1989, final rule, EPA established the final definitions and criteria that would be used to determine which mineral processing wastes are eligible for the Bevill exclusion, and applied these criteria to all wastes for which existing information was adequate to make Bevill exemption status determinations. Based on public comments and additional analyses found in the dockets, the final definitions of mineral beneficiation and processing differed markedly from those employed in the November, 1988 and April, 1989 proposed rules. One of the key distinctions between the two types of mineral industry operations, as discussed in the preamble to the September 1, 1989, final rule, is that beneficiation operations, including those using heat, may alter the physical/chemical characteristics of or remove water and/or carbon dioxide from the ore or mineral but do not change its basic physical structure, while processing wastes are generally not earthen in character and are physically dissimilar to the ore or mineral (or beneficiated ore or mineral) that entered the processing operation.

Among the industry sectors (and associated wastes) that were addressed in the September 1 final rule was the primary beryllium industry, which consists solely of the Brush Wellman facility near Delta, Utah. In conducting its evaluation, EPA used information submitted by Brush Wellman in the form of public comments on notices of proposed rulemaking addressing the Bevill exclusion and in your response to the 1989 National Survey of Solid Wastes from Mineral Processing Facilities. The process flow diagram (enclosed) provided by Brush Wellman with its survey response indicates a dual beryllium production circuit, in one circuit beryl ore is used and in the other circuit bertrandite ore is used; each mineral undergoes a different series of steps that yield a "pregnant leach solution" that is combined and subjected to further purification steps.

In deciding whether the solid wastes generated by this plant were eligible for the Bevill exclusion, EPA evaluated each of the production steps in order to determine whether and where mineral beneficiation operations end and mineral processing operations begin at the Brush Wellman facility. In the case of the bertrandite ore circuit, the facility's flow diagram indicates that essentially all of the operations from initial crushing and grinding through solvent extraction and stripping could be considered beneficiation operations, according to the Agency's final definition of beneficiation. In the beryl ore circuit, however, EPA's interpretation of the production steps employed was that the ore undergoes a mineral <u>processing</u> operation (melting) relatively early in the production sequence; hence, all steps following this initial processing step are, by definition, processing steps. Moreover, because the beryl leach solution arising from the beryl ore circuit is combined with that from the bertrandite circuit, all subsequent steps in the operation would

be defined as processing operations, and all wastes generated from these steps would be defined as processing wastes, and hence subject to the high volume criteria.

After review and analysis of the new information provided by Brush Wellman in the November 30, 1989 meeting, EPA now concludes that all operations associated with the beryl and bertrandite ore circuits upstream of the iron hydrolysis step are beneficiation operations. As a consequence, the waste streams that are generated by these two production circuits, including beryl plant discard and processing raffinate, are mineral beneficiation wastes rather than processing wastes. Wastes generated downstream of the iron hydrolysis step, such as sludge leaching slurry are considered low volume mineral processing wastes, and are removed from the Bevill exclusion as of the effective date of the September 1, 1989, final rule.

EPA stresses that this decision reflects the application of the same criteria that were enunciated in the September 1 final rule. The Agency's change in position on the status of the wastes generated at the Delta, Utah facility is due solely to receipt of detailed information on the operations of that specific facility and was not available previously. This information suggests that EPA's previous determination was in error, in that the Agency's assumption (based on the response to the National Survey) was that the melting step resembled smelting or similar pyrometallurgical (processing) techniques, rather than serving as a means of recrystallizing the beryl ore (beneficiation) prior to leaching.

If you have any further questions concerning the Bevill status of these wastes, please contact Dan Derkics or Bob Hall of my staff at 202-382-3608 or 202-475-8814, respectively.

Sincerely,

Robert Tonetti
Acting Deputy Director
Waste Management Division

Enclosure

9571.1990(02)

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

APR 9 1990

OFFICE OF
SOLID WASTE AND EMERGENCY RESPONSE

Erast Borissoff
Executive Director
American Coal Ash Association, Inc.
1000 16th Street, NW Suite 507
Washington, DC 20036

Dear Mr. Borissoff:

This letter is written to follow up on the August 2, 1989, meeting between you and other representatives of the American Coal Ash Association (ACAA) and representatives of the Office of Solid Waste concerning the status of coal ash as a "solid waste" (and your June 23, 1989, letter to the EPA administrator). I apologize for the delay in getting this letter to you and hope the delay has not inconvenienced you. In the meeting, you presented substantial evidence of the beneficial uses for coal ash as alternatives to its disposal. We applaud your efforts toward reducing the amount of wastes being land disposed.

As you know, EPA has been amenable to supporting coal ash's beneficial use, as evidenced by publication of the 1983 Guideline for Federal Procurement of Cement and Concrete Containing Fly Ash, and the use of fly ash as a stabilizing medium in setting treatment standards that certain hazardous wastes must meet prior to land disposal.

While EPA is very interested in furthering such beneficial recycling efforts, we do not believe that the designation of coal ash as a "solid waste" is the most important issue; the issue, as we see it, concerns ensuring that recycling activities are conducted using environmentally sound practices. As was stated in the meeting, coal ash is defined as a solid waste in the Resource Conservation and Recovery Act (RCRA); consequently, the change you request is statutory rather than regulatory. EPA's authority is limited to regulatory changes.

You also request that EPA "preclude States and political subdivisions from establishing or continuing in effect any requirement applicable to beneficial use of coal ash which would be inconsistent with any rule prescribed by the Administrator applicable to such beneficial use." This is beyond EPA's authority. For example, Federal regulations promulgated under Subtitle C of RCRA (i.e., hazardous waste regulations) are the minimum hazardous waste management requirements to protect human

health and the environment. States that are authorized to implement RCRA Subtitle C programs are able to, and sometimes do exceed Federal requirements in terms of stringency. Even in nonauthorized States, State regulations governing hazardous wastes must be complied with in that State. The regulation of Subtitle D wastes (e.g., coal ash) is primarily managed by State and local governments. Although EPA can encourage States to promulgate regulations that reflect the growing need to encourage beneficial recycling of solid wastes it cannot <u>require</u> a State regulatory Agency to be less stringent.

As RCRA reauthorization is being considered in Congress, waste minimization and recycling are already a strong focus. Should you have information you wish to share with the Congress on the environmentally sound recycling of coal ash and its beneficial uses, the appropriate time to do so is now. I thank you for your interest in the beneficial use of coal ash and encourage your continued marketing of such uses as an alternative to disposal. If you have further questions or need additional information, you should contact Mr. Pat Pesacreta, of my staff, at (202) 382-7915.

Sincerely,

Sylvia K. Lowrance
Director
Office of Solid Waste

OSW-100

9571.1990(03)

APR 6 1990

Mr. Richard McQuisten
Project Manager
Department of Energy
P.O. Box 1189
Laramie, Wyoming 82070

Dear Mr. McQuisten:

Thank you for your letter on March 12, 1990, concerning environmental regulations applicable to the use of retorted oil shale and coal fly ash. I have been asked to reply.

On March 8, 1988, the Environmental Protection Agency (EPA) submitted to Congress a report entitled Wastes from the Com-bustion of Coal by Electric Utility Power Plants. This report presented the results of studies carried out pursuant to Section 8002(n) of the Resource Conservation and Recovery Act of 1976 (RCRA), as amended (42 U.S.C. § 6982(n)). This report is available from the U.S. Department of Commerce, National Technical Information Service (NTIS), 5285 Port Royal Road, Springfield, Virginia, 22161. Their phone number is (703)487-4650. The report number is PB88-177977 and the Appendices number is PB88-177985.

This report indicates that EPA has concluded that coal combustion waste streams generally do not exhibit hazardous charactistics under curent RCRA regulations, and that EPA does not intend to regulate under RCRA Subtitle C fly ash, bottom ash, boiler slag and flue gas desulfurization wastes. These wastes are currently subject to RCRA Subtitle D, which pertains to solid (non-hazardous) wastes, and which is administered by State Solid Waste regulatory agencies. A list of State Solid Waste Directors can be provided by the Association of State and Territorial Solid Waste Management Officials. The Association may be contacted by phone at (202)624-5828.

In 1985, EPA issued a Report to Congress entitled Wastes from the Extraction and Beneficiation of Metallic Ore, Phosphate Rock, Asbestos, Overburden from Uranium Mining and Oil Shale.

This report is also available from NTIS (report number PB88-162631). On July 3, 1986, EPA issued a Regulatory Determination that stated that solid wastes from the extraction and beneficiation of ores and minerals were best regulated under RCRA Subtitle D, not under Subtitle C. (See 51 FR 24496, copy enclosed.) EPA staff is currently developing a draft Subtitle D regulatory approach known as the "strawman" (copy enclosed) which if finalized as a rule, would place minimum standards on oil shale extraction and beneficiation wastes. At present, however, EPA does not have any RCRA regulations specific to oil shale retort wastes until EPA finalizes, in early 1993, its Subtitle D rule on extraction and beneficiation wastes.

It should be noted that the U.S. Synthetic Fuels Corporation, an office in the Treasury Department, currently provides financial support to the Union Oil Shale Project in Colorado. Synthetic Fuels maintains excellent files on the environmental effects of the plant and may have data on retorted shale. They can be contacted at (202)634-2506.

Thank you for your interest in fly ash and oil shale. If I can be of further assistance, feel free to contact me, at (202)382-6972.

Sincerely,

151

Robert Tonetti, Acting Chief
Special Waste Branch

Enclosures

JUN 27 1990

9571.1990(04)

Karl T. Johnson
Assistant Vice President, Regulatory Programs
The Fertilizer Institute
501 Second St. N.E.
Washington, D.C. 20002

Dear Mr. Johnson

This letter is in response to the two concerns you raised in your April 16, 1990 letter to Dan Derkics, and which staff also discussed at their April 18, 1990 meeting with you.

The first issue you raised concerns the status of corrosive, low volume secondary materials such as precipitates and spilled materials that are generally recycled in the phosphoric acid plants' recirculating water systems. You are correct in your interpretation of the impact on these wastes from the recent rulemakings on the mining waste exclusion. The Agency interpretation of the mixture rule as it applies to mineral processing wastes could result in the entire water circulation system losing its exempt status if there is continued circulation of the corrosive secondary materials through the system.

In your letter, you suggest that the upcoming Report to Congress (RTC) may result in a determination that the co-management of secondary materials with process wastewater is appropriate and would not endanger the exempt status of the entire water system. The Agency does not believe that the RTC is an appropriate vehicle to recommend such changes, due in part to the severe time constraints the court has imposed on the Agency for completion of the report. Instead, any Agency action addressing these issues would have to be in the form of a proposed and final rulemaking amending the mixture rule. Undertaking such a rulemaking by the Agency at this time, however, is unlikely due to other court ordered, higher priority deadlines. In addition, it is unclear what impacts such a rulemaking would have on other industries.

Consequently, it would be prudent for the phosphoric acid industry to take the steps necessary to comply with the requirements of the recent Bevill rulemakings.

The second issue raised in your April letter concerns the mixture rule and the use of phosphoric acid process wastewater in the production of ammoniated phosphate fertilizer. You are correct in your interpretation of the rule. The mixture of non-hazardous ammoniated phosphate fertilizer waste with process wastewater does not make a phosphoric acid plants water recirculation system a hazardous waste management unit when the mixture of process wastewater and non-hazardous ammoniated phosphate wastes is returned to the system.

If you have any additional questions concerning these matters, please contact Bob Hall or Dan Derkics at (202) 475-8814 or (202) 382-3608, respectively.

Sincerely,

Robert Tonetti
Acting Branch Chief
Special Waste Branch

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

9571.1990(04)

MAY 30 1990

OFFICE OF
SOLID WASTE AND EMERGENCY RESPONSE

Mr. T. S. Ary
Director
Bureau of Mines
2401 E. St., N.W.
Washington, D.C. 20241

Dear Mr. Ary:

Thank you for your letter dated April 6, 1990, concerning iron and steel slags, and their status in the upcoming Report to Congress (RTC) on Mineral Processing Wastes. EPA appreciates the contributions that the Bureau of Mines has made to the RTC to date, and we would be pleased to meet with you to discuss issues related to these slags.

Although the RTC has not been completed yet, based on the information the Agency has collected to date on iron and steel slags it is likely that the Agency will recommend that these wastes remain within the Bevill exclusion -- that is, we believe these wastes will become permanently exempt from regulation as hazardous waste under Subtitle C of the Resource Conservation and Recovery Act (RCRA).

Iron and steel slags which are used in a manner constituting disposal are currently considered "discarded materials" and thus meet the definition of solid wastes under Section 1004(27) of RCRA. See 40 CFR § 261.2 or 53 Fed. Reg. 31,198 (Aug. 17, 1988) for details. EPA is further considering, however, whether such slags are similar enough to virgin aggregate that they should not be classified as solid waste. EPA will address this issue in greater detail in the upcoming Report to Congress, as already promised in the final "Bevill Rule" (54 Fed. Reg. 36,615 (Sept. 1, 1989)). In any event, if these slag materials were to continue to be exempt from Subtitle C regulation, I would expect the use of slag materials would continue. Please let us know, however, if the Bureau of Mines has reason to believe that continued classification of these slags as solid wastes would cause market disruptions and harm to the slag recycling industry.

EPA is committed to furthering beneficial reuse and recycling of materials such as iron and steel slags, to the extent that these activities are conducted using environmentally sound practices. Our search for documented cases in which mineral processing wastes may have endangered human health and the environment has revealed at least one instance where blast furnace and basic oxygen furnace slag is believed to have caused ground water and surface water contamination from the use of the slag as fill and a landfill liner (see enclosure). Information such as this must be analyzed before the Agency can make an informed decision concerning wastes.

Regulation of these slags as hazardous might have an effect on their rate of utilization. The current process (RTC, followed by public comment, regulatory determination and, if necessary, the development of a regulatory program) is the appropriate mechanism for addressing the environmental concerns and the concerns about encouraging beneficial use in a safe manner. Toward that end, Bob Hall of my staff will be in touch with Larry Miller to arrange a mutually agreeable time for a meeting, preferably in early June. Bob can be reached at (202) 475-8814.

Sincerely,

Sylvia K. Lowrance
Director
Office of Solid Waste

Enclosure

cc: Bob Hall

9572 – STATE PROGRAMS

Subtitle D

ATK1/1104/72 kp

OSWER POLICY DIRECTIVE
#9572.00-2

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

OFFICE OF
SOLID WASTE AND EMERGENCY RESPONSE

FEB 22 1985

THIS LETTER WAS SENT TO ALL STATE AND TERRITORIAL ENVIRONMENTAL COMMISSIONERS

Dear:

As discussed in several recent meetings with State and local officials and with the State/EPA Committee, the Administrator and I believe it is important to renew our efforts to develop strategies for management of municipal solid wastes. We particularly believe that statewide solid waste planning is an important step in assuring safe and adequate solid waste management capacity.

In this regard, I want to encourage you to review and, where appropriate, update your State's solid waste plan. In these plans, we believe States should identify a general strategy for protecting health and the environment from adverse effects associated with solid waste disposal. I believe that the following areas warrant particular attention in solid waste management plans:

- An indication of current and projected quantities and locations of solid wastes generated in the State
- The expected future roles of source reduction, recycling, incineration/energy recovery, landfilling and/or other management approaches
- A summary of key regulatory and permitting requirements which apply to solid waste management in your State
- An indication of the role of the public and various political subdivisions in solid waste planning

The above and related information would be very helpful as we jointly develop a national perspective on solid waste management. To assist in this local-State-Federal effort, I would be interested in receiving the latest version of your plan, if available, in the next few months. I also would request that copies of plans be sent to the appropriate EPA Regional Offices.

I am aware that you have also been contacted in recent months by your regional EPA office and requested to certify compliance with Section 4005(c) (1) of the Hazardous and Solid Waste Amendments of 1986. This section requires States to develop and implement permit programs or other systems of prior approval for facilities which receive household hazardous waste and hazardous waste from small quantity generators. Many of you have responded, or are in the process of responding to this request, and we are grateful for your cooperation. This system, together with sound long-range planning, should help lead us toward more efficient and environmentally sound methods of handling solid waste in the future.

An enclosure to this letter lists a number of documents which may be of use when developing or revising your State solid waste plan. For your additional information, I am also enclosing a copy of a speech on solid waste management which I delivered January 29 at a conference sponsored by the Council of State Governments in New York City. The speech is similar to testimony I presented last December 3 before the Subcommittee on Toxic Substances of the Senate Committee on Environment and Public Works.

Thanks very much for your help. Please let me know if EPA can provide any assistance in responding to this request.

Sincerely,

Win Porter

J. Winston Porter
Assistant Administrator

Enclosures

SOURCES OF INFORMATION FOR STATE SOLID WASTE MANAGEMENT PLANNING

Guidelines for Development and Implementation of State Solid Waste Management Plans (40 CFR Part 256) - 44 FR 45066, July 31, 1979, amended at 46 FR 47051, September 23, 1981.

Criteria for Classification of Solid Waste Disposal Facilities and Practices (40 CFR Part 257) - 44 FR 53460, September 13, 1979; amended at 46 FR 47052, September 23, 1981.

Municipal Waste Combustion Study: Report to Congress, June 1987 (Available from NTIS - Publication No. PB87-206074).

Testimony of Dr. J. Winston Porter before the Subcommittee on Toxic Substances, Senate Committee on Environment and Public Works, December 3, 1987.

RCRA/SUPERFUND HOTLINE MONTHLY SUMMARY

SEPTEMBER 86

4. State Programs

40 CFR 271.1(i) allows a state's authorized RCRA program to be broader in scope or more stringent than the Federal RCRA program. What is the difference between state program elements that are broader in scope and more stringent than Federal requirements? What are some examples?

The best available guidance distinguishing between "more stringent" and "broader in scope" is program implementation guidance (PIG) 84-1. A state program that is broader in scope than the Federal program either: 1) expands the size of the regulated community; or 2) incorporates program elements that do not have a Federal counterpart. Examples of requirements that are broader in scope are permits for Federally-exempt wastewater treatment units, special licenses for transporters, and listing of wastes which are not listed Federally.

A state program requirement that is more stringent has a direct Federal program counterpart. Examples of more stringent requirements are requiring generators to submit an annual, rather than a biennial report; shorter duration periods for permits; and stricter management standards for permitted or interim status tanks and containers.

The distinction between broader and more stringent state requirements is significant because EPA may enforce a more stringent state requirement but not a state requirement that is broader in scope. RCRA §3008 (a)(2) allows EPA to enforce any provision of an authorized state's approved program. More stringent state requirements fall into this category. State provisions that are broader in scope are not part of the Federally approved RCRA program, according to 40 CFR 271.1(i), and are therefore not enforceable by EPA (see also PIG 82-3).

Source: Marty Madison (202) 382-2229
Research: Jennifer Brock

UNITED STATES ENVIRONMENTAL PROTECTION A

WASHINGTON, D.C. 20460

9572.1988(03)

DEC 23 1988

THE ADMINISTRATOR

MEMORANDUM

SUBJECT: Policy Regarding Hazardous Waste Management Capacity and RCRA Consistency Issues

TO: Regional Administrators

In recent months we have focused on two parallel, but overlapping, issues in the hazardous waste management area. One issue has been the development of guidance for the State hazardous waste capacity assurance process called for by Section 104(c)(9) of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA). The other has been the issue of EPA's approach to State actions which may be inconsistent with the federal Resource Conservation and Recovery Act program.

This past June a task force on these RCRA consistency and CERCLA capacity issues presented their findings to me. In addition, we have now completed our guidance to the States for the CERCLA capacity assurance process. Based on an evaluation of the findings and guidance, I now want to present to you EPA's policy in the area of RCRA consistency and CERCLA capacity assurance.

First, we will rely on the CERCLA process as our primary vehicle for ensuring that States have adequate capacity to manage their hazardous wastes. As our CERCLA capacity guidance indicates, the States must provide EPA with a good knowledge of their current and projected waste amounts and management practices, including correlation of imports and exports between States; description of waste minimization programs; and discussions of laws and regulations which may affect the state's ability to manage wastes. EPA must approve these State assurances in order for EPA to provide Superfund remedial actions in a State after October 17, 1989.

Secondly, the Regions should use the procedures for withdrawal authorized State RCRA programs in the case of failure to use the RCRA uniform manifest system, or for unreasonable restrictions on

interstate waste movements. The CERCLA capacity assurance process should be used as an initial response to State actions which prohibit waste management within State boundaries without environmental justification. States may be able to resolve issues related to such actions themselves during the interstate discussions that the CERCLA process will foster. The Regions should, therefore, decide whether to initiate proceedings to withdraw State RCRA programs for prohibitory actions after determining that the CERCLA process has proven ineffective.

I believe the above dual approach to be a positive one allowing us to work within the legal authority provided, and to assist States in developing needed waste management capacity.

Lee M. Thomas

9573 – MUNICIPAL WASTE COMBUSTION

Subtitle D

ATK1/1104/73 kp

9573.1986(01)

JUN 27 1986

Mr. Steve Stander
c/o Department of Plant
and Soil Sciences
Stockbridge Hall, Room 10
University of Massachusetts
Anherst, Massachusetts 01003

Dear Mr. Stander:

This is in response to your June 9, 1986, request for information regarding municipal waste incinerator ash management, resource recovery, and regulatory statutes applicable to such incineration.

Disposal of solid residues from municipal waste combustion (MWC) processes is generally accomplished by landfilling. Fly ash as well as other residues from MWC processes sometimes exhibit the characteristics of hazardous waste and, therefore, are regulated under the applicable disposal standards in 40 CFR Parts 260 through 265. Other than those occasions when the MWC residues meet the definition of hazardous waste, the Federal regulations that apply are the same as those for any non-hazardous waste. These regulations are the "Criteria for Classification of Solid Waste Disposal Facilities and Practices" (40 CFR Part 257) which were promulgated on September 13, 1979, under authority of the Resource Conservation and Recovery Act (RCRA). A copy of these Criteria is enclosed for your information.

On the State level, regulatory strategies regarding disposal of MWC residues are greatly varied. Currently, your home State of Massachusetts has no specific restrictions addressing disposal of MWC residues. However, it is my understanding that future Massachusetts regulations may require that disposal of the residues be restricted to landfills which are lined and have leachate collection systems. For additional information, you may wish to contact:

Mr. William F. Cass, Director
Division of Solid and Hazardous Waste
Department of Environmental Quality
Engineering
One Writer Street, 5th Floor
Boston, Massachusetts 02108
(617) 292-5589

In response to the various Congressional mandates written into the Hazardous and Solid Waste Amendments of 1984, the U.S. Environmental Protection Agency (EPA) has recently initiated several projects in an effort to address subject areas pertinent to your inquiry. The Agency is currently developing a technical information document for use by State and local governments in evaluating municipal waste combustion projects. Included in this document will be the results of a study to determine the characteristics of ash from MWC processes. We anticipate that this document will be available in February 1987. EPA is also evaluating the potential health and environmental impacts from the disposal of these residues. The results of this assessment should be available within the year.

EPA's Municipal and Environmental Research Laboratory in Cincinnati, Ohio, is currently investigating ash sampling and analytical techniques. Should you require technical information at this level, you may contact:

U.S. EPA
Center for Environmental Research
Information/ORD
26 West St. Clair Street
Cincinnati, OH 45268

I am also enclosing a list of references which address a broad range of topics which should be pertinent to your study.

I hope this information is useful to you. If you have further inquiries, please do not hesitate to contact me.

Sincerely,

Gerri Dorian
Special Wastes Branch

Enclosures

cc: Bob Janney, EPA (w/o enclosures)

9. Subtitle D Survey

Under the Subtitle D Survey, the EPA is evaluating solid waste disposal facilities in response to the Hazardous and Solid Waste Amendments of 1984. The authority EPA is using to obtain the survey information is sited in §3007(a) of RCRA. However, this authority only allows access to facilities which handle or have handled hazardous waste. Where does EPA get its authority to access and obtain information at a facility that does not or has not handled hazardous waste?

EPA gets its authority to access entry and obtain information at solid waste disposal facilities from §3007(a) of RCRA. This section requires any person who handles or has handled hazardous wastes to furnish to EPA information relating to such wastes and to allow access to the facility and its records to EPA or authorized State officials, for the purpose of developing or assisting in the development of any regulation or for enforcement purposes. The scope of EPA's inspection authority is not limited under the statute to hazardous wastes identified or listed under Subtitle C but rather extends to any waste that the Agency believes may meet the statutory definition of a hazardous waste under §1004(5). As defined by Congress, the term hazardous waste means any solid waste that EPA reasonably believes

"because of its quantity, concentration or physical, chemical, or infectious characteristics may-

(A) cause or significantly contribute to an increase in mortality or an increase in serious irreversible, or incapacitating reversible, illness; or

(B) pose a substantial present or potential hazard to human health or the environment when improperly treated, stored, transported, or disposed of, or otherwise managed." (emphasis added)

Solid wastes which may contain any of the hazardous constituents listed in 40 CFR 261, Appendix VIII which may form the basis for listing actions under 40 CFR 261.11 would fall within the statutory definition of hazardous waste and would be subject to EPA's information gathering and inspection authorities.

These authorities also apply to hazardous waste from households and small quantity generators which are often placed in municipal landfills and other Subtitle D disposal facilities.

Consequently, when EPA needs information to facilitate regulatory development or enforcement, EPA can use Section 3007 to obtain information from Subtitle D facilities.

Source: Jim Craig (202) 382-3410
Research: Joe Nixon

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C.

9573.1990(01)

FEB 16 1990

OFFICE OF
SOLID WASTE AND EMERGENCY RESPONSE

Guy Sutherland
Managing Director
Lomax Development Corporation
P.O. Box 41206
Houston, TX 77241

Dear Mr. Sutherland:

This is in response to your letter of January 12, 1990, in which you inquire about any regulations which may apply to you should you choose to export municipal solid waste (i.e., non-hazardous waste) from the United States to an unspecified country in Central America. At the present time, the Environmental Protection Agency (EPA) does not have the authority to control the export of this type of waste; therefore, there are no EPA regulations that apply. (For your information, EPA does regulate the export of hazardous waste under section 3017 of the Resource Conservation and Recovery Act (RCRA)). Thus, there is no requirement that you provide written proof of acceptance by the receiving country.

As you may be aware, the U.S. government is in the process of deciding whether to sign the Basel Convention. The Basel Convention governs the transboundary movement of wastes. Should the U.S. sign and ratify the Convention, certain new requirements will apply to persons exporting municipal wastes. Such requirements would include a notification and consent procedure for the export of municipal solid waste.

In addition, there is legislation currently pending before Congress, which, if passed, would regulate exports of municipal solid waste. The legislation would ban the export of solid waste unless it was made pursuant to a bilateral or regional agreement with the receiving country. The exporter would also have to obtain a permit from EPA to export the waste under the proposed legislation.

Although there are no EPA regulations that apply at the present time to the export of wastes such as those referred to in your letter, this situation could change should the U.S. become a signatory to the Basel Convention or should pending legislation pass. You may find it valuable to keep informed on legislative developments in this area.

Should you have questions regarding this letter you may contact Emily Roth of my staff at (202) 382-4777.

Sincerely,

Sylvia K. Lowrance
Director
Office of Solid Waste

OSW-11
9573.1990(02)

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

MAR 29 1990

OFFICE OF
SOLID WASTE AND EMERGENCY RESPONSE

Ms. Julie Sullivan
9 Bittersweet Court
Centerport, New York 11721

Dear Ms. Sullivan:

I am writing in response to your March 6 letter to Sylvia Lowrance regarding the Environmental Protection Agency's (EPA) interpretation of the regulatory status of municipal waste combustion ash.

As you noted, EPA articulated its interpretation of Section 3001(i) of the Hazardous and Solid Waste Amendments in the July 15, 1985 Federal Register (pages 28725-26). The Agency stated that there was no specific legislative language or history indicating that ash generated by energy recovery facilities accepting non-hazardous wastes from commercial or industrial sources would be exempt from regulation under Subtitle C if such ash exhibits a characteristic of a hazardous waste. Because the Section 3001(i) exemption did not extend to the ash from energy recovery facilities, ash generated by the combustion of non-household wastes is required to be handled like any other waste - if it exhibits a hazardous waste characteristic, it must be managed accordingly.

Recently, Sylvia Lowrance reiterated the Agency's position regarding the regulatory status of ash, in testimony before the House Subcommittee on Transportation and Hazardous Materials. Ms. Lowrance indicated that although the statute is ambiguous, EPA continues to believe that its interpretation of existing law is correct. The testimony also makes clear, however, that EPA believes that ash could be managed safely as a special waste under RCRA Subtitle D, with the use of management controls such as disposal in lined monofills, leachate collection systems, and groundwater monitoring. Accordingly, the Agency supports Congressional legislation that would provide EPA with clear authority to regulate ash from municipal waste combustors under Subtitle D.

Two recent court decisions (enclosed) have rejected EPA's statutory interpretation and concluded that Section 3001(i) of RCRA does exempt ash from regulation under Subtitle C.

Environmental Defense Fund, Inc. v. Wheelabrator Technologies, Inc. No. 88 Civ. 0560 (S.D.NY. Nov. 21, 1989). Environmental Defense Fund, Inc. v. City of Chicago No. 88 C 769 (N.D.IL. Nov. 29, 1989). The Agency is considering the appropriate response to these decisions.

I hope that this information sufficiently addresses your questions. Thank you for your interest.

Sincerely,

Doreen Sterling
Chemist
Municipal Solid Waste Program

RCRA/SUPERFUND HOTLINE MONTHLY SUMMARY

MAY 1991

2. Regulation of Municipal Waste Combustion (MWC) Ash

Two cities have recently constructed combustion facilities to manage municipal solid waste. The first city has an energy recovery plant, while the second has a non-energy recovery incinerator. Both units generate a fly and bottom ash. Would these types of ash be subject to RCRA hazardous waste regulation if the ash exhibited a toxicity characteristic?

No. The ash would not be subject to the 40 CFR 261.24 toxicity characteristic (TC) regulation. The Clean Air Act Amendments of 1990 were enacted on November 15, 1990; Section 306, entitled "Ash Management and Disposal," established that for a period of two years after the date of enactment, MWC ash from "solid waste incineration units" would not be regulated as a RCRA Subtitle C waste should it exhibit a hazardous waste characteristic of ignitability, corrosivity, reactivity, or toxicity in 40 CFR Part 261, Subpart C. (Note: MWC ash would not be regulated as a hazardous waste in 40 CFR Part 261, Subpart D since it is not a listed source.) The term "ash from solid waste incineration units burning municipal waste" includes fly and/or bottom ash from both energy recovery and incineration facilities managing municipal waste. During the two year moratorium, however, MWC ash would be subject to: 1) current federal regulations in 40 CFR Part 257 governing the disposal of solid waste, 2) state regulations governing solid waste disposal; and 3) state regulations governing municipal waste combustion ash disposal or utilization/reuse, where they exist. See also Environmental Defense Fund, Inc. v. Wheelabrator Technologies, Inc., Docket No. 90-7437 (2d Cir. April 24, 1991).

Source: Andrew Teplitzky, OSW (202) 382-4536
Research: Cynthia Hess

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

9574.1990(01)

NOV 28 1990

Marilynne Wilson, RN
Quality Assurance Coordinator
Family Home Care
P.O. Box 2145
Spokane, Washington 99210-2145

Dear Ms. Wilson:

Thank you for your letter dated October 12, 1990 regarding the proper disposal of old medications.

Expired medications from households may fall into the category of household hazardous waste. Household hazardous waste (HHW) is appropriately identified by applying two criteria. First, the waste must be generated by individuals on the premises of a temporary or permanent residence for individuals. Second, the waste stream must be composed primarily of materials found in the waste generated by consumers in their homes. Other items that may fall into this category may include excess household cleaners, lawn and garden products, and paint thinners, among others, when intended for disposal. Based on the information in your letter, it is not clear whether the medication you manage qualifies as HHW. However, you should be able to determine the regulatory status of the material based on the aforementioned criteria. At the Federal regulatory level, HHW is excluded from hazardous waste regulations under Subtitle C of the Resource Conservation and Recovery Act (RCRA). Please note that state or local regulations may be more stringent than Federal regulations.

Although household hazardous waste is excluded from Subtitle C regulations, the Environmental Protection Agency (EPA) shares concerns such as yours regarding household hazardous waste. In fact, EPA attempts to address some of these concerns in the enclosed publication entitled A Survey of Household Hazardous Wastes and Related Collection Programs. This report contains the results of a comprehensive nationwide survey of HHW. In this publication the Agency identifies: existing information on the types and quantities of HHW; the impacts of HHW on homeowners, solid waste collection and disposal personnel, and the environment; and existing collection programs at the state and local levels. You may also be interested in the enclosed publication Household Hazardous Waste: Bibliography of Useful References and List of State Experts which lists resources and contacts for HHW programs.

With regard to disposal of old medications, rinsing the bottles and flushing this type of waste down a toilet may be the most appropriate method of disposal. Additionally, most pharmacists recommend flushing expired tablets and capsules down the toilet. By disposing of these normally minute quantities of household waste in this fashion, the possibility of exposing children that might be attracted to the potentially harmful materials while in the trash is removed. Federally, any mixture of domestic sewage and other wastes that pass through a sewer system to a publicly owned treatment works (POTW) for treatment is not regulated under Subtitle C.

I suggest you consult your local publicly owned treatment works (POTW) to determine if local limits or general/specific prohibitions are applicable when disposing of expired medications in this manner. I also suggest you contact your state solid waste program office to determine if they can provide additional HHW disposal guidance. The address in Washington is:

Solid And Hazardous Waste Management Division
Department of Ecology
Mail Stop PV-11
Olympia, Washington 98504
(206) 459-6316

Thank you for your interest in proper waste management. I hope this information is useful when determining the appropriate disposal options for expired medications.

Sincerely,

Mike Petruska, Chief
Waste Characterization Branch

Enclosures

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

9574.1991(01)

MAY 30 1991

OFFICE OF
SOLID WASTE AND EMERGENCY RESPONSE

Lynn L. Bergeson
Weinberg, Bergeson, and Neuman
1300 Eye Street, N.W.
Suite 600 East
Washington, D.C. 20005

Dear Ms. Bergeson:

This letter responds to your April 12, 1991 letter on behalf of the Battery Products Alliance (BPA) requesting clarification of the scope of the 40 CFR 261.4(b)(1) household waste exclusion under the Resource Conservation and Recovery Act (RCRA).

Specifically, you have raised the issue of the applicability of the exclusion to nickel-cadmium batteries (NiCds) removed from household products by service centers where the household products are taken to the service center by a consumer. Further, you express concern that the Agency's interpretation of the scope of the household waste exclusion is contrary to both the legislative and regulatory histories of the exclusion.

First, thank you for your interest in developing recycling programs for NiCd batteries and in the applicability of RCRA regulations to these programs. We are considering the points that you and BPA member companies have raised in your letters concerning the difficulties involved in implementing NiCd recycling programs if the batteries exhibit the Toxicity Characteristic.

Turning to the Agency's interpretation of the household waste exclusion, you are correct in understanding our interpretation to be that batteries removed by consumers in their homes are within the exclusion and are exempt from the hazardous waste regulations, and batteries removed by service centers from appliances taken to the service centers by consumers are not within the exemption.

This means, of course, that if spent NiCds generated by service centers exhibit any of the hazardous waste characteristics, they are subject to the RCRA hazardous waste regulations. Service centers must determine the total quantity of hazardous waste generated per month to determine whether they must manage the NiCds in compliance with the conditionally exempt

small quantity generator regulations of 40 CFR 261.5, or the generator regulations of 40 CFR Part 262. Also, individual states may have more stringent or additional regulations governing the management of these wastes.

Although others may have a different interpretation of the legislative history of the household waste exclusion, the Agency's interpretation of the legislative history and of the scope of the exclusion have been consistent since promulgation of the exclusion in 1980. Note that the May 19, 1980 Federal Register (45 FR 33099) states that EPA interpreted Congressional intent "... to exclude waste streams generated by consumers at the household level" (i.e., by homeowners at home). Additionally, a November 13, 1984 Federal Register notice (49 FR 44978) which amended the household waste exclusion also included a discussion of the scope of the exclusion in the preamble. The 1984 notice explained that based on legislative history, it is appropriate to apply two criteria to define the scope of the exclusion. First, the waste must be generated by individuals on the premises of a temporary or permanent residence for individuals (i.e., a household) and second, the waste stream must be composed primarily of materials found in the wastes generated by consumers in their homes. If a waste satisfies both criteria, it is considered a household waste. Thus, spent NiCd batteries generated by homeowners would fall under the household waste exclusion, while those generated by service centers and other businesses would not.

We recognize that the NiCd battery situation (i.e., many states considering take-back programs and many products manufactured such that spent batteries must be removed by service centers) may present some unique opportunities for safe and effective recycling. We are also aware of your concerns about implementation of recycling programs in states considering legislation designed to increase the rate of NiCd recycling. We are therefore currently examining the available options to determine how to facilitate such programs. We expect it will take us several more weeks to assess options and reach a tentative decision on how to best address your concerns. At that time, we will notify you of the results of our analysis and of our plans to implement the decision.

To ensure that you are fully informed about our current thinking on an approach to this issue, there are several options that we are exploring. First, we are investigating what could be accomplished in the short term to alleviate the problems you have identified. One possibility is to extend the current regulations governing lead-acid battery reclamation to spent NiCd battery reclamation. As part of this effort, we must evaluate issues such as the size of the problem, hazards posed by waste disposal and recycling, and the feasibility of possible solutions. Any information that you could provide concerning the following items

would be extremely helpful: 1) the types and quantities of cadmium and nickel used in batteries in the United States, 2) current management practices for spent NiCds, 3) collection and storage systems currently in place and planned, 4) recycling processes currently in use and planned, and 5) quantities of batteries reclaimed within the U.S. and overseas.

Second, as you are aware, we are currently conducting a comprehensive analysis of the RCRA regulations to determine how they could best be modified to encourage environmentally sound recycling of hazardous wastes. In particular, one of the issues being studied is how to address reverse distribution systems that involve the return of hazardous wastes to product manufacturers.

Thank you for your continued interest in increasing the environmentally sound recycling of NiCd batteries and how RCRA regulations impact such efforts. Should you have any further questions regarding the household waste exclusion, please contact Mike Petruska at (202) 475-8551.

Sincerely,

David Bussard
Director
Characterization and Assessment
Division

9574 – HOUSEHOLD HAZARDOUS WASTE

Subtitle D

OSWER POLICY DIRECTIVE NO. 9574.00-1

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

NOV 1 1988

OFFICE OF
SOLID WASTE AND EMERGENCY RESPO

MEMORANDUM

SUBJECT: Clarification of Issues Pertaining to Household Hazardous Waste Collection Programs

FROM: J. Winston Porter
Assistant Administrator for Solid Waste and Emergency Response

TO: Waste Management Division Directors, Regions I-X

As you know, the Agency enthusiastically supports household hazardous waste (HHW) collection and management programs. As part of this support, EPA has sponsored annual HHW conferences since 1986. The first collection programs began in 1981. As of October 1988, over 1300 collection programs have been set up in 44 States and more programs are being planned all the time. EPA believes these programs are important because they: (1) promote citizen awareness regarding proper handling of HHW; (2) reduce the amount of HHW in the municipal solid waste stream which ultimately is taken to municipal waste combustors or landfills; (3) limit the amount of HHW which is dumped down a drain and ultimately discharged to a publicly-owned treatment works (POTW), or is dumped indiscriminately; (4) remove a greater amount of HHW from the home, thereby reducing potential safety hazards; and (5) help to reduce the risk of injuries to sanitation workers.

Several issues have been raised pertaining to HHW collection programs. These issues include the liability of collection program sponsors under the Resource Conservation and Recovery Act (RCRA) and the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA); EPA's recommendations regarding the management of HHW; and the regulatory status of HHW that contains dioxin.

This memorandum clarifies our position on these issues. You should note, however, that State positions may vary; the State agency should be contacted for details on the State's policies or regulations regarding HHW.

1. What does EPA recommend regarding management of HHW collected in HHW collection programs?

As you know, all household wastes are exempt by definition from the Federal hazardous waste regulations promulgated under Subtitle C of RCRA. Section 261.4(b)(1) unconditionally exempts household wastes, including HHW, from the Subtitle C regulations even when accumulated in large quantities. This exemption also applies to HHW collected during an HHW collection program. However, when household wastes are mixed with hazardous wastes from small quantity generators, this resulting mixture is subject to the small quantity generator rules in Section 261.5. For this reason, sponsors of HHW collection programs should be careful to limit the participation in their programs to households to avoid the possibility of receiving regulated hazardous wastes from commercial or industrial sources and triggering all or some of the Subtitle C controls on this waste.

Household waste, including HHW, is subject to the regulations under Subtitle D of RCRA. The current Subtitle D regulations governing the disposal of any solid waste are the "Criteria for Classification of Solid Waste Disposal Facilities and Practices" (40 CFR Part 257). These regulations are general environmental performance standards that are implemented by the States. On August 30, 1988 (see 53 FR 33314) EPA proposed new rules for municipal solid waste landfills at 40 CFR Part 258. HHW can legally be disposed in any solid waste disposal facility, including a municipal solid waste landfill, that is in compliance with the existing "Criteria" and State and local requirements.

Although HHW is exempt from the Federal RCRA Subtitle C hazardous waste regulations, EPA recommends that sponsors of HHW collection programs manage the collected HHW as a hazardous waste. When a community has already gone to the effort and expense of collecting these materials, Subtitle C controls provide a greater level of environmental protection. In selecting a management option, the Agency recommends that program sponsors follow the waste management hierarchy of:

(1) Reusing and recycling as much waste as possible;
(2) Treating waste in a hazardous waste treatment facility; and, finally,
(3) Disposing of remaining waste in a hazardous waste landfill.[1]

The Agency also recommends the use of licensed hazardous waste transporters who will properly identify, label, manifest, and transport the collected wastes for recycling, treatment, or disposal. Although sponsors are not required to manage HHW as a hazardous waste, it is clear from seeing the programs in action, that, in fact, sponsors usually contract with hazardous waste management professionals to run the programs. These contractors generally manage the HHW as a hazardous waste and usually make efforts to reuse and recycle the waste.

2. What is the regulatory status of HHW that contains dioxin?

As stated above, HHW is unconditionally exempt from Federal RCRA Subtitle C regulation. This exemption includes HHW that contains dioxin, such as pesticides. Like any household waste, HHW that contains dioxin must be disposed of in accordance with EPA's rules under Subtitle D of RCRA.

The RCRA land disposal restrictions rule issued November 8, 1986, applies only to those dioxin-bearing wastes that are specifically listed as hazardous wastes under Subtitle C of RCRA. Therefore, this rule does not apply to any HHW and does not prohibit hazardous waste land disposal facilities from receiving any HHW, even those potentially containing dioxin.[2] Although dioxin-containing HHW are exempt from EPA's land disposal restrictions rule, we understand that, due to public perception concerns, some Subtitle C hazardous waste management facilities currently do not accept dioxin-bearing HHW. EPA will explore options with State and local governments so that a solution to this problem can be found. For example, we are looking at ways to encourage the waste management industry to reconsider their position and accept these wastes. Some communities have chosen to temporarily store this dioxin-bearing HHW until a more permanent management option can be found.

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[1]To the extent that non-hazardous liquids are not containerized in accordance with Sections 40 CFR 264.314(d), 265.314(c), 264.316, and 265.316, such liquids are subject to the non-hazardous liquids restrictions set forth at Sections 264.314(e) and 265.314(f).

[2]Likewise, the land disposal restrictions do not apply to any other HHW.

3. What liability do HHW collection programs sponsors have under Subtitle C of RCRA?

As stated above, Section 261.4(b)(1), exempts household wastes, including HHW, from the Federal Subtitle C regulations. As a result, handlers of HHW are not potentially liable under Subtitle C of RCRA for failure to follow the regulations and are not required to manage collected HHW in Subtitle C hazardous waste management facilities. As previously mentioned, however, EPA recommends that this waste be handled as a Subtitle C hazardous waste.

4. What liability do sponsors of HHW collection programs have under CERCLA?

CERCLA does not contain an exclusion from liability for household waste or an exclusion based on the amount of waste generated. Any waste that qualifies as a hazardous substance under CERCLA is subject to the liability provisions of Section 107. Hazardous substances are defined under Section 101(14) and designated under Section 102(a) of CERCLA. HHW may qualify as a "hazardous substance" if it contains any substance listed in Table 302.4 of 40 CFR Part 302. If a household waste contains a substance that is covered under these CERCLA sections (whether or not it is a RCRA hazardous waste), potential CERCLA liability exists.

Communities should recognize that potential liability under CERCLA applies regardless of whether the HHW was picked up as part of a community's routine waste collection service and disposed of in a municipal waste landfill (RCRA Subtitle D) or if the HHW was gathered as part of a special collection program and taken to a hazardous waste landfill (RCRA Subtitle C). The additional safeguards provided by HHW collection and Subtitle C management may reduce the likelihood of environmental and human health impacts and, therefore, may also reduce potential CERCLA liability.

I hope this information will assist you in addressing questions regarding HHW collection and management programs. We are providing copies of this memorandum to States and the major waste management trade associations. I request that you make this information available to any other interested parties in your Region. If you require additional information or clarification on these issues, please contact Allen Maples of the Municipal Solid Waste Program at (202) 382-4683.

cc: State Solid and Hazardous Waste Directors
Bryan W. Dixon, ASTSWMO
Dana Duxbury, Consultant to Tufts University, CEM
William Forester, APWA
H. Lanier Hickman, GRCDA
Sheila Prindiville, NSWMA
Hazardous Waste Branch Chiefs, Regions I-X
Regional Subtitle D Coordinators, Regions I-X

JAN 22 1985

Mr. Kevin Bromberg
Small Business Administration
1725 I Street, S.W.
Washington, D. C. 20416

Dear Mr. Bromberg:

I am responding to the December 31, 1984, letter that I received from Mr. Chuck Marshall (JACA Corporation) requesting information on the disposal of nonhazardous liquid wastewaters and sludges in sanitary landfills under the "old RCRA law" and "new RCRA law."

The Federal Government has no specific regulations on the disposal of bulk or containerized nonhazardous liquids in sanitary (nonhazardous waste) landfills. The EPA "Criteria" or guidelines regarding sanitary landfills were issued under Subtitle D of RCRA on September 13, 1979, in 40 CFR Part 257. These Criteria, in general, establish performance standards for sanitary landfills. Specific design and operating practices needed to meet the performance standards must be determined by the facility owner or operator and may be specified by the State through State regulations or State-issued permits. Restrictions on liquids or certain liquids in landfills may be needed at specific sites, depending on the facility design and location, in order to meet the Criteria performance standards. To get current information on State requirements, you should check with the State agencies (list of State agencies is enclosed).

Under the recent RCRA amendments, EPA is to review the adequacy of the Criteria in protecting human health and the environment and to make revisions as necessary. The RCRA amendments do not specifically address the issue of liquids at sanitary landfills.

Regulations regarding the disposal of nonhazardous liquid wastes at hazardous waste landfills were issued under Subtitle C of RCRA in 40 CFR 264.314 and 265.314. EPA's current requirement is that nonhazardous liquids, in a bulk form, cannot be placed into a hazardous waste landfill unless:

1) The landfill has a synthetic liner and a functioning leachate collection and removal system, as per §264.301(a), or

2) Before disposal, the bulk liquids or free liquids are treated or stabilized so that free liquids are no longer present.

In regard to the disposal of containerized nonhazardous liquids in hazardous waste landfills, EPA's current requirement is that all free-standing liquids must be removed from the container before the waste is placed in the landfill.

The RCRA amendments will change the rules regarding the disposal of nonhazardous liquids in hazardous waste landfills. The amendments require that 12 months after enactment (November 9, 1985), the placement of any liquid that is not a hazardous waste in a landfill for which a permit is required under §3005(c) or which is operating pursuant to interim status granted under §3005(e) is prohibited, unless the owner or operator demonstrates specific items to the Administrator (see enclosure).

If you have any further questions concerning this letter, you may contact Mr. Paul Cassidy of my staff at 382-4682.

Sincerely,

John H. Skinner
Director
Office of Solid Waste

Enclosure

cc: Chuck Marshall

Administrative Directives

9581 – RCRA GRANT FUNDS

9581.1988(01)

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

NOV 1 1988

MEMORANDUM

OFFICE OF
SOLID WASTE AND EMERGENCY RESPONSE

RCRA/SUPERFUND HOTLINE MONTHLY SUMMARY

AUGUST 88

FROM: Thea McManus, Project Officer
Office of Solid Waste

Hubert Watters, Deputy Project Officer
Office of Emergency and Remedial Response

TO: See List of Addressees

This report is prepared and submitted in support of Contract #68-01-7371.

I. SIGNIFICANT QUESTIONS AND RESOLVED ISSUES - AUGUST 1988

A. RCRA

1. Source Reduction and Recycling Technical Assistance Grants For States

On July 18, 1988 (53 FR 27077) EPA announced the availability of a new financial assistance program, "Source Reduction and Recycling Technical Assistance" for States to develop or expand source reduction and recycling technical assistance programs. The program is a grant/cooperative agreement program designed to provide assistance to a limited number of states to establish or expand technical assistance programs that address the reduction of pollutants from air, land, surface, water and ground-water.

How much money is available to states through this program?

Congress appropriated $4 million for the source reduction and recycling program. Of the total $4 million, $3 million will be awarded to States in fiscal year 1989 under cooperative agreements. Approximately 10-12 states will be selected through open competition. Each selected state will be eligible to receive no more than $300,000.

What procedures should a state follow to receive grant money?

To apply for funds, State environmental agencies must: (1) submit a letter of intent by August 15, 1988; and (2) submit a grant applications package by September 30, 1988.

1. Source Reduction and Recycling Technical Assistance Grants For States (Cont'd)

What types of activities are eligible for funding?

These cooperative agreement funds are to be used specifically for establishing and expanding source reduction and recycling assistance programs that address the transfer of pollutants across all environmental media. A list of possible activities eligible for funding include the following:

—Hiring personnel and/or procuring necessary expertise to support the establishment and development of multimedia program;
—Providing direct technical assistance in source reduction and recycling, especially to small and medium-sized firms;
—Conducting demonstration activities and/or in-plant pilot scale studies of pollution prevention technologies;
—Developing and delivering programs to train staff to provide technical assistance to generators in identifying and implementing source reduction and recycling opportunities and activities;
—Developing or expanding state technical information clearinghouses that contribute to national technical transfer networks or clearinghouses;
—Expanding and improving waste exchange programs among industry, states and local governments;
—Developing and distributing industry/process-specific technical manuals and/or brochures to help generators identify and implement source reduction and recycling activities; and,
—Conducting outreach activities such as presentations, workshops and seminars.

What are the differences between this program and RITTA?

RITTA (Resource Conservation and Recovery Act Integrated Training and Technical Assistance Initiative) is designed to provide assistance to States to plan and implement hazardous waste training and technical assistance activities in support of the States' RCRA programs. The activities funded under RITTA must include: (1) the development of a long term plan for training and technical assistance activities; (2) delivery of RCRA program training activities for State regulators; and (3) implementation of an initial pilot technical assistance project in waste minimization.

The cooperative agreement funds will be awarded to States to establish multi-media waste reduction technical assistance programs. Unlike RITTA, this program is not specifically limited to wastes regulated under RCRA.

Source: Jackie Krieger (202) 382-6972
Research: Chris Bryant