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Solid Waste and Emergency Response (OS-343)
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RCRA Permit Policy Compendium

Volume 7

9460.1980 - 9482.1990

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Transporter Standards (Part 263)

9461 – GENERAL STANDARDS

Part 263 Subpart A

RCRA/SUPERFUND HOTLINE MONTHLY SUMMARY

JANUARY 83

QUESTIONS/ANSWERS - RCRA

1. Question: Can a transporter consolidate manifested shipments of hazardous waste at a transfer facility by transferring wastes in drums to a tank truck for bulk delivery to a TSDF? All of the drums contain wastes with the same DOT shipping description.

Answer: If the transporter were combining waste with different DOT shipping descriptions into a single container, the transporter would be mixing wastes and must comply with the Part 262 regulations. Since in this instance no mixing of different DOT waste types occurs, there is no requirement for a new manifest. (The preamble to the Dec. 31, 1980, interim final rule on storage by transporters at transfer facilities solicited comments on whether regulatory controls over the consolidation of shipments and mixing of hazardous waste by transporters is [illegible]). If the containers are empty according to section 261.7, they are not subject to further RCRA regulations.

Source: Carolyn Barley, Rolf Hill, and Claire Welty
Research: Irene Horner

9461.01(83)

September 19, 1985

Mr. G. Thomas Manthey
Operations Manager
G W Inc.
P. O. Box 379
Cedarburg, Wisconsin 53012

Dear Mr. Manthey:

This is in response to your letter of August 30, 1985, which concerned the bulking and consolidating of compatible wastes with different EPA hazardous waste codes. We recognize that transporters sometimes pick up waste from several generators in order to send full loads to treatment, storage, and disposal facilities. These transporters also may consolidate different bulk waste shipments in a tank truck or pump the contents of drums containing different EPA waste codes into a single tank truck. You asked whether this method of handling hazardous waste constitutes treatment. It is our interpretation that incidental changes in the characteristics of the waste that occur from consolidating shipments going to treatment, storage, and disposal facilities for handling under RCRA regulations would not be considered treatment.

Treatment as defined in §260.10 "means any method, technique, or process...designed to change the physical, chemical, or biological character or composition of any hazardous waste ... to render such waste non-hazardous, or less hazardous; safer to transport, store, or dispose of...." Mixing listed waste does not render the wastes non-hazardous (40 CFR 261.3(c) and (d)). Mixing hazardous waste that is identified in 40 CFR 261 Subpart C on the basis of characteristics renders the waste non-hazardous if the waste no longer exhibits those characteristics after mixing (40 CFR 261.3(d)(1)).

Although characteristic wastes mixed by transporters may exhibit fewer hazards, this incidental reduction of hazard is not considered treatment if the wastes are still sent to treatment, storage, or disposal facilities. The basis of this interpretation is found in the definition of treatment in Section 1004 of the Hazardous and Solid Waste Amendments, which states: "...'treatment'...includes any activity or processing designed to change the physical form or chemical composition of hazardous waste so as to render it nonhazardous." The type of transportation you describe does not appear to be <u>designed</u> to

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render the waste nonhazardous. This is the basis of our interpretation that the bulking is not regulated as treatment under RCRA.

You should be aware that the blending of wastes by transporters is addressed by two other regulations. In particular, §263.10(c)(2) requires transporters to comply with generator requirements (e.g., issue a new manifest) when transporters combine wastes with different Department of Transportation (DOT) shipping descriptions in the same container. This occurs when combining two shipments of RCRA ignitable waste, when one is a DOT combustible and the other is a DOT flammable. Combining different RCRA waste streams that are both classified by DOT as "hazardous waste solid, n.o.s." would not require a new manifest. You can obtain the proper DOT shipping descriptions in 49 CFR 172.101 or contact DOT's Hazardous Materials Standards Division at (202) 426-2075.

The policy of bulking and consolidating waste shipments is also addressed in the preamble to the December 31, 1980, Federal Register on transfer facilities (45 FR 86966). At transfer facilities, "shipments may be consolidated into larger units or shipments may be transferred to different vehicles for redirecting or rerouting." Transfer facilities can store manifested waste shipments in DOT packages for up to 10 days without complying with §264 or §265 storage requirements, as described in 40 CFR 263.12. "These amendments relieve transporters who own or operate a transfer facility of the necessity of obtaining a RCRA permit and of complying with the substantive requirements for storage for the holding of wastes which is incidental to normal transportation practices (45 FR 86966)." Furthermore, this preamble later states, "These amendments do not place any new requirements on transporters repackaging waste from one container to another (e.g., consolidation of wastes from smaller to larger containers) or on transporters who mix hazardous wastes at transfer facilities (45 FR 86967)." In other words, this issue concerns storage, not treatment.

The transfer facility preamble also requested comments on whether transporters need to have a regulation similar to §265.17 for handling ignitable, reactive, or incompatible wastes to prevent ignition or reaction. Prudent waste management practices would probably include voluntary compliance with many of these standards.

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If you have any other questions about these issues, please contact Irene Horner of my staff at (202) 382-2550.

Sincerely yours,

Marcia Williams
Director
Office of Solid Waste (WH-562)

This has been retyped from the original document.

APR 10 1986

Ms. Virginia Eastwood
Director, Hazardous Waste Division
St. Joseph Motor Lines
5724 New Peachtree Road
Atlanta, Georgia 30341

Dear Ms. Eastwood:

I am responding to your letter of inquiry dated March 31, 1986.

As you stated correctly in your letter, the "10 day" regulation for storage in transit of hazardous waste does not apply to the period of time that such waste is actually in transit between the pick-up and delivery points.

This interpretation is consistent with the appropriate regulatory provision contained in 40 CFR Part 263 - Standards Applicable To Transporters of Hazardous Waste. More specifically 40 CFR 263.12 states: "A transporter who stores manifested shipments of hazardous waste in containers meeting the requirements of §262.30 at a transfer facility for a period of ten days or less is not subject to regulation under Parts 270, 264, and 265 of this chapter with respect to the storage of those wastes."

Thus, the "10 day" regulation only relates to storage at a transfer facility.

Furthermore, "transfer facility" is defined in 40 CFR 260.10 as follows: "Transfer Facility means any transportation related facility including loading docks, parking areas, storage areas and other similar areas where shipments of hazardous waste are held during the normal course of transportation".

I hope that these regulatory citation's provide you with the information which you requested. You must, however, remember that individual State hazardous waste regulations may be more stringent than these Federal requirements.

Respectfully,

Bernard J. Stoll
Program Manager
Financial Responsibility and
Assessment Branch

MAY 1 1987

Honorable Jesse A. Helms
United States Senator
P.O. Box 2944
Hickory, North Carolina 28603

Dear Senator Helms:

Thank you for your April 9, 1987, letter on behalf of your constituent, Mr. Murl E. Whitener, President of S & W Chemicals, Inc., who described his firm's difficulties in securing Product Liability Insurance coverage.

Financial responsibility regulations issued pursuant to the Resource Conservation and Recovery Act (RCRA) include requirements for liability coverage for third-party bodily injury and property damage. These requirements are effective upon hazardous waste treatment, storage, and disposal facilities. We have confirmed, however, that S & W Chemicals is a transporter of hazardous wastes and, therefore, is not subject to these liability coverage requirements.

S & W Chemicals, as a chemical transporter, is required to maintain liability insurance pursuant to the Motor Carrier Act (MCA). Transporters of hazardous substances must carry liability coverage of $1 million or $5 million, depending on the substance transported, for each vehicle. There are a variety of financial instruments, other than insurance, that may be relied upon to comply with the MCA liability coverage requirements. In addition to the brief explanatory materials attached, you might wish to contact Mr. Neil Thomas or Mr. Joseph Fulnecky at the Federal Highway Administration (202/366-2990) for more information about the MCA requirements, and how they apply to a firm like S & W Chemicals encountering insurance coverage problems.

We are aware of difficulties many hazardous waste management facilities covered by the RCRA liability coverage requirements have experienced recently in securing insurance. From our discussions with the insurance industry and our other efforts to monitor trends in this area, the Environmental Protection Agency (EPA) understands that liability insurance,

in general, is becoming increasingly available and at a lower cost than in the recent past. We hope the positive trends that EPA has noted may benefit S & W Chemicals in its efforts to locate insurance.

If I can be of any further assistance, please let me know.

Sincerely,

(S/J. Winston Porter
Assistant Administrator

WH-562/COTSWORTH/T.MCMANUS - 475-8818/sld/4-21-87/Control No: AL701323/Due Date: 4-27/CONTROLLED CORRESPONDENCE #11

JUL 30 1987

MEMORANDUM

SUBJECT: Generation of Aids to Navigation (ATON) Batteries and RCRA Requirements

FROM: Marcia E. Williams, Director
Office of Solid Waste (WH-562)

Gene A. Lucero
Office of Waste Programs Enforcement (WH-527)

TO: Kenneth D. Feigner, Chief
Waste Management Branch (HW-112)
EPA Region X

This is in response to your June 30, 1987, memorandum in which you requested clarification as to how the RCRA rules apply to ATON batteries. The answers to your specific questions are as follows:

1. We agree with you that the entire battery is counted in weight calculations;

2. The points of waste generation are, as you suggested, each ATON unit service area (either landbased or the tender vehicle). Each area is subject to the quantity determination of §261.5, except when several areas are on one site; then the entire quantity of hazardous waste generated at the site is counted.

3. The location to which the spent batteries are taken would normally be a TSDF, provided the waste is received from one or more ATON units which generate greater than 100 kg/mo. of hazardous waste. You should note, however, that 40 CFR §263.12 provides that properly packaged and labeled hazardous waste containers may be held for 10 days or less at a transfer facility without having to comply with Parts 264, 265, or 270.

4. The satellite accumulation area provisions of §262.34 (c) do not apply to the ATON locations because they are not all on one site, but rather are each distinct sites surrounded by water.

5. We believe that the batteries removed after tender servicing do require manifesting, as well as those removed from land-based vehicle servicing. The location where a battery is removed from service is the waste generation site. The generator must manifest the batteries to a TSDF provided they are not a conditionally exempt generator. As indicated above, the batteries may be held for up to 10 days at a transfer facility under §263.12.

Please feel free to contact Michael Petruska at 475-6676 if you have any further questions.

cc: Waste Management Division Directors, Regions I - IX
Solid Waste Branch Chiefs, Regions I - X

WH-562B/MPetruska/bc/7/15/87/475-6676/R242/RSCC-8701

RCRA/SUPERFUND HOTLINE MONTHLY SUMMARY

JULY 87

2. Domestic Sewage Exclusion

A RCRA hazardous waste is transported by truck accompanied by Uniform Hazardous Waste Manifest to a publicly-owned treatment works (POTW). Does the domestic sewage exclusion apply to this hazardous waste if it mixes with domestic sewage prior to treatment? Is the sludge generated from treating the RCRA hazardous waste and the domestic sewage a hazardous waste due to the "Derived-From Rule" (40 CFR 261.3(c) and (d))?

The Domestic Sewage Exclusion ("the exclusion" or "the exemption") found in RCRA Section 1004(27) and codified at 40 CFR 261.4(a)(1)(ii) applies to "domestic sewage and any mixture of domestic sewage and other wastes that pass through a sewer system to publicly-owned treatment works for treatment. 'Domestic sewage' means untreated sanitary wastes that pass through a sewer system" (emphasis added). These wastes are not considered to be solid wastes and therefore cannot be classified as a RCRA hazardous waste. The exemption does not extend to wastes which are transported to the POTW by way of truck, rail, or dedicated pipe and which do not mix with domestic sewage. The POTW would be operating under a NPDES permit and is subject to regulations under the RCRA permit-by-rule provisions (see 40 CFR 270.60(c)).

Even if the hazardous wastes which were transported from off-site were mixed with the influent domestic sewage before any treatment occurred, the exclusion would not apply. As discussed in the May 19, 1980 Federal Register (45 FR 33097), EPA has interpreted that the intent of Congress was that the exemption extend only to wastes which enter the system at or near the point of generation and actually "mix with sanitary wastes in a sewer system leading to a POTW" (emphasis added).

As discussed in the June 22, 1987 Federal Register (52 FR 23478), if any listed RCRA hazardous wastes denoted in 40 CFR 261 Subpart D are manifested to a POTW, the resultant treatment sludge would retain the listing per the "Derived-From Rule" (see 40 CFR 261.3(c)(2)(i)>. If the waste is characteristically hazardous under 40 CFR 261 Subpart C, the sludge would be considered a hazardous waste only if the sludge exhibited any one of the characteristics of hazardous waste.

Source: Dov Weitman (202) 382-7700
Research: Deborah McKie

4. DOT Manifest Requirements

When filling out a hazardous waste manifest, must the generator include the EPA hazardous waste identification number and hazardous substance reportable quantity under the Department of Transportation (DOT) shipping description?

In the November 21, 1986 Federal Register (51 FR 42175), DOT's Research and Special Programs Administration (RSPA) issued final hazardous materials regulations which incorporated CERCLA hazardous substances as DOT hazardous materials. In a later Federal Register dated February 17, 1987 (52 FR 4824), the RSPA published corrections to the November 21, 1986 regulations. Together, these regulations amended 49 CFR Parts 171 and 172 by placing additional information requirements on shippers of hazardous waste (i.e., generators). Section 172.02 of the new DOT regulations requires the shipper (hazardous waste generator) to identify EPA waste streams by the EPA identification number and for wastes which exhibit an EPA characteristic of ignitability, corrosivity, reactivity or EP toxicity, by the letters "EPA" and the word "ignitability" or "corrosivity" or "reactivity" or "EP toxicity", as appropriate. Section 172.203 and Section 172.324 of these regulations require the notation "RQ" on the shipping papers in association with the proper shipping description when a package (i.e., container) contains a reportable quantity or more of hazardous waste. However, the new DOT regulations do not require the "numerical reportable quantity" to be on the manifest (see November 21, 1986 Federal Register (51 FR 42175)).

Source: Paul Mushovic (202) 475-7736
Research: Joe Nixon

9461.1988(01)

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

AUG 31 1988

OFFICE OF
SOLID WASTE AND EMERGENCY RESPC

Richard A. Svanda, P.E.
Director, Hazardous Waste Division
Minnesota Pollution Control Agency
520 Lafayette Road
St. Paul, Minnesota 55155

Dear Mr. Svanda:

This is in response to your July 20, 1988, letter to Jeffery Denit, concerning regulation of hazardous waste recyclers.

The responses to your questions are attached. Please note that the responses address the Federal regulations for generators of over 100 kilograms of hazardous waste, or 1 kilogram of acute hazardous waste. Most of the generators that responded to the July 1987 survey conducted by the EPA Small Business Ombudsman, referenced in your letter, were actually conditionally exempt generators under 40 CFR Section 261.5. As you know, regulation of this conditionally exempt waste, including regulation of recyclers who accept such waste, is a State matter.

Please contact Michael Petruska at (202) 475-9888 if you have any questions on this response.

Sincerely,

Sylvia K. Lowrance
Director
Office of Solid Waste

Attachment

ATTACHMENT

1. Q: Can incoming listed hazardous wastes be stored at [a recycling] site for up to ten days and then be moved [on the same site] to the recycling process, where recycling begins immediately? What distinction is drawn between a transfer facility located on contiguous versus non-contiguous property in relation to the recycling operation?

   A: The transfer facility provisions of 40 CFR Section 263.12 apply to holding of waste in the normal course of transportation. Arrival of the waste at the designated facility constitutes completion of the transportation phase, so the 10 day limit is not applicable at the recycling facility. If waste is off-loaded from vehicles directly in recycling equipment at the facility, however, this off-loading area is not a storage facility. Each recycling facility has to be evaluated on a case-by-case basis to determine whether storage is in fact occurring.

   The distinction which is drawn between a contiguous transfer facility and a non-contiguous one is best described by stating that the Section 263.12 regulation was promulgated to account for normal transportation practices. A transporter who ships to a piece of property contiguous to a recycling facility has technically completed the transportation phase if no further "transportation" (as defined in Section 260.10--movement by air, rail, highway, or water) is to be conducted. Thus, a piece of property contiguous to a recycling facility must meet the definition of a designated facility. A piece of property that is <u>not</u> contiguous to the recycling facility technically could be a transfer facility provided further movement by air, highway, rail, or water will occur. There is potential for a transporter to deliver hazardous waste to a site close to the recycling facility, and still qualify for the transfer facility exemption; however, in an enforcement situation, this activity may not qualify for the exemption, which was intended to cover situations of limited in-transit storage.

2. Q: Is this (Question #1) a transfer facility as defined in Section 260.10?

   A: As explained above, designated facilities cannot have transfer facilities on their property. The recycling facility may or may not need a RCRA storage permit, depending on the factual situation at the facility.

3. Q: How should the definition of "storage" be interpreted? Is there a specific time limit on storage for this situation?

   A: The Agency has interpreted conveyance into a recycling unit as not regulated, while holding of hazardous waste for a matter of a few hours is a site-specific determination, and may or may not constitute storage. Each recycling facility that attempts to claim an exemption for their storage activities will have to be evaluated individually, and the owner or operator must maintain all supporting documentation under Section 261.2(f).

4. Q: What has been the EPA's and other State's practice for addressing this issue for containerized hazardous wastes?

   A: Based on discussions with four authorized States, three of four stated that any storage prior to recycling is regulated. One stated that a recent policy was developed in which hazardous waste received from off-site and placed into the recycling unit by nightfall of the calendar day it was received at the facility would not be considered stored.

5. Q: Would such a facility be exempt from the hazardous waste permitting requirements (i.e., can the facility operate under transporter, transfer facility and generator requirements)?

   A: Such a facility could not operate under transporter and transfer facility requirements, although they may qualify as a designated facility under Section 260.10 if they recycle without prior storage. As explained above, however, holding of drums for a few hours may not be storage. Further, the facility could be constructed so that the conveyance to the recycling unit is the only holding which occurs prior to recycling, so that there would be no RCRA storage area.

6. Q: If a hazardous waste storage permit is required, this type of operation will most likely not continue, and new prospective recycling operations will be discouraged from starting. What other methods of encouraging recycling of hazardous waste could you suggest?

A: EPA is currently evaluating how its regulatory structure affects recycling. You should note that a number of exclusions (i.e., Sections 261.2(e), 261.4(a)(6), (a)(7), (a)(8)), exemptions (i.e., Section 261.6 (a)(3)), and variances (i.e., Section 260.30) are available for recyclable materials. We are considering whether additional such mechanisms should be established, and whether some broader mechanism, such as a special recycler permit (perhaps similar to the one created by Congress for used oil under RCRA Section 3014(d)) might be appropriate.

You should be aware that a number of recycling facilities that provide storage of hazardous waste on site prior to recycling the waste have complained that their competitors are circumventing the spirit of our regulations by recycling directly from the transportation vehicle and not obtaining a RCRA storage permit. They have encouraged EPA to modify the regulations to state that such practices constitute storage and should be fully regulated under RCRA.

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

JAN 3 1989

MEMORANDUM

SUBJECT: Regulation of Hazardous Waste Transfer Operations

FROM: Sylvia K. Lowrance, Director
Office of Solid Waste (OS-300)

TO: B. G. Constantelos, Director
Waste Management Division (5H-12)
Region V

We have evaluated the issues raised in your October 31, and November 9, 1988, memoranda regarding the need to regulate containers transferring waste directly to incinerators, boilers, or industrial furnaces.

You expressed concern about the Agency's policy that transport vehicles are not considered storage vessels when located on-site for short periods during the transfer of hazardous waste fuel directly to a combustion device. Apparently, a number of facilities have used this policy to avoid obtaining a storage permit. Your concern is that, without a feed storage tank to enable continuous mixing and, if necessary, heating of hazardous waste fuels, steady-state combustion conditions cannot be maintained. You suggest that we include in the proposed boiler and industrial furnace rules a provision requiring a fuel blending and storage tank.

We agree with you that a blending and feed storage tank can be a useful approach to solving problems associated with assessing a uniform feed. We are not sure, however, that a blending tank is needed in every case irrespective of the unloading time and properties of the waste fuel. Moreover, the trial burn should be used to determine if a facility can comply with the emissions performance standards without a feed storage tank. Nonetheless, we will request comment in the proposed boiler and industrial furnace rule on whether blending and storage tanks should be required to ensure a maintain uniform feed and a steady state operation of the waste combustion facility.

Notwithstanding where we end up on that issue, we encourage you to establish permit conditions as necessary to protect public health and the environment using the omnibus authority of Section 3005(c)(3) of RCRA. Controls may be needed to address the potential for spills, fires, and explosions during the transfer operations. Thus, it may be appropriate to apply the storage facility standards to the transfer operation. We will discuss in the preamble to the boiler and industrial furnace rule the use of the omnibus authority to address the hazards posed by transfer operations.

If you have questions or comments, your staff can contact Mr. Dwight Hlustick at (202) 382-7926.

cc: Incinerator Permit Writers' Workgroup
Dave Bussard
Joe Carra
Dev Barnes
Carrie Wehling

RCRA/SUPERFUND HOTLINE MONTHLY SUMMARY

APRIL 89

A. RCRA

1. Generator Standards Applicable To Transporters

Are transporters considered generators when they mix wastes of different DOT descriptions?

No. Transporters who mix wastes of different DOT descriptions are not considered generators of the waste, however, they must comply with 40 CFR Part 262, "Standards Applicable to Generators of Hazardous Waste" (Section 263.10(c)). The transporter does take on some of the responsibilities and duties of a generator when he mixes wastes that are in his custody, including making sure the wastes remain properly manifested in the manner required by Parts 262-263. When transporters combine similar wastes, this act does not "generate" a new waste. It might, however, necessitate a new manifest or an amendment to the manifest when the act of mixing wastes changes the accuracy of the information on the manifest, by altering the container types and/or volumes contained or by changing the chemical or physical nature of the waste, so that the DOT proper shipping name on the original manifest is no longer accurate. If a new manifest is necessary, previous manifests must be attached to, and conveyed with, the new manifest.

Source: Emily Roth (202) 382-4777
Research: Joe Nixon (202) 488-1487

18 AUG 89

William L. Bider
Manager - Environmental Protection
Trans World Airlines, Inc.
P.O. Box 20126
Kansas City International Airport
Kansas City, Missouri 64195

Dear Mr. Bider:

This letter is in response to your letter of July 18, 1989. You ask if TWA's St. Louis Airport facility requires one or more EPA Identification numbers. The determination in this case must be made by State and EPA Region personnel. However, we can provide you with a general description of the relationship between the EPA ID number and a facility location, or "site" requiring such a number.

Generators and transporters of hazardous waste must obtain an EPA identification number from the EPA Administrator before they treat, store, dispose of, transport, or offer for tranportation, hazardous waste (40 CFR Section 262.12). The numbers are obtained by submitting a notification form, EPA Form 8700-12, to the Administrator. The numbers are issued to each generator on a by-site basis. Therefore, if TWA has facilities in various locations, each facility, by site, must have an EPA ID number.

The definition of "on-site" as referenced by you in your letter and as found in 40 CFR 260.10, may be helpful in determining if TWA's St. Louis Airport facility constitutes one or more "sites." "'On-Site' means the same or geographically contiguous property which may be divided by public or private right-of-way ..." From your description it appears that all of your airport facilities are on a single property. It is unclear, however, whether there are any rights-of-way to which the public has access. If there are, the entrance and exit between the properties must be at a cross-roads intersection, i.e. vehicles may not carry

unmanifested waste along the public right-of-way. The information you gave us thus seems to show that under EPA's regulations you would only need one identification number. However, as stated previously, the State is the appropriate authority for making this determination. Also, you should be aware that State regulations may dictate a different result.

If you have any further questions in regard to this letter, you may contact Emily Roth of my staff at (202) 382-4777.

Sincerely,

Devereaux Barnes, Director
Characterization & Assessment
Division
Office of Solid Waste

9461.1990(01)

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

JUN 7 1990

OFFICE OF
SOLID WASTE AND EMERGENCY RESPONSE

MEMORANDUM

SUBJECT: Transportation Regulations

FROM: Sylvia K. Lowrance, Director
Office of Solid Waste

TO: Robert L. Duprey, Director
Hazardous Waste Management Division
Region VIII

Thank you for your memorandum of February 26, 1990, in which you describe a situation of concern related to hazardous waste transportation. In the situation you describe (and described in the accompanying letter from the State of Utah) a hazardous waste transporter appears to be transporting hazardous waste unnecessarily through numerous transporters to "buy" time in which to accumulate a quantity of hazardous waste sufficient to fill a tank truck. The events as described raise the possibility that this chain of shipments is not consistent with a "normal course of transportation" as described in the Federal Register notice of December 31, 1980 (45FR86966). Our response is based upon, and limited to, the facts as you have described them.

In developing the hazardous waste transportation regulations, EPA differentiated between the storage of hazardous waste (requiring the obtaining of a RCRA permit) and the holding of waste for short periods of time during the course of transportation. EPA specifically stated that transporters who hold hazardous wastes for a short period of time in the course of transportation should not be considered to be storing hazardous wastes, and should not be required to obtain a RCRA permit or interim status and comply with the standards of Parts 264 or 265. EPA allows transporters to hold wastes at a transfer facility in the course of transportation for up to 10 days. This regulatory relief measure applies to the holding of wastes which is incidental to normal transportation practices. If the waste is held for more than ten days at a particular location, a RCRA permit is required, and the transporter must comply with the applicable storage standards and permit requirements.

Violations of the transportation regulations may be occuring in situations where State or EPA Regional enforcement authorities determine that a transporter has held waste at one location for longer than 10 days, or has held waste in a manner which is not consistent with the normal course of transportation. Two examples of activities which ordinarily would be inconsistent with the normal course of transportation are: (1) waste not being transported from a site at all, but rather, possession of the waste is changing from one transporter to another while the waste remains at one site, or, (2) waste is routed to the same geographic location more than once during the course of transportation.

Furthermore, the act of simply routing hazardous wastes to numerous transporters for extended periods of time may, at some point, no longer be consistent with the normal course of transportation. EPA noted at the time of promulgation of the transfer facility requirements that the transportation industry had indicated that shipments of hazardous waste normally take no longer than 15 days, including both on the road time and incidental temporary holding. While circumstances may occasionally justify periods significantly longer than 15 days, the 49-day chain identified in the documents from Utah strongly suggest that the intermediate purported transfer facilities were not holding the waste incident to the normal course of transportation.

Of course, our interpretation of the situation you describe is based upon, and limited to, what you have documented in your letter, and does not mean that there cannot exist additional circumstances not described in your correspondence that would be material to any determination of a violation. We cannot discount the possibility that, sometimes, under particular circumstances, activities such as those described above may be consistent with the normal course of transportation. The enforcement authority, either the State or EPA Region, must determine, based on the factual situation, whether the circumstances involved are in keeping with a normal course of transportation.

We are planning to consider the other question you raised (regarding re-manifesting of wastes received from multiple sources by transporters) as we discuss outstanding manifest issues as part of a project recently begun by a working group of states under an agreement between EPA and the National Governors' Association. This project will evaluate the current manifest system and provide input on potential improvements. EPA staff met in March of this year with the state manifest coordinators group to kick off the project. For information on this project, please contact Russ Brodie of the National Governor's Association at (202) 624-5305.

Thank you for bringing this transportation situation to my attention. If you have any questions regarding this memorandum, please have your staff contact Emily Roth, at FTS 382-4777.

9461.1990(02)

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

OCT 30 1990

OFFICE OF
SOLID WASTE AND EMERGENCY RESPONSE

MEMORANDUM

SUBJECT: Transfer Facility Regulation Interpretation

FROM: Sylvia Lowrance, Director
Office of Solid Waste

TO: David Ullrich, Acting Director
Waste Management Division (5H-12)

Thank you for your memorandum of July 19, 1990, requesting an interpretation of the regulations pertaining to "transfer facilities" in relation to designated facilities and permitted and interim status facilities.

The first issue you raise concerns whether a permitted or interim status treatment and storage facility can function as a transfer facility and temporarily store hazardous waste destined for another facility (the designated facility) for processing. The answer to this question depends on whether the transfer facility is also the "designated facility" indicated on the manifest. A permitted or interim status facility that has not been designated on the manifest as the "designated facility" may serve as a transfer facility for shipments of waste awaiting further transportation to the designated facility. The limiting conditions are the definition of "transfer facility," itself (Section 260.10) and the provisions of Section 263.12, i.e., storage not to exceed 10 days, and containers must meet DOT requirements. A permitted or interim status treatment and storage facility that is the "designated facility" for a particular shipment of waste cannot function as a transfer facility with respect to that waste. "Designated facility" is defined in 260.10 as a hazardous waste treatment, storage, or disposal facility that is permitted or has interim status, that is regulated under 40 CFR 261.6(c)(2) or Subpart F of 40 CFR Part 266, or another facility allowed by the receiving State to accept such waste and that has been designated on the manifest by the generator pursuant to 40 CFR 262.20. [See 55 FR 2353, January 23, 1990 for recent EPA statement on the designated facility issue.]

The term "transfer facility" is defined in 40 CFR 260.10 as "any transportation related facility including loading docks, parking areas, storage areas and other similar areas where shipments of hazardous waste are held during the normal course of transportation." The key part of this definition is the phrase "during the normal course of transportation." Arrival of a manifested shipment of waste at the "designated facility" constitutes completion of the transportation phase, such that the transfer facility provisions will no longer apply. That is, the manifested shipment cannot be stored for

10 days or less under 40 CFR 263.12 once it arrives at the designated facility. This issue is discussed in the attached letter dated August 31, 1988 from Sylvia Lowrance, Director of the Office of Solid Waste, to Richard Svanda, of the Minnesota Pollution Control Agency.

The second issue you address is the consolidation of wastes by a transporter at a transfer facility. Wastes are routinely combined at transfer facilities; often containerized waste is transferred to a tanker truck. However, you are correct that the December 31, 1980 Federal Register as well as subsequent notices on the topic of transportation do not place any additional requirements on transporters that consolidate wastes at transfer facilities.

There are no EPA Federal standards or requirements that apply specifically to transfer facilities other than the storage time limitation of 10 days and other provisions of 263.12. There have not been any new policy or guidance documents on the topic of transfer facilities since the regulations were promulgated. However, you should note that transporters who store hazardous waste at transfer facilities must comply with all applicable requirements of the transporter regulations of Part 263 (e.g., Subpart C, Hazardous Waste discharges).

Under certain circumstances, transporters are required to comply with the requirements that apply to generators of hazardous waste. A transporter who mixes hazardous wastes of different Department of Transportation (DOT) shipping descriptions by consolidating them into a single container must comply with 40 CFR Part 262, Standards Applicable to Generators of Hazardous Waste (40 CFR 263.10(c)(2)). The Agency does not intend to encourage transporters to combine wastes of different DOT descriptions. On the contrary, the imposition of the generator requirements should provide sufficient cause for the transporter to avoid such waste combinations whenever possible. The transporter who mixes hazardous wastes of different DOT descriptions is obligated to remanifest the waste. For example, a change in the DOT "proper shipping name" or hazard class would require the completion of a new manifest.

The act of combining wastes may also result in changes in containers. Therefore, the container designations on the manifest would need to be changed as well. In a situation involving only one or two minor changes, such as container changes, the original manifest could be marked to reflect the changes. In other cases such as the situation mentioned above involving a change in shipping description, a new manifest would have to be initiated. In any case, whether a new manifest is initiated or not, the waste may only be delivered to the designated receiving facility as indicated on the original manifest by the original generator of the waste. In other words, transporters would not be able to combine waste (resulting in a DOT description change), and remanifest the waste to a designated facility that was not indicated on the original manifest by the original generator as the designated facility.

In regard to the compatibility of wastes being mixed, I refer you to the document entitled "A Method for Determining the Compatibility of Hazardous Wastes," order number 600/2-80/076, available from EPA's Office of Research and Development ((513)

569-7562). An individual consolidating wastes in containers should also refer to Appendix V of 40 CFR Part 264. This appendix groups materials according to their potential incompatibility.

With respect to your questions regarding notification, several issues require clarification. Under Subpart D of 40 CFR 266, facilities which qualify as marketers or burners are required to notify the Agency of their hazardous waste fuel activities, even if they had previously obtained an EPA identification number. See 40 CFR 266.34(b) and 266.35(b), respectively. Marketers are defined as generators who market hazardous waste fuel directly to a burner, persons who receive hazardous waste from generators and produce, process, or blend hazardous waste fuel, and persons who distribute but do not process or blend hazardous waste fuel. If the service centers fall into any of these categories, they are considered marketers of hazardous waste fuel and are required to renotify to identify their hazardous waste fuel activities.

You are correct that the EPA identification number is location-specific. Under 40 CFR 263.11, a transporter is prohibited from transporting hazardous wastes without having received an EPA identification number. Currently, this number is assigned to the transportation company as a whole; all of the individual transporters (trucks) in a given shipping company have the same EPA ID number, the number that the transportation company was issued and which is issued to the company's headquarters location.

Your final question concerns the identification number that should appear on the manifest accompanying the waste at the transfer facility. Regardless of whether the transfer facility is acting as a transfer facility or a regulated storage facility, the identification numbers appearing on the manifest would be the EPA identification numbers associated with the generator of the waste, all the transporters who transport the waste, and the designated facility.

In the situation you describe, in which one company transports waste to and from a transfer facility it operates, and the waste remains under the control of the transporter, no separate EPA ID number need be entered on the manifest specific to the transfer facility. However, you should note that waste must remain under the control of a transporter as designated on the manifest while at a transfer facility. As described in detail in the regulations, a transporter may only deliver wastes to: (1) the designated facility listed on the manifest, (2) an alternate designated facility, (3) the next designated transporter or, (4) a place outside the United States designated by the generator (40 CFR 263.21). Until the signature of the designated facility or subsequent transporter is obtained, the waste is considered to be in the custody of the transporter who last signed the manifest (45 FR 12739; February 26, 1980).

As mentioned briefly above, transporters must comply with the generator standards of 40 CFR Part 262 when they mix wastes of different DOT descriptions (40 CFR 263.10(c)(2)). They must remanifest the waste to accurately reflect the composition of the waste. Although they may indicate on the manifest in box 15 the name of the original generator(s) of the combined waste, they must represent themselves as the generator of the new waste. Although by creating or generating a new waste they

have taken on some of the generator requirements, the transporter should continue to manifest the waste to the designated facility as indicated on the original manifest by the original generator.

I realize that this letter contains an abundance of information. If you would like to discuss any of the topics further, please have your staff contact Emily Roth of my staff at FTS 382-3098.

Attachment

RCRA/SUPERFUND HOTLINE MONTHLY SUMMARY

NOVEMBER 1991

2. Transfer Facility as Central Collection Point

A company generates small quantities of hazardous waste at several separate field locations. The company does generate more than 100 kilograms of hazardous waste per month at each separate field location. May the company use a transfer facility as a central collection point to consolidate waste from these field locations?

Yes. A company may consolidate waste from several locations or generation sites at a central point provided that certain requirements are met. First, each generation site must have an EPA Identification No. and meet all applicable requirements under 40 CFR Part 262. In addition, each shipment of hazardous waste must be accompanied by a hazardous waste manifest and the transporter must also have an EPA Identification No.

The transfer facility provision under §263.12 may be applied to a situation such as this one under the following conditions. According to §260.10, a transfer facility is defined as "any transportation-related facility including loading docks, parking areas, storage areas and other similar areas where shipments of hazardous waste are held during the normal course of transportation." The transfer facility is the place where transporters consolidate shipments or transfer shipments to different vehicles in order to redirect them; this activity usually takes place over a short period of time. (45 FR 86966; December 31, 1980) Section 263.12 allows a transporter to store manifested shipments of hazardous waste at a transfer facility for up to 10 days without obtaining a permit. During this time the hazardous waste must be held in containers which meet Department of Transportation (DOT) packaging requirements. As long as the central collection point meets the definition of a transfer facility, the company may use it to consolidate shipments of hazardous waste from different generation locations. Note that if a transporter mixes hazardous wastes of different DOT shipping descriptions, §263.10(c) requires compliance with 40 CFR Part 262, Standards Applicable to Generators of Hazardous Waste.

9462 – COMPLIANCE WITH THE MANIFEST SYSTEM AND RECORDKEEPING

Part 263 Subpart B

NOV 29 1985

Mr. David Boulter
~~Acting~~ Director, Maine Department of
Environmental Protection
Bureau of Oil and Hazardous
Materials Control
State House Station #17
Augusta, Maine 04333

Dear Mr. Boulter:

On February 6, 1985, Transport Canada published new regulations for the transport of hazardous materials. These regulations, which became effective on July 1, recognize the Uniform Hazardous Waste Manifest (UHWM) for those shipments originating in the United States and destined for Canada. Thus, under the Canadian regulations, U.S. generators are only required to prepare and transporters only need to carry the U.S. manifest for hazardous waste shipments to Canada.

I have been asked by Environment Canada if this Agency would consider recognizing the Canadian manifest for those hazardous waste shipments moving from Canada to the United States. Before discussing this subject further with Environment Canada, I first wanted to solicit comments from those States which are most directly involved in Canadian transboundary movements. Toward this end, I have enclosed a copy of the Canadian manifest form for your review and comment.

In particular, I would appreciate your comments on whether the format, number of copies, and information requirements on the Canadian manifest form meet your State's manifest information requirements. Specifically, do you support the initiation of a Federal rulemaking action which would allow the use of the Canadian manifest form for any hazardous waste shipment originating in Canada. Of course, I also welcome any other comments you may have on this subject.

I plan to discuss this issue with Mr. Vic Shantora of Environment Canada early next month. Therefore, I would appreciate your comments by December 6. In order to save time, I suggest that your staff contact Ms. Carolyn Barley on 202-382-2217 to discuss your comments.

Thank you for your help.

Sincerely yours,

Bruce R. Weddle
Director
Permits and State Programs Division

Enclosure

cc: Richard Baker (Maine)
Sue Moreland (ASTSWMO)
Robert Malpass (ASTSWMO)
Vic Shantora (Environment Canada)

WH-563:CB:cc:382-2117:10-25-85:CC's disk9.docl

Instructions on back — Instructions au verso

Type or print in ink — Dactylographier ou écrire en lettres moulées

Press hard — Appuyer fortement

MANIFEST
MANIFESTE

Manifest Reference No. / N° de référence du manifeste: A 548081

A - Consignor (Shipper) / Expéditeur

Company No. / N° de compagnie

Address / Adresse

Shipping Site Address / Origine de l'expédition

City / Ville — Prov. — Postal Code / Code postal

Intended Consignee / Destinataire choisi — Registration No. / N° de permis

Address / Adresse

Receiving Site Address / Destination de l'expédition

City / Ville — Prov. — Postal Code / Code postal

B - Carrier / Transporteur

Company Name / Nom de l'entreprise — Registration No. / N° de permis

Address / Adresse

City / Ville — Prov. — Postal Code / Code postal

Registration / Immatriculation (for vehicle) — License No. / Immatriculation — Province

Vehicle / Véhicule

Trailer #1 / Remorque #1

Trailer #2 / Remorque #2

Point of Entry / Point d'entrée — Point of Exit / Point de sortie

Carrier Certification: I confirm that I have accepted the manifested goods for delivery to the intended Consignee.

Déclaration du transporteur: Je certifie avoir accepté les marchandises mentionnées à des fins de livraison au destinataire choisi.

Name of Driver (Print) / Nom du conducteur (caractères d'imprimerie) — Tel. No. (Area Code) / N° de tél. (incl. indic.)

Signature — Date (YR/MO - ABM)

Consignee Verification No. / Numéro de vérification du destinataire — Quebec only / N° de vérification - Réservé au Québec

Reference No.s of Other Manifests used / N° s de référence des autres manifestes utilisés

C - Consignee (Receiver) / Destinataire

Company Name / Nom de l'entreprise — Registration No. / N° de permis

Address / Adresse

City / Ville — Prov. — Postal Code / Code postal

Receiving Site Address / Destination de l'expédition

City / Ville — Prov. — Postal Code / Code postal

Received / Réception — Time / Heure — AM ☐ PM ☐ — Date (YR/MO - ABM)

Shipping Name / Appellation Expédition	Product Identification No. / N° d'identification du produit: Provincial	NSA (DOT)	Class/Classe	Packing Group / Groupe d'emballage	Quantity Shipped / Quantité expédiée	Units / Unités	Consignor / Expéditeur	Units / Unités	Packaging / Conditionnement	Code	Quantity Received / Quantité reçue	Units / Unités	Identity and Disposal / Identité et élimination	Handling Code / Code de manutention	Containers / Récipients: Type / Nbr	Volume / Volume: Type / Nbre

DO NOT WRITE IN THIS AREA
NE PAS ÉCRIRE DANS CET ESPACE

Special Handling Instructions and Additional Information / Manutention spéciale et renseignements additionnels — Attached / Ci-joint ☐ — Other / Autre ☐

Handling Code "Other" (Sought) / Code de manutention "Autre" (requis)

If waste is to be co-mingled typically company owned / Si le déchet doit être co-mingled, indiquer le nom de l'entreprise — Registration No. / N° de permis

Address / Adresse — City / Ville — Prov.

Shipper Date / Expédition — Time / Heure — AM ☐ PM ☐ — Date (YR/MO - ABM)

Scheduled Arrival Date (YR/MO) / Date prévue d'arrivée (prévu)

Consignor Certification: I confirm that the information contained in Part A is correct and complete.

Déclaration du destinataire: Je certifie que les renseignements à la partie A sont véridiques et complets.

Consignee Certification: I confirm that the information contained in Part C is correct and complete.

Déclaration du destinataire: Je certifie que les renseignements à la partie C sont véridiques et complets.

Name of Authorized Person (Print) / Nom de l'agent autorisé (caractères d'imprimerie) — Tel. No. (Area Code) / N° de tél. (incl. indic.) — Signature

Emergency Telephone Numbers / Numéros de téléphone en cas d'urgence

Alberta — Local Police / Police locale: 1-800-222-6514

British Columbia / Colombie-Britannique: (604) 387-6666

Manitoba: (204) 944-4000

New Brunswick / Nouveau-Brunswick: Zone 4 9000

Newfoundland / Terre-Neuve: (709) 772-2083

Northwest Territories / Territoires du Nord-Ouest: (403) 920-8130

Nova Scotia / Nouvelle-Écosse: Zone 4 9000

Ontario: Zone 4 9000

Prince Edward Island / Île du Prince-Édouard: Zone 4 9000

Quebec / Québec: (418) 643-4505

Saskatchewan: Local Police / Police locale: 1-800-667-3801

Yukon Territory / Territoire du Yukon: (403) 667-7244

Canada (Call Collect / Canada (Appeler à frais virés): (613) 996-6666

RCRA/SUPERFUND HOTLINE MONTHLY SUMMARY

OCTOBER 87

2. Manifesting Requirements

40 CFR Section 263.20(a) requires that a transporter only accept waste which is accompanied by a manifest signed by the generator. Section 263.20(b) requires a transporter to sign and date the manifest, acknowledging receipt of the waste as it is described in the manifest. A generator loads his waste directly into a bulk tank railcar. The rail transporter will then distribute the load among three trucks. How would the manifesting requirements be handled?

The generator would cut three manifests and on each the total volume transported would be indicated with a notation that the waste will be split into thirds. Each manifest would require original signature of the generator and the rail transporter. The signed manifests would be mailed to the trucking company which would then give each of the three truck drivers one of the manifests.

Source: Paul Muschovic (202) 475-7736
Research: Laurie Huber

9463 – HAZARDOUS WASTE DISCHARGES

Part 263 Subpart C

9463.1980(01)

June 18, 1980

Subject: Questions on DOT's role in the Transportation of Hazardous Waste

From: Bruce Weddle, Deputy Director
State Programs and Resource Recovery Division (WH-563)

To: Janet DeBiasio
Hazardous Waste Section
Region I

The following are our responses to the questions you raised in your memorandum of May 8, 1980 on the above subject:

Question

Since U.S. DOT is broadening its authority to control intrastate commerce, who in DOT will be responsible for inspection, compliance and enforcement of the federal transportation regulations in Region I?

Answer

DOT's hazardous materials regulations will not apply to intrastate motor carriers operating in a state which has interim authorization. However, DOT's regulations will be applicable to intrastate motor carriers when that State receives final authorization. In states where EPA is running the program, the DOT hazardous materials rules will apply beginning on November 20th (the effective date of those rules). DOT and EPA are developing a plan for implementing the DOT/EPA Memorandum of Understanding which will include intrastate inspection, compliance, and enforcement. This plan will identify the specific offices within DOT responsible for enforcement activities. For further information on DOT's responsibilities for enforcement, I suggest that you contact Bill Nalley, DOT headquarters (755-5893).

Question

When a state submits an application to EPA to manage a hazardous waste program, it is assumed that U.S. DOT will allow the enforcement of the Federal Transportation Regulations, 49 CFR 100-199, to be carried out on the state level. Who makes the determination as to whether the state's transportation legislation and regulations are substantially equivalent and consistent with the Hazardous Materials Transportation Act and 49 CFR 100-199?

This has been retyped from the original document.

Answer

In terms of intrastate transportation, DOT specifically stated in the promulgation on May 22, 1980 that the regulations do not apply to intrastate motor carriers in those states with interim authorization. Final authorization will only occur at the state level when state regulations are equivalent to DOT regulations. For interstate transportation, DOT and EPA may step in when HW transportation procedures ar not in compliance with DOT HW transportation regulations.

The determination of whether a State's transportation legislation and regulations are substantially equivalent with the Federal program will be made by EPA. The RCRA State Interim Authorization Guidance Manual, which will be available this month, will provide the guidance necessary to make that determination.

The Agency has not negotiated who will make the determination of equivalence with DOT since we are focusing attention on matters related to interim authorization. Since this subject relates to final authorization, a decision as to who will determine equivalency between State and Federal regulations will be dealt with at a later date.

Question

When there is a hazardous waste spill during transit, the hauler submits a report to DOT. DOT, in turn, notifies EPA of the incident. Who in DOT will be receiving the report for the New England area and where in EPA does DOT intend to transmit copies of the incident report?

Answer

In the event of a hazardous waste spill during transit, a transporter must submit a written report as required by 40 CFR 171.16 to the:

Associate Director for Hazardous Materials Regulations
Department of Transportation
Washington, D.C. 20590

DOT will then provide copies of the incident reports to Headquarters. The forthcoming plan for implementing the DOT/EPA MOU (as discussed in the first answer) will address this particular issue.

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Question

I have read the draft Memorandum of Understanding between EPA and DOT. Would you explain difference in jurisdictions and responsibilities of the Bureau of Motor Carrier Safety (BMCS), Federal Highway Administration's Washington office (FHWA) and DOT? When will we know who will be Region I's contact in these different agencies?

Answer

The Bureau of Motor Carrier Safety (BMCS) is a part of the Federal Highway Administration, (FHWA) which is a part of the Department of Transportation. (See organizational chart attached.) BMCS's primary function is to reduce fatalities, injuries and property damage, as well as increase public safety in the highway transportation of hazardous materials. The BMCS and the FHWA field staff enforce the Federal Motor Carrier Safety Regulations pertaining to the transportation of hazardous materials by the highway mode.

The Federal Motor Carrier Safety regulations govern qualification of employees whose work affects safety of operation, maximum hours of service of such employees, safety of operation of commercial vehicles; and vehicle safety, including performance requirements, parts and accessories, and maintenance of vehicles. The Hazardous Material Regulations, among which are requirements for shipping papers, placards, containers, labels, etc., concern the safe transportation of hazardous materials.

The field programs of BMCS are administered by FHWA's nine regional offices. The contact person for each Region, as well as for each state in that Region, is provided in the office of Motor Carrier Safety's "Field Roster." A list of the FHWA contacts.

I hope these answers are sufficient, but, if you need further clarification or information, please contact Wolf R. Gill or Carolyn Barley (755-9145).

Attachments

cc: Regional Generator/Transporter Coordinators
w/attachments

This has been retyped from the original document.

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

2 5 1980 PIG 81-8
11-26-

MEMORANDUM

SUBJECT: Program Implementation Guidance On Issuance of Provisional EPA Identification Numbers

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
and Regional Notification Contacts

Issue:

Should the Agency establish a new procedure to facilitate rapid issuance of EPA identification numbers to generators or transporters during spills or other unanticipated events?

Discussion:

The final RCRA Subtitle C regulations effective November 19, 1980 include requirements for hazardous waste generators and transporters to obtain EPA identification numbers. Generators and transporters who did not obtain an EPA identification number during the notification period may obtain one by applying on EPA Form 8700-12. Concern has been expressed by some EPA Regional Offices and some members of the regulated community that the regulations do not provide for rapid issuance of identification numbers during spills and other unanticipated incidents where a person may become a hazardous waste generator or transporter. The following scenario illustrates this type of situation.

A spill of gasoline, which met the ignitable characteristic of hazardous waste, occurred at a gasoline filling station. The station did not have an EPA identification number. Once the spilled material was contained in barrels, the station operator judged that keeping the barrels on-site for several weeks while waiting for an identification number could be

dangerous. The transporters he contacted would not pick up the waste to take it to a facility unless the station operator produced a manifest bearing the generator's identification number. The operator called his EPA Regional Office to obtain a number but was told that the regulations do not provide for their issuance over the phone, and that application would have to be made on Form 8700-12. Obviously, that solution was unworkable, for it prevented timely and safe handling of the waste. Later that day it was resolved that the Regional Office would issue a special identification number over the phone to the operator, thus enabling him to have the waste transferred to another location without delay. This is one of several examples brought to our attention, indicating a need for rapid identification number issuance.

In response to this need, the Agency will publish a Notice in the Federal Register as soon as possible announcing that EPA Regional Offices may in certain instances and at their discretion issue provisional EPA identification numbers. The Regional Notification Contacts will be listed as contact points. I urge those individuals to plan for implementation of this new procedure.

At this time, we have identified a general set of circumstances where issuance of a provisional identification number would be appropriate. As the hazardous waste program matures, other applications will probably become apparent. Officials may waive the EPA identification number requirements for generators and transporters engaged in immediate hazardous waste removal following a discharge incident. (See 40 CFR 263.30(b) and EPA Headquarters guidance memo to Regional Offices on emergency response, 11/19/80.) For a variety of reasons a waiver may not be authorized, or if a waiver is authorized, the generator or transporter may still identify a practical need for obtaining an identification number before transporting the waste. In such a case, an oral or written provisional identification number may be issued by a Regional Office.

Decision:

Regional Office personnel should be prepared to issue provisional numbers on a 7-day, 24-hour basis. Preparations should also be made to issue these numbers orally either over the phone or in person, as well as in writing.

Recommended procedures for issuing a provisional identification number are as follows:

a) Ascertain the need for a provisional number from the applicant.

b) If a decision is made to issue the number, collect as much of the information required for Form 8700-12 as possible.

c) Issue the number. We suggest this be done by using a system devised internally in each Region. A recommended format, similar to the standard EPA identification number format, would have the two letter state abbreviation, followed by the letter "P" for "Provisional", followed by a serially increasing nine digit code for each subsequent number issued, e.g., "VAP000000428." (These numbers will not be part of the Dun and Bradstreet system and will not be entered into the national computer data base.)

d) Explain what conditions, if any, apply to the use or duration of the number. Inform the applicant of requirements for submission of completed Form 8700-12 within 10 days of receipt of a blank form from EPA. A final identification number may then be issued.

e) Document all proceedings and follow through as appropriate.

We intend that the provisional identification number be a practical alternative in situations where the standard procedure for issuing EPA identification numbers would be unreasonably time-consuming. A regulation change is not necessary in order to implement this procedure, however, future amendments to the generator and transporter regulations will clarify and discuss other requirements which may apply to persons who receive provisional numbers. The establishment of this procedure is part of a larger effort by the Agency to address the application of the Subtitle C regulations to hazardous waste discharges and other circumstances requiring rapid response. Your comments and suggestions are welcome.

TSDF Administrative Requirements (Parts 264 and 265)

RCRA/SUPERFUND HOTLINE MONTHLY SUMMARY

FEBRUARY 85

4. Section 213 of the RCRA amendments requires that owners/operators of land disposal facilities operating under interim status submit Part B permit applications certify compliance with applicable groundwater monitoring and financial responsibility requirements by November 8, 1985. If these requirements are not met, interim status is terminated. Would an owner/operator with a treatment surface impoundment operating under interim status fall under the requirements of section 213 and, therefore be required to submit a Part B and an appropriate certification by November 8, 1985?

   Yes; the owner/operator of a treatment surface impoundment must comply with the requirements of Section 213. The definition of land disposal units includes all land based hazardous waste management units. Therefore, owner/operators of facilities with landfills, surface impoundments, waste piles, and land treatment units must comply with Section 213.

   Source: Bryan Wilson (202) 382-4534

This has been retyped from the original document.

General (Subpart A)

9471 – GENERAL

Parts 264 & 265 Subpart A

9471.1983(01)

JUL 1 2 1983

Mr. J.E. Seavy, Plant Manager
Hercules, Incorporated
P.O. Box 249
Rock Road
Burlington, N.J. 08016

RE: WCBLG0344

Dear Mr. Seavy:

This letter is written in reference to the exclusion petition submitted by Hercules, Incorporated of Burlington, New Jersey. Hercules requested an exclusion for the wastewater stream generated at its Burlington facility, presently listed for containing methanol, a spent solvent. This waste is produced when the solvent (EPA Hazardous Waste No. F003), which is used in the manufacturing operation, is discharged to the plant's wastewater treatment system for treatment.

On November 17, 1981, EPA amended the hazardous waste regulations under the Resource Conservation and Recovery Act to exempt certain categories of mixtures of solid wastes and hazardous wastes from the presumption of hazardousness (see 46 FR 56582). In one case certain wastes are listed in Subpart D solely because they exhibit one or more of the characteristics of hazardous waste identified in Subpart C of the regulations. Mixtures of any of these wastes and other solid wastes, prior to the amendment, were presumptively hazardous by application of the mixture rules and remained hazardous unless the waste mixtures were excluded pursuant to 40 CFR 260.20 and 260.22. The Agency has, however, exempted mixtures of solid (non-hazardous) wastes and listed (hazardous) wastes that are listed solely for exhibiting a characteristic from the presumption of hazardousness since these waste mixtures can be tested to determine whether they still exhibit the hazardous waste characteristics. Therefore, mixtures of these wastes listed solely for exhibiting a characteristic and other solid wastes are no longer considered to be presumptively hazardous.

Hercules has stated that they have reviewed the treated waste stream generated a their facility in light of the November 17, 1981, amendment to the mixture rule and have concluded that this waste would no longer be considered hazardous. The Agency has not made an independent evaluation of your situation but, rather is accepting your statement as fact.

As a result, it is no longer necessary for you to petition the Agency for exclusion of your wastes. Therefore, this letter is to indicate to you that, based on your interpretation, we are closing your file.

However, if the manufacturing or wastewater treatment system at your facility undergoes any process changes, this waste could once again be considered a hazardous waste. Each generator is ultimately responsible for determining whether his waste exhibits any of the characteristics of a hazardous waste (i.e., ignitability, corrosivity, reactivity, and EP toxicity) as described in 40 CFR 261, Subpart C. If the waste must be managed in accordance with the hazardous waste management regulations.

If I can be of any further assistant to you in this matter, please do not hesitate to contact Mr. Matthew Straus or Mr. William Sproat of my staff at (202) 382-4770.

Sincerely yours,

Eileen B. Claussen
Director
Office of Management, Information,
and Analysis

cc: Ms. Sonya Shashoua
N.J. Department of Environmental Protection
Division of Environmental Quality
Solid Waste Administration
32 E Hanover Street
Trenton, N.J. 08623

WH-565B/BSPROAT:NA:S248:X24770:7/6/83:DISK:LG0344
Corrected:pes:7/8/83

RCRA/SUPERFUND HOTLINE SUMMARY

MARCH 84

11 - Can leachate from a landfill or liquid hazardous waste be viewed as wastewater so that the wastewater tanks handling these waste streams are excluded from regulation by 265.1(c)(10)?

Wastewater has no regulatory definition, but a resonable interpretation would be a process waste from an industrial process containing approximately 1% or less contaminants. Treatment tanks for leachate or liquid wastes such as spent solvents or ignitable liquids should not be excluded from regulation under 264.1(c)(10). It would be inconsistent to closely control wastes in a landfill and not control management of the hazardous constituents in the leachate from them.

Source: Steve Lingle and Fred Lindsey

RCRA/SUPERFUND HOTLINE SUMMARY

MARCH 84

10 - Do portable treatment units connected to a process unit meet the totally enclosed treatment exclusion?

Yes, if the unit when connected to a process is in compliance with the Regulatory Interpretive Letter (RIL 84) which specifies the parameter of a totally enclosed treatment facility. Thus, portable treatment units could be used at multiple facilities and be excluded from regulation by 265.1(c)(9).

Source: Fred Lindsey

SEP - 6 1984

Timothy A. Taylor
Wang Laboratories, Inc.
Mail Stop 02G2
41 Wellman Street
Lowell, Massachusetts 01851

Dear Mr. Taylor:

This is in response to your letter of August 2, 1984, in which you requested an interpretation of RCRA regulations regarding tanks used for emergency secondary containment. It should be understood that this interpretation applies only to the Federal regulations promulgated in 40 CFR Parts 260-265. In states with EPA-authorized hazardous waste programs, the state regulations will apply.

As provided under 40CFR §264.1(g)(8) and §265.1(c)(11), emergency structures (including tanks) are exempted from the regulatory standards of 40CFR Parts 264 and 265 (except for the preparedness and prevention and contingency plan requirements of those standards). To qualify for the exemption a unit must be intended exclusively for immediate responses to discharges of hazardous wastes, such as burst pipes, ruptured containers or tanks, breached dikes, and the like. Structures used for responding to discharge events which occur periodically or repeatedly, or in which containment or treatment extends beyond the immediate response period, do not qualify for the exemption.

The applicability of the exemption to the three example "secondary containment" tanks described in your letter must be determined based on a site-specific assessment of each unit against the above criteria. For example, taking the case of the tank used to contain spilled resicue from a truck loading/unloading area, the exemption would apply to the tank only if it could be demonstrated that such spills were extremely rare and unpredictable events.

I hope this adequately answers your questions. Please let me know if I can be of any further assistance.

Sincerely,

Peter Guerrero
Special Assistant to the Division Director

RCRA/SUPERFUND HOTLINE SUMMARIES

AUGUST 84

7. A new landfill will have a separate owner and operator. While both parties will sign the permit,

   a) is one party chosen as the "permittee"?

   b) which party is liable

      i) during the operating life?

      ii) during closure/post-closure?

         a) Both the owner and operator are the "permittees" on the permit; however, it is common for the operator to assume responsibility for meeting permit conditions.

         b)i) Both the owner and operator are liable during the facility's operating life.

         ii) Both the owner and operator are liable during closure/ post-closure of the facility, unless the closure/post-closure plans specify that the owner of the facility is becoming the operator as well as the owner. This action would be accompanied by a permit modification and relieve the original operator from liability (under RCRA) during the closure/postclosure period.

         Source: Chaz Miller
         Research: Tom Gainer

RCRA/SUPERFUND HOTLINE MONTHLY SUMMARY

DECEMBER 84

2. If a facility's interim status is terminated, must the owner/operator of the facility still meet the §265 interim status standards for closure, post-closure, and financial responsibility?

   Yes; a facility which has had its interim status terminated must meet §265 standards, including those for closure, post-closure, and financial responsibility. A technical amendment to the interim status standards which was published in the November 21, 1984 Federal Register (49 FR 46094) clarified that interim status standards are applicable to facilities whose interim status is terminated until their closure and post-closure requirements are fulfilled.

   Source: Libby Scopino (202) 475-8731
   Research: Hilary Sommer

9471.1986(01)

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

SEP 29 1986

OFFICE OF
SOLID WASTE AND EMERGENCY RESPONSE

Mr. Fred Hansen
Director
Department of Environmental Quality
522 S.W. Fifth Avenue, Box 1760
Portland, Oregon 97207

Dear Mr. Fred Hansen:

Thank you for your August 21, 1986, letter regarding accidental spills of listed or characteristic hazardous wastes. Enclosed is the Agency's response to the eight questions and issues that you raised. Please note that we have referred one of your questions to the Superfund Office and will forward a response to you. I hope this clarifies the Environmental Protection Agency's regulation of spills and spill cleanups.

If I can be of further assistance, please let me know.

Sincerely,

J. Winston Porter
Assistant Administrator

Enclosure

1. Accidental spills of listed or characteristic hazardous wastes which are cleaned up within a reasonably short time.

The Resource Conservation and Recovery Act (RCRA) regulations in 40 CFR Parts 264 and 265 Subparts C and D require immediate actions to minimize hazards to human health and the environment from any unplanned, sudden or non-sudden releases of hazardous waste or hazardous constituents. Sections 264.1(g)(8) and 265.1(c)(11) provide a regulatory exemption from interim status and permitting standards for treatment and containment activities hazardous waste discharges and imminent and substantial threats of discharges (under §260.10 the term discharge includes both accidental and deliberate spills). The effect of this exemption is to promote hazardous waste discharge prevention and control by relieving persons engaged in immediate response to discharges and serious threats of discharges from time consuming requirements.

Under this exemption, treatment, storage and disposal facilities regulated under RCRA must continue to meet the applicable requirements of Subparts C and D of Parts 264 and 265. Treatment and containment activities conducted after the initial response period are subject to interim status and permitting standards. A facility may qualify for an emergency permit under §270.61 for such treatment and containment activities occuring after the immediate response period.

Accidental spills should be addressed immediately and in accordance with the facility's contingency plan. Sections 264.51 and 265.51 require owner/operators of treatment, storage and disposal facilities to have a contingency plan describing actions facility personnel must take in response to any unplanned sudden or non-sudden releases. Under section 262.34(a)(4), generators are also required to have such contingency plans as a condition of obtaining a permit exemption for 90 day on-site accumulation. Generators are subject to interim status and permitting requirements for treatment and containment activities conducted after the accumulation period.

2. Accidental spills not cleaned up within reasonably short time.

As stated above, treatment and containment activities conducted after the initial response period are subject to permitting and interim status requirements. In addition, if cleanup activities do not begin promptly, the spill is considered a land disposal site subject to permitting requirements.

The Environmental Protection Agency (EPA) has not established a definition of what constitutes an immediate response to a spill situation. The timeframes and extent of immediate response must be judged by persons responding to discharges on an individual basis. Extended responses which are not judged to be immediate in nature may result in: (1) a modification to the facility's contingency plan; (2) an enforcement action for an inadequate contingency plan or permit violation; or (3) enforcement action for illegal disposal.

3. Spills where cleanup requires on-site treatment.

As explained in the response to question #1, §264.1(g)(8) and §265.1(c)(11) provide a regulatory exemption from interim status and permitting standards for treatment activities conducted in immediate response to discharges or threats of discharges.

4. Transportation spills cleaned up within a reasonably short time.

§263.30 requires the transporter to take appropriate, immediate action to protect human health and the environment. Under §263.30(b), an authorized official may authorize removal of the spill by transporters without an EPA ID number or manifest in an emergency. When an emergency no longer exists, all applicable requirements of the RCRA regulations once again apply to all of the transporter's activities. The Department of Transportation has also issued rules regarding spills occurring during transport.

5. Transportation spills not cleaned up within a reasonably short time

As discussed above, EPA has not established a definition of what constitutes an immediate response to a spill situation. The timeframes and extent of immediate response must be judged by persons responding to discharges on an individual basis. Extended responses which are not judged to be immediate in nature may be subject to enforcement action for illegal disposal.

1. When does a spill become a Superfund candidate versus cleanup under RCRA?

Question has been referred to our Superfund Office for response.

2. When does a spill become a facility as defined in RCRA?

As discussed above, if cleanup activities do not begin promptly, the spill is considered a land disposal site subject to permitting requirements. In addition, spill areas where hazardous waste is treated, disposed or stored past the immediate response phase are subject to all applicable interim status and permitting standards for hazardous waste management facilities receiving waste after 11/19/80 as outlined in Parts 264, 265 and 122.

3. Are there any situations where the cleanup standards are different than background?

RCRA regulations do not specifically identify a level of clean-up required in spill situations. Under §263.31, a transporter must clean up any hazardous waste discharge so that the discharge no longer presents a hazard to human health and the environment. Under the emergency procedures provisions of §264.51 and §265.51, generators, treatment, storage and disposal facilities must take those actions, as outlined in the contingency plan, necessary to minimize hazards to human health and the environment.

DEC 21 1987

MEMORANDUM

SUBJECT: RCRA Subtitle C Exemption for Wastewater Treatment and Elementary Neutralization Units

FROM: Marcia E. Williams
Director, Office of Solid Waste (WH-562)

TO: William A. Whittington
Director, Office of Water Regulations and Standards (WH-551)

James R. Elder
Director, Office of Water Enforcement and Permits (EN-335)

On November 17, 1980, EPA promulgated amendments to Subtitle C of RCRA that suspended the applicability of the hazardous waste regulations to owners and operators of wastewater treatment and elementary neutralization units (45 FR 76074) (see 40 C.F.R. sections 264.1(g)(6) and 265.1(c)(10)). Since then, EPA has been asked to respond to numerous inquiries regarding the intended scope of these exemptions. Because the overwhelming majority of inquiries are with regard to the exemption for wastewater treatment units, this memo will focus on these units. Several attempts have been made to address the ambiguities of this exemption. On more than one occasion, the EPA responses have offered conflicting guidance.

The Office of Solid Waste is again receiving a flurry of inquiries on the scope of this exemption, apparently prompted by the July 14, 1986, promulgation of more stringent revised standards for hazardous waste storage/treatment tank systems (including sumps). Obviously, numerous individuals are hoping to qualify for the wastewater treatment unit exemption as a means of avoiding being covered by the revised tank system standards. Thus, I feel that it is important that we review and clarify the scope of this exemption. The purpose of this memorandum is to obtain your concurrence with our reading of

the current exemption so that we could send a Policy Directive to the Regions regarding this matter and/or prepare a Federal Register notice of clarification.

In order for the exemption to be applicable to a wastewater treatment unit, these conditions, as listed in the definition of wastewater treatment unit under 40 C.F.R. Section 260.10, must be met:

1) The unit must be part of a wastewater treatment facility which is subject to regulation under either section 402 or 307(b) of the Clean Water Act; and

2) The unit receives and treats or stores an influent wastewater which is a hazardous waste as defined in section 261.3, or generates and accumulates a wastewater treatment sludge which is a hazardous waste as defined in section 261.3, or treats or stores a wastewater treatment sludge which is a hazardous waste as defined in section 261.3; and

3) The unit meets the definition of tank in section 260.10.

Most of the inquiries regarding the wastewater treatment unit exemption are directed towards interpretation of condition 1) above. Thus, our clarification of the intended meaning of the term "wastewater treatment facility" is the primary factor regarding the applicability of the exemption to a specific wastewater treatment unit.

It is our position that in order for a wastewater treatment unit to be covered by the exemption, it must be part of an on-site wastewater treatment facility. In this scenario, any hazardous waste tank system that is used to store or treat the wastewater that will be, or has been, managed at the on-site wastewater treatment facility with an NPDES permit (or one that discharges to a POTW), is exempt from the regulations. Also, the means of conveyance of the waste between storage/treatment units does not affect the applicability of this exemption. Assuming the conditions discussed above are met, no distinction will be drawn whether the wastewater is piped, trucked, or otherwise conveyed to the wastewater treatment facility within the on-site boundaries of the facility generating the wastewater. Likewise, any tank system at a facility with an NPDES permitted wastewater treatment facility (or one that discharges to a POTW) that is used to store/treat wastewater that is brought on-site from another facility, is covered by the exemption.

However, any tank system that is employed in managing wastewater at a facility prior to its off-site transfer to another location, whether or not the off-site location is an NPDES permitted wastewater treatment facility (or one that discharges to a POTW), is not covered by this exemption.

Another scenario that needs to be clarified is that situation where a facility with an on-site wastewater treatment facility has no discharge, direct or indirect, to surface water. The wastewater treatment unit exemption is intended to cover only systems that 1) produce a treated wastewater effluent which is discharged into surface waters or into a POTW sewer system and, therefore, is subject to the NPDES or pretreatment requirements of the Clean Water Act, or 2) produce no treated wastewater effluent as a direct result of such requirements. This exemption is not intended to apply to wastewater treatment units that are not required to obtain an NPDES permit because they do not discharge a treated effluent (45 FR 76078; November 17, 1980). As a result, we anticipate that some facilities will apply for a zero-discharge NPDES permit in an attempt to qualify for this exemption and thus avoid RCRA regulation.

Please note that the above reading is based on our assumption that all storage/treatment tank systems covered by this exemption will be subject to regulation by NPDES authorities.

If you agree with this general approach, please designate someone to serve as a contact person for the Office of Water's review of our draft policy statement. We have been working with staff from the Office of General Counsel and the Office of Water Enforcement and Permits in developing the rationale to support our preferred reading of the current regulations. We have their tentative concurrence on this approach. I look forward to hearing from you regarding our efforts to clarify the wastewater treatment unit exemption. If you have any questions, please contact me at 382-4627 or have your staff contact Bill Kline or Bob Dellinger of my staff at 382-7917.

cc: Gene Lucero, WH-527
Ron Brand, WH-562A
Bruce Weddle, WH-563

APR 29 1988

Mr. Bruce P. McLeod, P.E.
Senior Specialist
Environmental Control
Monsanto Chemical Company
P.O. Box 12830
Pensacola, FL 32575

Dear Mr. McLeod:

The purpose of this letter is to reply to your letter of July 24, 1987, to Bob Dellinger, requesting an interpretation regarding application of the elementary neutralization exemption to Monsanto's Pensacola plant. First, please accept my sincere apology for the delayed response to your letter. As previously mentioned, your letter involves difficult issues regarding the scope of the elementary neutralization unit exemption, and was further delayed by our inadvertent loss of your original letter.

I would like to address your concerns in the same order as discussed in your letter. You first questioned whether the Pensacola plant sumps are indeed sumps since the waste is not ultimately transported to a RCRA storage, treatment, or disposal facility as specified in the definition of sumps in 40 CFR 260.10.

Since the various wastes with differing pH values, that meet the definition of hazardous waste only due to corrosivity, are introduced at various points upstream to a system of sumps and piping, the collection and treatment of such wastes seemingly occur more or less concurrently. Accordingly, such sump(s) and associated ancillary equipment (e.g., piping, pumps) would indeed be considered a hazardous waste sump and be subject to the standards for hazardous waste storage/treatment tank systems.

Your second question requested clarification of whether the Pensacola plant wastewater collection system would qualify as a elementary neutralization and/or totally enclosed treatment facility, thus qualifying for those respective exemptions.

Based on your description of this particular operation, we believe that the totally enclosed treatment facility exemption would be unlikely to apply. We believe the sumps and their associated ancillary equipment would qualify for the elementary neutralization exemption under the Federal regulations because the sump and its ancillary equipment meet the criteria defining an elementary neutralization unit in 40 CFR 260.10 since it is used to neutralize hazardous wastes only exhibiting the corrosivity characteristic and it meets the definition of tank system. Thus, the elementary neutralization exemption, as allowed in 40 CFR 264.1(g)(6) and 265.1(c)(10), would seem to apply to this Pensacola plant wastewater system insofar as the neutralization sump and ancillary equipment are located within the boundaries of this facility.

Since the ultimate decision for determining the regulatory status of a specific unit at your facility is the responsibility of the State of Florida, please contact them at the address/ telephone number indicated below. If necessary, please feel free to refer them to me.

Again, please accept my apology for not sooner addressing your letter. If you have any further questions, please call Bill Kline of my staff or me at (202) 382-7917.

Sincerely,

Robert W. April, Chief
Capacity and Storage Section

RWD/bw

cc: Bob Dellinger, WMD
Bill Kline, WMD
Carrie Wehling, OGC
Chet Oszman, PSPD
RCRA Branch Chief, Region 4

Administrator, Florida DER
Solid and Hazardous Waste Section
Twin Towers Office Building
2600 Blair Stone Road
Tallahassee, Florida 32301
Phone: (904) 488-0300

RCRA/SUPERFUND HOTLINE MONTHLY SUMMARY

JULY 88

3. Elementary Neutralization Units

A generator produces large volumes of corrosive waste. It is pumped directly to a tank which is an elementary neutralization unit. However, this waste (corrosive only) remains in the tank for two months before it is actually neutralized. Is this waste counted for purposes of determining generator status? Is the corrosive waste that is stored in the neutralization unit prior to treatment included in the scope of the exemptions in Sections 264.1(g)(6), 265.1(c)(10) and 270.1(c)(2)(v)?

No, this type of waste is not counted for determining generator status. As stated in the March 24, 1986 Federal Register (51 FR 10146) wastes treated in elementary neutralization units are included in the general category of exempted or excluded wastes that would not be counted in determining generator status.

Also, this waste is not counted because it is not subject to substantive regulations in 40 CFR Parts 262 and 263 as long as it remains in the neutralization unit (51 FR 10152).

Source: Bob April (202) 382-7917
Emily Roth (202) 382-4777
Research: Mary Stevens

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

OCT 27 1988

OFFICE OF
SOLID WASTE AND EMERGENCY RESPON

MEMORANDUM

SUBJECT: RCRA Regulation of Pesticide Rinsate Treatment/Recycling System

FROM: Sylvia K. Lowrance, Director
Office of Solid Waste (OS-300)

TO: David A. Wagoner, Director
Waste Management Division
EPA Region VII

This memorandum is in response to your September 15, 1988 memorandum requesting clarification of the RCRA regulation of certain tanks in a pesticide container washing operation.

As I understand the process, the rinsewater from the container washing is collected in a sump, is then pumped to a settling tank, and subsequently treated with activated carbon. The treated rinsewater is reused for container rinsing, but the pesticide residues are discarded.

Your interpretation that the used rinsewater is a "spent material" is correct; as a spent material going for treatment (or reclamation), it is a solid waste. If the used rinsewater contains a pesticide listed in 40 CFR 261.33 that was not derived from an "empty" container as defined in Section 261.7, the used rinsewater is a hazardous waste. If the pesticides do not meet a listing, the used rinsewater is a hazardous waste if it exhibits a characteristic (Section 261.20-261.24).

Although the system does have certain characteristics of a reclamation operation, it is more clearly defined as a wastewater treatment unit. As stated in your memo, this unit would be subject to RCRA permit requirements unless exempted under the wastewater treatment unit exemption at 40 CFR 264.1(g)(6) or 265.1(c)(10). In a September 2, 1988 Federal

Register notice, the Agency clarified that this wastewater treatment unit exemption is intended to cover only tank systems that are part of a wastewater treatment facility that (1) produces a treated wastewater effluent which is discharged into surface waters or into a POTW sewer system and, therefore, is subject to the NPDES or pretreatment requirements of the Clean Water Act, or (2) produces no treated wastewater effluent as a direct result of such requirements. This exemption is not intended to apply to wastewater treatment units that are not required to obtain an NPDES permit because they do not discharge treated effluent (see 53 FR 34080-81). As your memo explains, the treated rinsewater is completely recycled back into the operation and no discharge occurs. I cannot conclusively determine whether the unit would be eligible for an exemption as a wastewater treatment unit; that determination must be made by the authorized State or Regional office. In making this determination, the authorized State or Regional office must determine whether the facility is subject to regulation under Sections 307(b) or 402 of the Clean Water Act.

Regarding the regulatory status of the "reclaimed" rinsate, you cited the January 4, 1985 Federal Register preamble (50 FR 634) discussion of products from recycling operations losing their status as a waste. While the regulatory language allows for flexibility in determining whether a reclaimed waste may be considered a product (thus losing its status as a waste), the preamble discussion indicates that reclaimed wastewaters are not to be considered products. The reasons for this approach (i.e., that wastewaters are not ordinarily considered to be commercial products and are often discharged, and that the Agency did not intend to allow facilities to exempt their wastewater treatment surface impoundments from regulation by being classified as "recycling" facilities) are not necessarily applicable in this case. When reused, the reclaimed rinsate would lose its status as a solid waste as provided in 40 CFR 261.2(e)(1)(ii), provided it is truly reclaimed as an effective substitute for what is typically used to rinse the containers. Until it is reclaimed and fit for reuse, the rinsate would remain a solid waste, and, if applicable, a hazardous waste.

If you have any further questions or need any additional clarification, you should contact Mitch Kidwell at FTS 475-8551.

cc: Michael Feeley
Chief, Waste Programs Branch
EPA, Region IX

Karen Schwinn
Chief, Waste Compliance Branch
EPA, Region IX

Waste Management Division Directors
Regions I-X

9471.1988(05)

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

NOV 30 1988

OFFICE OF
SOLID WASTE AND EMERGENCY RESPO

Mr. Fred Smith
Institute of Makers of Explosives
1120 19th Street, N.W.
Washington, D.C. 20036

Dear Mr. Smith:

EPA has been requested by the Institute of Makers of Explosives to render an opinion on the application and interpretation of the immediate response exception as set forth at 40 C.F.R. secs. 264.1(g)(8), 265.1(c)(11), and 270.1(c)(3). It is the Agency's view that the treatment of leaking or damaged explosives, or undetonated explosives left after an initial firing attempt will, in many instances, fall within the circumstances contemplated by the cited provisions.

The Agency recognizes that the use of commercial explosives is subject to many non-EPA governmental regulations, including a prohibition by the Department of Transportation against the transportation of "leaking or damaged packages of explosives" (49 C.F.R. sec. 173.51). According to the Institute of Makers of Explosives, these regulations affect the handling of explosive waste and reinforce the obligation of members of the explosives industry to consider safety as a paramount concern. Such wastes, if not treated promptly and properly, can present an imminent public safety and environmental hazard, e.g., unplanned explosions or leaching of materials to the soil. The immediate response exception applies in those instances where treatment of the explosive waste through open burning/open detonation is taken in immediate response to a discharge or an imminent and substantial threat of a discharge of a hazardous waste.

Examples in which the immediate response exception would apply to the disposal of explosive waste by open burning/open detonation would include, but not be limited to, the following situations:

A. Land is cleared with explosives and an amount of damaged or unusable explosive waste remains that, for safety reasons, cannot be stored or transported off-site.

B. An explosives distributor has a temporary or permanent magazine at which undetonated (but, for safety reasons, unusable and not transportable off-site), leaking or damaged explosives are found, usually at the end of the period of explosives use or during a periodic check on the stored explosives.

C. An explosives distributor operates an on-site magazine for a project with a changing location (e.g., road building, pipeline) at which undetonated (but, for safety reasons, unusable and not transportable off-site), damaged or leaking explosives are found.

D. A mining operation detonates large amounts of explosives and a small percentage remains undetonated after the initial firing attempt but, for safety reasons, cannot be reused or transported off-site.

The Agency notes that a guidance manual is currently being prepared that will discuss the permit requirements for facilities which store, treat, or dispose of explosive waste in circumstances not qualifying for the immediate response exception.

Yours truly,

Sylvia Lowrance

Director
Office of Solid Waste

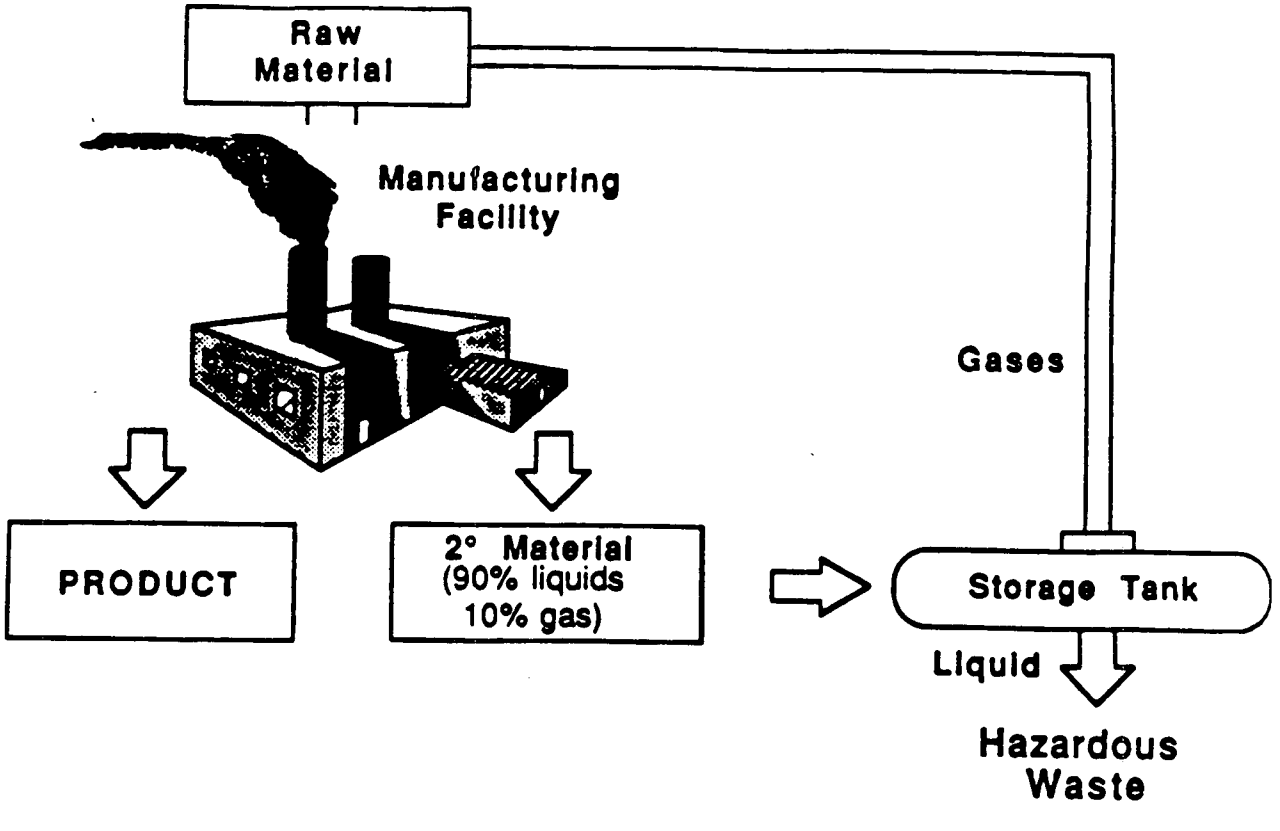
RCRA/SUPERFUND HOTLINE MONTHLY SUMMARY

DECEMBER 88

1. Closed Loop Recycling

In a production process a manufacturing facility generates a secondary material that consists of 90% ignitable liquids and 10% ignitable gases. From the production process the material is piped to a storage tank where the ignitable gases are separated from the ignitable liquids. The gases are then piped back into the production process to be used as raw material. The remaining ignitable liquid is discarded as a hazardous waste. Is the liquid and gas mixture exempt from being a solid waste under the closed loop recycling provision in Section 261.4(a)(8)?

1. Closed Loop Recycling (Cont'd)



According to Section 261.4(a)(8) secondary materials are not solid wastes if they are reclaimed and returned to the original process or processes in which they were generated where they are reused in the production process provided:

(i) Only tank storage is involved and the entire process through completion of reclamation is closed by being entirely connected with pipes or other comparable enclosed means of conveyance;
(ii) Reclamation does not involve controlled flame combustion (such as occurs in boilers, industrial furnaces or incinerators);
(iii) The secondary materials are never accumulated in such tanks for over twelve months without being reclaimed; and,
(iv) The reclaimed material is not used to produce a fuel or used to produce products that are used in a manner constituting disposal.

Provided the reclamation process meets all requirements of Section 261.4(a)(8), the portion of the secondary material that is returned to the production process to be used as a raw material (the ignitable gas) is not a solid waste. However, the remaining portion that is discarded (the ignitable liquid) is a hazardous waste and being such is not exempted from the definition of a solid waste per Section 261.4(a)(8). Since the generator is handling a hazardous waste, he/she must comply with the applicable provisions of Parts 262 through 270.

Source: Chester Oszman (202) 382-4499
Research: Joe Nixon

9471.1989(01)

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

MAR 20 1989

OFFICE OF
SOLID WASTE AND EMERGENCY RESP

Mr. Robert H. Elliott, Jr.
Zerpol Corporation
1300 Schwab Road
Hatfield, Pennsylvania 19440

Dear Mr. Elliott:

This letter is written in response to your correspondence of January 10, 1989, regarding the applicability of permit requirements under the Resource Conservation and Recovery Act (RCRA) to your zero discharge wastewater treatment system.

As I understand the Zerpol Zero Pollution System, industrial wastewater discharge to ground water, surface water and sewer systems is eliminated by a process that returns treated water to the production area for reuse. You have previously confirmed that a National Pollutant Discharge Elimination System (NPDES) permit issued under section 402 of the Clean Water Act (CWA) is not required for a zero discharge system. In your January 10, 1989 letter, you requested a statement from EPA confirming that a RCRA Part B permit is also not required for your system.

In responding to your letter, I am assuming that you are referring to an exemption from a RCRA Part B permit requirement based on the wastewater treatment unit exemption found at 40 CFR 264.1(g)(6) or 265.1(c)(10). There has been some confusion, which I will clarify, regarding the regulatory interface between the NPDES permit of the CWA and the exemption for wastewater treatment units at 40 CFR 264.1(g)(6) or 265.1(c)(10) of RCRA, particularly where zero discharge is involved. To understand this interface, it helps to note that one of the reasons for the wastewater treatment unit exemption is to avoid the overregulation of such units by requiring both a NPDES permit and a RCRA Part B permit for the same unit.

To qualify for the wastewater treatment unit exemption, one of the criteria which must be met is that the unit must be part of a wastewater treatment facility which is subject to regulation under either section 402 or 307(b) of the CWA. This means that the facility must have a NPDES permit under section

402, be subject to an effluent guideline issued under sections 301 and 402 of the CWA, or be subject to the pretreatment requirements of 307(b) of the CWA (i.e., protection of human health and the environment is ensured by regulation under the CWA rather than RCRA).[1] While it is true that a zero discharge system does not require a NPDES permit, the absence of this permit (or an applicable effluent guideline or pretreatment standard specifying zero discharge) necessitates a RCRA Part B permit. Otherwise, a wastewater unit treating hazardous wastes could escape regulations developed to ensure protection of human health and the environment. Although this approach may, at first, be viewed as a disincentive to developing zero discharge systems, a NPDES permit that specifies "zero discharge" may be the most appropriate alternative to a RCRA Part B permit in industries without zero discharge effluent guidelines, encouraging zero discharge systems while being consistent with the Agency's mandate to protect human health and the environment.

I should also respond to a statement you made in your request for confirmation that a RCRA Part B is not required. You asked EPA to send you a statement that a Part B permit is not required for a "completely closed loop system." I assume you are referring to the exemption for a totally enclosed treatment facility found at 40 CFR 264.1(g)(5) or 265.1(c)(9). As defined at 40 CFR 260.10, a totally enclosed treatment facility is one which is directly connected to an industrial process and which is constructed and operated in a manner which prevents the release of any hazardous waste, or any constituent thereof, into the environment during treatment. A zero discharge system under the CWA does not automatically qualify for this exemption. For example, a system that uses tanks without covers may not qualify because it would not restrict the escape of hazardous constituents to the air. However, I did not receive sufficient information on your system to evaluate it.

You should be aware that State environmental regulations are also applicable and that the State may regulate such facilities differently under the State program. Therefore, whether a RCRA Part B permit is required for your system may be determined by the appropriate State agency.

[1] A point source discharge which is operating without a valid NPDES permit is also "subject to" section 402 of the CWA (albeit in violation of that section).

Should you have any further questions, you may contact Robert Dellinger or Mitch Kidwell, of my staff, at (202) 475-8551.

Sincerely,

Sylvia K. Lowrance, Director
Office of Solid Waste

General Facility Standards (Subpart B)

9472 – GENERAL FACILITY STANDARDS

Parts 264 & 265 Subpart B

ATK1/1104/33 kp

RCRA/SUPERFUND HOTLINE MONTHLY SUMMARY

JULY 83

3- How detailed must the analysis of my waste be for simple storage at my interim status facility?

The caller is referred to §265.13 (General waste analysis). The analysis must, at a mimimum, contain all the information necessary to store the waste in accordance with Part 265. Adequacy is determined on a case by case basis by the Regional EPA office or the State (if the State has interim authorization). Further guidance can be found in Permit Applicant's Guidance Manual for General Facility Standards (Draft-June 1983) which is currently available in the EPA Regional libraries.

RCRA/SUPERFUND HOTLINE MONTHLY SUMMARY

JULY 83

7 - 40CFR 264.12(b) requires the owner/operator of a hazardous waste management facility to inform a generator in writing that the facility has the appropriate permit(s) for and will accept a generator's wastes. Is a generator required to receive this written notice prior to transport?

No, 40CFR 262.20(b) states that wastes transported offsite must be sent to a facility permitted to handle that waste; a generator is not required to ask for or receive a written notice from the facility owner/operator. However, a written notice would assure the generator that he is in compliance with 40CFR 262.20(b). A written notice would also avoid the potential problem of a generator sending waste to a facility which has the proper permits but which has not agreed to accept the waste.

Source: Rolf Hill

RCRA/SUPERFUND HOTLINE MONTHLY SUMMARY

MAY 85

Waste Analysis

2. Pursuant to 40 CFR §§265.13 and 264.13, owners and operators (o/o) of hazardous waste treatment, storage, and disposal (TSD) facilities must obtain a waste analysis. Must owner/operators use "Test Methods for Evaluating Solid Wastes" (SW-846) for this waste analysis?

   Currently, EPA does not require the use of SW-846 for the required waste analysis pursuant to §§265.13 and 264.13. EPA, however, recently proposed in the October 1, 1984, Federal Register (49 FR 38786) to require the mandatory use of SW-846 for all sampling, monitoring, analysis, and testing required under 40 CFR Parts 260-271 unless otherwise specified.

   Sources: Barbara Pace (202) 382-7703

9472.1986(02)

JAN 29 1986

Dr. B. F. Dudenbostal, Director
New Jersey DEP
CN-028
436 Easte State Street
Trenton, New Jersey 08625

Dear Dr. Dudenbostal:

The Office of Solid Waste and Emergency Response has an ongoing laboratory evaluation program for EPA laboratories and contractors. This program entails the periodic analysis of performance samples using specified methods selected from those published in "Test Methods for Evaluating Solid Waste" (SW-846).

As we promised last summer, EPA is expanding the program and inviting the solid waste testing laboratories of State regulatory agencies to participate. This is a voluntary program designed to allow laboratories to evaluate their capability to analyze RCRA/CERCLA samples using SW-846 methods. We feel that a valuable side benefit of the program is the information, the Agency obtains, on how well the test methods perform in routine use and where method improvements are needed.

The program is structured so that it is a self-auditing operation. Samples are periodically sent to the designated laboratory contact along with specific instructions and analytical standards necessary for the analyses. The samples range from very simple aqueous solutions to more complex matrices characteristic of wastes. Participating laboratories receive four sets of samples per year. Each set consists of two samples, one inorganic and one organic. Results are submitted to EPA for evaluation against referee values. A report is then prepared, and sent to you which shows both how well your laboratory performed and how the other participating laboratories did. No laboratory is identified to any other laboratory. If your laboratory encounters problems in performing a specific test, EPA is prepared to assist you in resolving the problems.

If you would like to your laboratory to participate in the evaluation program, please contact Florence Richardson or me at (202) 332-4770 for more details.

David Friedman

Manager
Methods Program (WH-5629)

9472.1986(04)

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

4 JUN 86

FILE COPY

OFFICE OF
SOLID WASTE AND EMERGENCY RESPONSE

Mr. John Richard Slate
City Attorney
Suite 204
10551 Allen Road
Allen Park, Michigan 48101

Dear Mr. Slate:

This is in response to your April 30, 1986, letter to Congressman John Dingell regarding the Crystal Mines in Detroit, Michigan. Mr. Dingell has requested that we keep you informed of any developments pertaining to this matter.

The Resource Conservation and Recovery Act (RCRA) allows the placement of hazardous wastes, other than bulk liquids, in salt mines if a RCRA permit is issued. Crystal Mines, Inc. (CMI) thus could apply now for a RCRA permit for the placement of containerized or solid hazardous waste. You should be aware that neither EPA nor the Michigan Department of Natural Resources (MDNR) has yet received an application from CMI.

Depending on site-specific factors, however, it may be more appropriate to consider permitting the Crystal Mines facility under new, special regulations for "miscellaneous" hazardous waste management units. These rules are likely to be used for permitting most placement of containerized or solid hazardous waste in underground mines. The rules will be proposed this summer for public comment and will be issued in final form early in 1987.

Once a permit application is received, EPA and MDNR would consult with each other during careful review of the application. The consultation process provides assurance that all the RCRA permitting requirements designed for the protection of human health and the environment are satisfied before the permit is issued. These requirements include monitoring, corrective action, closure and post-closure care, and financial assurance. Because of the many new requirements imposed by the Hazardous and Solid Waste Amendments of 1984, it is likely that any permit issued to CMI would be issued jointly by EPA and MDNR.

The RCRA permitting process also includes public participation through comments on a draft permit. Usually, the notice of intent of a permit decision and opportunity for public comment is provided in local newspapers, on radio, and to local groups on EPA or MDNR mailing lists. The schedule for public input to the permitting process in this case is uncertain, since we have not yet received a permit application from CMI.

Thank you for your interest in this important hazardous waste issue.

Sincerely,

J. Winston Porter
Assistant Administrator

cc: Honorable John D. Dingell
Richard Traub, Region V
James Roberts, MDNR

WH-562/D.Zeitlin/bc/6-2-86/Control No: 601581/Due Date: 6/4/86
382-4646

9472.1986(06)

8 JUL 86

Mr. Richard J. Gimello
Executive Director
State of New Jersey
Hazardous Waste Facilities
Siting Commission (CN 406)
Trenton, New Jersey 08625

Dear Mr. Gimello:

Thank you for your June 5, 1986, letter regarding the Environmental Protection Agency's (EPA's) activities on location guidance. You raised six major issues that I will address. I understand that you discussed several of these issues with Christopher Daggett, Regional Administrator for Region II, his staff, and Arthur Day of my staff in a meeting on June 20, 1986.

You requested copies of the Phase I and Phase II documents. I have attached the Phase I document entitled The Permit Writers' Guidance Manual for Location of Hazardous Waste Land Treatment, Storage, and Disposal Facilities -- Phase I -- Criteria for Location Acceptability and Existing Applicable Regulations. However, the second document entitled Guidance Criteria for Identifying Areas of Vulnerable Hydrogeology is currently under internal Agency review and not available for external distribution. When this review is completed, the document will be issued as an "interim final" guidance to provide the public with the opportunity to comment. We will send you a copy at that time. I have attached a summary of these two documents (Attachment I) to clarify any confusion that exists about the various drafts that were circulated. In addition, I have attached Criteria for Identifying Areas of Vulnerable Hydrogeology -- Appendix D -- Development of Vulnerability Criteria Based on Risk Assessment and Theoretical Modeling and an Executive Summary which provides the detailed rationale for why we selected the "time of travel" (TOT) along a 100-foot flow line (TOT_{100}).

Your major concern centered on EPA's rationale for proposing the TOT. We selected TOT_{100} for three reasons:

(1) it identifies locations where plume size will be minimized;

(2) it identifies areas that minimize potential for exposure to releases occurring in the absence of monitoring and response; and

(3) it is useful in recognizing three potential exposure pathways.

You also questioned how the TOT method applies to coastal states like New Jersey. EPA is currently developing a strategy to decide how the numerous RCRA regulatory provisions pertaining to ground water should interrelate. One of the questions the strategy will address is how the vulnerable hydrogeology guidance should be used, i.e., how vulnerability under the TOT method should affect a siting decision. The strategy should be completed by this fall and will be publicly available. I want to stress, however, that the vulnerable hydrogeology guidance is not "location guidance" in the sense that it prescribes where facilities may be sited. The document only describes a method by which vulnerability can be assessed; it does not dictate what siting decision should be made based on the results of the assessment.

You asked if the compendium of siting criteria is completed and if so was it used to develop the Guidance Criteria for Identifying Areas of Vulnerable Hydrogeology. We have completed the compendium and produced a report entitled Review of State Siting Criteria for the Location of Hazardous Waste Land Treatment, Storage and Disposal Facilities. I understand my staff provided you with a copy of this report earlier. This report states that there seems to be no consensus among states that use a TOT concept; appropriate values for travel time ranged from 3 years to reach off-site wells to 1000 years to reach an environmental pathway. Also, states emphasized that disposal units should be located in low permeability soil (examples ranged from 10^{-6} to 10^{-8} cm/sec). These two points indicated to us that our vulnerability criteria were well within the scope of many state siting criteria.

Finally, you suggested that we conduct a management-level review of the suitability of New Jersey's siting criteria. We are currently reviewing the New Jersey Siting Criteria document you enclosed and will provide you with comments by late July.

Please understand that our vulnerable hydrogeology guidance is just that, guidance. Our next step, in response to RCRA Section 3004(O)(7), is to develop location regulations applicable to new and existing hazardous waste treatment, storage, and disposal facilities. We will keep you informed as these standards are developed, proposed, and finalized over the next two years.

I hope this letter addresses the issues you raised. If you have any further questions, please feel free to contact John Lehman, Director, Waste Management Division, at (202) 382-7919.

Sincerely,

J. Winston Porter
Assistant Administrator

Enclosures

WH-562/MCMANUS/D.ZEITLIN/sld/7-2-86/Control No.: SWER-09159
382-4651/Due Date: 7-8-86

ATTACHMENT 1

I. The Permit Writer's Guidance Manual For Location of Hazardous Waste Land Treatment, Storage and Disposal Facilities -- Phase I

- o Published in draft final in February of 1985
- o Written prior to the Hazardous and Solid Waste Amendments (HSWA)
- o Describes five criteria for an acceptable location and cites existing applicable regulations under RCRA and other Federal laws

II. Guidance Criteria for Identifying Areas of Vulnerable Hydrogeology

- o Formerly known as Phase II Guidance
- o Satisfies the statutory requirement (3004)(0)(7) of RCRA as amended by HSWA that EPA develop Guidance Criteria that defines Vulnerable Hydrogeologies
- o Assesses site vulnerability by applying the time-of-travel (TOT) of ground water along a 100-foot flow line (TOT_{100}) originating at the base of a hazardous waste unit.

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

9472.1987(01)

JUN 24 1987

MEMORANDUM

SUBJECT: Determination of Operator at Government-Owned Contractor-Operated (GOCO) Facilities

FROM: Gene A. Lucero, Director /S/
Office of Waste Programs Enforcement

Marcia E. Williams, Director
Office of Solid Waste

TO: Waste Management Division Directors
Regions I - X

The purpose of this memorandum is to clarify who should sign as the operator on permit applications for Government-Owned Contractor-Operated (GOCO) facilities. Earlier guidance (see attached memo) had recommended that the Regional office consider the role of the contractor in the operation of the facility before determining who should sign the permit application. We also noted that in some cases where the contractor's role is less precisely defined the Region should exercise judgment given the factual situation.

It appears that there is still some confusion regarding signatories for permit applications. Whenever a contractor or contractors at a government-owned facility, are responsible or partially responsible for the operation, management or oversight of hazardous waste activities at the facility; they should sign the permit as the operator(s). In some instances both the Federal agency and the contractor(s) are the operators and multiple signatures to that effect would be appropriate. A review of the facility's operating records, contingency plans, personnel training records, and other documents relating to waste management should indicate who the operator(s) are. As a general rule, contractors will meet this test and therefore in most situations should be required to sign the permit application.

If you have any questions please contact Jim Michael, Office of Solid Waste at FTS 382-2231 or Anna Duncan, Office of Waste Programs Enforcement at FTS 382-4829.

Attachment

cc: Bruce Weddle, OSW
Elaine Stanley, OWPE
Chris Grundler, OSWER
Matt Hale, PSPD
Federal Facility Coordinators, Region I-X

bcc: Jim Michael, OSW
Anna Duncan, OWPE
Suzanne Rudzinski, PSPD

JUN 2 1988

Thomas J. Dolce, P.E.
Principal Engineer
Applied Environmental Technologies Corp.
7 Belver Avenue, Suite 210
Quonset Point, Rhode Island 02852

Dear Mr. Dolce:

Your letter of April 18, 1988 asks for a regulatory interpretation regarding the security requirements of 40 CFR 264.14(b). I will provide you with the Federal interpretation, however, I also want to refer you to the States where your facilities are located, for the States' interpretation.

The RCRA/Superfund Hotline was correct in indicating that if all hazardous waste storage and treatment occurred within a facility's building, then the walls of the building would constitute compliance with the artificial barrier requirement in 40 CFR 264.14(b)(2)(i). Further, 40 CFR 264.14(b)(2)(ii) is satisfied when all entry doors are locked at all times with entry strictly controlled through the main plant entrance, as you suggest. However, the phrase "strictly controlled" should be fully described, with examples relevant to the facility, if you are preparing a Part B permit application.

The "Permit Applicants Guidance Manual for the General Facility Standards of 40 CFR 264", SW-968, August 1983 (available through the Hotline), supports our regulatory interpretation by stating that "264.14(b) is satisfied if the active portion is located within a facility or plant which itself has a surveillance system, or a barrier and a means to control entry." The guidance goes on to say that "the requirements for signs in 264.14(c) would still be applicable."

I urge you to also ask the State hazardous waste agency which maintains jurisdiction over the facility(ies) of concern to you for an interpretation of the State security requirements, using the same description as was included in your April 18th letter. The State, in most likelihood (especially in New England), is the authorized permitting

authority who will be issuing the facility's permit. In some cases, the State's hazardous waste regulations are more stringent or broader-in-scope than the Federal requirements. A list of State hazardous waste agencies is attached for your use.

If you have any further questions about the Federal RCRA requirements, please contact Chester Oszman at (202)382-4499.

Sincerely,

Bruce R. Weddle
Director
Permits and State Programs
Division

Attachment

cc: Chester Oszman, OSW

NOTE

SUBJECT: Location Standards for Hazardous Waste Management Facilities

TO: Bob Knox

You recently requested information on our hazardous waste facility siting requirements in response to a request by Gordon Binder, who is concerned about potential environmental equity issues in the siting process. The following is a summary of our current siting requirements and an overview of new standards that are being developed. Both current standards and those under development are based on technical suitability of a site; economic or other factors are not considered. Historically, hazardous waste units have been associated with industrial manufacturing plants. The siting of these plants is controlled by local zoning requirements.

EPA currently has limited regulatory restrictions for the siting of hazardous waste treatment, storage, and disposal facilities (TSDFs). These siting restrictions are based on the sensitivity of the environment; they restrict TSDFs from locating in 100-year floodplains and areas prone to severe earthquake damage in certain parts of the western United States.

The Agency, however, is currently developing more restrictive siting criteria for TSDFs. These more restrictive criteria will also be based on the sensitivity of the environment. Certain very environmentally sensitive locations will be subject to absolute siting prohibitions. New and expanding TSDFs will be prohibited from siting in wetlands, in historic migration zones of rivers and coastal waterways, and directly over active seismic faults. The proposed location standards will also place additional conditions and restrictions on TSDFs in unstable areas, areas susceptible to earthquake damage anywhere in the United States, karst terrane (limestone areas prone to sinkhole development), hydrogeologically complex areas, and areas over high-resource-value ground waters (e.g. drinking water areas). Additional requirements in these sensitive locations include either technical or health-based demonstrations by the owner or operator of the TSDF. Technical demonstrations would generally involve engineered modifications to the environment or to the unit that would mitigate against the location-specific hazard.

EPA is not alone in recognizing the need for TSDF location standards in certain sensitive locations. To date, 38 states have either proposed or promulgated location standards that are more stringent than the Agency's current siting standards. Some of the States' siting standards are even more stringent than what the Agency is proposing. For example, the State of South Carolina also requires TSDF siting setbacks from schools and waterways.

The specific location selected for a TSDF is a local decision. However, because EPA regulations are based on the technical suitability of a site and not on economic or other factors, they ensure that the selected TSDF site is protective of the environment. Furthermore, the EPA and State permitting process ensures public participation in establishing the conditions for the TSDF, including its location, design and operation.

Jeff Denit

Preparedness And Prevention (Subpart C)

9473 – PREPAREDNESS AND PREVENTION

Parts 264 & 265 Subpart C

Contingency Plan And Emergency Procedures (Subpart D)

9474 – CONTINGENCY PLAN AND EMERGENCY PROCEDURES

Parts 264 & 265 Subpart D

ATK1/1104/35 kp

PERMIT POLICY Q & A REPORT

CONTINGENCY PLAN

SEPTEMBER 10, 1984

General Standards

1. Question: For a new facility, can information for the contingency plan, such as arrangements with local authorities, be submitted at a date later than submission of the rest of the Part B? 40 CFR Subpart D, §270.14(b)(7).

Answer: No. If the applicant has done enough planning to support obtaining a RCRA permit, he should have sufficient information to attempt to make arrangements with local authorities and draft an adequate contingency plan. Only those arrangements agreed to by local authorities need to be described in the contingency plan. If the applicant's efforts were unsuccessful, these must be documented separately, according to §162.37(b), and, in this case, the contingency plan does not need to address arrangements with local authorities. Also, under §264.51(d), information regarding the specific emergency coordinators may be submitted after the time of application.

9474.01(84)

Manifest System, Recordkeeping And Reporting (Subpart E)

9475 – MANIFEST SYSTEM, RECORD KEEPING AND REPORTING

Parts 264 & 265 Subpart E

ATK1/1104/36 kp

RCRA/SUPERFUND HOTLINE MONTHLY SUMMARY

APRIL 84

2. a) Is a generator required to keep copies of biennial reports and manifests at the site? The RCRA definition of generator is site specific.

   b) Is a TSDF required to keep copies of manifests and biennial reports on site?

   a) 262.40 does not specify that a generator must keep copies of manifests and biennial reports on site. Copies of both can be kept at corporate headquarters. It must be noted, however, that 3007(a) of RCRA states that a generator must be able to provide to EPA or duly designated personnel information on or access to records regarding waste management. 9454.02(84)

   b) 265.71(a)(5) requires TSDF's to retain copies of manifests on site for at least three years from the date of delivery. 265.74(a) states that all required records must be furnished upon request and made available for inspection by EPA personnel. Biennial reports are required records. 9475.01(84)

RCRA/SUPERFUND HOTLINE MONTHLY SUMMARY

SEPTEMBER 85

Waste Minimization Certification

3. A shipment of hazardous waste is initiated on or after September 1, 1985, by a fully-regulated generator. The manifest does not contain the waste minimization certification as required by Section 3002(b)(i) of RCRA. The owner/operator of the designated treatment, storage or disposal facility (TDSF) receives the waste shipment unaccompanied by the waste minimization certification. May the owner/operator accept the waste shipment? Is the owner/operator required to notify the State or Region about the incomplete manifest?

   Section §265.72(b) requires the owner/operator of a TSDF, upon discovering a "significant [manifest] discrepancy," to first attempt to reconcile the discrepancy with the generator. If the discrepancy cannot be reconciled in fifteen days, then the owner/operator must notify the Regional Administrator. However, "significant discrepancies" as defined in §265.72(a) are: "(1) for bulk waste, variations greater than 10 percent in weight and (2) for batch waste, any variation in piece count." The owner/operator must notify the Regional Administrator only for unreconciled significant discrepancies. The owner/operator need not notify the Regional Administrator since waste shipments unaccompanied by a waste minimization certification are not significant manifest discrepancies.

   Source: Mark Greenwood (202) 382-7703

8. Small Quantity Generators, 100-1000 kg/month generators, and the Manifest

A small quantity generator (SQG) of less than 100 kg/month sends the waste to a facility which is registered by the State to manage (store) solid wastes. This State-registered storage facility accepts wastes from other small quantity generators of less than 100 kg/month and after collecting enough waste for a bulk shipment (over 1000 kg), sends it to a facility for disposal.

(a) Is manifesting required at all in this scenario? If so, at what point?
(b) Must the final disposal site be a RCRA permitted disposal facility?
(c) If the small quantity generators generated between 100-1000 kg/month, how would the scenario be affected?

(a) No manifesting is required in this scenario. The hazardous waste itself is excluded from regulation under Parts 262 to 265, 270, and 124, so that manifesting is not required of any party who stores, treats, or disposes of the waste.

(b) The final disposal site need not be a RCRA permitted disposal facility. Section 261.5(g)(3) allows SQGs to send their waste to a facility which is registered by the State to manage solid wastes and still remain exempt from full regulation.

(c) If the waste was generated by 100-1000 kg/month generators, manifesting would be required to the State-registered solid waste storage facility as well as t the State-registered disposal facility. In addition, until March 31, 1986, t. waste may be disposed of in a State-registered disposal facility. After Marc 1986, the final disposal site must be a RCRA permitted (or interim status) facility.

Source: Barry Stoll (202) 382-4761

9475.1986(01a)

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

OCT 30 1986

OFFICE OF
SOLID WASTE AND EMERGENCY RESPONSE

Honorable Rudy Boschwitz
United States Senator
210 Bremer Building
419 N. Robert Street
St. Paul, Minnesota 55101

Dear Senator Boschwitz:

Thank you for your September 16, 1986, letter regarding your constituent, Mr. Win Sabatka, President of Finishing Equipment, Inc. In the correspondence which you enclosed, Mr. Sabatka raised several questions about the application of Minnesota's hazardous waste program to Finishing Equipment's operations.

Minnesota has been authorized to implement and enforce the Federal Resource Conservation and Recovery Act (RCRA) program in lieu of the Environmental Protection Agency (EPA) since February 1985, Mr. Sabatka's concerns, therefore, are most appropriately addressed by the Minnesota Pollution Control Agency (MPCA) with whom he has been corresponding. Nevertheless, we have spoken with EPA Region V and MPCA representatives to try to clarify the situation.

With respect to Finishing Equipment's manifests, Mr. Sabatka stated in his letter to you that the waste was "properly manifested as [waste] F001". While the waste was correctly identified by the F001 category, MPCA has informed us that it was incorrectly described as waste oil, rather than as still bottoms.

Mr. Sabatka also stated that he does not believe Finishing Equipment's operations are subject to the financial assurance regulations. From the information we have obtained, it appears that Finishing Equipment is a storage facility, as defined in both the EPA and MPCA regulations. Consequently, the owner or operator of the facility must comply with the financial responsibility regulations (among others). The Federal financial regulations were published in large part on April 7 and 16, 1982. Copies of these rules, along with a summary of them, are enclosed. EPA also made minor changes to the rules on May 2 and July 11, 1986, but these are not yet effective in Minnesota. Otherwise, Minnesota's financial rules are subtantially equivalent.

I hope this response is helpful. Please feel free to contact Matthew Straus on (202) 475-8551 or Carole Ansheles on (202) 382-4761 of my staff if you have any further questions on manifesting or financial responsibilities, respectively.

Sincerely,

J. Winston Porter
Assistant Administrator

RCRA/SUPERFUND HOTLINE MONTHLY SUMMARY

APRIL 87

1. Storage Prior to Recycling

According to the hazardous waste recycling regulations promulgated as part of the January 4, 1985 rule (50 FR 614), owners or operators of facilities that recycle materials without prior storage are subject only to Section 3010 notification requirements and §265.17 and §265.72 manifest regulations per §261.6(c)(2). Do the two following recycling operations involve storage prior to recycling?

(a) Truck drivers with bulk shipments or drums of spent solvent pour the solvent into a receiving bin at a recycling facility. The receiving bin is directly hard-piped to the distillation unit, such that the receiving bin feeds the distillations unit. When the distiller is non-operational (at night), some waste solvents may remain in the feed tank.

(b) As in the first situation, bulk shipments or drum of spent solvent are poured into a receiving device at a second recycling facility. The receiving device is essentially a tank with a pump in the bottom which is connected to a large tube that directly feeds into the distillation unit. The pump is in operation whenever there is waste in the tank. Therefore, the tank never contains solvent when the distillation unit is not in operation.

(a) Although there is no time limit for storage, the two recycling facilities are fundamentally different. The first recycler uses the receiving bin to store waste when the distillation unit is not operating. Per §261.6(c)(1), he is subject to the storage standards.

(b) In the case of the second recycler, he does not use the receiving bin for storage. His receiving bin is more clearly used only for conveyance, not storage. The bin is more directly tied to the operation of the recycling unit and indeed, could be viewed as part of the recycling unit. Hence, the second recycler would only be subject to §261.6(c)(2) (i.e., getting an EPA ID number and complying with the manifest standards.)

Source: Matt Straus (202) 475-8551
Research: Kim Gotwals

FEB 9 1989

9475.1989(01)

Dear Facility Manager:

As required by the Resource Conservation and Recovery Act (RCRA), the U.S. Environmental Protection Agency (EPA) must submit a report to Congress on the generation and management of large-volume solid wastes from mineral processing facilities. Within six months after submission of the report EPA must then determine which of these wastes will remain exempt from RCRA hazardous waste management (Subtitle C) regulations. We are asking for your assistance in gathering the necessary information for the preparation of the report to Congress and the subsequent regulatory determination.

We have enclosed EPA's National Survey of Solid Wastes from Mineral Processing Facilities. Please complete and return the questionnaire within 45 days of the date you receive it. Your response to the survey is required under Sections 3001 and 3007 of RCRA. Failure to respond may result in a fine or other penalties under Section 3008 of RCRA. We have included some important details about Confidential Business Information as an addendum to this letter. Please read this information carefully before responding to the survey.

Section 8002(p) of RCRA directs EPA to study various factors as part of the report to Congress on large-volume mineral processing wastes, including sources and volumes of wastes, current waste management practices, alternative waste management practices and their costs, and documented damage and potential risk to human health and the environment from waste management practices. Consequently, the questionnaire requests information on the large-volume mineral processing wastes (which are called SPECIAL WASTES in the questionnaire) from the point of generation to their ultimate onsite or offsite disposition, including all intervening steps.

The survey is composed of three booklets. The first booklet contains instructions and definitions for use in completing the questionnaire. The second booklet contains the questionnaire itself. The third booklet contains extra sets that you may need to complete. Please read the instructions thoroughly and carefully before attempting to complete the questionnaire.

The questionnaire itself contains nine sections:

Section 1, general information on the entire facility.

Section 2, processing units that GENERATE a special waste.

Section 3, processing units that RECEIVE a special waste (or its residue).

Section 4, wastewater treatment plants that RECEIVE a special waste (or its residue).

Section 5, surface impoundments (including tailings ponds and lagoons) that RECEIVE a special waste (or its residue).

Section 6, other waste management units that RECEIVE a special waste (or its residue).

Section 7, environmental monitoring in proximity to special waste management units that RECEIVE a special waste (or its residue).

Section 8, general information on waste management units not covered in Sections 5 and 6. (Since any facility subject to Subtitle C requires corrective action at any onsite solid waste management units causing environmental problems, an inventory of each facility's solid waste management units is necessary for assessing the economic impact of such a designation.)

Section 9, contact person at the facility in case follow-up information is needed, and instructions on returning the completed questionnaire.

At the end of the questionnaire are lined pages labeled "FACILITY NOTES" for you to use in clarifying or explaining your answers, if necessary.

EPA appreciates your efforts to provide timely and accurate information and looks forward to your response. If you have any questions about the survey, please call the toll-free survey helpline (1-800-635-8850). If you are unable

to get through on this number, you may call Bob Hall of my staff at (202)475-8814.

Sincerely,

Sylvia K. Lowrance
Director
Office of Solid Waste

Enclosures

Closure And Post-Closure (Subpart G)

9476 – CLOSURE AND POST-CLOSURE

Parts 264 & 265 Subpart G

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

FEB 2 1988

OFFICE OF
SOLID WASTE AND EMERGENCY RESPONSE

MEMORANDUM

SUBJECT: Closure Requirements

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

TO: David A. Wagoner
Director
Waste Management Division
EPA, Region VII

This memorandum is in response to your memorandum of December 17, 1987, which posed a number of questions related to implementation of the closure regulations. As you know, we have discussed the issues over the phone with you several times since receiving your memo, both in the context of general policy, and also in the context of applying these policies to specific situations. We have responded to each point in turn.

Response to point 1:

Your question concerns the consistency between the new tank system regulations (51 FR 25422, July 14, 1986), which include post-closure care, and the closure requirements for container storage units. Since we have now revised the tank system standards as of July 14, 1986, we recognize that there are inconsistencies with the present container standards. We agree that the container storage requirements in Subpart I of 40 CFR Part 264 and 265 should be revised so that the Agency will have a consistent overall policy for closure of storage and treatment units.

Response to point 2:

You requested guidance on whether the clean closure policy for surface impoundments contained in the March 19, 1987 Federal Register notice can be applied to all hazardous waste management units in Iowa (which does not have final RCRA

authorization). The clean closure policy that was contained in the March 19, 1987 Federal Register should be applied to closures by removal of wastes from any RCRA regulated unit. Regulated units include landfills, surface impoundments, waste piles, and land treatment units. The regulatory language governing the level of cleanup described in each of the following sections, 264.197, 264.228(a), 264.258(a), 265.197, 265.228(a), and 265.258(a), is identical. Since the consequences of achieving clean closure are the same, regardless of type of unit, the general policy contained in the March 19, 1987 FR notice, and the specific details regarding the setting of cleanup levels in each medium that are contained in the upcoming "Surface Impoundment Clean Closure Guidance Manual", should be applied consistently to all units that close by removal of wastes. Another guidance document, "Clean Closure of Hazardous Waste Tank Systems and Container Units", is currently being developed. It is consistent with the manual for clean closure of surface impoundments; differing only where necessary because of the unique nature of tank systems and containers.

As stated in the March 19, 1987 preamble, clean closure cleanup levels are to be based on Agency-approved health based limits, rather than background, except where no such Agency-approved limit exists, and then background may be used as the basis for setting cleanup levels.

Response to point 3:

As currently envisioned, the proposed changes to the closure regulations would allow a landfill to defer closure to manage non-hazardous wastes only if certain demonstrations are made. Key among these is that managing non-hazardous wastes will not be incompatible with prior management practices. The preamble will include a discussion of potential incompatible or detrimental effects which are to be considered in evaluating a request to defer closure. For landfills these concerns include: subsidence, increased leachate formation, cap settlement and gas production. These potential detrimental effects could support a finding of incompatibility, which would be grounds for disapproving a deferred closure request.

This rule change will not affect enforcement actions. The opportunity to defer closure will be afforded to both permitted and interim status units. Facilities with units which have lost interim status can receive an operating permit which includes the LOIS unit. Waste receipt would not be allowed in the LOIS unit prior to permit approval.

Response to point 4

You have requested guidance on the issue of whether changes may be made at facilities operating without a permit or interim status and LOIS (loss of interim status) facilities under Section 270.72 when necessary to comply with corrective action and closure plans. This issue was raised in the context of the rule, proposed on August 14, 1987, 40 CFR Parts 265, 270 and 271 entitled "Changes to Interim Status and Permitted Facilities for Hazardous Waste Management; Procedures for Post-Closure Permitting; Proposed Rule". We are currently considering this issue and will address it in the final rule scheduled for Summer 1988.

Response to point 5

Your first question, in 5a and b, concerns your interpretation of 40 CFR Part 261 and the March 19, 1987 Federal Register notice, as they apply to wastes resulting from closure. Your interpretation is correct. As you stated, a characteristic waste must be managed under Subtitle C unless the material no longer exhibits any of the four characteristics specified in Part 261, Subpart C. It would not be sufficient to merely demonstrate that the materials no longer exhibit the one or more characteristics that had originally brought the waste under Subtitle C regulatory control. A waste that is listed as hazardous under Part 261, Subpart D, and any waste residues or contaminated soil or debris that are removed from a unit during closure operations, are considered to be hazardous, unless the waste materials have been delisted, in accordance with Section 261.3.

Your first bullet point within point 5 referred to how DOD/DLA (Department of Defense/Defense Logistic Agency) recommends, in their "Conforming Storage Model RCRA Permit Application" (which accompanies their model permit), to determine whether or not decontamination washwater at a site is hazardous. As mentioned above, the determination should be based on whether or not the waste exhibits any of the four characteristics specified in Section 261.20. TOC and TOX are indicator parameters only. Therefore the DOD/DLA Model Permit Attachment for Closure is incorrect when it implies that the concentrations of TOC and TOX define whether or not washwater is hazardous.

EPA has commented on this closure plan application extensively. DOD, however, has not responded to all of our comments on the model permit. Therefore, as we said in the August 8, 1987 cover memo to the model permit, EPA may request different or additional information if a permitting authority

finds part or all of the model permit application to be inappropriate. Copies of both the cover memo and EPA's comments on DLA's conforming model permit application are attached for your reference. Please note EPA comments regarding waste analysis and the closure plan. We recommend that you use the recent draft report, "Clean Closure of Hazardous Waste Tank Systems and Container Units" instead as a guide to closure.

Your second bullet point within point 5 asked why, in certain situations, non-hazardous material must be removed from a landfill for clean closure, but then could conceivably be re-deposited legally in a sanitary landfill. We share your concern that this could be viewed as an inconsistency within our regulatory program. Two regulatory efforts, however, are currently underway which should address this potential problem. You alluded to the first effort, redefining hazardous waste, in your memo.

As we move more towards concentration-based listings, inconsistencies may occur less often. You should note, however, that the basic reason why action levels in the clean closure situation are not consistent with hazardous waste identification levels is that action levels in the clean closure situation are based on the more protective of two possible scenarios: the direct ingestion of soil and ingestion of contaminated ground water, assuming no attenuation in the unsaturated zone or dilution in the ground water. The delisting levels, on the other hand, are based strictly on ground water ingestion, and are derived from a generic model that accounts for vertical and horizontal spreading of contaminants over a 500 foot distance in the aquifer. This difference may well remain even if changes are made in how hazardous wastes are listed. The answer to the problem is to complete the Subtitle D regulations for municipal landfills and surface impoundments. The result of these more stringent regulations should be that if waste is removed from a landfill for clean closure and re-deposited in a sanitary landfill, that the new landfill will be more protective of the environment than the original one.

We hope you will find this memo to be useful to you in interpreting these issues related to the implementation of regulations regarding closure. Please contact Hope Pillsbury of my staff at FTS 475-6725 if you have any questions regarding this memo.

Attachments

cc: Luetta Flournoy, Region VII
Matt Hale, OSW
Margaret Schneider, OSW
Jim Bachmaier, OSW
Chet Oszman, OSW
Bill Kline, OSW
Mike Petruska, OSW
Chris Rhyne, OSW

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

OFFICE OF
SOLID WASTE AND EMERGENCY RESPONSE

MEMORANDUM

SUBJECT: Regulatory Interpretation of the Closure Performance Standard

FROM: Marcia Williams, Director
Office of Solid Waste

TO: William Miner, Chief
Solid Waste Branch, Region V

In your memorandum of December 31, 1987 you requested our views on whether the closure performance standard (264.111 and 265.111) could be used to require source control at two particular surface impoundments which the owner/operator wishes to close as landfills. Our response to your question first addresses the issue in a general way and then turns to your specific question concerning the two surface impoundments.

The general performance standards and the technical standards complement each other, and both must be complied with (See 51 FR 16424). Where the unit-specific technical standards provide detailed instructions, those procedures should be followed. In exceptional cases where unit-specific standards may not be enough to minimize or eliminate post-closure escape of hazardous constituents, you should look to the closure performance standard for authority to require additional control measures.

In addition, the preamble to the March 19, 1985 Proposed Rule for Standards Applicable to Owners and Operators of Hazardous Waste Treatment, Storage, and Disposal Facilities (a Final version of the Rule was published on May 2, 1986) states, in 51 FR 11070, that

> "the amendment explicitly requires owners or operators of TSDFs to comply with both the general performance standard and the applicable process-specific standards. Owners or operators must close their facilities in a manner that complies with applicable process-specific requirements where specified; the general performance

- standards apply to activities that are not otherwise addressed by the process-specific standards but are necessary to ensure that the facility is closed in a manner that will ensure protection of human health and the environment."

The final rule for Closure, Post-Closure and Financial Responsibility Requirements (May 2, 1986) further states, in 51 FR 16424, that TSDFs must "comply with both the general performance standard and the applicable process-specific standards."

These authorities support your position that the closure performance standard can be used as a basis for requiring source control when necessary to achieve this standard. 40 CFR Subpart G, Sections 264.112 and 265.112 requires a description of how each unit and facility will be closed in accordance with Sections 264.111/265.111 (see Sections 264.112/265.112(b)(1) and (2)). Section 265.112(b) in particular, requires that the closure plan include "a detailed description of other activities necessary during the partial and final closure period to ensure that all partial closures and final closure satisfy the closure performance standards, including, but not limited to, ground-water monitoring, leachate collection, and run-on and run-off control."

Your memorandum indicates that hazardous constituents may migrate into ground water because the water table may come into contact with the bottom of the unit. The closure requirements at 264.228/265.228 were designed to minimize infiltration through the cap. Therefore the problem identified in this case is not addressed by the design-specific requirements, and the 264.111/265.111 performance standard can be invoked to require additional actions.

It is also important that the closure process is consistent with any corrective action process that may be required in the future. In the case of these two surface impoundments, your memorandum indicates that releases are currently occurring and that these releases would not be minimized if closure were performed with significant amounts of waste in place. Corrective action to address such releases could necessitate removal of the waste. If this occurred after capping, the action would be seriously complicated and substantial resources would have been wasted on the cap.

An alternative approach to using the closure performance standard as a tool for obtaining environmentally sound closure and to address releases, would be to use a post-closure permit and/or a 3008(h) order issued in conjunction with closure plan approval.

In conclusion, it is the Region and/or the state's choice (depending on which level of government is authorized to implement RCRA) as to which tool is used. Clearly the regulations allow the use of the general performance standards, post-closure permits or 3008(h) orders to ensure that facilities close in a way that is protective of human health and the environment.

cc: Robert Swale, Region V
Lee Tyner, OGC
Chris Rhyne, OSW
Jim Bachmaier, OSW
Lauris Davies, OSW
Regional Division Directors

9476.00-13
(Attachment)

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION V

DATE: 31 DEC 1987

SUBJECT: Regulatory Interpretation of the Closure Performance Standard For Surface Impoundments At GMC Harrison Radiator, Dayton, Ohio

FROM: William Miner, Chief
Solid Waste Branch

TO: Marcia Williams, Director
Office of Solid Waste

The Closure Performance Standard under §40 CFR Part 265.111(b) calls for the Owner/Operator to close the facility in a manner that "Controls, minimizes or eliminates....post closure escape of hazardous waste, hazardous constituents, leachate, contaminated run-off, or hazardous waste decomposition products to the ground or surface waters..." GMC Harrison Radiator has proposed the closure as a landfill option for their regulated surface impoundments; which, we contend, will not meet the closure performance standard as defined above. We believe that proposed method of closure will not provide adequate protection against the release of hazardous constituents to the groundwater underlying the facility; and, as such, does not provide adequate protection for human health and the environment, as called for under the Closure Performance Standard.

The facility has two surface impoundments which received a variety of hazardous wastes beginning with the "South Lagoon" constructed in 1966, and the "North Lagoon" which was constructed in 1972. Both lagoons accepted wastewaters containing halogenated solvents, which in the case of the North Lagoon, has compromised groundwater quality to a significant degree.

Recent groundwater quality assessment data for the North Lagoon has revealed concentrations of halogenated solvents which exceed the Maximum Concentration Limits for drinking water by an average of twenty times. It is also believed that the South Lagoon is affecting groundwater quality as well, but it is unknown at this time the concentrations of any specific hazardous constituents.

The Exposure Information Report (EIR), completed for the regulated units at the GMC facility, concluded that the proposed method of closure may not minimize the production of leachate which will occur as a result of groundwater infiltration into the stabilized wastes. In particular, page 47 of the EIR states, "It is assumed that water levels will rise when pumping of (the) county wells is discontinued, with gradients and water levels returning to near historic (prepumping) conditions. Water levels may rise to elevations above those of the bottoms of the lagoons...

As such, it is possible that some of the recompacted sludges contained within the closed facilities may be below the water table. This could result in leaching of the wastes..."

We do not believe that GMC can adequately demonstrate that they can minimize or eliminate the post-closure escape of hazardous constituents to the groundwater (as required by the Closure Performance Standard) simply due to the expectation that the stabilized wastes will lie within the aquifer after closure has been completed. Also, the presence of groundwater contamination from the impoundments leads us to believe that simply capping the impoundment will not alleviate the problem. We propose that GMC has only two options for the regulated impoundments: 1) GMC must remove the wastes presently in the impoundments and dispose of them off-site or; 2) Remove the wastes from the present units and construct a doubly-lined landfill unit in its place, and construct the unit at least one meter above the highest expected groundwater elevation. We believe that these methods of closure will adequately meet the closure performance standard, since they will demonstrate that the post-closure escape of hazardous constituents to the groundwater has been thoroughly minimized.

We request that a determination be made by your office concerning our argument that the intent of the closure performance standard precludes closure as a landfill. In any event, we will be pursuing corrective action either in a postclosure permit or with a 3008(h) order. However, if we can require excavation through the closure process, appropriate action can be started much more quickly. Approval of this closure plan is a 3rd Quarter FY '88 commitment by the Region, and we have tentatively scheduled a meeting with GMC to discuss these closure concerns for mid-January 1988. Therefore, we request that you respond to this memo by January 10, 1988, so that we can be prepared when we meet with the facility.

Specific questions concerning the facility can be answered by Robert Swale, the closure plan reviewer for this facility. Mr. Swale can be reached at FTS 886-6591.

cc: Anthony Sasson, OEPA
Randy Meyer, OEPA
Richard Robertson, OEPA-SWDO

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

MAR 31 1988

OFFICE OF
SOLID WASTE AND EMERGENCY RESP.

MEMORANDUM

SUBJECT: Ground-Water Monitoring at Clean-Closing Surface Impoundment and Waste Pile Units

FROM: J. Winston Porter
Assistant Administrator

TO: Regional Administrators
Regions I-X

Several provisions of HSWA have made it necessary or desirable for a number of owners or operators to close their land disposal units. Many of these units are going through "clean closure"; that is, removal of all waste residues, contaminated containment system components, contaminated subsoils, and structures and equipment contaminated with waste and leachate. Several Regions have questioned whether a clean closure demonstration requires ground-water monitoring before the unit is declared clean for the purposes of closure under sections 264.228(a), 264.258(a), 265.228(a), or 265.258(a). The purpose of this memo is to reiterate and clarify Agency policy in this regard.

It has been the Agency's policy for some time that owners and operators must not be allowed to "walk away" from units with inadequate ground-water monitoring systems or with ground-water contamination at closure. This policy has been described in my August 27, 1985 memorandum regarding RCRA policies on ground-water quality at closure, in the FY 1987 and 1988 RCRA Implementation Plans (RIP), and in the clean closure policy outlined in the preamble to the final "conforming changes" rule concerning clean closure of surface impoundments, published in the Federal Register on March 19, 1987 (52 FR 8704). If an adequate ground-water monitoring system is in place, it is still the Agency's policy that as part of the clean closure certification process EPA must review ground-water monitoring data to verify that there is no ground-water contamination from the unit(s).

There exists, however, a universe of land disposal units that may not have a ground-water monitoring system, or may have an inadequate ground-water monitoring system in place at closure. These include interim status waste piles, interim status surface impoundments that contain corrosive-only hazardous waste that are eligible for a waiver under section 265.90(e), interim status units exempted from ground-water monitoring on the basis of the self-implemented waiver found in section 265.90(c), or units simply failing to comply with the Subpart F requirements.

Many of these units have already closed by removing waste and certifying "clean closure" without assuring clean ground water. Congress has made it clear that ground-water contamination at treatment, storage, and disposal units must be addressed. Section 3005(i) of RCRA requires all units receiving hazardous waste after July 26, 1982 to comply with ground-water monitoring standards established under Section 3004, regardless of their current active or inactive status. Any closed interim status unit covered under Section 3005(i) that does not meet the 40 CFR 264 clean-closure standard must be issued a post-closure permit implementing the appropriate Subpart F program. In order to avoid post-closure permit responsibilities, interim status facilities that have "clean closed" will need to present evidence that the "clean closure" is in compliance with the Agency's clean-closure rules found in sections 264.228 and 264.258. (This position is clearly presented in the Final Codification Rule, 52 FR 45788, December 1, 1987). Reexamination of all prior clean closures should be performed as suggested by the 1988 RIP and in concert with individual Regional priorities.

We recognize, however, that under certain circumstances for units that "clean-closed" under interim status a demonstration that ground water is uncontaminated might be made without a ground-water monitoring system in place. In order to preclude the need for ground-water monitoring at a clean closing unit the owner or operator would need to meet the decontamination standard as codified in section 270.1(c)(5) and (6) and make a demonstration in accordance with applicable waiver requirements found in section 264.90(b)(4). For clean-closing units at least the following criteria would need to be met to assure compliance with the general closure performance standard (section 264.111):

1) Accurate historical data on wastes handled at the unit have been carefully recorded, including a complete analysis of waste composition and characteristics;

2) The properties of the waste constituents together with the geochemical environment of the soils show no potential for migration to ground-water during the active life and any post-closure care period; and

3) Other supportive data (e.g., an alternative monitoring system or other geophysical verification) needed to ensure protection of human health and the environment.

We recognize that these criteria for not requiring ground-water monitoring are stringent. However, these restrictions are necessary because the Part 264 clean-closure demonstration may ultimately relieve the owner or operator of any further Subtitle C responsibilities at the closing unit or facility.

For those units authorized to operate under Section 3005(e) that stopped receiving waste prior to July 26, 1982, several tools exist for obtaining confirming data. Where the Administrator has determined, based on any information, that there has been a release of hazardous waste (or hazardous waste constituents) from a facility into the environment, Section 3008(h) may be used to perform studies (including ground-water monitoring) and/or corrective measures, as necessary to protect human health or the environment.

Where imminent and substantial endangerment can be established, studies and corrective measures can be required under Section 7003. Section 3013 could be used to collect data and to implement ground-water monitoring, where the presence or the release of hazardous waste "may present substantial hazard" to human health or the environment.

Where a permit for the facility is otherwise required, corrective action (including ground-water monitoring) for improperly "clean closed" units may be effected under Section 3004(u) during the permit process. In cases where an adequate ground-water monitoring system has not been installed and there is no valid ground-water monitoring waiver, and/or where other Subtitle C requirements have been violated, attempts at clean closure, whether successful or not, should not preclude the imposition of enforcement authorities, for example under Section 3008(a) to obtain remedies and/or penalties under Section 3008(g).

Should you have any questions regarding the content of this memorandum, please contact Chris Rhyne of my staff at FTS 382-4695.

cc: Waste Management Division Directors, Regions I-X
RCRA Branch Chiefs, Regions I-X
Permit Section Chiefs, Regions I-X
Enforcement Section Chiefs, Regions I-X

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

OFFICE OF
SOLID WASTE AND EMERGENCY RESPONSE

APR 1 1988

MEMORANDUM

SUBJECT: Effective Dates for Characteristic and Listed Wastes per March 19, 1987 Clean Closure Regulation

FROM: Sylvia K. Lowrance, Director
Office of Solid Waste (WH-562)

TO: Waste Management Division Directors
Regions I-X

Several regions have raised questions about the effective date of the Clean Closure Conforming Changes Rule of March 19, 1987 (52 FR 8704) and, in particular, have asked whether the clean closure standards discussed in the preamble to the rule (52 FR 8705) apply in authorized states. The purpose of this memorandum is to clarify the applicability of the March 19, 1987 rule.

As you know, the Clean Closure Conforming Changes rule made several conforming changes to the Part 265 closure and post-closure regulations for surface impoundments. Additionally, the Agency set forth its interpretation of these regulatory requirements in the preamble to the rule. In particular, the rule changed the closure by removal standards under Part 265 to be consistent with Part 264 standards. A key feature of this change was to amend the 265 closure by removal standards for characteristic wastes. Under the old closure by removal standard, "clean closure" could be achieved if the owner or operator demonstrated that remaining materials did not exhibit the characteristic that first brought the unit under control. Under amended §265.228(a), however, surface impoundments containing characteristic wastes as well as those containing listed wastes must "remove" all waste residues, including hazardous waste constituents derived from the waste. The preamble to the Conforming Changes rule provides guidance on determining when "removal" of waste residues has been achieved.

According to the preamble (52 FR 8706), "removal" under §265.228(a)(1) means removal of all wastes and liners, and the removal of leachate and materials contaminated with the waste or leachate (including ground water) to levels that are protective of human health and the environment. Owners/operators must

demonstrate that any hazardous constituents left in the soils, subsoils or groundwater would not cause unacceptable risks to human health or the environment. These demonstrations must document that the contaminants do not contaminate any environmental media in excess of Agency-recommended limits. The Agency-recommended limits include water quality standards and criteria and health-based limits based on verified reference doses (RfDs) and Carcinogenic Potency Factors (CPFs). If no Agency-recommended limits exist for a hazardous constituent, then the owner/operator must remove the constituent down to background levels, submit data of sufficient quality for the Agency to determine the environmental and health effects of the constituent, or follow landfill closure and post-closure requirements.

The March 19, 1987 rule became effective in unauthorized states on September 15, 1987. The date on which the clean closure policy outlined in the preamble may be applied in authorized states will depend on whether the wastes in question are listed or characteristic. For characteristic wastes, the policy would not apply until the authorized state had adopted the new regulation at §265.228(a)(1) - - until that time facilities could continue to clean close by demonstrating that remaining materials did not exhibit the characteristic that brought the waste into the system (i.e., the demonstration required under the former rule). The deadline by which authorized states must incorporate the March 19, 1987 regulatory changes is July 1988. For listed wastes, on the other hand, the policy may be applied in authorized states immediately, since the preamble interprets regulations that should already be adopted as part of the authorized state program.

Regardless of whether a specific state has adopted these regulatory changes, owners and operators should be reminded of the statutory requirements of §3005(i) of HSWA. Units which clean close pursuant to Part 265 standards will not be relieved of post-closure care obligations until they demonstrate "equivalency" with Part 264 clean closure standards (see 52 F.R. 45788). Accordingly, owners and operators of facilities who wish to clean close should be encouraged to perform such closures in accordance with Part 264 standards.

If you have any questions, please call Sharon Frey at FTS 475-6725.

cc: Region Counsel, Regions I-X

MAY 12 1989

OSWER Policy Directive # 9476.00-18

MEMORANDUM

SUBJECT: Guidance on Demonstrating Equivalence of Part 265 Clean Closure with Part 264 Requirements

FROM: Sylvia Lowrance, Director
Office of Solid Waste

TO: Regions I-X

I. PURPOSE

This memorandum provides guidance to Regional RCRA permits staff concerning the review of Part 264 equivalency demonstrations for interim status surface impoundments and waste piles that certified clean closure under the Part 265 standards prior to March 19, 1987. The Agency discussed the requirements for submitting equivalency demonstrations in the preamble to the December 1, 1987, Codification Rule (52 FR 45788). This memorandum expands upon that discussion by providing further guidance on the Agency's expectations for the review and approval of these demonstrations.

II. AUTHORITY

Section 3005(i) of the Hazardous and Solid Waste Amendments of 1984 (HSWA) requires all landfills, surface impoundments, waste piles, and land treatment units that received waste after July 26, 1982, to comply with the ground-water monitoring, unsaturated zone monitoring, and corrective action requirements applicable to new units. EPA implemented this provision in the December 1, 1987, Codification Rule. 40 CFR Section 270.1(c) requires that units which received waste after July 26, 1982, or which certified closure after January 26, 1983, obtain a post-closure permit unless they successfully demonstrate compliance with the Part 264 requirements for closure by removal.

III. CLEAN CLOSURE REQUIREMENTS UNDER PARTS 264 AND 265

Prior to March 19, 1987, the Part 265 regulations governing interim status clean closures differed significantly from the Part 264 requirements pertaining to permitted units. In March of 1987 (52 FR 8704), the Agency issued conforming changes to the Part 265 regulations to bring them into conformance with the Part 264 requirements.

A. Part 264 Clean Closure Requirements

The Part 264 provisions (§§ 264.228 and 264.258) require the owner/operator to "remove or decontaminate all waste residues, contaminated system components (liners, etc.), [and] contaminated

subsoils..." The Agency interprets the terms "remove" and "decontaminate" to mean "...removal of all wastes and liners, and the removal of all leachate and materials contaminated with the waste or leachate (including ground water) that pose a substantial present or potential threat to human health or the environment" (52 FR at 8706). To meet this standard, owner/operators must demonstrate that no Part 261 Appendix VIII constituents remain in the soils, vadose zone, or ground-water above Agency-recommended limits before certifying clean closure.

These Agency-approved limits or factors include water quality standards and criteria, health-based limits based on verified reference doses (RfDs) and Carcinogenic Potency Factors (CPFs), or site-specific Agency-approved health advisories (52 FR at 8706).

When assessing potential exposures to constituents released from the unit, the owner/operator must establish the points of compliance directly at or within the unit boundary for all routes of exposure (surface water contact, ground-water ingestion, inhalation, direct contact, and soil ingestion). In setting these points of compliance, consideration of contaminant attenuation between the unit and potential exposure points is not allowed.

Further discussion of these requirements is provided in the preamble to the March 19, 1987, conforming changes regulation (52 FR 8704), and in a subsequent Notice of Clarification issued on March 28, 1988 (53 FR 9944). Pending the up-coming issuance of the clean closure guidance mentioned in the March 19, 1987, preamble, these two sources provide the fullest interpretation of Agency policy concerning the requirements applicable to units undergoing clean closure.

B. Previous Part 265 Interim Status Clean Closure Requirements

The pre-1987 Part 265 interim status clean closure requirements differed from the Part 264 requirements in several significant ways. First, these standards allowed owner/operators to discontinue removal activities and certify closure if they were able to demonstrate that residuals associated with the unit were no longer hazardous. This provision allowed owner/operators of surface impoundments containing solely characteristic wastes to meet the clean closure standard by demonstrating that wastes no longer exhibit the characteristic that first brought the impoundment under regulatory control. In this situation, owner/operators could have clean closed without evaluating the presence of additional Appendix VIII constituents that could pose a threat to human health or the environment.

Secondly, the interim status ground-water monitoring requirements applicable to these units only required

owner/operators to monitor for indicator parameters and hazardous waste constituents for which a waste was listed. Owner/operators did not have to demonstrate that all Appendix VIII constituents that could pose a threat to human health or the environment had been removed in order to certify clean closure.

Finally, interim status facilities were not required to demonstrate that all releases of Appendix VIII constituents to soils, surface water, air, or ground water posing a threat to human health or the environment had been removed at closure.

IV. EQUIVALENCY DEMONSTRATION INFORMATION REQUIREMENTS

A. General Information Requirements for Equivalency Demonstrations

40 CFR Section 270.1(c) now affords owner/operators who closed under the Part 265 requirements the option of demonstrating that the units had actually been closed in accordance with the Part 264 requirements, by submitting an "equivalency demonstration". This equivalency demonstration is outside the Part B post-closure permit application and review process. The Agency expects owner/operators to submit sufficient information in their equivalency demonstrations to allow the Agency to determine whether the clean closures fully comply with the Part 264 requirements. The Agency does not intend, however, that owner/operators submit the same quantity of information required when submitting full Part B permit applications.

The demonstration submitted by the owner/operator must include, at a minimum, sufficient information for identifying the type and location of the unit, the unit boundaries, the waste that had been managed in the unit, and the extent of waste and soil removal or decontamination undertaken at closure. Relevant ground-water monitoring and soil sampling data should also be submitted to demonstrate that any Appendix VIII constituents originally in the unit and that remain at closure are below levels posing a threat to human health and the environment. These levels are those discussed in the March 28, 1987 preamble, i.e., water quality standards and criteria, health-based limits, carcinogenic potency factors, or ATSDR site-specific Agency-approved advisories (52 FR at 8706).

Owner/operators can submit information demonstrating that the closure certified under Part 265 complies with the Part 264 standards using existing data developed at the time of closure. If insufficient data are available to support this demonstration, owner/operators may collect new data to demonstrate that the Part 265 clean closure meets the Part 264 clean closure requirements that were in effect at the time of closure. If upon review, the Agency determines that the closure does not meet the Part 264 standards, the owner/operator will be required to submit a Part B

permit application containing all the applicable information required in Part 270, including ground-water monitoring information.

B. Acceptability of Specific Information Supporting Equivalency Demonstrations

Five potential issues concerning the acceptability of specific kinds of data used in an equivalency demonstration have been identified. These issues are discussed below.

1. Acceptability of Previously Collected Data

Many facility owner/operators will have generated considerable amounts of data during their original closure activities. To the extent that these data represent the conditions at closure and provide sufficient information to determine compliance with the Part 264 requirements, they may be used to support an equivalency demonstration. Regional staff should evaluate the information for the extent to which it fulfills the requirements of Part 264, and for its overall quality, reliability, and accuracy.

While previously collected data may be used, in many cases owner/operators will need to collect some additional information on hazardous constituents that may remain in the soils, vadose zone, or ground water to demonstrate equivalency.

2. Use of Existing Soil and Ground-Water Sampling Data as Proxies for Missing Data

The Agency believes that in limited cases owner/operators may use existing soil and ground-water sampling data as proxies for missing data. In the first case, soil sampling data can serve as a proxy for ground-water monitoring data when these are not available. In the second case, ground-water monitoring data can be used to demonstrate the acceptability of a soil or vadose zone cleanup. In such cases, the Agency may consider these data when reviewing equivalency demonstrations. For example, some owner/operators may wish to use previously collected soil sampling data as a surrogate for actual ground-water sampling data in order to demonstrate compliance with the Part 264 ground-water clean closure levels, or facility owner/operators may wish to demonstrate that soil contamination was remediated sufficiently by submitting ground-water monitoring data demonstrating no migration of contaminants from the soil. It is more likely that EPA will accept soil sampling data as a proxy for ground-water monitoring data than the converse. One such example of where soil sampling and vadose zone data might be used as a surrogate for ground-water sampling data is in a hydrogeologic setting where the water table is located at

significant depths from the surface or where ground-water monitoring is not feasible.

Demonstrations using soil sampling data will, however, generally require assumptions of contaminant fate and transport in the relevant subsurface media. As stated in the preamble to the March 19, 1987, conforming changes rule, the Agency does not believe it is appropriate to consider assumptions about subsurface attenuation when approving clean closures, given the uncertainty involved in such assumptions and the fact that all further regulatory control ends upon certification of the closure.

3. Requirement for Full Appendix VIII Sampling

The Part 264 clean closure standards require a demonstration that all Appendix VIII constituents originally in the unit have been removed or decontaminated. As with the 40 CFR Section 264.93 monitoring requirements, however, the Agency believes that it may be possible to exclude some hazardous constituents from consideration based on knowledge of past activities at the unit. Equivalency demonstrations that consider all the hazardous constituents that may reasonably be expected to be in or derived from the wastes managed in the unit may be acceptable in lieu of the full list of Appendix VIII constituents.

The Regions may decrease the list of constituents that must be evaluated to the extent that information submitted by the owner/operator is complete relative to the wastes disposed and demonstrates that these constituents could not reasonably be present in environmental media affected by the unit. In evaluating such demonstrations, Regions should also evaluate closely the potential that additional Appendix VIII constituents may be present in the soils or ground water beneath the unit.

4. Use of Data from Previously Existing Ground-Water Monitoring Systems

The Agency will consider equivalency demonstrations based on data from previously existing ground-water monitoring systems provided such ground-water monitoring systems were in compliance with the applicable requirements. At a minimum, such systems must have met the Part 265 Subpart F ground-water monitoring requirements. To the extent that these systems were located, screened, and operated properly to gather representative ground-water information, the Agency believes that they can be used to support an equivalency demonstration. In order to determine whether monitoring systems were in compliance with Part 265, Regions should examine available records and documents, such as old inspection reports, enforcement records, CME reports, or Ground-Water Task Force reports.

5. Practicability of Obtaining New Data

Some facilities will have certified clean closure several years ago, and subsequently may have constructed structures on top of clean closed units, making it difficult to obtain new data for the equivalency demonstration. For example, a building with a concrete floor or wastewater treatment unit constructed on top of a clean closed hazardous waste management unit could obstruct the collection of new sampling data. Collecting new soil or ground-water data at such a site might require either drilling through the concrete floor of the building or using angled drilling techniques.

The Agency recognizes the difficulties associated with data collection in these cases. In reviewing the quantity of such data submitted, the Regions may consider the technical difficulties involved in collecting such data. The standard of protection against which equivalency demonstrations will be evaluated will not, however, be different depending on the technical difficulties of data collection. Accordingly, the Agency will require owner/operators to submit representative existing data and/or to collect those data necessary to demonstrate compliance with the Part 264 requirements.

V. APPLICABILITY TO LANDFILLS

EPA interprets its regulations to allow landfills from which wastes have been removed at closure to accomplish "clean closure" and, if closed under 40 CFR Part 265 standards, to allow an equivalency demonstration to be made under 40 CFR Section 270.1(c)(5) and (6), through redefinition of the landfill as a waste pile, surface impoundment, or land treatment unit. It is most likely that the redefinition, or change in process, will be to a waste pile, pursuant to 40 CFR Section 270.72(c). Clean closures or demonstrations of equivalency with clean closure, are governed by the applicable Part 264 closure requirements (e.g., 40 CFR Section 264.258 for waste piles).

As an alternative to making an equivalency demonstration pursuant to 40 CFR Section 270.1(c)(5), the owner/operator of a landfill from which all waste has been removed and for which the owner/operator can provide evidence that the level of contamination is such that it no longer poses a threat to human health and the environment, may request that the Regional Administrator shorten the post-closure care period [40 CFR Section 264.117(a)(2)(i)]. The term of the post-closure permit should then be modified to a minimal period in accordance with 40 CFR Section 270.42.

VI. CONTENTS OF THE EQUIVALENCY DEMONSTRATION AND PROCEDURES FOR SUBMITTAL

No specific format for an equivalency demonstration is required. For ease of review, the Agency suggests that equivalency demonstrations include three basic sections: 1) a Unit Description, 2) a Description of Closure Activities Conducted, and 3) a Demonstration of Compliance with Clean Closure Levels.

The first section, Unit Description, should provide information on the size and location of the unit, the wastes managed by the unit (EPA hazardous waste numbers and quantities), any liner system and leachate collection system, containment system, and run-on and run-off control systems. In addition, owner/operators should present a description of the hydrogeology of the immediate area, including descriptions of ground-water and soil conditions, ground-water monitoring systems, detection programs, and any corrective action activities undertaken. For land treatment units, information concerning application rates should also be included.

The second section, the Description of Closure Activities Conducted, must identify, in detail, all removal and decontamination activities completed at the unit during closure. This description should include information on the quantity of waste removed (by waste type), the quantity of leachates and contaminated containment liquids removed, the quantity of bottom sludges/residues removed, the quantity of contaminated soil removed, the methods used for removal of inventory (i.e., waste, sludge, residue, liquid, and soil), and the procedures used for decontaminating and/or disposing of inventory. Specifically, the description of the decontamination and disposal activities should identify the method of decontamination of equipment/structures, the treatment or disposal of cleaning agents/rinsewater, and the demolition and removal of containment systems (e.g., liners, dikes) and other equipment/structures.

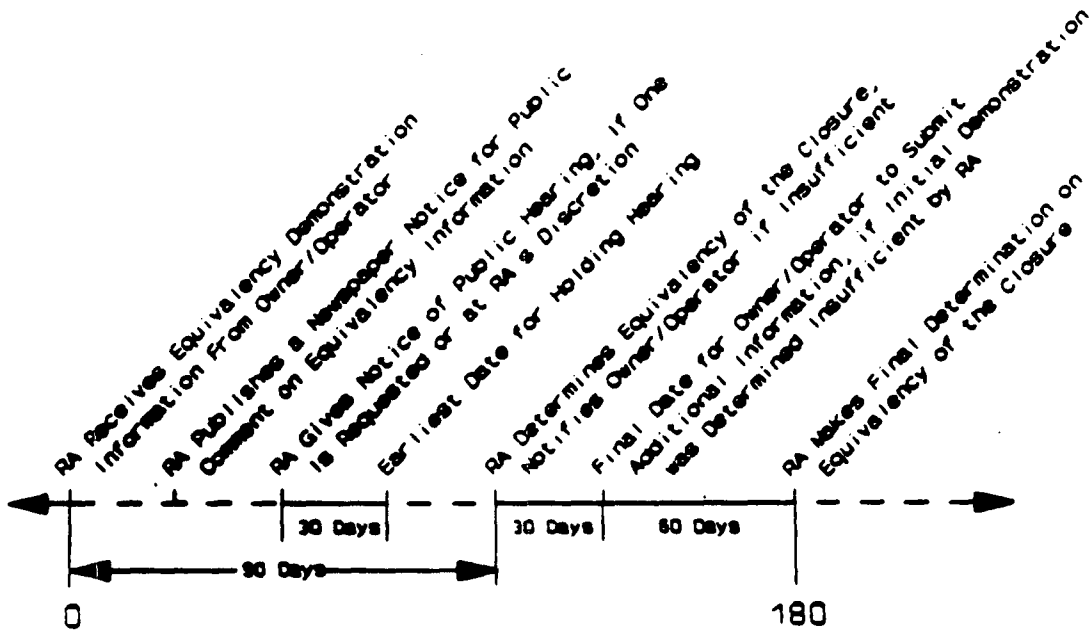
The previously approved closure plan should provide the majority of the descriptive material required for sections 1 and 2 of the demonstration. The owner/operator should not assume that the closure plan has been retained by the Agency; relevant portions of the plan should be resubmitted. A copy of the closure certification should also be provided.

The third section, Demonstration of Compliance with Clean Closure Levels, should present sampling data supporting the owner/operator's equivalency demonstration. This section should specify where samples were taken in each relevant medium, when the samples were taken, what parameters were examined, and the analytical results. The information should specify the sampling protocols and analytical methods used during the sampling

activities, along with available quality assurance/quality control information. The raw sampling data should be presented in an appendix to the report, while the results should be summarized in a clear manner in the body of the report. In cases where surrogates or proxies are proposed for use, the owner/operator should fully explain the reason for the use of such proxies and any analytic assumptions which were made. Where data from all Appendix VIII constituents are not submitted, section 2 of the submission should support the assertion that such constituents were not and are not present in the unit.

Finally, the demonstration should include a narrative discussion summarizing both the results of previously collected data and new data collected for this demonstration. In the conclusion, the section should compare the results of sampling data to the applicable clean closure levels for the relevant parameters.

The December 1, 1987, Codification Rule presented procedures and timeframes for the submittal, review, and approval of equivalency demonstrations. The timeline presented below summarizes the critical dates and activities that must be followed by owner/operators and the Agency upon receipt of an equivalency demonstration.



JAN 11 1983

Dr. Reva Rubenstein
Director
Institute of Chemical Waste
Management
National Solid Wastes
Management Association
1120 Connecticut Avenue, N.W.
Washington, D.C. 20036

Dear Dr. Rubenstein:

This letter is in response to your letter of December 6, 1982, requesting interpretation of closure and post-closure requirements regarding land disposal facilities. I have responded to your questions in the order presented in your letter and attachment.

1. Recontouring the final cover material and/or adjusting inplace waste in the same unit as required to maintain the function of the final cover as a result of subsidence and settlement, does not constitute receipt of hazardous waste after January 25, 1983. These actions must be described in each facility's closure and post-closure plans which must be approved by the Regional Administrator. Modifications can be made to these plans as necessary with Agency approval.

2. The controlled irrigation of the vegetative cover is allowed in order to establish vegetation during the closure period or to maintain it during prolonged dry spells in the post-closure period. But the regulations require the final cover to provide long-term minimization of migration of liquids through the closed landfill (§264.310(a)(1)), and to function with minimum maintenance (§264.310(a)(2)). Thus, the guidance documents recommend that the plant species chosen be indigenous, require minimal or no additional moisture, and be selected based on anticipated moisture, light, temperature, elevation, and competitive cohabitants, etc.

3

The closure and post-closure plans should contain a description of why and when the irrigation may be determined to be necessary (e.g., recommended by local agronomist to establish vegetation during a dry period), the amount and frequency of water application, and water balance analysis showing the effect of the irrigation water on total annual liquid input through the final cover.

EPA has available two reports that provide technical information on this subject, entitled "Evaluating Cover Systems for Solid and Hazardous Waste" SW-867, September 1982, which discusses irrigation of plant cover and other plant requirements; and (2) "Hydrologic Simulation on Solid Waste Disposal Sites" SW-868, September 1982, which is a computerized water balance model, to evaluate the probable hydrologic performance of existing or proposed landfill designs. Both of the reports are available from the Government Printing Office (SW-867 is Stock No. 055-000-00228-2 $4.75, SW-868 is Stock No. 055-000-00225-8 $6.00). EPA is currently revising the model for "Hydrologic Simulation on Solid Waste Disposal Sites" to enable its use in estimating seepage through the liner as well as through the cover. The revised model should be available early in 1983.

Your statement that 40 CFR Parts 264 and 265 prohibit the addition of bulk liquids to the waste management unit is not quite accurate. Bulk liquids ~~are allowed~~ if the site is lined and has a leachate collection and removal system. Liquids in the leachate collection system must be removed during operation, closure, and post-closure. In general, the addition of liquids into the unit during closure would be permitted only if by doing so the facility and waste will be stabilized sooner. As you know, the objective during and after closure is to <u>remove liquids and keep them out</u>. If liquids are added during closure, the closure period would need to be extended until the addition stopped.

To further clarify the above explanations I must emphasize four points. First, any liquid applied to the final cover of a landfill to sustain vegetation cannot be a hazardous waste (e.g., cannot be leachate unless it is no longer a hazardous waste), cannot harm the vegetation, and cannot otherwise impair the integrity of the final cover (e.g., cause increased infiltration because of damage caused by pH). Second, liquids may not be injected into the waste after closure (e.g., leachate recirculation by injection), since this is contrary to the post-closure objective of keeping liquids <u>out</u>. Third, as stated above, liquids could be allowed during closure, including leachate

recirculation, if: (a) there is a liner and leachate collection system, (b) leachate is removed from the leachate collection system, (c) the addition of liquids serves to enhance closure (e.g., accelerates subsidence and stabilization), rather than merely serves as a convenient way to dispose of the liquids, and (d) the liquid addition is explained and justified in the closure plan. Such closure would not be completed until recirculation ceases. Also, recirculation of a hazardous waste (leachate) after January 26, 1983 would make the unit a regulated unit subject to the requirements of Part 264. I should point out that recirculation of a hazardous waste (leachate) can occur during operation and would normally be considered an operational rather than closure activity. Closure activities are those which lead to stabilization of the unit in a timely manner after receipt of wastes has ceased. Fourth, the characteristics and purpose of any liquids to be added to the landfill or to the cover during or after closure. must be specified in the closure or post-closure plans and approved by the RA (or authorized State), including any extension of the closure period. Such purpose and extension must be consistent with the environmental objectives specified in Part 264 or 265.

3. Landfills that are currently engaged in co-disposal of hazardous and non-hazardous wastes could continue to accept non-hazardous wastes after January 25, 1983, in order to complete a partially filled hazardous waste unit and close under either 40 CFR Part 265 or Part 264 requirements. This assumes that the owner or operator completes the cell in a timely manner, which generally means within the 180 day closure period. If the closure cannot be completed within the 180 days the owner or operator must apply to have the closure period extended beyond 6 months, for a specified time period, as provided in 40 CFR 265.113(b) or 264.113(b), to allow the waste to be filled until the designed elevation is reached. This type of closure could be approved if it provides for a more environmentally sound closure, and not merely for the economic convenience of the owner or operator. Each extension will be considered on a case-by-case basis. The regulatory concern is closing the landfill in as expedient a time as is practical (i.e., achieving final contour and final cover) so as to prevent additional rainfall infiltration and other environmental exposure. Pertinent factors include use of earth materials and redesigning the final contours. The Regional Administrator or approved State permitting authority could approve a closure plan or modification to the closure plan allowing the unit or cell to be completed with non-hazardous waste after January 25, 1983, and possibly extending the closure period (more than 6 months) after January 25, 1983 upon such a showing. Conditions for accomplishing this would be in any approved closure plan

or closure permit (e.g., time period, final contours, type of waste).

4. For the situation where a surface impoundment "closes as a landfill" before January 25, 1983, I presume you mean no more hazardous wastes received after January 25, 1983, but closure (e.g., dewatering, etc.) has not yet been done. The waste will be removed from the surface impoundment, solidified and replaced in the same impoundment, to ensure that it will bear the weight of the cover. EPA does not consider this replacement of waste after January 25, 1983, to be "receipt" of hazardous waste which would constitute a "regulated unit". This decision assumes that the solidifying material is not a hazardous waste.

5. For your last question you described the case where multiple hazardous waste trenches will cease to receive hazardous waste on or before January 25, 1983, and where the closure plan provides for a delayed closure of a half-filled trench for the deposit of solidified hazardous waste from closed and capped trenches. ~~In general,~~ such placement ~~of solidified hazardous waste from the closed trenches into the reserved half-filled trench,~~ even at the same facility, will be considered "receipt" of hazardous waste such as to constitute a "regulated" unit. Because the waste is received and disposed at the facility unit after January 26, 1983, I refer you to the July 26, 1982 Federal Register preamble discussion at 47 FR 32289 which describes the concept of a waste management unit. Where landfills consist of a series of trenches which are separately lined, each trench is a separate waste management unit. The transfer of hazardous waste from one unit to another after January 26, 1983 therefore makes the receiving trench or unit a "regulated" unit.

As a side note, I should mention that the closure performance standard for interim status and for permitting facilities is the same (40 CFR 264.111 and 40 CFR 265.111). The final cover or cap for landfills closed under Part 264 or 265 standards should be similar. Significant differences in the design of the cap should result from site specific factors rather than the type of permit a facility has. Thus, many of the above comments apply to both Part 264 and 265 closure requirements.

I hope the above explanations help clarify the regulations for you. Should you have any further questions with regard to

how this regulation effects NSWMA members please contact me or Fred Lindsey of my staff (382-4756).

Sincerely yours,

John H. Skinner
Acting Director
Office of Solid Waste

cc: Regions I - X (With incoming)

Mike Cook
Eileen Claussen
John Lehman
Bruce Weddle
Lisa Friedman
Mark Greenwood
Fred Lindsey
Gene Lucero
Ken Shuster

RCRA/SUPERFUND HOTLINE MONTHLY SUMMARY

MARCH 84

7. - Does a 265 closure have to use the §270.1(d) certification?

No, the closure is not a permit application or a permit report.

Source: Betty Zeller

9476.03(84)

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

9476.1984(04)

AUG 07 1984

OFFICE OF
SOLID WASTE AND EMERGENCY RESPONSE

MEMORANDUM

SUBJECT: Closure Issues Related to Wood Preserving Plants

FROM: John H. Skinner, Director
Office of Solid Waste

TO: James H. Scarbrough, Chief
Residuals Management Branch, Region IV

In your June 26, 1984 memorandum you posed three questions regarding closure activities and the use of unproven technologies for closure at wood preserving plants. Several questions regarding the definition of K001 hazardous wastes generated by these facilities were also raised; these latter questions have been partly answered in my July 25, 1984 memorandum.1/

First, the maximum time allowed for closure after final receipt of waste is 180 days as specified in §264.113(b) unless the Regional Administrator grants the owner or operator an extension. The grounds for extensions are strictly limited to instances when: (1) of necessity, it takes longer than 180 days to perform closure, or (2) a new owner or operator will recommence operations at the site and closure would be incompatible with continued operation. It seems that the first criteria could be argued in the case of wood preservation plants. However, if the owner or operator could use a proven technology to complete closure within the 180 day period, an extension may not be justified. In addition, I agree with your assessment on this issue and reaffirm the guidance in the preamble to the May 19, 1980 regulations: "A variance procedure will allow a longer period, where it can be justified, although in no case may closure take more than three years."

1/ A question was raised regarding contaminated rainwater run-off from treated wood storage areas. We hope to resolve this issue along with the regulatory status of spray irrigation fields in conjunction with EGD. We expect to get back to you on these points in the near future.

SEP 18 1984

MEMORANDUM

Subject: Steam Team Comments, Crucible Steel, Syracuse, NY

From: Chris Rhyne
HQ Permit Assistance Team

To: James Reidy, Chief
RCRA Permits Section, Region II

Background

Crucible Corporation operates a speciality steel mill on the west side of Onondaga Lake approximately 2 miles northwest of Syracuse, New York. Since 1973 Crucible has been operating a 20 acre landfill to dispose of its steel mill waste. These wastes, including EAF and AOD dusts, waste caustic solids, and acid pickling sludges, are spread over the surface of an inactive Solvay Process Wastebed that is 60 feet deep and 365 acres in areal extent.

The Solvay Process Wastebed was formed as a by-product from the production of Soda Ash (sodium carbonate) dating back to 1881 and is comprised of Calcium Carbonate, Calcium Silicate, Magnesium Hydroxide, and lesser amounts of other compounds. The average pH is approximately 12.0.

After spending time with the State of New York in an attempt to obtain a permit to dispose of their hazardous waste, Crucible decided to halt the disposal of hazardous waste at this site in March of 1982. Since Crucible was no longer disposing of hazardous waste, they agreed to submit a closure plan to the Region II office. In this plan, Crucible proposes to continue operating the landfill as a non-hazardous waste landfill, applying non-hazardous waste over the in-place hazardous waste. Final cover would be applied in stages as the landfill, is completed. Crucible anticipates completion in eight years.

Second, we agree with you that closure techniques should be based on proven techniques and not concepts still in the R and D stage. For example, if the owner or operator wishes to use land spreading of hazardous waste at closure, he must demonstrate the effectiveness of the technique in his permit application in accordance with Subpart M (land treatment) in §264.272.[2/] In this instance, more details are required to determine the specific nature of the technology. However, if an interim status facility wishes to add a land treatment technique, these new processes must be allowable under §270.72 as changes to interim status. If these processes cannot be justified under §270.72, a RCRA permit is required before they can be used at the facility regardless of whether it is to be used during the operating life or at closure.

Third, the addition or creation of new processes at the facility during interim status may be allowable under §270.72. If the facility is permitted, however, process changes are not allowed as minor modifications; therefore, the new process would require a RCRA permit.

I hope this memorandum addresses your concerns. Please contact Carole Ansheles at 382-4761 if you have any further questions.

2/ As explained in my July 25, 1984 memorandum, we are currently investigating the regulatory status of spray irrigation technologies to determine if they meet the definition of a land treatment unit, a surface impoundment, or a landfill.

Issues

- May the requirement for cover at closure be delayed for an extended period of time?
- Assuming the regulations allow delayed cover, do Crucible's arguments for delayed cover demonstrate that the facility will prevent threats to human health and the environment?
- May the final cover be covered by non-hazardous waste after installation?

Discussion

The first issue is whether there is a legal basis for delaying placement of the cover. The owner or operator must generally complete closure activities within 180 days after closure plan approval. The regulations do provide in some cases for a longer than 180 day closure period; however, the conditions outlined in §265.113(b) are specific and must be met by the applicant. That is, the closure activities must, of necessity, take him longer than 180 days to complete; or closure would be incompatible with continued operation, there is a reasonable likelihood that operation will be recommenced by a person other than the owner or operator, and the facility has the capacity to receive additional waste. In addition, the owner or operator must take all steps to prevent threats to human health and the environment.

If the Regional Administrator finds that the above conditions have been met, Crucible may delay closure for a period longer than 180 days. Discussions with OSW staff and with ONC staff have concluded, however, that the longer period must be related to a need for extra time to complete legitimate closure activities or to a likely transfer of the operation to new parties, not to the addition of non-hazardous waste disposal operations at the same site by the same owner or operator. We have not been informed of any likelihood that someone other than the current owner will take over operations at this site. In addition, the preamble to the May 19, 1980 regulations (45 FR 33197) provides that "..in no case may closure take more than 3 years." Therefore, the Crucible closure plan must contain only that time needed to complete legitimate closure activities and must reflect a closure time of less than 3 years.

The second issue is whether or not Crucible's arguments for delaying final cover are environmentally sound. Crucible has indicated that an impermeable membrane over their waste would cause excess settlement and subsequent Solvay Waste dike instability. They reference a report by Ray M. Teeter, P.E., addressing settlement and stability of the Crucible Landfill. Mr. Teeter states that if the water table within the Solvay Waste were

lowered (as would be the case if the landfill were covered with impermeable liner), this would increase the effective stresses in the Solvay Waste, resulting in increased settlement. Nowhere does Mr. Teeter indicate that the increased settlement would create instability in the dike.

Crucible's other environmental argument for delaying cover is that the Solvay Waste adsorbs the chromium being leached from the hazardous steel mill waste. This argument is based on Section 4 of the Engineering Report and Plan of Operation accompanying the application for a State of New York permit.

In this document lab scale and field scale test results are reported. The report, however, does not support Crucible's conclusion. The following questions and observations are included for your use:

1. Significant amounts of chromium were leached from the Pilot column leaching test (see tables 4-4, 4-5, 4-6, and 4-7 for examples).

2. The "Multiple 2 Column Tests" did not indicate how much tap water was leached through the columns or what the composition of the leacheate was at the completion of the test. This information is critical to proper evaluation of the data.

3. Hexavalent Chromium is readily leached from both Air Pollution Dust and Waste Caustic Solids (See Table 4-8, page 4-12.).

4. Crucible indicates that Caustic Sludge and Acid Pickling Sludge do not leach chromate with neutral pH water, but do leach chromate during the EP toxicity test at pH 5.0. They then conclude that these wastes could not be expected to leach Hexavalent Chromium in the Crucible Landfill (see page 4-13). This is not necessarily true since acid rain deposited in this region can be expected to have a pH of <5.0 (see pages 4-7 and 4-10).

5. Field Scale tub leaching tests showed a high level (17.6 mg/L) of Chromium in the leachate when Solvay Waste was used as an adsorbant (see table 4-15, page 4-24).

6. Trivalent and Hexavalent Chromium tests are not thoroughly reported since the quantity of leachate passed through the Solvay Process Waste has not been stated. Results do, however, indicate that Hexavalent Chromium is not well adsorbed by the Solvay Waste.

7. Hexavalent Chromium Adsorption Tests show that Chromate is not well absorbed (350 mg/L) and is easily leached by tap water (see page 4-28).

8. In the Sequential Adsorption Columns test the Hexavalent Chromium content of the Solvay Process waste was very low (.5mg/L). Crucible indicates that this is due to the reduction of Hexavalent Chromium to Trivalent Chromium. Our review indicates that this is unlikely to happen. Since the chromate content of the leachate was not reported, no reliable deductions can be made. Their theory of reduction of the Hexavalent Chromium to Trivalent Chromium with Ferrous Iron as the reducing agent is unsubstantiated (see page 4-29).

The third issue is whether the final cover can be covered by additional non-hazardous waste. It is distinctly the intent of the regulations that final cover be "final". (This is clearly implied by the reference to the vegetative layer in rule, preamble, and guidance). Moreover, §265.117(c) states that post-closure use of the property on or in which hazardous wastes remain after closure must never be allowed to disturb the integrity of the final cover. The only exception is if the owner or operator can demonstrate that the disturbance:

(1) Is necessary to the proposed use of the property, and will not increase the potential hazard to human health or the environment; or

(2) Is necessary to reduce a threat to human health or the environment.

Obviously, the first test would be the one that might be used at this site. To meet meet this test, Crucible would still have to show how disturbance of the cover would not only satisfy the requirements of §265.117(c)(1) but must demonstrate specifically how this disturbance will still provide for control of pollutant migration and surface water infiltration (§265.310(b) and other applicable conditions outlined in §265.310.

Recommendations

Crucible's request for an extended period of time for installation of a final cap should be denied. First, it is doubtful that continued operation of the nonhazardous landfill is "necessary" for the completion of closure activities. Even if it could be construed as such, 3 years would be the limit outlined in the regulatory preamble. Secondly, the purely environmental arguments outlined in Crucible reports are not technically substantiated. In fact, the underlying Solvay Process Waste is

apparently a significant contributor to the poor quality ground water underneath the site. Crucible's steelmill waste merely exacerbates the problem by making its own hazardous waste contribution in the form of Hexavalent Chromium, and by providing a conduit for increased infiltration into the underlying Solvay Process Waste.

Covering of the final cap with additional non-hazardous solid waste might be allowed if Crucible can demonstrate that this disturbed cap will function as well as a normal exposed final cap as per §265.117(c) and §265.310, and that periodic inspections will not be necessary.

In any event, the currently proposed cap configuration should not be approved. Since it is a soil-only cap, it will allow significant amounts of precipitation to enter the underlying Solvay Process Waste. An impervious cap design will not only mitigate the threat posed by the chromium-containing steel mill wastes but will also lower the contaminant loading contributed by underlying Solvay Process Waste. If the Region should allow the interim cap, it should take another look at subsidence, since it appears to be significant. The problem with slope stability should not be increased by the addition of the impermeable cap.

Contacts

Region II - Catherine Massimino FTS 264-1717
Headquarters - Chris Rhyne FTS 382-4695

cc: Terry Grogan
Peter Guerrero
Bruce Weddle
Ernie Regna
Ron Ney
Dov Weitman
Nancy Hutzel
Art Day

RCRA/SUPERFUND HOTLINE MONTHLY SUMMARY

JUNE 85

Partial Closure

3. The owner/operator (o/o) of a permitted facility plans to remove a tank from service. His permit does not address removal of the tank. Must the permit be modified to reflect this tank removal?

   Removing the tank would constitute partial closure of the facility. The closure plan should address this situation according to §264.112(a)(1). Since the permit does not cover partial closure, the o/o must amend his plan. Section 264.112(b) requires the o/o to amend his plan whenever changes in operating plans (e.g., tank removal) affect the closure plan. To amend the closure plan to address partial closure, the o/o must comply with the standards for major modifications for permits under §270.41. The o/o should amend his plan to address all anticipated partial closures so that he need only modify his permit once.

   Source: Susan Hughes (202) 382-4790

9476.01(85)

9476.1985(02)

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

AUG 27 1985

OFFICE OF
SOLID WASTE AND EMERGENCY RESPONSE

MEMORANDUM

Subject: RCRA Policies on Ground-Water Quality at Closure

From: J. Winston Porter
Assistant Administrator

To: Regional Administrators
Regions I-X

Background

As a result of the Hazardous and Solid Waste Amendments of 1984, we expect that an unprecedented number of facilities will close one or more hazardous waste management units during the coming months. Moreover, many of these units will close because they are unable to certify compliance with applicable ground-water monitoring and financial responsibility requirements on November 8, 1985. Overall, perhaps one half of all existing surface impoundments may close before the effective date of the retrofitting provisions in 1988. Given the number and significance of these closures, it is essential that EPA and the States take steps to ensure proper implementation of RCRA requirements as these facilities close. This memorandum is intended to provide general guidance on RCRA closure policies as affected by the 1984 Amendments, especially in terms of ground-water quality at closure.

The Amendments generally confer broad authority on the Agency to assure that hazardous waste management units are operated and closed in a manner that protects human health and the environment. In particular, the Agency now has several authorities for ensuring ground-water quality and conducting corrective action at and after closure, in addition to the pre-Amendment closure process. We intend to make full use of these authorities to be sure that improper closures do not occur.

Close attention to closures follows from practical concerns as well. In many cases, closure is the last time that a facility comes under the close scrutiny of RCRA. Lack of attention to environmental problems at the time of closure may lead to an increase in the number of Superfund sites several years in the future.

New Closure Policies

In the past, there has been some uncertainty regarding what level of clean-up is required at closure. Facilities were allowed to close in some cases without an adequate ground-water monitoring system in place or without a plan to respond to contamination.

We must be clear that ground-water quality is an integral aspect of RCRA closure. Owners and operators must not be allowed to "walk away" from units with inadequate monitoring systems and ground-water contamination at closure. In many cases, the interim status regulations (Part 265, Subparts F and G) can and should be used to address ground-water quality issues at closure. Post-closure permits, corrective action orders (RCRA §3008(h)), and corrective action authority under RCRA §3004(u) can and should be used when applicable and necessary to supplement these regulations to address contaminated soils or ground water at closing facilities. For example, approval and completion of a closure by removal under §§265.228 or 265.258 does not preclude the Agency's ability to use 3008(h) orders, 3004(u) authority, or other applicable RCRA provisions as necessary.

For facilities with closing land disposal units, the facility management process (as described in the FY 86 RIP) will be used to determine the most appropriate course of action. The strategy for each facility will depend upon the specific facts of each case. All closures, however, should be guided by the principles outlined in this memorandum.

New Authorities

Several new tools are available to the permitting and enforcement programs to supplement the closure process of Part 265. These new authorities should be used (when applicable and within the context of overall Agency priorities) to assure that adequate ground-water monitoring and protection are implemented at closing facilities. The following provisions of the 1984 Amendments give the Agency broad new authority to address potential soil and ground-water contamination at closure:

§3005(i) changes the definition of "regulated unit" in §264.90(a) to include units that received waste after July 26, 1982 (from the current date of January 26, 1983). This expands the universe of facilities that is subject to the requirements of Part 264, Subpart F, through a post-closure permit.

§3004(u) requires corrective action for releases from solid waste management units, and from regulated units (for releases

other than ground-water releases), at facilities seeking RCRA permits. This authority may be used when a closed or closing unit is located at a facility which is receiving either an operating or post-closure permit.

§3008(h) allows corrective action to be required at any interim status facility with a release of hazardous waste into the environment. This authority may be used in tandem with the closure process to require corrective action during or after closure.

Additional Guidance

This is the first in a series of guidance memos that will be issued regarding the closure of hazardous waste management facilities. Future guidance will address in detail the issues raised in this memo, including technical and policy guidance for closure by removal and post-closure care. I encourage you to contact my staff to discuss any of the issues regarding closure and to identify any areas in which Headquarters should be preparing additional guidance.

cc: John Skinner
Gene Lucero
Bill Hedeman
OSW Senior Staff
Peter Cook
Lloyd Guerci
Waste Management Division Directors, Regions I-X
RCRA Branch Chiefs, Regions I-X
Permit Section Chiefs, Regions I-X
Enforcement Section Chiefs, Regions I-X
Mark Greenwood

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

SEP 11 1985

OFFICE OF
SOLID WASTE AND EMERGENCY RESPONSE

MEMORANDUM

SUBJECT: Permitting Units Created for Facility Closure

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

TO: Hazardous Waste Division Directors and Branch Chiefs
Regions I-X

This memorandum addresses the question of whether hazardous waste management units built specifically as part of the closure process must by covered by RCRA permits. Some facilities have proposed closure schemes which involve the creation of a new tank, impoundment, pile, or incinerator to manage hazardous wastes exhumed and/or transferred during closure. A number of owners/operators have argued that creation of these new units is a necessary and temporary measure to accomplish closure of regulated units. They have sought to have the new units approved in their Part 265 closure plan rather than through the permit process.

In all cases, the addition of new units requires more than closure plan approval. In some cases it requires a permit. The Part 264 standards apply to new units added during closure as well as to new operating units. The regulations do not provide a means for exempting new units from the permitting standards simply because they are used in the closure process.

Alternatively, the addition of new units may constitute an allowable change to a facility during interim status. According to §270.72(c), changes in processes or addition of processes may be allowed if a revised Part A and justification are submitted, and the Director approves the change because of an emergency situation or because it is necessary to comply with Federal regulations or State or local laws. In the case of adding a new unit for closure, this section could be applicable if the Director agrees that the additional unit is necessary for the owner/operator to comply with Part 265 closure requirements. In no case, however, may the cost of adding these units exceed 50% of the cost of building a comparable entirely new facility (§270.72(e)).

cc: Permit Section Chiefs, Regions I-X
Peter Guerrero
Terry Grogan
Carole Ansheles
Amy Mills
Dave Fagan

9476.1985(04)

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

SEP 25 1985

OFFICE OF
SOLID WASTE AND EMERGENCY RESPONSE

MEMORANDUM

SUBJECT: Applicability of Post-Closure Permitting Requirements to Non-Regulated Units

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

TO: Charles E. Finley, Director
Hazardous Waste Division, Region X

In your memorandum of May 20 (attached) and in phone conversations with Jeff Webb of your staff, you requested clarification on several points regarding closure for disposal facilities that stopped receiving waste prior to July 26, 1982. Outlined below is a discussion of those points.

We agree with your interpretation that land disposal units that stopped receiving wastes prior to July 26, 1982 and closed after January 26, 1983 are subject to the post-closure permit requirements of §270.1(c), but not ground-water monitoring requirements of Part 264 Subpart F. We do not agree with your conclusion, however, that such a permit could require compliance with Part 265 ground-water monitoring requirements. Part 265 is applicable only to interim status units and cannot be incorporated into a permit.

If the unit described above is the only unit at the facility subject to permitting, issuance of a post-closure permit would have little benefit since ground-water monitoring requirements cannot be applied. The unit/facility in this case should be closed under interim status, and thus subject to the general closure performance standards of Part 265 and post-closure ground-water monitoring (§265.117), as applicable. If the unit has caused ground-water contamination, enforcement action to compel corrective action under §3008(h) should be initiated. Alternatively, if the unit is located at a facility which has another unit(s) requiring a permit, the 3004(u) corrective action authority would apply when the permit is issued since the unit is a "solid waste management unit."

If you have any further questions regarding this issue, please contact Dave Fagan, Acting Manager, Permits Policy Program at 382-4740.

Attachment

cc: RCRA Branch Chiefs
Permit Section Chiefs

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 10
Seattle, Washington 98101

REPLY TO ATTN OF: M/S 533

MAY 20 1985

MEMORANDUM

SUBJECT: Applicability of 40 CFR Part 264, Subpart G to Non-Regulated Units

FROM: Charles E. Findley, Director
Hazardous Waste Division

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

The purpose of this correspondence is to confirm our interpretation of 270.1(c) which states that all owners and operators of hazardous waste management units must have permits during the active life (including the closure period) and for units which close after the effective date of the Part 264 standards for any post-closure care period required under 264.117.

We are interpreting this to require permits for the closure and post-closure care of any unit not closed (including certification of closure) prior to permit issuance. If the unit ceased receipt of wastes prior to July 26, 1982, the permit would not require compliance with Subpart F of Part 264, but with the ground water monitoring requirements of Part 265 interim status. All other applicable requirements of Part 264, particularly the closure performance standards of Subparts G, K, L, M, and N, would also be imposed through the permit.

Such an interpretation would subject the facility to the provisions of the 1984 Amendments, particularly Section 3004(u).

We would appreciate confirmation of this interpretation.

DEC 13 1985

Ms. Ellen E. Eagan
URS Engineers
3500 North Causeway Boulevard
Metairie, Louisiana 70002

Subject: Land Disposal Unit Closure
Clarification of Proposed
and Promulgated Rules
URS No. 520-02-96

Dear Ms. Eagan:

Thank you for your letter of October 10, 1985, in which you requested clarification of several issues relating to land disposal units. We are responding to your questions in the order order in which they were detailed in your letter.

If a land disposal unit contains no waste currently listed or characterized as hazardous, and completes all closure activities prior to the effective date of any regulation listing or characterizing a waste contained in the unit as hazardous, the unit would not be regulated under Subtitle C of the Resource Conservation and Recovery Act, as amended (RCRA). If the subject land disposal unit is located at an interim status facility or a facility seeking a permit under RCRA, certain requirements under the Hazardous and Solid Waste Amendments of 1984 (HSWA) may apply. Your letter did not contain sufficient information to make a determination on this point. A land disposal unit not regulated under Subtitle C of RCRA would not be required to comply with the specific regulations referred to in your questions numbers 2 through 6.

In response to your question number 7, Section 3004(o)(1)(A) mandates that a permit issued to a landfill or surface impoundment after November 8, 1984, must require the installation of two or more liners and a leachate collection system and ground-water monitoring. Section 3005(j) of RCRA prohibits surface impoundments in existence on November 8, 1984, and which qualify for interim status, from receiving storing or treating waste after November 8, 1988, unless the surface impoundment is in compliance with the liner, leachate collection system, and ground-water monitoring requirements of Section 3004(o)(1)(A). If a surface impoundment becomes subject to these requirements after November 8, 1984, due to the promulgation of additional listings or characteristics for the identification of hazardous waste, the

surface impoundment must comply with the requirements of Section 3004(o)(1)(A) four years from the date of promulgation of the additional listings or characteristics. A land disposal unit not required to obtain a RCRA permit, including a post-closure permit, and not otherwise subject to the HSWA would not be required to retrofit under Section 3004.

Since you mentioned in your letter that the subject land disposal units are in authorized States, you should contact each appropriate State agency for applicable State rules and statutes. Currently, no States are authorized for the HSWA. Any applicable requirements under HSWA also must be complied with in addition to the authorized States' regulatory program.

Sincerely,

Marcia Williams
Director
Office of Solid Waste

cc: Carol Ansheles
Peter Guerrero
Terry Grogan
Dave Fagan
Lillian Bagus
Benjamin Smith
Dov Weitman

9476.1986(01)

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

MAY 8 1986

OFFICE OF
SOLID WASTE AND EMERGENCY RESPONSE

Ms. Deborah Self
Student Environmental Health Project
Center for Health Services
Station 17
Vanderbilt University
Nashville, Tennessee 37232

Dear Ms. Self:

This is in response to the questions you submitted in April 1986 at the Cincinnati meeting. Your questions address both the particular situation of the partial closure of Chemical Waste Management's Emelle facility, and the general requirements of the closure/post-closure regulations promulgated under authority of the Resource Conservation and Recovery Act (RCRA).

In regard to the Emelle facility, my staff spoke with the appropriate staff in our Region IV (Atlanta) office. My understanding is that the situation has changed somewhat since last July, when Region IV held a public hearing on their closure plan. Region IV staff said they had processed the closure plan without a formal post-closure plan submittal because it was a partial closure and they were attempting to work out a new ground water monitoring system required for the facility. The remaining active hazardous waste management units will obtain an operating permit. Regional staff say that post-closure care will begin at final closure of the facility and will continue for 30 years. However, Chemical Waste Management will be required to conduct post-closure activities for the partial closure, as well. In addition, permit conditions will need to be developed. If you have further questions regarding the Emelle facility, you should contact Craig Brown in our Region IV office (404 347-3067).

The former procedural requirements for closure and post-closure care were somewhat unclear regarding partial closures and subsequent post-closure responsibilities. We proposed amended regulations on March 19, 1985, that attempted to clarify those requirements. The final regulations were published on May 2, 1986 (51 FR 16422), and will become effective on October 29, 1986. I am enclosing a copy of them for your information.

The final regulations clarify the definition of partial closure, hazardous waste management unit, partial closure notification requirements, and how partial closure and the initiation of post-closure responsibilities interact. I believe these regulations will result in better protection of human health and the environment at all hazardous waste management facilities. Thank you for your interest in these issues.

Sincerely,

Marcia E. Williams
Director
Office of Solid Waste

Enclosure

RCRA/SUPERFUND HOTLINE MONTHLY SUMMARY

AUGUST 86

5. Closure Plans - Appeals

The owner/operator (o/o) of an interim status facility has submitted his written closure plan at least 180 days before he expects to begin closure as required by 40 CFR 265.112(c). The EPA subsequently noted deficiencies in the plan and returned it to the o/o for revision according to 40 CFR 265.112(d). After the o/o has submitted his plan a second time, the EPA again noted deficiencies. Using the authority given in 40 CFR 265.112(d), EPA modified the plan and sent it back to the o/o as a final closure plan. What avenue of appeal is available to the o/o if he wishes to contest the modifications made to his final closure plan?

At the present time, there are no provisions under RCRA which would allow the o/o to appeal the final closure plan issued by the Regional Administrator. The o/o would have to pursue other legal recourse outside of the RCRA regulations to appeal the provisions in his final closure plan.

Source: Dov Weitman (202) 382-7703
Research: Kris Andersen

RCRA/SUPERFUND HOTLINE MONTHLY SUMMARY

SEPTEMBER 86

3. Hazardous Waste Tank Closure and Post-Closure

The owner/operator (o/o) of an interim status underground hazardous waste storage tank plans to close the tank. During the operating life of the tank, hazardous waste leaked and contaminated underlying soils. What regulations apply in this situation?

EPA published a final rule regulating tanks holding hazardous waste in the July 14, 1986 Federal Register (51 FR 25422). EPA revised the standards for hazardous waste tanks, effective January 12, 1987. EPA stated that if an o/o demonstrates that all contaminated soils cannot be practically removed or decontaminated as required in 40 CFR 265.197(a), then the o/o must close the tank system as a landfill (51 FR 25484). The o/o must perform post-closure care in accordance with the closure and post-closure care requirements that apply to landfills (40 CFR 265.310). The tank o/o must meet all of the requirements for landfills specified in Subparts G and H of Part 265 with regard to closure, post-closure, and financial responsibility.

Under the landfill closure and post-closure requirements (40 CFR 265.310), the o/o must comply with all post-closure requirements contained in 40 CFR 265.117 through 265.120 including maintenance and monitoring throughout the post-closure care period.

Note that the above mentioned requirements for closure of hazardous waste tanks as landfills do not become effective until January 12, 1987. Tank closures occurring prior to January 12, 1987 must comply with prior regulations which may include 40 CFR §265.197 and §265.110 through §265.115. The latter sections were amended on May 2, 1986 (51 FR 16422). Section 265.11(b) requires the o/o to control, minimize or eliminate, to the extent necessary to protect human health and the environment, postclosure escape of hazardous waste, hazardous constituents, leachate contaminated run off or hazardous waste decomposition products to the ground or surface waters or to the atmosphere. Since the May 2, 1986 amendments were not promulgated pursant to HSWA, they are effective in authorized states only if the states have adopted revisions to their programs to incorporate these requirements.

Also, under Section 3008(h) of the Solid Waste Disposal Act, whenever the EPA Administrator determines that there is or has been a release of hazardous waste into the environment from a facility authorized to operate under Section 3005(e), the Administrator may issue an order requiring corrective action or any other response measure necessary to protect human health or the environment.

Source: Bill Kline (202) 382-7917
Ginny Steiner (202) 475-9329
Research: Carla Rellergert

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

9476.1986(0

8 OCT 86

Honorable Bob Wise
House of Representatives
Washington, D.C. 20515

Dear Mr. Wise:

Thank you for your September 4, 1986, letter regarding closure requirements for surface impoundments under the Resource Conservation and Recovery Act (RCRA).

On May 2 of this year, the Environmental Protection Agency (EPA) promulgated final regulations requiring hazardous waste facilities to begin closure activities within a specified time after they ceased accepting hazardous wastes. EPA promulgated this rule based on the belief that expeditious closure of hazardous waste disposal surface impoundments, after they are no longer receiving hazardous waste for disposal, would improve the protection of human health and the environment.

The goal of EPA's current regulations is to minimize the formation and migration of leachate to the adjacent subsurface soil, ground water, or surface water. This goal is achieved, in part, through design and operating standards that require placement of final covers on closing units. EPA relies principally on the final cover to provide post-closure protection of ground water. Many older units are not lined, so early placement of the final cover is important to reducing leachate generation from the unit.

The Union Carbide facility referred to in your letter is affected by this rule since they plan to cease accepting hazardous wastes rather than installing a double-liner system in accordance with the requirements of Section 3005(j) of the Hazardous and Solid Waste Amendments of 1984. As you may be aware, we are currently involved in litigation with Union Carbide on this issue.

I hope that this clarifies EPA's rationale in determining whether a facility be allowed to remain open. If I can be of further assistance, please let me know.

Sincerely,

for J. Winston Porter
Assistant Administrator

WH-562/BROMM/T.MCMANUS - 475-8613/sld/9-22-86/Control No:AL602911/Due Date: 9-23-86/CONTROLLED CORRESPONDENCE #5

RCRA/SUPERFUND HOTLINE MONTHLY SUMMARY

OCTOBER 86

8. Retrofitting Surface Impoundments

RCRA Section 3005(j) states that except for specific cases for which variances are granted a surface impoundment shall not receive, store, or treat hazardous waste after November 8, 1988 unless it is in compliance with Section 3004(o) (1)(A), the minimum technology standards for new surface impoundments. Section 3004(o)(1)(A) requires new surface impoundments to have two or more liners with a leachate collection system between the liners and ground water monitoring. Hence, the owner/operator (o/o) must either close or retrofit his surface impoundments to meet the minimum technology standards if he wants to operate the units after November 8, 1988.

Since storage in a surface impoundment not meeting minimum technology standards is prohibited after November 8, 1988, must the o/o who wishes to close his impoundments, complete closure by November 1988?

No; EPA interprets the statute to require the facility to stop accepting waste by November 8, 1988. The statute does not require closure by that date. Therefore, the owner or operator must comply with applicable closure regulations.

The "Interim Status of Surface Impoundments - Retrofitting Variance" (OSWER Policy Directive #9484.00-1) states that closure activities can occur after November 8, 1988, provided that the receipt of hazardous waste stops on or before November 8, 1988. Therefore the owner/operator is required under 40 CFR 265.112(d)(2) to begin closure within 30 days after the last date on which wastes are received. According to 40 CFR 265.112(d)(1) the owner/operator must also submit a written closure plan to the Regional Administrator at least 180 days prior to the date on which closure is expected to begin. Therefore, notification of closure of an interim status surface impoundment is required by June 8, 1988 unless the impoundment is retrofitted or a variance is obtained (51 FR 1644).

Source: Barbara Pace (202) 382-7703
Research: Betty Wilson

9476.1987(01)

June 9, 1987

MEMORANDUM

SUBJECT: Applicability of Section 3005(i) of RCRA to Surface Impoundment Closed by Blue Bird Midwest Pursuant to 40 CFR §265.228(b)

FROM: Marcia Williams, Director
Office of Solid Waste (WH-562)

TO: David A. Wagoner, Director
Waste Management Division
Region VII

This is in response to your May 13, 1987 request for a statutory interpretation regarding the applicability of Section 3005(i) to closure conducted at the Blue Bird Midwest facility pursuant to 40 CFR §265.228(b).

We have reviewed the information accompanying your request and concur with Region VII's interpretation that unless Blue Bird Midwest can demonstrate compliance with the standards for closure by removal in 40 CFR §265.228(a), a post-closure permit implementing applicable Part 264 standards, including Subpart F ground-water monitoring and corrective action, is required. The post-closure permit is required regardless of whether Blue Bird has satisfied the closure requirements of 40 CFR §265.228(b). Your information indicates that Blue Bird has not clean closed the swale and has not demonstrated through an adequate ground-water monitoring system that all contaminated subsoils have been removed or decontaminated, as required by §264.228(a). Therefore, it appears that RCRA Section 3005(i) applies to the closed surface impoundment at Blue Bird. Your memorandum did not include information indicating that Blue Bird Midwest upgraded the ground-water monitoring system in accordance with comments in the Region's December 29, 1986 letter.

For your information, we expect the final codification rule based on the March 28, 1986 proposed rule to be issued within the next two months. The draft final rule now in Red Border states that the requirements of Section 3005(i) (i.e., ground-water monitoring, unsaturated zone monitoring and corrective action requirements applicable to new units) are applicable to all land disposal units which received waste after July 28, 1982 or had

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not closed by January 26, 1982. The rule clarifies that land disposal units that close by removal under interim status are subject to post-closure permitting.

An exception to the post-closure permit requirement would be the case where surface impoundments closing by removal or decontamination met the requirements of §264.228(a). The forthcoming rule will allow the owner/operator to submit a petition to demonstrate to the Regional Administrator that a post-closure permit is not required for units that closed according to Part 265 standards. The petition must contain ground-water and soil analytical data and other information sufficient to demonstrate the applicable Part 264 standards for closure by removal or decontamination can be met. If the "equivalency" of Part 264 closure by removal can be demonstrated, a post-closure permit would not be required. Public notice of Agency actions on these petitions will follow the closure plan public notice procedures of §265.112.

If you have additional questions about this memorandum or the codification rule language, please contact Matthew Hale, Chief, Permits Branch at FTS 382-4740.

cc: Terry Grogan, OSW

This has been retyped from the original document.

RCRA/SUPERFUND HOTLINE MONTHLY SUMMARY

JUNE 87

4. Clean Closure

Section 265.228(a) of the recently promulgated amendment to the surface impoundment closure and post-closure care rule, published in the Federal Register on March 19, 1987 (52 FR 8704), states that various facility elements (e.g., contaminated subsoils, liners, and structures) must be removed or decontaminated before clean-closure can occur. Contaminated groundwater is not listed among those elements. Must affected groundwater also be removed or decontaminated before clean closure is possible?

In the preamble to the final rule the Agency stated that it interprets the term "contaminated subsoils" to include contaminated groundwater (52 FR 8705). The preamble also states (52 FR 8706) that owners and operators must remove all wastes, liners, and all materials contaminated with waste or leachate (including groundwater) that pose a threat to human health or the environment.

Source: Ossi Meyn (202) 382-7597
Research: Kurt Patrizi

RCRA/SUPERFUND HOTLINE MONTHLY SUMMARY

SEPTEMBER 87

2. Certification of Closure

The owner/operator of a hazardous waste management unit is conducting closure and hires a contractor to certify the closure. 40 CFR 264/265.115 state that certification of closure must be made by an independent, registered, professional engineer. Can the engineer who is employed by the contractor performing the closure, certify the closure of the facility?

Yes, the "RCRA Guidance Manual for Subpart G Closure and Post-Closure Care Standards and Subpart H Cost Estimating Requirements" clarifies that an "independent" engineer cannot be directly employed by the owner or operator of the unit. Also, the May 2, 1986 Federal Register (51 FR 16433) states that, "... the certification should be made by a person who is least subject to conscious or subconscious pressures to certify to the adequacy of a closure that in fact is not in accordance with the approved closure plan."

Source: Sharon Frey (202) 475-6725
Research: Chris Bryant

RCRA/SUPERFUND HOTLINE MONTHLY SUMMARY

NOVEMBER 87

4. Closure Plan Public Comment Period

As specified in Section 265.112(d)(4), the Regional Administrator has ninety (90) days to approve, modify or disapprove the closure plan for an interim status facility once it has been submitted for consideration by the owner operator. The section also provides for a 30 day public comment period on the content of the plan, which is to be carried out during the 90 day term. It is initiated via a notice in the local newspaper. It is unclear as to when this public comment period would begin. Is it immediately upon receipt of the plan without an initial approval by the Regional Administrator? Or would it begin only after a preliminary screening by the Region?

Section 265.112(d)(4) provides for a 30 day public comment period on the content of a proposed closure plan for an interim status facility and does not state when this period is to be initiated. The Agency has not issued any specific guidance, because the practice will vary from site to site depending on the detail and complexity of the individual plan. Owners and operators may request public hearings in addition to comment periods. The Regional Administrator also may schedule a hearing at his own discretion. The Regional Administrator may schedule the hearing with or without the benefit of the response from the public comment period; regardless, the hearing must be noticed 30 days prior to its occurrence. It is therefore conceivable that, within the framework of the 90 days allowed, the time required to fulfill both regulatory requirements could be as long as 60 days, or as short as 30 days (for current notice of the hearing and the comment period). The Regional Administrator will review the plan prior to offering the contents for public review, and will approve, modify or disapprove its contents within 90 days from the date of submission.

Source: Chris Rhyne (202) 382-4695
Research: Andy O'Hare

This has been retyped from the original document.

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

OFFICE OF
SOLID WASTE AND EMERGENCY RESPONSE

DEC 17

MEMORANDUM

SUBJECT: Closure and Post-Closure Issues

FROM: Marcia E. Williams, Director
Office of Solid Waste (WH-562) Marcia

TO: Robert E. Greaves, Chief
Waste Management Branch (3HW30)
Region III

Thank you for your November 4, 1987 memorandum in which you requested clarification of several issues relating to closure of interim status surface impoundments. The clarification of these issues follows the same format as presented in your memorandum. The answers to questions one and two are derived from the draft guidance, "Surface Impoundment Clean Closure Guidance Manual" (October 12, 1987).

1. For an interim status surface impoundment that is closing by removal under §265.228(a)(1), but has not triggered ground-water assessment under §265.93(d), it is not necessary to monitor ground water for the full list of Appendix VIII (or IX) constituents. A ground-water evaluation conducted as part of the clean-closure demonstration should establish the chemicals that may be reasonably associated with the wastes managed at the impoundment, including any decomposition products. While the most convincing means of demonstrating the absence of such chemicals is by performing an Appendix VIII analysis of the waste, this is not required if it can be demonstrated that only a subset of these constituents could reasonably be expected to exist at the impoundment.

   On the other hand, if the interim status surface impoundment <u>has</u> triggered ground-water assessment under §265.93(d) and ground-water contamination is evident, clean closure is probably not a feasible option. However, should it be determined to be feasible (see issue 3), the same rationale should be used to determine constituents of concern as was used when ground-water assessment was not triggered.

2. As stated above, Appendix VIII (or IX) analysis of ground-water samples is not necessary for a clean closure demonstration. As you suggested, a combination of analyses for what is likely to be present in the waste coupled with an explanation of the basis for not analyzing the remaining hazardous constituents would be appropriate in most instances.

3. The general closure regulations (§265.113(b)(1)(i)) allow the 180 day closure period to be extended if the closure period will, of necessity, take longer then 180 days to complete. This rule allows for flexibility in complex closure situations, and in other situations where the owner or operator cannot practicably complete closure expeditiously.

   However, we generally believe that ground-water contamination should be addressed under a corrective action program--preferably in the context of a permit, since ground-water contamination clean-up usually involves an extended clean-up period. Most operators attempting to close units that have ground-water contamination will need a post-closure permit and therefore are not likely to be able to clean close. We recognize, however, that under some limited circumstances an owner or operator may be able to demonstrate that clean closure is possible after a very short ground-water corrective action effort (perhaps less than one year).

   Should this be the case, the Regional Administrator has the option under §265.113(b)(1)(i) of extending the closure period to implement such an effort. Protracted or indefinite closure periods designed solely for the purpose of ground-water clean-up are not acceptable. Under these circumstances a post-closure permit containing corrective action schedules of compliance should be used or a §3008(h) corrective action order.

4. The Final Codification Rule published in the Federal Register on December 1, 1987 (52 FR 45788) addresses this issue directly. In essence, the rule states that units closing by removal under Part 265 standards must obtain a post-closure permit unless the owner or operator can demonstrate to the Regional Administrator that the closure met the standards for closure by decontamination in section 264.228, 264.280(e) or 264.258, respectively. The rule further outlines approaches for making the demonstration. A copy of the rule is attached for your information.

5. When EPA has issued guidance that interprets a permit or closure requirement, States should follow that guidance for comparable State requirements or be able to explain why their approach is equivalent or more stringent than the Agency's approach. In overviewing State permits and closure plans the Region should follow the approach outlined in the permit quality and closure plan protocols which cross reference regulatory requirements and applicable guidance; the State administrative record should be consulted to determine how the State has interpreted those State regulations (comparable to the Federal) for which we have issued guidance. Of course, if a "more stringent" EPA regulatory amendment or rule clarification requires the State to amend its regulations, the State should follow the procedures and timeframes in Part 271 for program revisions.

Should you require further clarification of these issues please contact Chris Rhyne of my staff at FTS 382-4695.

Attachment

cc: RCRA Branch Chiefs, Regions I-X

Pim

9476.1988(01

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

JAN 29 1988

JAN 29 1988

OFFICE OF
SOLID WASTE AND EMERGENCY RESPONSE

Mr. John Ramsey
Environmental Engineer
Bureau of Waste Management
Kansas Department of Health
and Environment
Forbes Field
Topeka, KS 66620-0001

Dear Mr. Ramsey:

This letter is in response to your December 29, 1987 inquiry regarding closure requirements at facilities having delisting exclusions revoked. Specifically, you requested guidance on the applicable closure requirements for units at facilities whose State-issued final delisting decisions (granted before the enactment of HSWA) were being revoked based on re-evaluations of their petitions using HSWA criteria. To date, we have not revoked a Federally-issued final delisting exclusion. We have, however, denied final exclusions (as a result of HSWA re-evaluations) for wastes that had been issued temporary exclusions based on pre-HSWA criteria. This letter, therefore, only provides insight to policies concerning the regulatory status of Federally-issued final exclusions and temporary exclusions that have been revoked.

Since the state of Kansas has been authorized by EPA to administer and enforce hazardous waste management programs pursuant to Section 3006 of RCRA, 42 U.S.C. Section 6926, the closure requirements for the waste units at the subject facilities should be determined by State authorities. The Federal policies discussed in this letter may be helpful as guidance in determining the closure requirements for the units at those facilities where State-issued final exclusions are being revoked.

The regulatory status of wastes that have been granted exclusion from Subtitle C regulation is dependent on the retrospectivity given to the type of exclusion granted. For wastes that are granted final exclusions, the Federal policy is that these exclusions are fully retrospective (i.e., the waste is assumed to have always been non-hazardous). In these cases, the units handling wastes that were issued final exclusions are not subject to Subtitle C regulation unless the unit also contains or had contained other non-excluded hazardous wastes.

Some Federal temporary exclusions were granted based on pre-HSWA criteria evaluations and later denied final exclusion after re-evaluations using post-HSWA criteria. In these cases we have adopted a policy which, in short, states that these wastes were non-hazardous only during the time that the temporary exclusion was in effect. The regulatory status of the units containing such wastes is, therefore, dependent on whether those units accepted the temporarily excluded wastes before the temporary exclusion was in effect and/or whether the same unit continued to accept these wastes after the temporary exclusion was revoked and a final denial issued. Attachments I and II address the Federal regulatory status of units and the interim status of facilities that handled wastes that were temporarily excluded and then denied final exclusion.

Your letter makes reference to Section 3005(i) of RCRA and the possible implications for State implementation. Please note that Section 3005(i) is a HSWA provision and as such is implemented by EPA until a state is specifically authorized for that provision. Also, please note that the key "trigger" under Section 3005(i) is receipt of hazardous waste after July 26, 1982. It may be beneficial to consult your legal office to determine if Kansas has a State requirement which parallels Section 3005(i) and if so, what consequences the State equivalent regulation may have on the regulatory status of revoked final exclusions. The applicability of a State equivalent to 3005(i) and its effect on revoked exclusions may be dependent on the retrospectivity given to State-granted final exclusions.

I hope this letter has provided some guidance to assist you in developing closure policies for the subject waste units. If you have any further questions, or wish to discuss our delisting or closure policies in more detail, please feel free to contact me at FTS 382-4206. I will be Acting Branch Chief for Suzanne Rudzinski until March.

Sincerely

Elizabeth Cotsworth, Acting Chief
Assistance Branch

Dupl.

9476.1989(02

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

AUG 22 1989

OFFICE OF
SOLID WASTE AND EMERGENCY RESP

MEMORANDUM

SUBJECT: Correction to the Delay of Closure Rule Preamble Language

FROM: Joseph S. Carra, Director
Permits and State Programs Division (OS-340)

TO: Permit Section Chiefs
Regions I-X

This memorandum clarifies a discrepancy in the Delay of Closure final rule published in the Federal Register of August 14, 1989 (54 FR 33376). The discrepancy involves the time frame for submission of permit modification requests for owners and operators of permitted facilities that wish to receive non-hazardous wastes after the final receipt of hazardous wastes.

The rule language at §264.113(d)(4) correctly stated that the request must be submitted 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 wastes at the unit or no later than 90 days after the effective date of the rule in the state in which the unit is located, whichever is later. This language is found at 54 FR 33395.

The preamble language incorrectly stated that the request must be submitted at least 120 days prior to final receipt of hazardous wastes, or within 90 days of publication of the Federal Register notice. This language is found at 54 FR 33377.

We do not intend at this time to publish a Federal Register correction notice. If you have any questions about this, please call Barbara Foster at FTS 382-4751.

Your third question asked if the interim status closure plan has to include all units that are listed in the Part A or solely those that have actually been constructed. Your interim status closure plan must account for all units that have been constructed. According to 40 CFR §265.112(b)(1), the closure plan must include a description of how each hazardous waste management unit at the facility will be closed (51 FR 16422); it is not required to address closure of units planned in the future. Of course, before further units or cells are put into service, the plan must be revised in accordance with applicable regulations.

Please be reminded that the above responses are based on the Federal RCRA regulatory requirements at 40 CFR Part 265. States authorized to implement the RCRA program may have adopted more stringent requirements. Should your facilities be located in authorized states the applicable state law applies.

If you have any further questions, please call Sharon Frey at FTS 475-6725.

Sincerely,

/S/

Jeffery D. Denit
Acting Director
Office of Solid Waste

cc: Robert Greaves, Region III
Kenneth D. Feigner, Region X

MAR 2 1988

MEMORANDUM

SUBJECT: Cleanup Levels for Lead and Cadmium in Soils for RCRA Clean Closures

FROM: Jeffery D. Denit, Acting Director
Office of Solid Waste

TO: David A. Wagoner, Director
Waste Management Division
Region VII

In your memorandum of December 29, 1987, you requested guidance on setting soil cleanup levels for lead and cadmium at RCRA facilities that intend to achieve clean closure. As you know, the preamble to the March 19, 1987, final regulation (conforming 265.228(a) to 264.228(a)) stated that verified Reference Doses (RfDs) and Carcinogenic Potency Factors (CPFs) could be used as Agency-recommended limits for contaminants such as lead and cadmium, where appropriate, to set soil cleanup levels. The verified RfD would be the most appropriate criteria for setting a soil cleanup level for contaminants that are not known to have carcinogenic effects, and the CPFs would be the most appropriate limit for carcinogens.

The preamble also states that, in cases where no EPA recommended limit exists for a specific contaminant, a soil cleanup level may be based on either:

1. background levels; or

2. data developed by the owner or operator to support a health-based limit.

When neither of the above is feasible, clean closure cannot be achieved and the unit must be closed under the landfill closure requirements.

Presently, the Office of Research and Development is investigating recent data on the toxicity of lead and cadmium. Over the next several months, decisions will be made on an RfD for cadmium and an RfD and a CPF for lead. The Office of

Drinking Water will soon propose a Maximum Contaminant Level Goal (MCLG) for cadmium, and may be revising the current Maximum Contaminant Level (MCL) for lead. It is apparent, therefore, that the toxicological information on lead and cadmium is undergoing extensive Agency review, and decisions on relevant health-based standards are currently being made.

Although the RfD Workgroup has not formally approved the RfD for cadmium, it is likely that a value of 0.0005 mg/kg/day will be approved as an RfD for cadmium when the Workgroup meets in March. Since this value is the same as the one proposed in the Hickok study, I recommend that it be used to set a soil cleanup level at the Frit Industries site in Humboldt, Iowa. The cleanup level for cadmium is, therefore, 9 mg/kg, which agrees with the level stated in your memo, as calculated by Region VII.

Presently, the Carcinogen Assessment Group (CAG) of ORD is evaluating lead as a potential human carcinogen via the oral route of exposure. OSW has requested that CAG estimate a CPF for lead based on current toxicity studies, and has requested that an RfD be developed by the RfD Workgroup on the basis of new toxicological data on the non-carcinogenic, neuro-behavioral effects of lead exposure. It is not likely, however, that the CPF or the RfD will be developed and approved soon. Therefore, I am recommending that soil cleanup levels for lead should be based on local background soil lead levels.

You can use either of the following approaches to determine the background levels for lead in soils:

a. Take soil samples at uncontaminated areas of the facility and at various depths to ensure representativeness and random distribution. Analyze the sample for total lead.

   Refer to Mason, B.J., 1983 and Barth, S., et. al., 1984 for guidance on soil sampling and quality assurance procedures; or

b. Consult the open literature for published data on lead levels in soils of similar origin and chemical characteristics as the soils in the immediate area of the facility. Using the U.S. Department of Agriculture's Soil Conservation Service classification system, it should be possible to identify similar soils and corresponding levels of naturally-occurring lead that could establish background levels. One publication (Connor, J., et. al., 1975) reports average lead concentrations of 30 mg/kg or less in surficial soils across the United States.

Attached for your information are comments marked on a copy of the Hickok report by Lisa Ratcliff or OSW's Technical Assessment Branch, as well as a fact sheet on lead prepared by the Office of Waste Programs Enforcement (for internal EPA use only). These materials summarize the Agency's current recommendations on the effects of exposure to lead and cadmium.

The Surface Impoundment Clean Closure Guidance Manual that was provided to your staff on October 12, 1987, for review, provides additional information on adjusting soil levels to account for certain site-specific factors. Although this guidance has not been cleared through the Agency review process, you can use the information contained in Chapters 4 and 5 of the October 12, 1987, draft until such time that the final guidance manual is available. These chapters provide information on the removal of wastes, contaminated soils, ground water, and other materials, and on follow-up monitoring and sampling to ensure that the cleanup levels have been met. If there are any further questions on clean closure, please contact Jim Bachmaier of the Land Disposal Branch at FTS 475-8859. Any questions regarding toxicity studies should be directed to Lisa Ratcliff of the Technical Assessment Branch at FTS 382-4781.

Attachments

cc: Joseph Carra
Robert Tonetti
Alessi Otte
James Bachmaier
Lisa Ratcliff

References:

Barth, S., et. al., 1984. Soil Sampling Quality Assurance User's Guide- (EPA/600/4-84/043) USEPA-Las vegas, Nevada (NTIS: PB 84-198-621)

Connor, J., et. al., 1975. Background Geochemistry of Some Rocks, Soils, Plants, and Vegetables in the Conterminous United States. (Geological Survey Professional Paper 574-F), U.S. Government Printing Office, Washington, D.C.

Mason, B.J., 1983. Protocol for Soil Sampling: Techniques and Strategies. (EPA/600/54/83/020) USEPA - Las Vegas, Nevada (NTIS: PB 83-206-979)

RCRA/SUPERFUND HOTLINE MONTHLY SUMMARY

APRIL 88

3. Post Closure Plans for Hazardous Waste Tanks

According to Section 264.197(c) an owner or operator of a tank system that does not have secondary containment meeting the requirements of Section 264.193(b) through (f) and is not exempt from the secondary containment requirements in accordance with Section 264.193(g), must have a contingent closure and post-closure plan that meets all closure, post-closure and financial responsibility requirements under Subparts G and H of Part 264. If the facility's permit for an underground tank system specifically states that no post-closure care is required, must a contingent post-closure plan still be prepared and submitted as required by Section 264.197(c)?

No, the facility's permit would shield the owner or operator from the requirement to prepare and submit a contingent post-closure plan. According to Section 270.4(a), compliance with a RCRA permit during its term generally constitutes compliance for purposes of enforcement with Subtitle C of RCRA. However, the facility would also be required to clean close. Alternatively, the Director (in either the Regional Office or the State, as appropriate) could modify the permit under Section 270.41 to require post-closure care and the submission of post-closure plans for cause, such as new information or new regulations. For instance, if the permit was issued before the hazardous waste tank regulations were revised to require post-closure plans (July 14, 1986) and the tank system cannot be clean closed, the Director may modify the permit to require post-closure care as required by Section 264.197(b).

Source: Chester Oszman (202) 382-4498
Research: Joe Nixon

9476.1988(03a)

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

MAY 27 1988

OFFICE OF
SOLID WASTE AND EMERGENCY RESPON

MEMORANDUM

SUBJECT: Interpretation of the Use of Soil Background Levels as Clean Closure Standards

FROM: Sylvia K. Lowrance, Director
Office of Solid Waste (WH-562)

TO: William Muno, Acting Associate Director
Waste Management Division, Region V (5HS-13)

The purpose of this memorandum is to provide an interpretation, as requested by you in your May 9, 1988 memorandum, on the use of soil background levels as clean closure standards under RCRA. Please note that we have recently responded to a similar request from Region VII. The attached memorandum from Jeff Denit to David Wagoner dated March 2, 1988 presents our position on when soil background levels should be used as clean closure standards. This interpretation is based on previous discussions on this topic included in the preamble to the March 19, 1987 final regulation (conforming 265.228(a) to 264.228(a)) and in the subsequent notice of clarification to the final regulation (March 28, 1988).

The March 19 preamble states that exposure levels, or clean closure levels, must be based on Agency-recommended exposure levels or factors that have undergone peer review by the Agency. If no Agency-recommended exposure limit exists for a specific hazardous constituent, the clean closure level must be based on either a background level or an exposure level submitted by the owner or operator based on toxicity data of sufficient quality for the Agency to determine the environmental and health effects of the constituent.

In response to the issues raised in your memorandum regarding the Burnham Corporation foundry in Zanesville, Ohio, I want to emphasize two points raised in the March 2 memorandum. First, the toxicity data for lead and cadmium are still being reviewed by the Office of Research and Development. However, we expect a verification of the cadmium reference dose (RfD = 0.0005 mg/kg/day) by the RfD Workgroup in the near future. As a result, I would continue to recommend that the soil clean closure level for lead

be based on background soil levels and the level of 9 mg/kg be used as the clean closure level for cadmium. Also, the March 2 memorandum states that two approaches can be used to determine background levels for lead; either by taking soil samples at uncontaminated areas of the facility or by using published literature data on lead levels in similar soils. It should be noted that background soil samples should be taken from an area(s) that has not been affected by routine operations of the unit, by accidental or emergency incidents, or by other operations at the facility. Your statement describing the selection of background samples appears to fulfill this requirement.

If you have any questions regarding the above comments and recommendations or require further assistance, please feel free to contact Mark Salee of my staff at (FTS) 382-4755.

Attachment

cc: Regional Division Directors
Jeff Denit, OSW
Bruce Weddle, PSPD
Joe Carra, WMD
Dev Barnes, CAD

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

9476.1988(04)

MAY 31 1988

MEMORANDUM

SUBJECT: Guidance on Deadlines Applicable to Proposed Delay of Closure Regulation

FROM: Sylvia K. Lowrance, Director
Office of Solid Waste

TO: Hazardous Waste Regional Division Directors
Regions I-X

Attached you will find a copy of the "Delay of Closure" regulation, to be published in the Federal Register in about two weeks. Many questions have been received, both from the Regions as well as industry, on how this proposed rule might affect facilities which will cease the receipt of hazardous wastes to comply with the November 8, 1988 statutory requirement for retrofitting of surface impoundments.

The purpose of this memorandum is to provide guidance on these issues, particularly the timing for closure plan submittals and approvals in light of the proposed Delay of Closure regulation.

Statutory and Regulatory Requirements

According to statute, interim status surface impoundments that have not been retrofitted or have not received a retrofit waiver must cease the receipt of hazardous waste by November 8, 1988. By current Federal regulation the final receipt of hazardous waste triggers initiation of the closure process for the unit (40 CFR 264/265.113). Furthermore, under current regulations, a facility owner/operator without an approved closure plan who intends to close an interim status surface impoundment rather than retrofit must submit a closure plan to the Regional Administrator by no later than June 13, 1988 (180 days before the "expected date" of closure - which is December 8, 1988, i.e., 30 days after the last receipt of hazardous waste). See 40 C.F.R. §265.112(d)(1) and (2). An owner/operator with an approved closure plan who intends to close a permitted or an interim status surface impoundment must notify the Regional Administrator 60 days prior to the time closure is expected to begin. Since the "expected date" of closure must be no later than December 8, 1988, notification must occur by October 10, 1988. See §§264.112(d)(1) and (2) and 265.112(d)(1) and (2).

These requirements and timeframes are more fully described in OSWER Policy Directive #9484.00-5-a, October 15, 1987. These requirements are currently unaffected by the proposed Delay of Closure rule, since the existing regulations remain in effect until the proposal is finalized and adopted in authorized States. However, once finalized, this rule would allow landfills, and in more limited circumstances, surface impoundments to postpone closure to receive non-hazardous wastes after the November 8, 1988 retrofitting deadline. Some owner/operators of these types of units may wish to avail themselves of this alternative. However, such units are still subject to all closure plan submission deadlines.

Synopsis of Proposed Regulation

Briefly, the proposed rule allows owner/operators to delay closure of surface impoundments and landfills to receive non-hazardous waste after they cease receiving hazardous waste. (Units which have lost interim status are ineligible.) The rule contains general requirements imposing a set of conditions that are applicable to all owners/operators who wish to defer the closure process, regardless of the unit type. These general requirements are basically the same for permitted and interim status facilities. There is also an additional set of requirements for surface impoundments that do not satisfy the minimum technology requirements. The proposed regulation is not a means for facilities to circumvent closure; rather, it is designed to allow units with existing capacity which are operating in an environmentally protective manner to use their remaining disposal capacity. The proposed requirements are stringent and we believe that most existing, non-MTR surface impoundments will find it difficult to meet the criteria to delay closure to receive only non-hazardous wastes. We emphasize that all units that meet the criteria for delaying closure will remain subject to Subtitle C requirements, including final closure requirements when they stop receiving non-hazardous waste.

General Requirements

All units wishing to delay closure must obtain a Subtitle C permit and comply with applicable permit requirements. As part of the permit modification or Part B permit application, the owner/operator must include demonstrations showing that the unit has the existing design capacity to manage non-hazardous wastes and that the non-hazardous wastes are not incompatible with any remaining wastes in the unit. The permit modification or the Part B permit application must include revised facility plans, including waste analysis, ground-water monitoring, and closure and post-closure plans, and, if necessary, closure and post-closure cost estimates and financial assurance to reflect changes associated with operating the unit to receive only non-hazardous wastes.

Specific Requirements for Surface Impoundments

An additional set of requirements will apply to surface impoundments that do not satisfy the HSWA double liner and leachate collection system requirements or have not received a waiver from these requirements. For these units, we are proposing a combination of source control, accelerated corrective measures, and limitations on continued operations following a detected release to ground water. (See attachment). At the time the decision is made to delay closure, owner/operators must choose one of three alternatives: (1) to leave the wastes in place (i.e., disposal impoundments); (2) to remove the waste from the impoundment; or (3) to remove sludges and flush the impoundment with non-hazardous wastes. Alternative 1 is available only to impoundments which have not had a release at the time of conversion to receipt of only non-hazardous waste. If such an impoundment begins releasing, closure is triggered. If a unit that has undergone waste removal is leaking at the time it converts to receipt of non-hazardous waste, this receipt may not begin until corrective measures are implemented. On the other hand, if a unit that has undergone waste removal begins leaking after the conversion to the receipt of non-hazardous waste, corrective action must be implemented within one year of this conversion. Any impoundment that has converted to receiving only non-hazardous waste must show substantial progress in meeting cleanup standards. If neither of these requirements are met, the unit must close.

Regional Procedures

As noted above, we believe that the proposed rule establishes stringent requirements for those wishing to remain open to receive non-hazardous waste. Accordingly, we expect that while many owners and operators may be initially interested in exploring this regulatory option if finalized and adopted in authorized States, relatively few units will be able to meet the regulatory requirements. In light of the upcoming November 8, 1988 deadline we offer the following implementation questions and answers concerning closure plan review and approval procedures to assist you in responding to inquiries from interested owners and operators:

Q. Can a unit postpone submission of the closure plan on the grounds that the owner/operator intends to delay closure?

A. No. Units remain subject to the closure plan submission deadlines despite this proposal. Enforcement authorities should be used if necessary to ensure that closure plans are submitted. (OSWER Policy Direction No. 9900.0-1A, Oct. 1, 1987).

Q. May interim status units which cease receiving hazardous waste on November 8, 1988 continue to receive non-hazardous wastes under the current regulations?

A. Yes, in certain cases. Interim status units are not required to initiate closure until the closure plan is approved. Units awaiting closure plan approval may continue to receive non-hazardous waste. Further, units may continue to receive non-hazardous wastes during the closure period provided the receipt of non-hazardous waste does not impede the timely and effective closure of the unit. The timeframes for closure are set forth in 40 CFR 265.113. (See OSWER Policy Directive No. 9484.00-5-a Oct. 15, 1987)

Q. If a large number of closure plans are received in June 1988, how should Regions and States set priorities?

A. The regulations set a 180-day timeframe for review of closure plans. However, we recognize that it will be difficult to meet these timeframes if a large number of closure plans are submitted on June 13. The RIP provides guidance on establishing priorities for review of closure plans. Environmentally significant facilities should be addressed first.

Q. Which units are affected by this proposal?

A. The option would be available only to permitted and interim status facilities which submit a Part B application or amended application. Facilities that have lost interim status (including LOIS facilities) would not be eligible to delay closure.

Q. Will the rule be effective in authorized States?

A. Authorized States will have the discretion on whether or not to adopt the rule since the rule is less stringent than the 1986 amendments to the closure regulations. (Please note that authorized States are required to adopt conforming changes to implement the May 1986 changes no later than January 1, 1989. See 53 FR 7740, March 10, 1988). The final rule will be effective in unauthorized States.

Q. What affect does the proposal have on ongoing enforcement actions?

A. None. Enforcement actions underway will not be affected by the regulation when it is finalized; the regulation will not be retroactive.

We will keep you updated on the rule development and schedule. If you have any further questions, please contact Sharon Frey at FTS 475-6725.

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

9476.1989(01)

MAY 16 1989

MEMORANDUM

SUBJECT: Final Rule for Delay of Closure Period for Hazardous Waste Management Facilities

FROM: Sylvia K. Lowrance, Director /S/
Office of Solid Waste

TO: Jonathan Z. Cannon
Acting Assistant Administrator

Attached is a final rule that amends portions of the closure requirements applicable to owners and operators of hazardous waste land disposal facilities. This rule is the subject of a pending lawsuit brought by Union Carbide and the Chemical Manufacturers Association.

Under existing rules, hazardous waste management units must initiate closure after final receipt of hazardous waste. The attached regulations allow, under limited circumstances, a landfill, surface impoundment, or land treatment unit to remain open after the final receipt of hazardous waste in order to receive non-hazardous wastes in that unit. This rule details the circumstances under which a unit may remain open to receive non-hazardous wastes and describes the specific conditions applicable to such units.

This rule must undergo a second Red Border review and subsequent OMB review due to changes made in the rule following initial clearances. I request that this rule be handled expeditiously to avoid the need for the Agency to defend the existing (rather than amended) regulatory requirements. The Steering Committe has approved a 7 calendar day Red Border review period.

Attachments

Dupl.

9476.1989(02)

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

AUG 22 1989

OFFICE OF
SOLID WASTE AND EMERGENCY RESPO

MEMORANDUM

SUBJECT: Correction to the Delay of Closure Rule Preamble Language

FROM: Joseph S. Carra, Director
Permits and State Programs Division (OS-340)

TO: Permit Section Chiefs
Regions I-X

This memorandum clarifies a discrepancy in the Delay of Closure final rule published in the Federal Register of August 14, 1989 (54 FR 33376). The discrepancy involves the time frame for submission of permit modification requests for owners and operators of permitted facilities that wish to receive non-hazardous wastes after the final receipt of hazardous wastes.

The rule language at §264.113(d)(4) correctly stated that the request must be submitted 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 wastes at the unit or no later than 90 days after the effective date of the rule in the state in which the unit is located, whichever is later. This language is found at 54 FR 33395.

The preamble language incorrectly stated that the request must be submitted at least 120 days prior to final receipt of hazardous wastes, or within 90 days of publication of the Federal Register notice. This language is found at 54 FR 33377.

We do not intend at this time to publish a Federal Register correction notice. If you have any questions about this, please call Barbara Foster at FTS 382-4751.

9476.1989(03)

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

SEP 1 [redacted]

OFFICE OF
SOLID WASTE AND EMERGENCY RESPONSE

MEMORANDUM

TO: Terry Anderson, Chief
Wyoming/South Dakota Section
EPA Region VIII

FROM: Frank McAlister, Chief
Permits Policy Section
Office of Solid Waste

Barbara Foster, Acting Chief
Closure and Financial Responsibility Section
Office of Solid Waste

SUBJECT: Public Participation Requirements for Closure Plan Approval

This memorandum responds to your letter of August 7, 1989 in which you requested clarification of the public participation requirements of the closure plan approval process. You questioned whether public notification is required when the Agency modifies an approved closure plan for an interim status facility. The specific case you discussed involves several changes to the liner system of a landfill that will be used for closure. We have examined this request and discussed it with the Office of General Counsel. Our response is as follows.

The regulations governing amendment of interim status closure plans are found at 40 CFR 265.112. Section 265.112(c)(3) states that if an amendment to an approved closure plan is a Class 2 or 3 modification according to the criteria in § 270.42, the modification to the closure plan must be approved according to the procedures in § 265.112(d)(4). Based on your description, we believe that the modifications to the closure plan would likely be classified as Class 3, and that the procedures in § 265.112(d)(4) must be followed. Under these procedures, the Regional Administrator will provide the owner and the public, though a newspaper notice, the opportunity to submit written comments on the plan and request modifications to the plan no later than 30 days from the date of the notice. He will also, in response to a request from the public or at his own discretion, hold a public hearing whenever such a hearing might clarify one or more issues concerning a closure plan. The Regional

Administrator will give public notice of the hearing at least 30 days before it occurs. The amendment cannot be approved until these procedures have been followed.

The specific case you discussed involves the closure of five surface impoundments. The closure plan discusses the construction of a landfill on the location of two of the five closing surface impoundments. The Region should also consider whether the creation of this new landfill constitutes a change in interim status under § 270.72 and therefore requires submission of a revised Part A application and EPA approval.

If a public hearing is held, it may be held concurrently with one being held by the Wyoming Department of Environmental Quality (WDEQ), provided that the Federal procedural requirements are satisfied. In addition, notice should be given that there is a separate Federal action.

We hope that this memorandum answers your questions on this matter. If you have any further questions please call Wayne Roepe at FTS 475-7245.

cc: Denise Keehner
Wayne Roepe
Margaret Schneider, OGC
Nandam Kenkeremath, OGC
Pat Godsil, Region VIII
David Christenson, Region VIII

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

9476.1991(01)

MAY 2 - 1991

MEMORANDUM

SUBJECT: Closure Standards for Hazardous Waste Land Treatment Units

FROM: Devereaux Barnes, Director
Permits and State Programs Division
Office of Solid Waste (OS-340)

TO: Doug McCurry, Chief
Waste Engineering Section
RCRA Branch, Region IV

You previously raised a series of questions regarding the closure of hazardous waste land treatment units to my staff and to the ORD laboratory in Ada (RSKERL-Ada). These are important questions since many land treatment facilities are beginning to close in response to the November 8, 1990 prohibition of the land disposal of the petroleum refining wastes (K048-52). After consulting with RSKERL-ADA, as well as internally, we are providing you with the answers you sought. It is important to keep in mind that of the four major types of land disposal units, the land treatment unit is the most difficult for which to define generic technical closure procedures. This is due to the fact that the characteristics of the soils affecting the closure are by nature site-specific, and that the wastes are to be transformed, degraded, or immobilized during the closure process by the soil, biologic, and climatic conditions unique to each site. With this constraint in mind, we have addressed your questions as specifically as possible:

1. Q. Is soil sampling required during closure/post closure?

   A. Section 265.280(d)(1) requires that during the closure period the owner or operator of an interim status land treatment facility continue unsaturated zone monitoring in a manner and frequency specified in the closure plan, except that soil [illegible] monitoring may be terminated 90 days [illegible] to the 90 days after the last application of waste to the

90 days after the last application of waste to the treatment zone. Unsaturated zone monitoring consists of both soil-pore liquid monitoring and analysis of soil cores (see Sections 265.278(a) and (b)).

In addition, Section 265.280(f) requires that during the post-closure care period the owner or operator of an interim status land treatment unit must continue soil-core monitoring [soil sampling] in the manner and frequency specified in the post-closure plan.

Similarly, permitted units must continue unsaturated zone monitoring during closure and post-closure care periods, as specified in the permit (see Sections 264.280(a)(7) and (c)(7)).

Given the language of Sections 264.280 and 265.280, we expect that in most cases unsaturated zone monitoring (particularly soil-core) will be necessary during the closure and post-closure care periods of a land treatment unit. There are, however, limited instances where soil-core monitoring may not be required by the closure and/or post-closure plan. For example, in the case where the treatment zone is removed as a part of clean closure, soil-core monitoring may be suspended at the completion of the closure period. (See Sections 264.112(e); 264.280(c); 265.280(d) and (f)(i)).

2. Q. At what intervals and for how long?

A. General guidance pertaining to soil sampling intervals and duration during land treatment site closure/post-closure is provided in several land treatment guidance documents:

Guidance Manual on Hazardous Waste Land Treatment Closure/Post-Closure (OSWER Directive 9476.00-9)

Permit Guidance Manual on Unsaturated Zone Monitoring for Hazardous Waste Land Treatment Units (EPA/530-SW-86-040)

RCRA Guidance Document: Land Treatment (NTIS-PB-155065)

Permit Guidance Manual on Hazardous Waste Land Treatment Demonstrations (July, 1986)

Although the guidance provides a general framework for soil sampling, the geographic, spatial, and temporal variabilities between different land treatment units (as well as within any individual unit) necessitate that

site-specific considerations be evaluated when establishing the sampling intervals and duration required during closure/post closure of a given land treatment unit.

Data from the reconnaissance survey is used as the primary basis for establishing site-specific sampling requirements. If this survey reveals that the facility has been well managed, with no apparent significant buildup or downward migration of hazardous constituents, the general guidance provided in the above-referenced guidance documents can be used to establish soil sampling intervals and duration. We recommended that, at a minimum, samples should be collected quarterly during the closure period and during the first year of the post-closure period. Periods between sampling events may be gradually extended after the first year of post-closure.

If data from the reconnaissance survey reveals an apparent significant buildup and/or downward migration of hazardous constituents, the general guidance alone will not be sufficient to establish soil sampling intervals and duration. Under such a scenario, soil pore liquid samples should continue to be collected as recommended in the Permit Guidance Manual on Unsaturated Zone Monitoring for Hazardous Waste Land Treatment Units (EPA/530-SW-86-040). The soil pore liquid monitoring should continue until there is no longer potential for vertical migration of fast-moving hazardous constituents from the waste-soil matrix. Additionally, it is important to collect soil cores downward through the treatment zone into the unsaturated zone for analysis at selected intervals along the core in order to determine the extent of degradation and immobilization within the treatment zone, as well as the migration of less mobile waste constituents into the unsaturated zone. Under this scenario, actual degradation rate data under the closure conditions may be deemed important. If such is the case, sampling intervals should be shorter than specified in the guidance.

Two recent land treatment research studies, sponsored by RSKERL-Ada, provide useful guidance because they involve a determination of degradation rates under field conditions. These studies used the following sampling schedule: 0, 2, 4, and 8 weeks, and continued at 4-week intervals throughout the study. Under a closure scenario, the sampling schedule should use these same intervals, or other type of appropriate sampling interval, until a minimum of 6 data points are obtained or until an asymptotic constituent level is approached. Any time degradation rates are to be calculated, a

minimum of 3 replicate sample analyses are recommended for each sampling date in order to establish a 95% confidence interval for the degradation rates and half-lives of the waste and its constituents. After you determine that degradation is proceeding at an acceptable rate and that downward migration is not occurring, quarterly sampling (as recommended in the general guidance) can be initiated.

3. Q. Does EPA recognize approved methods for determining degradation rates?

A. There are no EPA-approved methods for determining degradation rates, although methods for determining degradation rates are discussed in the Permit Guidance Manual on Hazardous Waste Land Treatment Demonstrations (LTD). These are based on methods used in the land treatment research program at RSKERL-Ada and documented in the lab's publications. (See Attachment)

The need and approach for determining degradation rates will depend to a great degree on the results of the reconnaissance survey discussed under Question 2. Under the well-managed scenario, we can see little need to undertake this task unless the final loading rate is significantly greater than that used during normal operation. Under the poorly managed scenario, we would consider this task a necessity. The actual approach for determining degradation rates would vary somewhat depending on the degree of the problem as well as waste and site-specific characteristics. In addition to the treatability study approach discussed in the LTD Guidance Manual, the RSKERL-Ada publication Mobility and Degradation of Residues at Hazardous Waste Land Treatment Sites at Closure (See Attachment) specifically provides information pertaining to the quantitative evaluation of mobility and persistence of organic and inorganic waste constituents which have accumulated in soil treatment systems under various closure scenarios.

4. Q. Can continued operations under closure last indefinitely? At what concentration is closure complete? At what concentration, degradation rate, or point in time does operational closure cease and a RCRA cap become a requirement?

A. As Sections 264.113 and 265.113 layout, closure is expected to be completed within 180 days after receiving the final volume of hazardous waste, but a longer period may be approved if the owner or operator can demonstrate that closure activities will, necessarily, take longer than 180 days (see Sections 264.113(b)(1)(i) and

265.113(b)(1)(i)). In the case of a land treatment unit, more than 180 days may be required to maximize degradation, transformation, or immobilization of hazardous constituents within the treatment zone. This period cannot be defined by regulation in that each site will require a time period specific to that site. The duration of the closure period is primarily dependent on the waste loading rate at closure as well as the potential waste degradation rate. Each owner or operator should, however, be able to estimate that time in advance, based on the treatment data already established during operation. For the large majority of well-managed land treatment units, the duration of the closure period will vary between 90 and 360 days.

Because land treatment closure is a continuing process rather than a set of distinct engineering procedures (as in landfill closure), the concentrations of hazardous constituents remaining in the treatment zone after closure may vary and will continue to change during the post-closure care period. Post-closure care at a land treatment facility is different from practices at other closed or closing land disposal facilities in that active management will frequently continue to enhance degradation and transformation and sustain immobilization. Complete degradation of organics to background levels before closure has been completed is not necessarily required. Concentrations of organics should, however, be to the point that the application of a final cover and the reduced level of active site management will prevent the post-closure escape of hazardous constituents from the treatment zone. Similarly inorganics should be immobilized during closure to provide the same level of protection over the long term.

In the case where closure activities fail to immobilize or degrade hazardous constituents, an impermeable cap may be required or clean closure may be appropriate. (Changes to the closure plan will require approval by the Regional Administrator (Sections 264.112(c) and 265.112(c)). The determination of the rate of immobilization and degradation is site specific; however, escape of constituents from the treatment zone at concentrations above health-based levels indicates that the rate of immobilization or degradation is unacceptable.

5. Q. What closure standards are required where migration of hazardous constituents has occurred?

A. The general closure performance standard remains the same

whether or not migration of hazardous constituents has occurred. That is, the owner or operator must close the facility in a manner that minimizes the need for further maintenance; and that controls, minimizes, or eliminates to the extent necessary to protect human health and the environment, the post-closure escape of hazardous waste, hazardous constituents, leachate, contaminated run-off, or hazardous waste decomposition products to the ground or surface water or to the atmosphere. (Sections 264.111 and 265.111).

Where hazardous constituents have migrated beyond the treatment zone above health-based levels, successful immobilization, degradation, or transformation during closure may be subject to question. In this case additional closure and post-closure activities may be required that go beyond disking, adding soil amendments, and installation of a vegetative cover. Obviously, the additional activities will vary from site to site; however, some of these activities may include, but are not limited to, removal of some or all of the treatment zone and installation of a low permeability cap. In addition, cleanup of the contaminated media, e.g., ground-water removal and treatment, may be appropriate. Cleanup of these media is a corrective action decision.

Whatever program of additional activities is selected, it must be consistent with the goals specified in the general closure performance standard.

6. Q. What closure standards are required where ground-water contamination exists but where levels of contaminants are within the ACL's established by the permit?

A. At units where ground-water contamination exists but where that contamination is below the established ACL, corrective action under Section 264.100 may not be required. The decision as to whether ground-water cleanup is required is site-specific, generally based on the principles described in EPA's proposed corrective action rule (55 FR 30798). At the same time, the closure standard to be applied remains the same (see previous discussion).

Furthermore, having an ACL does not negate the treatment demonstration requirement of Section 264.272. If it is found during closure that constituents are migrating below the treatment zone above health-based levels, additional steps may be required, such as treatment zone removal or installation of a low permeability final cover. The determination of what steps are required will depend primarily upon whether the hazardous constituents

The owner or operator should be aware that the post-closure care period cannot be terminated until the owner or operator successfully demonstrates that all the ground water at the site is safe for all potential receptors (Alternate Concentration Limit Guidance, EPA/530-SW-87-017).

7. Q. At what point in the life of the unit do closure activities become in-situ remediation under corrective action? At what concentrations and frequencies for soil, pore-water, surface water and ground water? What permit modifications are required?

A. Most actions taken to remedy migration of constituents of concern outside the treatment zone (into ground water, surface water, or soil adjacent to the treatment zone) at closing units can be accomplished as a part of closure.

At a permitted facility, methods for preventing such migration should be outlined in the permit (see Sections 264.270-264.283). If, during closure, migratory constituent concentrations are found to exceed levels specified in the permit, a corrective action program must be initiated (see Sections 264.90-264.101). The addition of a corrective action program requires a permittee to initiate a Class 3 permit modification, although some limited remediation activities, such as a change in the number of ground-water monitoring wells at a regulated unit, may require only a Class 2 permit modification (see Appendix I to Section 270.42). Such modifications may receive temporary authorization provided they meet the test of Section 270.42(e)(2). (Of course, Class 2 or 3 modifications would not be used in states authorized for ground-water corrective action, but not authorized for EPA's new permit modification procedures. In authorized States, permit modifications must be made according to state modification procedures.) In the alternative, the Agency may take unilateral action to modify a permit to require corrective action (see Section 270.41).

At an interim status facility, certain requirements designed to prevent migration of constituents of concern are specified in Sections 265.270-265.282 and 265.90-265.94. Unlike permitted facilities, at present there are no regulatory provisions requiring corrective action when migratory constituent concentrations exceed regulatory levels of concern. Instead, the Agency may compel corrective action at an interim status facility through the issuance of an administrative order pursuant to RCRA, Section 3008(h). In addition, as an alternative, the Agency may expedite the issuance of a

permit to an interim status facility, with the result that the corrective action provisions referenced above would be applicable.

Completion of remedial activities may exceed 180 days. As mentioned previously, this is a legitimate basis for granting an extension of the closure period. In addition, long-term remediation activities at regulated units, such as ground-water counterpumping, may be performed during the post-closure care period.

8. Q. At what point in time, and to what standards does a facility certify closure?

A. This question is directly related to question 4 in your letter. You will note in Sections 264.115 and 265.115 that closure is to be certified when the unit has been closed in accordance with the specifications in the approved closure plan. Closure will be complete when closure activities have immobilized, degraded, or transformed hazardous constituents in the treatment zone to levels agreed upon in the closure plan and when a vegetative cover has been established. In the case where the treatment zone is ineffective, closure may be certified after the treatment zone is removed or after a low permeability cap is installed. Other long-term activities such as ground-water remediation will normally be completed during the post-closure care period and after closure certification.

We hope these responses are useful. Please feel free to call Chris Rhyne (FTS 382-4695) to discuss other technical aspects of land treatment closure.

Attachment

cc: Sylvia Lowrance, OSW
RCRA Branch Chiefs, Regions I-X
Nancy Bethune, Region IV
John Matthews, RSKERL-Ada
Scott Huling, RSKERL-Ada
Tom Beisswenger, OGC
Susan Bromm, RED, OWPE
Chris Rhyne, AB, PSPD, OSW
Barbara Foster, PB, PSPD, OSW
Dave Fagan, CAB, PSPD, OSW

2. TSDF Closure/Post-Closure After Loss of Interim Status

Pursuant to 40 CFR §270.73(c)(2), a Subtitle C land disposal facility lost its interim status due to the owner/operator's failure to submit certification that the facility was in compliance with all applicable groundwater monitoring and financial responsibility requirements. The owner/operator has been told by his enforcement agency that he is required to close his facility in accordance with 40 CFR Part 265, Subpart G closure standards. If the facility has lost its interim status to operate, why should the owner/operator be required to comply with interim status standards to close the facility?

According to 40 CFR §265.1(b), the standards of Part 265 are applicable to interim status facilities until Part 265 closure and post-closure responsibilities are fulfilled. As EPA explained in the preamble to its November 21, 1984, amendments to the applicability sections of Part 265 (49 FR 46094), EPA has statutory authority under §3004 to enforce the Part 265 standards at facilities which no longer have interim status to operate. The preamble explains that such facilities must close in accordance with 40 CFR Part 265, Subpart G.

The September 25, 1985, Federal Register (50 FR 38949), specifically indicates that compliance with all applicable closure and post-closure requirements specified in 40 CFR 265, Subpart G is required when a facility has lost its interim status due to the owner/operator's failure to submit certification of compliance with all applicable groundwater monitoring and financial requirements (40 CFR §270.73(c)(2)) to the Regional Administrator. Such a facility owner/operator must, in accordance with 40 CFR §§265.112(d)(3)(i) and 265.118(e)(1), submit a closure and post-closure plan to the Regional Administrator no later than 15 days after termination of interim status.

Financial Responsibility Requirements (Subpart H)

9477 – FINANCIAL RESPONSIBILITY REQUIREMENTS

Parts 264 & 265 Subpart H

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

NOV 23 1987

OFFICE OF
SOLID WASTE AND EMERGENCY RESPONS

MEMORANDUM

SUBJECT: Risk Retention Groups and Financial Assurance

FROM: Marcia E. Williams, Director
Office of Solid Waste (~~WH-562~~)

TO: Waste Management Division Directors, Regions I-X

Attached for your information is a letter from Bruce Weddle, Director of the Permits and State Programs Division, to Harry Shuford of the Environmental Protection Insurance Company confirming that risk retention groups may qualify to issue liability insurance policies under RCRA regulations. As the letter states, policies issued by risk retention groups would satisfy the RCRA requirements if the group was licensed to transact business in one or more states, and if the policy otherwise met the RCRA financial assurance requirements.

Because the question of whether policies issued by risk retention groups can be used to satisfy RCRA financial assurance requirements has been raised in a number of states, I ask that you forward this letter to the RCRA financial assurance contacts in each of your states.

If you have any questions on the letter please contact Matt Hale (382-4740) or Margaret Schneider (382-4696) of my staff.

Attachment

cc: Gene Lucero

9477.00-5

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

NOV 10 1987

OFFICE OF
SOLID WASTE AND EMERGENCY RESPONSE

Harry Shuford
Environmental Protection Insurance Company
220 E. 42nd Street, Suite 500
New York, NY 10017

Dear Mr. Shuford:

I am writing you, at Robert F. Schiff's request, in response to Mr. Schiff's letter of November 2, 1987 to the EPA Office of Solid Waste. In his inquiry, Mr. Schiff sought our view of whether the Resource Conservation and Recovery Act (RCRA) requirements that hazardous waste management facilities demonstrate financial assurance for liability can be satisfied by a policy issued by a risk retention group.

The RCRA regulations at 40 CFR Subpart H require, in part, that to satisfy the financial assurance requirements, an insurance policy must be issued by an insurer licensed to transact business in one or more states. (40 CFR 264.147(a)(1)(ii), (b)(1)(ii) and 265.147(a)(1)(ii), (b)(1)(ii)). A risk retention group which meets the requirements of the Risk Retention Act of 1986 and which is licensed to transact the business of insurance in at least one state would satisfy this regulatory requirement. Your letter indicates that the Environmental Protection Insurance Company (EPIC) has met these conditions. Accordingly, policies issued by EPIC in conformance with all other requirements of Subpart H could be used to satisfy the Federal RCRA requirements for liability coverage, or the requirements of an authorized state that adopted the Federal regulatory language.

I should add, however, that compliance with Federal requirements may not be sufficient to fulfill state requirements. State RCRA requirements may be more stringent than the Federal requirements. In states authorized to

administer the RCRA program, therefore, state regulations must be examined to determine whether your specific mechanism satisfies the RCRA financial assurance requirements and is otherwise consistent with state law.

Sincerely,

Bruce R. Weddle
Director
Permits and State Division

cc: Robert F. Schiff
RCRA Waste Management Division Directors, Region I-X

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*ADMITTED TO MARYLAND BAR ONLY

November 2, 1987

VIA HAND DELIVERY

Mr. Matthew Hale
Chief, Permits Branch
Office of Solid Waste
Environmental Protection Agency
Room 2818 J, 401 M Street, S.W.
Washington, D.C. 20460

Re: Environmental Protection Insurance Company--Risk Retention Group ("EPIC")

Dear Mr. Hale:

Following our telephone discussion, I am writing to request your opinion that the Environmental Protection Insurance Company ("EPIC") qualifies under federal regulations to provide Resource Conservation and Recovery Act ("RCRA") insurance.

As you know, EPIC is in the final stages of raising the necessary capital to begin operations. In order to assure potential investors that an EPIC policy will allow them to satisfy state financial responsibility requirements, EPIC is now discussing those requirements with individual state environmental regulators. A concern sometimes raised in these discussions is whether EPA's regulations under RCRA can be satisfied by a policy issued by a risk retention group such as EPIC. Of particular relevance are the regulations located at 40 C.F.R. §§ 264.147(a)(1)(ii), (b)(1)(ii) and 265(a)(1)(ii), (b)(1)(ii).

EPIC is licensed as an insurance carrier in the state of Illinois. Pursuant to the Liability Risk Retention Act of 1986, it has filed as a risk retention group in all 50 states. EPIC intends to comply with all RCRA regulations for liability coverage.

Based on the foregoing, please inform us whether, in EPA's view, EPIC can provide RCRA insurance to hazardous waste facility owners and operators. We would appreciate your transmitting your response to the appropriate EPA Regional offices, and through them to state representatives.

Thank you for your prompt attention to this matter.

Sincerely,

Robert F. Schiff

PINK

11/23/87

OSWER DIRECTIVE # 9477.00-6

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

23 NOV 87

OFFICE OF
SOLID WASTE AND EMERGENCY RESPONSE

MEMORANDUM

SUBJECT: Guidance for Reviewing Exclusions for Pre-Existing Conditions in RCRA TSDF Insurance Policies

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

TO: Regional Waste Management Division Directors, Regions I-X

SUMMARY

Under 40 CFR Parts 264 and 265, Subpart H, owners and operators of RCRA treatment, storage and disposal facilities (TSDFs) may use insurance policies to meet RCRA requirements for financial assurance for third-party property and bodily injury damages. Insurance policy language generally begins with broad coverage for damages, which is modified through the use of inserted exclusions to limit the scope of the policy coverage. Because insurance is intended to cover only possible future events, policies typically have exclusions limiting the insurer's coverage of releases which occurred prior to the start of the policy. Such "pre-existing conditions" exclusions are acceptable provided that they do not so limit a policy that it no longer provides the coverage required by Subpart H. While the Agency recognizes that it is inappropriate to expect insurance to be provided to cover damage that is certain to occur or that has already occurred, it does expect policies to cover future conditions whose incidence is uncertain. This guidance describes acceptable pre-existing conditions exclusions based on the Agency's interpretation of the Subtitle C regulations.

BACKGROUND

Regulatory Provisions

On April 16, 1982 (47 FR 16554), EPA promulgated regulations to require owners and operators of TSDFs to provide financial assurance for third-party compensation for bodily injury and property damage caused by accidental occurrences arising from facility operations. Such damage should be "neither expected nor intended" by the owner or operator of the facility (40 CFR 264.141(g) and 265.141(g)).

While the regulation defines accidental occurrence and other key terms, it also provides that these definitions "are not intended to limit their meanings in a way that conflicts with general insurance industry usage," but

rather are intended to "be consistent with their common meanings within the insurance industry." Also, the definitions of bodily injury and property damage would "not include those liabilities which, consistent with standard industry practices, are excluded from coverage" (40 CFR 264.141 (g) and 265.141(g)).

Specific guidance on what constitutes industry practices was not deemed necessary in 1982. Of late, however, it has become difficult to define standard industry practice regarding exclusions. In response to court decisions that interpreted policy language in a manner that expanded the coverage intended by insurers, some insurers have tried to clarify the coverage by modifying their pre-existing conditions exclusions. A variety of such modified exclusions have been developed, some of which are inconsistent with the accidental occurrence definition in §264.141(g). This guidance is intended to assist in determining which exclusions are permissible under current regulations.

GUIDANCE

Acceptable Exclusions

The range of pre-existing conditions exclusions can be divided into broad and narrow exclusions. Broad exclusions are usually part of the basic policy language used by an insurer, while narrow exclusions are added to specific policies as endorsements to limit the scope of the basic policy for a particular insured. The Agency reviewed a variety of both types of exclusions and identified acceptable language for both. This guidance describes and provides examples of that language.

Broad Exclusions

Broad pre-existing conditions exclusions are "generic" exclusions applicable to all facilities covered by a particular type of policy. Such exclusions generally apply to a specific type of occurrence (e.g., a pollution incident known or expected by the insured or a release occurring prior to the policy's effective date) or a particular type of damage (e.g., contamination of ground water).

Permissible broad exclusions may allow the insurer to limit its liability for current and certain damages present at the start of the policy. Policies that make clear that pre-existing conditions (releases likely to result in damages) must be known or reasonably foreseeable to the owner/operator would be acceptable.

The Agency has determined that the following provide examples of acceptable broad pre-existing conditions exclusions:

> "Insurance does not apply where the insured knew or could have reasonably foreseen that <u>claims</u> would result."

> "Insurance will pay on behalf of the insured ... provided always that the claim is made during the policy period and that the insured as of the 'First Coverage Date' did not know or might not have reasonably foreseen that such a claim would result."
>
> "The policy will pay on behalf of the insured for damages caused by an occurrence ...," with occurrence defined as "a happening resulting in bodily injury or property damage neither expected nor intended from the standpoint of the insured."
>
> "The insurance does not apply to damages arising from any environmental impairment that was known or should have been known to the insured prior to the original policy inception date."
>
> "This insurance does not apply to 'bodily injury,' 'property damage' or 'environmental damage' expected or intended from the standpoint of the insured."
>
> "Insurance does not apply to damages from a release that the insured knew or could reasonably have known had occurred."

The language in these examples is specific enough to provide guidance to insurers and is consistent with the intent of the definition of accidental occurrence in its focus on whether damage, rather than a release, was expected or intended, or on whether the impairment was known or should have been known. These exclusions are also consistent with industry practice since they are now used by some insurers.

The following sample language is representative of unacceptable broad exclusions:

> "This insurance does not apply to releases either expected or intended by the insured."
>
> "This insurance does not apply to groundwater contamination."

The first example, by excluding a release "expected" by the insured, could severely limit coverage because any releases from hazardous waste facilities could be deemed "expected" by the very nature of the materials involved. The second example specifically excludes, in a blanket fashion, a particular type of damage and therefore would be inconsistent with Subtitle C regulations.

Narrow Exclusions

Narrow exclusions are coverage exclusions for damages related to a specific problem at a specific facility. Such exclusions may be written for a particular area of contamination (e.g., contamination from waste unit X) or for a particular type of damage at a specific facility (e.g., groundwater contamination at facility A). Narrow exclusions are generally added, in an

accompanying endorsement, to the basic policy's broad exclusions and are intended to tailor the policy to a specific facility.

Narrow exclusions should be specific enough to prevent excessive limitations of policy coverage. A narrow exclusion should be described so that there appears to be a basis for the exclusion (i.e., damage must be expected from a known, actual release). To ensure that such a basis exists, narrow exclusions should refer to a facility assessment[1] that identifies the threatening contamination. An acceptable exclusion should include a description of the media, type of contamination, and specific location involved. Thus, such exclusions should specifically indicate a current and reasonable belief that damage has occurred or is likely to occur.

Given this need for specificity, the Agency has identified the following sample language as representative of acceptable narrow exclusions:

> "All claims and costs resulting from ...
>
> a) groundwater contamination as identified in the facility assessment dated XX/XX/87 ...
>
> [or]
>
> b) groundwater contamination by light and gross hydrocarbons as identified in the facility assessment dated XX/XX/87 ...
>
> [or]
>
> c) contamination arising from a release at unit A and identified in the facility assessment dated XX/XX/87 ...
>
> at facility XYZ in Smalltown, Any State, are not covered by this policy."

These types of exclusions specifically and clearly identify particular known existing problems constituting current and certain -- i.e., known or expected -- damages that an insurer should not be required to cover.

Less specific language, or language excluding certain damages from coverage due to facility conditions causing insurers to suspect, rather than know, there has been or will be a release, are unacceptable. There should be clear evidence that a pre-existing condition in fact exists that has a reasonable likelihood of resulting in damage. The Agency reviewed, and found

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[1] A facility assessment is <u>similar to</u> a CERCLA preliminary assessment or the preliminary review portion of the RCRA facility assessment. It is generally based on a search of the files of the facility and regulating agencies, and a windshield site review. The format for assessments will vary, and we are not suggesting that any specific format is required. It is also not necessary to review these assessments.

unacceptable, the following language:

> "All claims and costs resulting from ...
>
> a) groundwater contamination ...
>
> [or]
>
> b) groundwater contamination by light and gross hydrocarbons ...
>
> at facility XYZ in Smalltown, Any State, are not covered by this policy."

These exclusions are insufficiently narrow to justify an exclusion of a pre-existing condition. They could be interpreted to exclude all groundwater damage, even that initially occurring during the policy period. The coverage provided would thus be too limited to meet the §§264.141(g) and 265.141(g) definition of accidental occurrence.

Implementation

Current regulations (40 CFR 264.147 and 265.147) require the owner or operator of a RCRA TSDF to submit a signed duplicate of the Hazardous Waste Liability Endorsement or Certificate of Liability Insurance to the appropriate EPA Regional Administrator(s). These certificates and endorsements state only that coverage is provided in a particular amount and do not reveal specific policy terms or endorsements. Therefore, to implement this guidance, EPA or the authorized State should review the pre-existing conditions exclusions of the policies being used to demonstrate financial assurance. Such a review should routinely include the following steps:

1) Endorsements relating to pollution coverage should be routinely requested. Any endorsements adding narrow exclusions for pre-existing conditions should be reviewed to determine if the exclusions are acceptable based on the criteria described above.

2) If the narrow exclusions are determined to be unacceptable, the owner/operator should be notified, so that it can seek an acceptable policy (enforcement action may also be determined to be appropriate).

3) If reason for broader concern arises, the Regional Administrator or State may request signed copies of liability policies from owners/operators (this authority is granted under §§264.147(a)(1)(i) and (b)(1)(i) and 265.147(a)(1)(i) and (b)(1)(i)).

4) Periodically, a review of selected basic policy language should be undertaken to determine if its

broad pre-existing conditions exclusion is acceptable based on the criteria described above.

Apart from the acceptability of any narrow exclusions, their presence in a policy may signal a need for corrective action at the facility. In some cases, the need for corrective action will already have been determined by EPA because exclusions are often written based on records from the RCRA permitting and interim status programs. However, if a review of narrow exclusions indicates a potential need for corrective action, the following is applicable:

5) Appropriate EPA Regional or State staff should be notified if a narrow pre-existing conditions exclusion points to a potential need for corrective action.[2]

For further assistance in implementing this guidance, please contact Margaret Schneider, Chief, Closure and Financial Responsibility Section, Office of Solid Waste (202 or FTS-382-4640).

cc: Regional Counsels

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[2] The presence of a narrow exclusion is merely one factor to consider in determining the need for corrective action decisions. Consistent with established priorities, these releases should be addressed using any or all corrective action authorities.

9477.1982(01)

May 24, 1982

MEMORANDUM

SUBJECT: Part B Financial Responsibility Information Requirements for Owners or Operators in States with only Phase I Authorization

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

TO: Ira W. Leighton, Chief
Hazardous Waste Section
Region I

This is in reply to your memo of April 13, 1982 (copy attached). We agree with you that owners or operators in States with only Phase I authorization are required to submit financial instruments (as specified in Subpart H, Part 264) only prior to the final permit decision.

The requirement in §122.25 for submission of copies of the financial instruments with the Part B application is, as you point out, based on the premise that owners or operators of existing facilities would have established the instruments in compliance with Federal interim status standards. The premise does not hold in Phase I States. For owners or operators in these States, the effect of §122.25(a) (14)-(16) would be to impose financial requirements through the permit application procedures. This would be inappropriate since there would not be an applicable standard (either in Part 264 or Part 265) in effect. Therefore the Regional Administrator may exercise the discretion afforded in §122.25 (first paragraph) to require copies of the financial instruments only prior to permit issuance. However, these owners and operators should be required to specify in their Part B applications the mechanisms they intend to use to satisfy the financial requirements.

Although these owners or operators are not required to establish financial instruments until just prior to permit issuance, they may find it distinctly advantageous to provide the instruments by the time the draft permit is made available for public comment. Without providing financial assurances, they may

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encounter significantly greater difficulty in obtaining public acceptance of the facility.

In view of the above, we are advising the Regions as follows: Owners or operators in States with only Phase I authorization should be required to specify, as part of their Part B applications, the mechanisms they intend to use to satisfy the financial requirements. The instruments must be submitted to the Regional Administrator prior to final permit decision. We strongly recommend that owners and operators be informed of the advisability of establishing financial instruments prior to public notice of the draft permit.

Thank you for calling this matter to my attention.

Attachment

cc: Solid/Hazardous Waste Branch Chiefs, Regions I-X
Permit Branch Chiefs, Regions I-X
State Programs Branch, OSW
Joseph Freedman, OGC, A-131

This has been retyped from the original document.

7 OCT 82

Dr. R. M. Aickin
Director, FPAS (International) Limited
Thex House
Minories
London EC3N 1BJ, England

Dear Dr. Aickin:

Thank you for your letter of July 26, 1982, regarding the Hazardous Waste Facility Certificate of Liability Insurance included in the liability coverage regulation applicable to hazardous waste facility owners and operators (40 CFR 264.151(j)). As Acting Director of the Division responsible for development of the liability coverage regulation, I am pleased to provide you with the following response.

Your concerns, as we understand them, have to do with the Agency's intent in using certain terms in the Certificate. To clarify the intended meanings, we confirm the following. In using the word "occurrence" in the Certificate, the Agency did not intend to limit the insurance policies which may be used to meet the requirements of 40 CFR 264.147 or 265.147 to occurrence-based policies. Nor did the Agency intend to exclude coverage provided by claims-made policies, or to amend claims-made policies so that they respond on an occurrence basis. (The Agency's intent in using the term "occurrence" is indicated in the preamble to the regulation under "Definitions and Usage" (47 FR 16551, April 16, 1982).) Furthermore, use of the words "each occurrence" in the Certificate is not intended to alter limits of liability under the policies which respond on a "per claim" or "per incident" basis.

Similarly, use of the terms "sudden accidental occurrence" and "nonsudden accidental occurrence" in the Certificate does not preclude use of other terms, such as "environmental impairment" or "pollution incident," in the insurance policies to describe the extent of coverage. As indicated in the preamble, the Agency does not intend that the Certificate language should modify the contractual obligations regarding extent of coverage under the insurance policies used to satisfy the liability coverage requirement (47 FR 16543, under "Extent of Coverage").

These statements are intended to clarify the meanings of terms used in the Certificate and should not be interpreted as a comment on the acceptability of coverage provided by any particular insurance policy in meeting the requirements of 40 CFR 264.147 or 265.147.

We hope this letter responds to and alleviates your concerns.

Sincerely,

Bruce R. Weddle
Acting Director
State Programs and
Resource Recovery Division
(WH-563)

January 5, 1983

Mr. Bradley E. Dillon
Associate General Counsel
US Ecology, Inc.
3200 Melbville Road, Suite 526
P.O. Box 7216
Louisville, Kentucky 40207

Dear Mr. Dillon:

Your letter of November 5, 1982, raises a question about the applicability of the Subpart H, Financial Responsibility requirements to a US Ecology facility. Your specific concern is the extent of your responsibility for compliance in view of the §265.140(c) exemption for States and the Federal government and the fact that your facility operates on land leased from the State of Nevada.

Section 265.140(c) states "States and the Federal government are exempt from the requirements of this subpart." The Subpart H regulations apply to owners and operators; while either party may fulfill the requirements, the Agency may take action against either or both of the parties in the event of noncompliance. The Agency interprets this exemption to mean that where one party (the owner or the operator) is an exempted party because it is a State or Federal governmental unit, the other, private sector party need not comply with the Subpart H requirements. However, a State or Federal agency owner may, of course, require the private sector operator by contractual agreement to demonstrate financial responsibility.

I suggest that you confer with staff of EPA Region IX and the state of Nevada to determine the extent and applicability of responsibility for the concerned parties under the Resource Conservation and Recovery Act regulations. You should be aware that the RCRA Subpart G regulations, which stipulate the

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requirements for performance of closure and post-closure care, do not contain any such exemption. The exemption applies only to the Subpart H regulations, which contain the requirements for proving financial responsibility for closure and post-closure care and for liability coverage.

Sincerely,

John H. Skinner
Acting Director
Office of Solid Waste

cc: Dick Procunier, Region IX

This has been retyped from the original document.

11 MAY 1983

MEMORANDUM

SUBJECT: April 20, 1983, Memorandum on Financial Requirements

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

TO: Harry Seraydarian, Director
Toxics and Waste Management Division, Region IX (T-1)

Your memorandum of April 20, 1983, suggested that a regulatory interpretation memorandum be written to clarify the exemption of States and the Federal government from the RCRA Subpart H, Financial Requirements (§§264.140(c) and 265.140(c)). However, the interpretation you suggest does not appear to be consistent with the regulations. Our interpretation of the regulations, confirmed by Office of General Counsel staff, is that set forth in my January 5, 1983, letter sent to Mr. Bradley E. Dillon at US Ecology, a copy of which is attached. A copy of that letter was also sent to Richard Procunier, the Region IX financial contact.

Your suggestion that EPA notify the various State and Federal agencies which may be affected by this exemption may be pursued at a later date. However, since the owners and operators of hazardous waste facilities are jointly and severally liable for the other requirements of the Resource Conservation and Recovery Act (RCRA) regulations, I am not sure that such a narrowly focused letter would be appropriate. Rather, a letter broadly addressing the potential obligations of the States and the Federal government under the RCRA regulations would be sent.

You can be sure that as we make decisions on regulatory reporting to EPA Headquarters, this particular section will be kept in mind. I am certain that should we find environmental problems caused or exacerbated by this exemption, we will make every effort to revise the regulations in a responsive manner.

Attachment

RCRA/SUPERFUND HOTLINE MONTHLY SUMMARY

FEBRUARY 83

3. Question: Can the owner/operator of a facility cancel or terminate his policy without giving the insurance company the 60 or 30 days the insurance company needs in order to give EPA 60 to 30 days notice of cancellation?

Answer: The insurance company is bound by the certificate or endorsement to give proper notice. There is no requirement for the facility to give the insurance company advance notice. The insurance company could protect itself against this in its contract with the facility.

Source: Karen Gale
Research: Irene Horner

1/7/83

12/9/83

9477.1983(03

2)B. Zeller/sds/11/22/83/S-273/AX08040
Index 26

Mr. Allan B. Mitchell
Mitchell & Schultz, Inc.
P.O. Box 190
310 E. Lee
Sapulpa, Oklahoma 74066

Dear Mr. Mitchell:

Thank you for your letter of October 23 in which you question the net working capital requirement of the financial test for assurance of closure and post-closure care at hazardous waste management facilities. The financial test is a means by which a financially sound firm may demonstrate its ability to cover the costs of closure and post-closure.

The financial test differs from other acceptable mechanisms for assurance of financial responsibility. In the event of abandonment or bankruptcy, there is no special fund of money that EPA can use to properly close and maintain a facility. Therefore, it is imperative that the Agency be assured that a firm passing the test is viable and that sufficient funds would remain available even in the event of a change in the financial position of the firm.

In developing the financial test, the Agency extensively analyzed over 300 possible tests, applying them to known bankruptcies to determine which test would provide the needed safety margin while allowing as many viable firms as possible to pass the test. The result was the two alternative sets of criteria found in 40 CFR Parts 264 and 265.

The first alternative, the "ratios" test, requires a net working capital of at least six times the sum of the closure and post-closure cost estimates. To assure that the closure and post-closure costs themselves would not cause insolvency, the Agency originally determined that a firm should have net working capital of at least twice the cost estimates. However, in studying bankruptcies, the Agency discovered that many firms experienced a rapid deterioration

of financial condition in the two to three years prior to business failure. In such cases, net working capital fell by an average of 66% in two years. Thus, a multiple of six (a factor of two - to ensure ability to pay - times three - to protect against rapid deterioration) was found necessary.

The second alternative, the "bond rating" test, is not directly comparable to the "ratios" test. While both options provide EPA with the needed assurance, they do it in different ways. While the "ratios" are designed as predictors of bankruptcy, the "bond rating" assures viability and credit-worthiness. In fact, both Moody's and Standard and Poor's look at many factors, including ratios, in assigning a rating. For example, they consider a firm's size to be very important. Most firms assigned investment grade bond ratings have net worth in the $100 million to $200 million range and above. Firms which pass the "bond rating" test are able to raise money easily, and they have a statistically lower business failure rate than those that pass the "ratios" test.

It is important to note that over 90% of those firms wishing to use the financial test are able to pass it. I can certainly understand the frustration of those unable to use the test, but believe that our requirements are appropriate to meet our overriding responsibility to protect human health and the environment.

Sincerely yours,

William D. Ruckelshaus

RCRA/SUPERFUND HOTLINE SUMMARIES

SEPTEMBER 83

12. If a State does not have a required financial mechanism but has an approved financial mechanism, can a facility owner/operator use the approved mechanism under 40CFR 264.149?

Section 264.149 of the regulations allows the substitution of a financial mechanism which the State requires for one of the EPA approved mechanisms. This substitution requires the approval of the Regional Administrator. A State approved (but not required) mechanism can also be used in lieu of the Federal mechanism if the facility owner/operator receives approval from the Regional Administrator.

Source: Scott Biehl

9477.1984(01)

January 12, 1984

MEMORANDUM

SUBJECT: Closure Cost Estimates Based on Third Party Costs

FROM: John H. Skinner, Director
Office of Solid Waste (WH-563)

TO: James H. Scarbrough, Chief
Residuals Management Branch
Region IV

This is in response to your memorandum of November 22, 1983, in which you raise the issue of whether a closure plan for a recycling facility can specify continuation of recycling in order to reduce waste inventory during closure. You raised this issue in the context of a statement made in the September 19, 1983 RCRA/Superfund Hotline report. The Hotline report stated that a closure cost estimate cannot be reduced to reflect planned recycling of waste at a facility or the planned sale of equipment or property after closure begins. The rationale given by the Hotline is that the cost estimate must reflect closure at the most expensive point in the facility's operating life, rather than some point after the facility's inventory is reduced by continued recycling of waste on site, or after sale of capital.

While the Hotline memo is correct, your memo raises a separate issue, which the Hotline report did not address. That issue is whether the closure cost estimate may reflect the cost of closure activities carried out by the owner/operator (who may use his own personnel and equipment if he desires), or whether the estimate must reflect the costs of closure activities carried out by a third party, such as the government or a private contractor.

You referenced several statements in the regulations and EPA guidance documents which you interpret to mean that the first case is correct. In the context of recycling facilities, you have interpreted the regulations and guidance to mean that 1) continued recycling at a recycling facility is a form of "treatment" and a legitimate closure activity, and 2) the closure cost estimate for a recycling facility may reflect the owner/operator's own costs of carrying out his closure plan.

This has been retyped from the original document.

I concur with these interpretations. With regard to your last point, please make note of an important requirement which lessens the likelihood of a large, abandoned stockpile of waste in the event of a forced closure. Under §264.113(a), and §265.113(a), the owner/operator has 90 days from the day closure activities begin in which to "treat, remove from the site, or dispose of on-site, all hazardous wastes in accordance with his approved closure plan". Therefore, acceptable cost estimates for recycling facilities could reflect labor and materials for up to 90 days of recycling plus the cost to dispose of the amount of waste which could not reasonably by recycled with existing throughput capacity during 90 days. This, in effect, ensures that recyclers do not stockpile more hazardous waste than they have the ability to recycle in 90 days, unless they have made provisions in their closure plans and cost estimates for disposing of the excess hazardous wastes, either on-site or off-site, by end of the 90-day period.

cc: Bruce Weddle
Eileen Claussen
Carolyn Barley
Hazardous Waste Branch Chiefs, Regions I-III, V-X

This has been retyped from the original document.

9477.1984(01)
Attachment

DATE: November 22, 1983

SUBJECT: Closure Plans and Cost Estimates-Treatment of Waste Inventory As Part of Closure Activities

FROM: Chief, Residuals Management Branch
Region IV

TO: John Skinner, Director
Office of Solid Waste (WH-563)

The September 20, 1983 memo from Carolyn Barley transmitting Superfund hotline monthly status report for August contained a response with which we do not agree. On page six the following statement is made "The Agency has interpreted these two statements to not allow a Closure Plan to include recycling of waste or sale of equipment or property in order to reduce the closure cost estimate." Region IV does not totally agree with this response. We agree that the money gained from the sale of recycled hazardous waste equipment or property can not be included in the closure cost estimate as a credit. However we feel that the regulations and guidance are clear that a recycling facility can continue to treat its waste inventory as a part of its closure operations.

The following citations from RCRA Regulations and Guidance Documents support this position:

DOCUMENT CITED	SUPPORTING QUOTATION
40 CFR 264.142	Cost estimates for closure are to be based on the closure plan
Preamble to May 1980 Reg.	"Closure is the period after wastes are no longer accepted, during which the owners or operators complete treatment, storage and disposal operations, apply final cover to all cap landfills, and dispose of or decontaminate equipment"

This has been retyped from the original document.

40 CFR 264.112(a)(4)	"For example, in the case of a landfill, estimates of the time required to <u>treat</u> and dispose of all waste inventory.
40 CFR 264.113(a)	"Within ninety days after receiving the final volume of hazardous wastes, the owner or operator must <u>treat</u>, remove from the site, or dispose of on-site, all hazardous wastes in accordance with the approved closure plan.
EPA Draft Guidance Closure and Post Closure: Interim Status Standards 40 CFR 265,	"The Plan (Closure) should also include a description of the procedures for <u>treating</u> or removing these wastes ..."
P. 2-8	"It does ensure that an owner or operator has prepared for <u>treating</u>, disposing or sending hazardous waste off-site in a timely fashion.
P. 2-9	"In most cases, it is likely that wastes awaiting disposal will require varying degrees of <u>processing and treatment</u>. At an incineration facility, for example, all wastes may be incinerated on-site and the residues hauled off-site."
P. 2-11	"The schedule of closure activities should include: (e.g. dates for completing <u>treatment</u> and disposal of all wastes on-site,)
P. 4-2	"An example would be the costs of <u>treating</u> or disposing of inventory on-site, which will <u>normally be a simple continuation of the normal operating practices of the business</u>.

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P. 5-5 "In the vast majority of cases at disposal facilities, the disposing or treating of inventory will take place on-site,"

From these documents we think the following conclusions can be clearly drawn. These conclusions reflect our Region's approach to Closure Plans and cost estimates for Hazardous Waste recycling facilities.

1. The Closure Cost Estimate is based on the Closure Plan.

2. The Closure Plan is based on a planned Closure that is carried out by the owner (who may use his own personnel and equipment if he desires). There is no regulatory basis for requiring the closure plan and cost estimate to be based on a third-party or contractor handling the closure activities.

3. The Regs and Guidance are clear that a facility that does treatment of Hazardous Waste may continue to provide treatment as a part of its closure activities as a means of reducing its inventory on hand at the time closure begins. For a facility that recycles spent solvents through distillation this would mean that the facility could distill spent solvents on hand when closure begins as a means of reducing the costs for final disposal.

4. Once Closure begins the Closure Cost Estimate must reflect all operating costs, disposal costs, and clean-up costs incurred during the closure period including any costs associated with continued treatment during closure, such as all costs associated with the operation of facility. The guidance manual indicates that the company should submit the previous years financial budget and put up the percentage of the year it will take for the treatment, ultimate disposal and decontamination in their closure fund.

There are many waste recycling facilities throughout the country that are subject to the RCRA permitting requirements. Because of the significant impact which the financial assurance requirements have on these facilities, it is important that EPA be consistent nationwide in our application of the RCRA regulations for Closure

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This has been retyped from the original document.

Plans and Cost Estimates. We have issued and are about to issue several permits to recycling facilities using the above stated guidance. If you disagree with our approach please call Douglas C. McCurry of my staff at FTS 257-3433 before December 15, 1983.

James H. Scarbrough

cc: Region IV State Directors
Hazardous Waste Branch Chiefs, Regions I-III,V-X

This has been retyped from the original document.

JAN 30, 1984

MEMORANDUM

SUBJECT: U.S. Ecology's Nevada Facility and Financial Responsibility

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

TO: Harry Seraydarian, Director
Toxics and Waste Management Division
Region IX (T-1)

Your memorandum of April 5 requested comments on the Notice of Deficiency you sent U.S. Ecology.

While I sympathize with your desire to ensure that all owners and operators demonstrate financial responsibility, EPA is not in a position to require such compliance in this instance. Section 140(c) of the regulations clearly exempts the States and the Federal government from the Subpart H regulations. Therefore, EPA does not have authority to enforce compliance with the financial requirements since the U.S. Ecology facility is located on land owned by the State of Nevada. Only the State of Nevada may require U.S. Ecology to demonstrate financial responsibility by contractual arrangement.

This point is covered in both the January 5, 1983 letter to U.S. Ecology and the May 11, 1983 memorandum to you (copy attached). I want to reassure you that my staff had extensive conversations with your staff before the January letter was issued. I hope this clears up the matter for you.

Attachment

Closure/Post-Closure and Cost Estimate Updates

RCRA

What is the latest inflation factor for updating the closure/post-closure cost estimate?

The inflation factor is determined by dividing the latest annual Implicit Price Deflator for Gross National Product by the previous annual deflator. The deflators are publisned by the U.S. Department of Commerce in its Survey of Current Business. Typically, the cost estimate update is done annually, within 30 days after the anniversary date of the first cost estimate which was May 19, 1981. Therefore, cost estimates are only required to be updated by the regulations (264.142(b). 265.142(b), 264.144(b), and 265.144(b))

between May 19 and June 19 of each year using the latest deflators which are published every March. However, if a change in the closure/post-closure plan occurs at any other time and results in increased costs, the closure/ post-closure cost estimates must be revised at that time and updated annually thereafter (265.142(c), 264.142(c), 265.144(c)).

Most companies requesting the inflation factor were updating their financial test letters and wanted to update their cost estimate to coincide with the close of their fiscal year ending December 31, 1983. As the regulations are written, the financial test annual update for fiscal year ending December 31, 1983, would cover the May 1983 cost estimate. Callers are reminded that if their facilities are in interim authorized States, the State — not the Federal — financial requirements apply per 265.1(c)(4).

NO: 20

Charles W. Shipley
1 Williams Center
Suite 1770
Tulsa, OK 74172

Dear Mr. Shipley:

This letter is in response to your question to my staff regarding insurance coverage limits required under the RCRA Subpart H regulations.

As you know, 40 CFR 264.147 and 265.147 require all owners or operators of hazardous waste management facilities to demonstrate financial responsibility for bodily injury and property damage to third parties caused by sudden accidental occurrences in the amount of $1 million per occurrence and $2 million annual aggregate. In addition, the owner or operator of a surface impoundment, landfill, or land treatment facility must demonstrate financial responsibility for bodily injury and property damage to third parties caused by nonsudden accidental occurrences in the amount of $3 million per occurrence and $6 million annual aggregate. An owner or operator has several options to satisfy this liability coverage requirement.

An owner or operator who chooses to meet both the sudden and nonsudden requirement solely through the purchase of insurance may obtain a single insurance policy to cover both sudden and nonsudden accidental occurrences. This policy, however, must provide coverage for at least the sum of the sudden and nonsudden minimun limits. In other words, such a policy must provide coverage for at least $4 million per occurrence with an annual aggregate of at least $8 million. The liability limits of $4/$8 million are consistent with our regulations and provide adequate coverage. Of course, an owner or operator may satisfy the liability coverage requirement by obtaining two separate insurance policies, one to cover sudden accidental occurrences (with limits of at least $1 and $2 million) and one to cover nonsudden accidental occurrences (with limits of at least $3 and $6 million).

We are aware that this option is not specifically addressed in §§ 264.147 or 265.147 of the regulations. The required wording for the endorsement and the certificate of insurance (§§ 264.151(i)(1) and 264.151(j)(1)), however, states that:

> The coverage applies at [list EPA Identification Number, name, and address for each facility] for [insert "sudden accidental occurrences," "nonsudden accidental occurrences," or "sudden and nonsudden accidental occurrences"] (emphasis added).

If you have further questions, please feel to contact me at (202) 382-4761.

Sincerely,

George A. Garland
Chief, Financial Responsibility
and Assessment Branch

9477.1984(05)

JUN 6 1984

Review of Financial Assurance Instruments

George Garland, Chief
Financial Responsibility and Assessment Branch (WH-562)

Hazardous Waste Branch Chiefs
Regions I-X

The purpose of this memorandum is to clarify our policy regarding the review of financial assurance instruments. Lee Daneker and Tony Montrone sent a memorandum to the HWDMS Project Officers on December 20, 1983 to clarify the instructions for the Compliance and Enforcement Log and the Facility Status Sheet. As a result of that memorandum, I am concerned that reviews of financial instruments are being deferred until closure/post-closure plans and cost estimates are determined to be adequate and in compliance with federal or state regulations.

It is our policy to review all financial assurance instruments regardless of decisions concerning the adequacy or inadequacy of closure/post-closure plans and/or cost estimates. We expect you to examine the financial instruments (wording, issuer qualifications, etc.) for compliance with Federal or State regulations. We consider this distinct review essential and, therefore, stress that it be conducted even in the absence of a reviewed plan and cost estimate.

The facility status sheets should reflect this policy. Therefore, item number eleven--Closure Assurance Instruments--and item number fourteen--Post-Closure Assurance Instruments--should always be completed even when the plans and/or cost estimates have been determined inadequate. When the plans and/or cost estimates are revised and reviewed, the adequacy of the amount of the financial instrument should be reviewed concurrently.

I have made minor revisions to the facility status sheet instructions to reflect this distinction. The revised instructions are attached to this memorandum. Please inform your States of our policy and explain the change in the status sheet. If you have any questions about adequacy determinations on financial assurance instruments, please contact Carole Ansheles on 382-4671.

Attachment

cc: Carole Ansheles
Susan Hughes
Lee Daneker
Tony Montrone

(WH-562)S. Susan/sds/S-242/6/1/84

28 NOV 1984

MEMORANDUM

SUBJECT: Availability of Environmental Impairment Liability (EIL) Insurance

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

TO: Regional Division Directors
Regions I-X

There has been some question raised in the Regions about the availability of Environmental Impairment Liability (EIL) insurance. EIL insurance is necessary for owners and operators of surface impoundments, landfills, and land treatment facilities to meet the liability coverage requirement for nonsudden accidental occurrences under §§ 264.147(b) and 265.147(b), if they are not using the financial test. Owners and operators with annual sales or revenues of less than $5 million will become subject to this requirement in January 1985.

It is my understanding that this type of insurance is available, although there is a waiting list. Attached is a list of companies which offer EIL insurance and the limits of coverage they provide. The Agency has been advised that at this time only two companies on the list, Shand Morahan and American International Group, are taking new customers. The rest of the companies are offering policies only in limited circumstances.

Attachment

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

9477.1984(07)

DEC 3 1984

OFFICE OF
SOLID WASTE AND EMERGENCY RESPONSE

MEMORANDUM

SUBJECT: Determination of a Facility's Operating Life

FROM: George A. Garland, Chief
Financial Responsibility and Assessment Branch (WH-562B)

TO: William H. Taylor, Chief
Enforcement Section, Region 6

This memo addresses the questions raised by the State of Oklahoma in their letter to Region 6 dated September 6, 1984. Most of these questions concern how one determines the operating life of a facility for the purpose of calculating the trust fund pay-in-period. As requested, I also address the separate issue of how to treat recycling in the closure cost estimate.

1. How does one calculate a facility's operating life for determing the pay-in-period for the trust fund?

For permitted facilities, "payments into the trust fund must be made annually by the owner or operator over the term of the initial RCRA permit or the remaining operating life of the facility as estimated in the closure plan, whichever period is shorter" (§§264.143(a)(3) and .145(a)(3)). For interim status facilities, "payments into the trust fund must be made annually by the owner or operator over the 20 years beginning with the effective date of these regulations or over the remaining operating life of the facility as estimated in the closure plan, whichever period is shorter" (§§265.143(a)(3) and .145(a)(3)).

For purposes of this requirement, the operating life of a facility must be presumed to end in that year in which the owner or operator currently expects to close his facility. His expected year of closure should be identified in his closure plan.

EPA should be able to determine, after reviewing the facility's operating record, whether the owner or operator's estimate of the year he expects to close his facility is reasonable. If EPA believes that the facility's operating life is less than that stated, we may require the owner or operator to change the closure plan.

2. Should a facility's operating life be determined based on existing, permitted unbuilt, or unpermitted unbuilt capacity?

The capacity of both permitted and interim status facilities to store or dispose of wastes for the purpose of determining the facility's operating life should be based on "the maximum extent of operation which will be unclosed during the life of the facility" as required in the closure plan under §§ 264.112(a)(1) and 265.112(a)(1).

Thus, for permitted facilities, operating life should be based on permitted capacity which may include unbuilt capacity. Operating life will not be based on unpermitted capacity. If the owner or operator later decides to increase capacity at a permitted facility by building additional units or expanding existing units, he must modify his permit.

For interim status facilities, operating life should be based on the capacity described in Part A of the facility's permit application. If the owner or operator later decides to increase capacity beyond what is stated in the Part A, the owner or operator must modify his Part A and his closure plan.

3. Are payments to the trust fund based on each individual unit or the facility as a whole?

Sections 264.143(a)(3), 264.145(a)(3), 265.143(a)(3), and 265.145(a)(3) state that the payments into the trust fund must be made over the remaining operating life of the facility (if less than the permit life or 20 years). We cannot interpret "facility" as it is used here to mean "unit". Thus, the pay-in-period to the trust fund must be calculated for the facility as a whole. If the facility has more than one unit, the end of the facility's operating life for purposes of calculating the trust fund pay-in period will be that year when the owner or operator expects to close the last unit (assuming this period is less than the permit life or 20 years).

4. How does one determine the operating life of a tank or surface impoundment which can be refilled? How do treatment processes affect operating life?

During the operating life, the level of waste in a tank or an impoundment may vary. Filling and emptying is part of a tank or impoundment's normal operating life. Wastes may be treated, sludges may settle out, liquids may evaporate or be drained off, sludges may be dredged out and disposed of. While the level of waste in a tank or impoundment may fluctuate, the facility is still operating until the year the owner or operator has indicated he expects to close the facility.

Prior to the time the facility receives its final volume of waste, the owner or operator should be able to determine the year he expects to close based on the treatment or other storage and disposal processes he employs. If he plans to operate longer than he had originally intended, he must modify his closure plan.

5. Should waste stored in tanks prior to recycling be considered a salable asset or liability for disposal?

Section 265.142(a) states that the cost estimate "must equal the cost of closure at the point in the facility's operating life when the extent and manner of its operation would make closure the most expensive". Since EPA has no guarentee that there will be a market for wastes stored prior to recycling and that these wastes will be in a salable condition when recycled, such wastes should be considered a liability.

As discussed in the January 12, 1984 memo from John Skinner to James Scarbrough on closure cost estimates based on third party costs, the owner or operator of a recycling facility may continue to recycle wastes during the closure period as a legitimate closure activity. While the owner or operator need not include the cost of disposing of that inventory of waste that he anticipates will be eliminated because of recycling during closure, his cost estimate must reflect the labor and materials necessary for recycling that waste. It is important to point out that recycling may only continue for 90 days after the final receipt of waste unless an extension of the closure period is granted by the Regional Administrator. The cost estimate must also include a reasonable estimate of the cost to dispose of that amount of waste which cannot be recycled with existing treatment capacity in the 90 days of closure.

If you have further question, please contact Alyce Ujihara of my staff at 382-4784.

RCRA/SUPERFUND HOTLINE MONTHLY SUMMARY

NOVEMBER 84

6. The Agency requires owners or operators of hazardous waste treatment, storage, or disposal facilities to have liability coverage for accidental occurrences arising from the operation of their facilities. These requirements are specified in 40 CFR §264.147 and §265.147 for permitted and interim status facilities, respectively. The required coverage for sudden accidental occurrences is at least $1 million per occurrence with an annual aggregate of at least $2 million, exclusive of legal defense costs. The required coverage for nonsudden accidental occurrences applies to facilities with surface impoundments, landfills, or land treatment units. These facilities must also have sudden accidental insurance coverage. Nonsudden coverage is at least $3 million per occurrence with an annual aggregate of at least $6 million, exclusive of legal defense costs. Must an owner or operator of several facilities have liability coverage in the amounts just stated for each facility?

   No; one policy will cover all facilities. Liability insurance is required on a per firm basis rather than a per facility basis. The requirement for the use of an annual aggregate liability coverage encompasses the risk of multiple occurrences among facilities belonging to the same owner or operator. For example, an owner of six container storage facilities would only need sudden accidental occurrence coverage of $1 million per occurrence with an annual aggregate of $2 million. This issue is addressed in the April 16, 1982 Federal Register (47 FR 16546).

   Source: Carole Ansheles (202) 382-4761
   Research: Hilary Sommer

This has been retyped from the original document.

RCRA/SUPERFUND HOTLINE MONTHLY SUMMARY

DECEMBER 84

1. The financial requirement regulations (40 CFR §264 and §265, Subpart H) require that owners and operators of all hazardous waste management facilities establish financial assurance to cover the cost of closing their respective facilities. The regulations provide six methods for establishing financial assurance. One method is a financial test and corporate guarantee for closure (§264.143(f)(10) and §265.143(e)(10)). Using this method, a parent corporation (guarantor) can provide the financial assurance for an owner/operator of a subsidiary company. If a facility becomes a separate company, completely autonomous from the parent company, may the ex-parent company provide financial assurance for the owner/operator of the newly independent company?

   No; the ex-parent company may not provide financial assurance for the newly independent company. Sections 264.143(f)(10) and 265.143(e)(10) state that "The guarantor must be the parent corporation of the owner or operator." Therefore, the newly independent company must establish its own financial assurance since its ex-parent company can no longer function as its guarantor. This financial assurance must be in place upon independence.

   Source: Joe Freedman (202) 382-7700
   Research: Gordon Davidson

1/3/86

Senator Charles E. Grassley
United States Senate
Washington, D.C. 20510

Dear Senator Grassley:

Thank you for forwarding Mr. Gary Jaehnel's letter of November 26, 1985, concerning the Kiowa Corporation's transfer of its hazardous waste storage operations to a new site. Outlined below is our understanding of how regulations under the Resource Conservation and Recovery Act (RCRA) apply to Mr. Jaehnel's facility.

RCRA requires that hazardous waste storage facilities obtain permits to ensure that the wastes are managed in an environmentally protective manner. RCRA regulations also allow facilities that were in existence on May 19, 1980 to continue operation in "interim status" until decisions are made as to whether or not to permit the facility (Kiowa is an interim status facility). Regulations prohibit, however, changes to an existing facility during interim status which are so extensive as to amount to reconstruction of the facility [see 40 CFR 270.72(e)].

The proposed transfer of the Kiowa storage facility would, in effect, amount to reconstruction of the facility. As such, it must be treated as a new facility. In order to begin construction of a new facility, it must first be issued a permit, as provided by 40 CFR 270.10(f). In addition, closure of the existing Kiowa facility must be done in accordance with interim status closure standards (contained in Subpart G of 40 CFR Part 265).

We contacted Mr. Gene Evans, the EPA Region VII staff member assigned to this project, who provided additional background information. Mr. Evans reviewed the revised closure plan submitted by the Kiowa Corporation, and advised Mr. Jaehnel that the revised closure plan was not acceptable as submitted. Mr. Evans offered to amend the submitted plan as provided for in the regulations. Mr. Jaehnel preferred to amend the plan himself and requested a letter detailing the deficiencies in the plan. This letter was prepared and sent on November 20, 1985.

We wish to apologize for any lack of responsiveness Mr. Jaehnel may have encountered. As an "interim" authorized State, the Iowa

Department of Water, Air, and Waste Management had been implementing certain portions of the RCRA program, including closure activities, in lieu of the Federal hazardous waste management program. The Iowa State legislature voted to end funding of the State's hazardous management program, effective July 1, 1985. On that date, the State's hazardous waste management program ceased operating and EPA Region VII assumed responsibility for the entire hazardous waste management program, including closure activities. This transfer of responsibility may explain some of the problems Mr. Jaehnel experienced. Again, we apologize for any lack of responsiveness he may have encountered and regret any inconvenience.

If you or Mr. Jaehnel have any additional questions or require further information, please call Mr. Gene Evans at (913) 236-2888. Thank you for your interest in this matter.

Sincerely,

J. Winston Porter
Assistant Administrator

cc: Region VII
Congressional Liaison/Deremer

9477.1986(02)

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

JAN 3 1986

OFFICE OF
SOLID WASTE AND EMERGENCY RESPONSE

Honorable Charles E. Grassley
United States Senate
Washington, D.C. 20510

Dear Senator Grassley:

Thank you for your letter of December 11, 1985, forwarding the November 15, 1985 comments from Mr. Russell C. Smith of Salsbury Laboratories. Mr. Smith suggested that the Agency consider a corporate guarantee from a parent corporation or an indemnity agreement or letter of credit as alternative means for meeting the financial responsibility requirements for liability coverage under the Resource Conservation and Recovery Act.

In the past, the Agency has not allowed a parent company to use the corporate guarantee to meet the requirements for liability coverage; we have been concerned that this use of the corporate guarantee might be declared an invalid practice of insurance under State insurance law. The Agency is now reconsidering its position, however. Over the next few months, we expect to promulgate regulations allowing the corporate guarantee where the hazardous waste facility has obtained a letter from the State Attorney General or from the State Insurance Commissioner, indicating that this is a valid practice under State law. In addition, the Agency intends to propose the use of indemnity agreements and letters of credit at a later time.

Please let me know if I can provide any further assistance.

Sincerely yours,

/s/ Jack McGraw

J. Winston Porter
Assistant Administrator

RCRA/SUPERFUND HOTLINE MONTHLY SUMMARY

FEBRUARY 86

6. Liability Requirements

According to §265.147(a)(1)(ii), insurance policies held by owners/operators of hazardous waste facilities must be issued by an insurer which, at a minimum, is licensed to transact the business of insurance, or eligible to provide insurance as an excess or surplus lines insurer in one or more States. Under what circumstances, if any, would an off-shore (foreign) entity be able to provide insurance for a domestic treatment, storage, or disposal facility (TSDF)?

Under Federal RCRA requirements, facilities must be insured by a company that is licensed in one or more States. The company need not be licensed in the State in which the facility is located, unless stricter State regulations require in-State licensing. The facility owner/operator should verify the qualifications of a company by first contacting the insurer about its licenses and then confirming with insurance regulatory authorities of the appropriate State or States.

Regarding the off-shore entity, any captive or alien insurers must meet the above requirements in order to provide insurance satisfying the Subpart H regulations. See SW-961, "Liability Coverage: Requirements for Owners and Operators of Hazardous Waste Treatment, Storage and Disposal Facilities: A Guidance manual," dated November 1982 (pages II-3 and G-3).

Source: Carole Ansheles (202) 382-4761

MAR 20 1986

Honorable F. James Sensenbrenner, Jr.
House of Representatives
Washington, D.C. 20515

Dear Mr. Sensenbrenner:

Thank you for your letter of February 18, 1986 on the subject of liability insurance.

You are correct in stating that some industries have chosen to comply with EPA's liability requirement by establishing captive insurance companies. The National Solid Waste Management Association and the Synthetic Organic Chemical Manufacturers Association represent two such industries. However, we believe these additional suppliers of insurance would add to competition in the insurance marketplace, rather than create a monopoly.

Second, the Agency has recently contacted all insurance companies known to have been involved in the environmental impairment liability market. I have enclosed a list of all companies who were willing to be named as potential suppliers of environmental impairment liability coverage. Of course, it is possible that not all companies named would be able to supply all coverage needed, but may be able to supply partial coverage. This list was current as of January 24, 1986.

Finally, the Agency requires coverage for bodily injury or property damage to third parties for hazardous waste facilities in 40 CFR §264.147 and §265.147. The Superfund reauthorization bills would not waive these provisions. You may have in mind HR. 3917, passed December 16, 1985, which would provide limited relief from the required financial responsibility certification in Section 3005(e)(2) of the Resource Conservation and Recovery Act (RCRA). However, the Agency does intend to amend the

financial responsibility regulation in the next few months to allow a corporate guarantee to satisfy this requirement. The Agency also will propose indemnity agreements and letters of credit at a later time.

Please let me know if I can be of any further assistance.

Sincerely,

Lee M. Thomas

Lee M. Thomas

Enclosure

9477.1986(09)

July 24, 1986

Mr. Gettinger
President
Midwest Oil Refining Co.
1200 Walton Road
St. Louis, Missouri 63114

Dear Mr. Gettinger:

Thank you for your letter of June 25 addressing the effects of the constrained insurance market on your business. Although we are aware of the difficulties in obtaining liability insurance, EPA believes liability regulations are desirable for several reasons. First, the liability requirements assure that funds will be available for third parties seeking compensation for bodily injury and property damage arising from operation of hazardous waste management facilities. Second, without liability coverage, many commenters to EPA believe that there will be lessened public confidence in and greater opposition to proposed and existing hazardous waste management facilities. Third, these regulations have the potential for inducing improved design and operation of the facility resulting from the incentive of lower insurance premiums and the oversight that insurers might provide over facility operations. Finally, when EPA published a proposal on various methods of addressing the constrained insurance market on August 21, 1985, we received many comments indicating continued support for the liability requirements.

While I understand that it is difficult to pay for a risk assessment without prior assurance that insurance coverage will be provided, we understand that most insurers will insist on conducting a risk assessment before they make a decision to offer coverage or not. We believe that this is sound insurance practice. In addition, risk assessors and insurance companies have quoted risk assessment costs as generally falling between $5,000 and $25,000; your $5,000 cost therefore appears to be at the low end.

In response to this situation, EPA has several ongoing efforts. First, the Agency developed the February 25, 1985 list of Environmental Impairment Liability providers, a copy of which you obtained and enclosed in your letter. We will update this list soon.

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Second, we expect to publish final regulation allowing the use of a corporate guarantee as a method of demonstrating compliance with the liability requirements. This regulation was signed by the Administrator on July 3 and should be published very soon.

Third, we have begun work on developing a proposal to authorize the use of other instruments to demonstrate compliance. We expect to publish the proposal in approximately one year.

Fourth, the Federal regulations allow both the state assumption of this requirement (§§264.150 and 265.150) and the use of state-required instruments (§§264.149 and 265.149), upon meeting certain conditions. You may wish to pursue this further.

Finally, I urge you to consult with the appropriate officials in Missouri, since the state has authorization to administer these liability insurance regulations in lieu of the EPA.

With regard to your comment on the effect of a possible listing of used oil as hazardous waste, we received many similar comments on our November 29, 1985, proposed rule. Although no final determination has been made yet on this issue, these comments will be fully considered and addressed before the issuance of the final rule.

I hope you find this information helpful.

Sincerely,

J. Winston Porter
Assistant

Administrator

This has been retyped from the original document.

9477.1986(10)

UNITED STATES ENVIRONMENTAL PROTECTION
WASHINGTON, D.C. 20460

JUN 25 1986

MEMORANDUM

SUBJECT: Union Carbide's March 1986 Financial Test

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

TO: Conrad Simon, Director
Air & Waste Management Division (2AWM)

I am responding to your May 2 memorandum concerning the Union Carbide financial test. Your memo requests assistance in determining whether the adjustments Union Carbide made are consistent with the criteria of the Subpart H financial test. I recommend that you disallow Union Carbide's use of the financial test for five reasons.

First, the firm fails the financial test because the procedures used to compute the test ratio (sum of net income plus depreciation, depletion and amortization (NIDDA) to total liabilities) does not satisfy the procedures prescribed in the Subpart H regulations. Based on the information available to us, if Union Carbide had followed those procedures, the firm would not have passed.

Second, the 0.1 cut-off value for the ratio of NIDDA to total liabilities is premised on the RCRA definition of NIDDA; incorporating other cash flow measures (e.g., fixed assets write-offs) might invalidate the credibility of the cut-off value as a predictor of firm viability.

Third, the write-off of fixed assets is not equivalent to asset depreciation (or depletion or amortization) under generally accepted accounting principles.

Fourth, by adding back the value of fixed asset write-offs to NIDDA, Union Carbide allegedly "improves" the measure of cash flow by $615 million. However, as a result of reductions in the provision for deferred taxes associated with the fixed asset write-off, the net effect of the fixed asset write-off was very likely a decrease in cash flow in 1985.

Finally, data from Union Carbide's "Consolidated Statement of Changes in Financial Position" reveals that using <u>any one</u> of three measurements of its cash flow in the cash flow to total liabilities ratio of the financial test will <u>not</u> provide the firm with a passing value for the ratio.

Attached to this memorandum are copies of memos prepared by ICF, our consultants, which explain in greater detail the rationale behind these five reasons.

In addition, although not strictly relevant to the question of acceptability of Union Carbide's financial test, I am concerned about the amount of some of the cost estimates listed in the test. I suspect closure cost estimates that are listed as $5,373 and $4,804 may not be adequate. Some of the other estimates also appear unusually low. I would suggest that all plans and cost estimates be reviewed for adequacy, if that has not yet been done.

Because Union Carbide owns or operates so many facilities across the nation, I want to ensure that all Regions and States with Union Carbide facilities are aware of this issue. I am sending all Regional Division Directors a copy of your incoming memorandum, my response, and a list, developed from their test submission and from HWDMS data, of their facilities. I appreciate your bringing this matter to my attention. If you have any additional questions regarding this matter, please contact Carole Ansheles on FTS 382-4761.

Attachments

cc: Hazardous Waste Division Directors, Regions I, III-X

bcc: R1-X Sub H contacts
ICF - Eleanor Blayney
Jackie Tenusak - OWPE
Joe Freedman - OGC

RCRA/SUPERFUND HOTLINE MONTHLY SUMMARY

JUNE 86

3. Financial Requirements/Closure Costs

The regulations under 40 CFR 265.143(a) apply to the use of a trust fund as a financial assurance mechanism for closure of an interim status facility. Section 265.143(a)(3) requires the owner/operator to make annual payments into the fund throughout the "pay-in period." The "pay-in period" is defined as the 20-year period following July 6, 1982 (the effective date of the regulation per 47 FR 15032) or the remaining operating life of the facility, whichever period is shorter. An interim status facility with three surface impoundments has estimated different closure dates for each unit. If the facility uses a trust fund for closure/financial assurance, how does it make adjustments in the pay-in period for the different closure dates? Do the new closure/financial assurance regulations, effective October 29, 1986 (see the May 2, 1986 Federal Register)(51 FR 16422)), change these requirements?

Assuming that the estimated closure dates fall before July 6, 2002 for the units, the pay-in period for the facility would equal the pay-in period for the unit closing last. Specifically, Section 265.143(a)(3) states that the owner/operator must make payments into the trust fund "over the remaining operating life of the facility as estimated in the closure plan...." For

example, if unit A closes in six years, unit B in eight years, and unit C in ten years, the pay-in period would be ten years. Closure of the first two impoundments would constitute partial closure, as defined in §260.10, so that the facility would continue operating until the last unit closed. A definition of "final closure" was added to §260.10 by the May 2, 1986 regulations.

The new closure/financial assurance regulations published in the May 2, 1986 Federal Register (51 FR 16422) do not directly affect the current pay-in period system. EPA requested comments on the system in the preamble to the proposed closure/financial assurance regulations published in the March 19, 1985 Federal Register (see 50 FR 11068). Some comments suggested that the pay-in period should be as long as the shortest operating life of a unit at a multiple process facility. EPA believes that the accelerated pay-in period may be cost-prohibitive for smaller facilities and discourage owners/operators from conducting partial closures (51 FR 16438). Presently, EPA will maintain the existing pay-in period regulations and evaluate the situation further.

Source: Michael Northridge (202) 382-4790
Research: Jennifer Brock

UNITED STATES ENVIRONMENTAL PROTECTION A

JUL 28 1986

MEMORANDUM

SUBJECT: LTV Bankruptcy

FROM: Carole J. Ansheles, Chief
Closure/Financial Responsibility Section (WH-563-A)

TO: Addressees

On July 17, 1986, LTV Corp. and most of its subsidiaries filed for protection under Chapter 11 of the Bankruptcy Code. In a Chapter 11 proceeding, the debtor generally remains in business during the bankruptcy action, retains his property, and pays the creditors from future earnings, in accordance with a plan of rehabilitation approved by the court. In a Chapter 11 proceeding, the debtor may be allowed to continue to operate the business or a trustee may be appointed in the interest of the creditors.

The financial responsibility regulations require that an owner or operator, or a guarantor of a corporate guarantee, notify the Regional Administrator by certified mail of the commencement of a proceeding under Title 11 (Bankruptcy), U.S. Code, naming the owner or operator as debtor, within 10 days after the commencement of the proceeding (see §§264.148(a) and 265.148(a)) Accordingly, LTV must notify appropriate officials by July 27, 1986.

Attached to this memorandum is a copy of information that shows which facilities are owned by LTV or its subsidiaries, according to our firm/facility data base. Although it appears that only Regions II, III, IV, V and VI have LTV facilities, I am sending this to all Regional Subpart H contacts, in the event this listing is incomplete (please notify me of such errors). Many of the facilities are located in authorized states.

I suggest that you watch for the required notification, and in any case, ensure that financial responsibility mechanisms for the LTV facilities are in order. Of course, the notices for facilities in authorized states are unlikely to be sent to you; please coutact your counterparts in the those states. I also suggest that you inform your Regional Counsels of this action. OSW developed a guidance document entitled "Pursuing RCRA Subpart H Interests in Bankruptcy Litigation", dated February, 1983, which was provided to you at that time.

In addition, you may be aware that the General Accounting Office (GAO) recently published a report regarding the risks posed by closing/closed facilities ("Hazardous Waste: Environmental Safeguards Jeopardized When Facilities Cease Operating", February 1986, GAO/RCED-86-77). As part of the information collection and analysis that supported this report, GAO developed a list of RCRA facilities owned or operated by firms that have declared bankruptcy. I just received the attached memorandum from ICF, where they attempted to match GAO's list of facility names with EPA identification numbers. Again, please let me know of any errors on the list.

I will attempt to track notices of bankruptcies and provide you with similar lists of facilities. Call me on FTS 382-4761 if you have any questions or if you need another copy of the guidance.

Attachments

Addressees:

Gary Gosbee, Region I
Lelia Meltzer, Region II
Bill Shreve, Region III
J.R. Finney, Region IV
Dave Strinnham, Region V
Bill Gallagher, Region VI
Mike Wolfram, Region VII
Carol Lee, Region, VIII
Rhonda Rothschild, IX
Chuck Rice, X
Joe Freedman, OGC
Ginny Steiner, OWPE
Scott Parrish, OSWER
Pam Shar, OECM
Mike Northridge, OSW
Susan Bromm, OSW

UNITED STATES ENVIRONMENTAL PROTECTION

9477.1986(13)

August 15, 1986

Mr. C.T. Howlett, Jr.
Director, Government Affairs
Environment, Health and Chemical Safety
Georgia-Pacific Corporation
International Square
1785 Eye Street, N.W.
Washington, D.C. 20006

Dear Mr. Howlett:

I am responding to your letter of August 4, 1986, to Mr. George Garland, since the Office of Solid Waste has been reorganized. The specific questions you raised are addressed below:

QUESTION: Do these new provisions in 40 CFR Parts 264 and 265 automatically take effect in California on September 9, 1986?

The corporate guarantee rule that appeared in the Federal Register on July 11, 1986 (51 FR 25350) is an interim final rule. Comments were requested from the regulated community on the "form" of the guarantee. If the comments do not show a need to modify the rule, it will become effective for the Federal RCRA program on September 9, 1986. Compliance with any applicable California State liability requirements may also be necessary; their regulations may differ from the corresponding Federal rules on third party liability. The key individuals from California you mentioned in your letter would be able to offer you better guidance in the area of state liability requirements.

An additional requirement is receipt by EPA of a written statement or statements, as the case may be, from the Attorney General(s) or insurance commissioner(s) of the State in which the guarantor is incorporated and the State(s) in which the facility(ies) covered by the guarantee is (are) located, saying that the corporate guarantee executed as described in sections 264.147, 265.147 and 264.151(h)(2) is a legally valid and enforceable obligation in that State.

Although your question concerned a Georgia Pacific Resin facility in Ukiah, California, other facilities owned or operated by your company in States with RCRA authorized programs may not have the opportunity to benefit from the Federal corporate guarantee rule. Authorized States will not be required to modify

their programs because these standards, promulgated on July 11, 1986, are considered to be less stringent than the existing Federal requirements.

QUESTION: Have you also obtained any response from the California Attorney General about the legality of the approved guaranty under California's insurance law?

As yet, we have not received any response from either the California or the Georgia (State of incorporation) State Attorney General.

I trust that my answers have been helpful. If you have any further questions, please call Carlos Lago on (202) 382-4700.

Sincerely,

Carole J. Ansheles, Chief
Closure/Financial Responsibility
Section (WH-563A)
Permits and State Programs Division

cc: George Garland

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

SEP - 4 1986

MEMORANDUM

SUBJECT: Third-Party Letters of Credit, Convertible Bonds, and Subpart G Conference

FROM: Carole J. Ansheles, Chief
Closure/Financial Responsibility Section

TO: Subpart H Contacts, Regions I-X

We have recently received questions and researched the following two subjects, which should be of interest to you:

(1) Third-Party Letter of Credit: We received a question from an individual who wanted to know if a third party could obtain a letter of credit for an owner or operator who must comply with the Subpart H requirements. Our contractor, ICF, looked into the matter, and concluded that a letter of credit obtained by a third party on behalf of an owner or operator would comply with the regulatory requirements of Subpart H if the language is identical to the language stipulated in 40 CFR §264.151(d). OGC, OECM, OWPE, and OSW agree. Attachment 1 explains the reasoning behind the response.

(2) Convertible Bonds: We received a question concerning whether convertible bond ratings are acceptable for meeting financial test requirements. Attachment 2 shows ICF's analysis. They concluded that a convertible bond issue should be acceptable in meeting financial test requirements if it is rated investment grade by either of the required rating agencies.

In addition, the Subparts G and H conference, originally scheduled for this fall, has been postponed due to resource problems. We have not rescheduled yet, but will likely hold it in the spring.

Please pass this information on to your State contacts. If you have any questions on these matters, call Deborah Wolpe at 382-7729.

Attachments

cc: Joe Freedman
Jackie Temusak

9477.1987(01)

March 2, 1987

MEMORANDUM

SUBJECT: Liability Requirements for Facilities Actively Seeking a RCRA Permit

FROM: J. Winston Porter
Assistant Administrator

TO: Waste Management Division Directors
Regions I - X

As you know, before a treatment, storage, or disposal facility is issued a RCRA permit, §270.14(b)(17) requires that the facility demonstrate its ability to comply with the liability coverage requirements of §264.147.

We are aware that a number of facilities with Part B permit applications currently undergoing review by EPA and the authorized States do not have insurance coverage and cannot otherwise demonstrate compliance with the §264.147 liability coverage requirements. The permit applicant's inability to demonstrate compliance with this important financial responsibility requirement is grounds for permit denial under §270.10(e)(5).

The constrained insurance market which currently exists makes the §264.147 requirement difficult to meet. We are especially concerned about facilities that are actively seeking a permit and can satisfactorily demonstrate compliance with the other Part 264 regulations. Some of these facilities face permit denial solely because of the limited availability of insurance.

As we agreed at the October, 1986 Division Director's Meeting, we believe it is appropriate to grant such facilities additional time prior to final action on the permit, to make concerted efforts to secure insurance or provide an alternative mechanism for lability coverage. Six months is suggested as sufficient extra time; however, facility-specific adjustments can be made in order to be consistent with compliance orders issued pursuant to the October 29, 1986, memorandum of "Enforcement of Liability Requirements for Operating RCRA Treatment, Storage, and Disposal Facilities." Facilities that are close to either a Notice of Intent to Deny (NOID) or permit denial solely for failure to meet the §264.147 liability coverage requirements should be notified immediately that further permit processing

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will be delayed for the duration of this final opportunity to demonstrate compliance with §264.147. Some of these facilities, for instance, may be able to take advantage of the recently promulgated corporate guarantee. Others may now find it easier to locate an insurer. At the end of the additional period of time, if the applicant still does not have an acceptable financial instrument in place, the permit is to be denied.

It should be understood that approving an additional few months for facilities to provide the necessary demonstration of compliance with our §264.147 liability coverage regulations does not justify delaying any land disposal facility's permit issuance/denial beyond the November 8, 1988 deadline.

To the extent facilities accorded this additional time are approaching NOID or permit denial during the next few months, I realize this policy may affect the Regions' abilities to meet quarterly SPMS targets. Regions should identify, on a facility-specific basis, the permitting targets for the second and third quarters of FY 1987 that will be missed due to the exercise of this policy. The revised schedules for draft and/or final permit determinations should also be provided. This information should be submitted in writing to Susan Bromm, Acting Director, Permits and State Programs Division, by March 30, 1987. The Office of Solid Waste (OSW) will use this information in the quarterly SPMS briefings for me and the Deputy Administrator. In this way, managers at both the Regional and national level will continue to focus on the liability coverage issue and the utility of this policy.

In addition to the near-term SPMS reporting information, OSWER also needs to be able to accurately characterize the problems that operating hazardous waste facilities are facing in regard to insurance for liability coverage. Whereas OSWER has previously relied upon informally-gathered or anecdotal information, it has become increasingly important for OSWER to have more facts about the magnitude of the problem. I am, therefore, asking for an overall list of the land disposal facilities in your Region that are currently seeking an operating permit but are not in compliance with §264.147. Among these, you should identify the facilities which, in the judgment of the Region, will not qualify for a RCRA permit due solely to their lack of liability coverage. This information should be submitted to Susan Bromm no later than March 17, 1987.

This has been retyped from the original document.

Please contact Matt Hale (FTS 382-4740) or Elizabeth Cotsworth (FTS 382-4746) if there are questions regarding this policy or the information being requested from each of you.

cc: Susan Bromm
Jim Michael
Kim Ogden
Susan Absher
Thad Juszczak
Jackie Terusak
Sue Gladek
Elizabeth Cotsworth
Matt Hale
Permit Section Chiefs, Regions I-X
RCRA Branch Chiefs, Regions I-X

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

APR 1 1987

OFFICE OF
SOLID WASTE AND EMERGENCY RESPONI

Honorable Robert Dole
United States Senator
636 Minnesota Avenue
Kansas City, Kansas 66101

Dear Senator Dole:

Thank you for your letter of March 6, 1987, concerning the comments of your constituent, Mr. Gregory Shondell, Secretary Treasurer of Heathwood Oil Company. Mr. Shondell, had written to you expressing concerns with hazardous waste financial responsibility regulations under the Resource Conservation and Recovery Act (RCRA).

A particular concern of Mr. Shondell with respect to his parts cleaning business, is the reluctance of his insurance company, Federated Insurance, to provide either a Hazardous Waste Facility Liability Endorsement or a Certificate of Liability Insurance to the Kansas Department of Health and Environment (KDHE). Either of these documents, if submitted, is sufficient to indicate Heathwood Oil Company's compliance with RCRA liability coverage requirements. The Endorsement and the Certificate were developed specifically to ease compliance with the RCRA liability coverage requirements. Insurance companies can rely on the standard language of the Endorsement or Certificate rather than having to assure that the language of individual policies meet the requlatory requirements. At the same time, for regulatory and enforcement authorities who must evaluate facility compliance with various design, operating and performance requirements, compliance with the liability coverage can be easily verified. We are not aware of any insurance company's reluctance to provide the Endorsement or Certificate when the policies being issued fully comply with the RCRA liability coverage requirements.

As stated above, authority for the RCRA program currently belongs to the State of Kansas. Under Section 3006 of RCRA, EPA may authorize qualified States to administer and enforce their own hazardous waste programs. Kansas has been authorized since 1985. As such, Kansas imposes regulatory requirements that are equivalent or more stringent than those of the Federal RCRA program. As part of its authorized hazardous waste program, Kansas relies on receipt of the Endorsement or Certificate as the mechanism for indicating compliance with its liability coverage regulations.

We understand that Mr. Shondell's situation is currently under review by the KDHE. A meeting was held between KDHE officials, Mr. Shondell, and Federated Insurance representatives to review possible deficiencies in the coverage provided and suggest changes that may bring Heathwood Oil Company back into compliance with Kansas regulations. A final decision is pending.

There is a concern on the part of KDHE that one existing policy for Heathwood Oil Company does not cover all its hazardous waste operations. Our financial responsibility expert, Mr. Mike Wolfram (913-236-2800) in EPA's Region VII office, is also reviewing the Federated Insurance policy and will be available to participate with KDHE officials and Mr. Shondell's insurance company representatives to discuss the policy in question.

Mr. Shondell also commented on the difficulty of securing liability insurance. The EPA is aware of the constrained environmental liability insurance market and is sensitive to the problem for owners and operators of hazardous waste management facilities seeking to comply with RCRA. Enclosed for Mr. Shondell's information is a list of companies that offer Environmental Impairment Liability (EIL) Insurance.

There are changes taking place in the insurance marketplace that are favorable to the regulated community. For instance, Business Insurance, the trade publication of the insurance industry, reported in its December 8, 1986, issue that the two major vendors for EIL insurance are looking to expand the volume of EIL business they write. In addition, risk retention groups are being formed to offer EIL coverage. The Agency has also made efforts to offer relief to RCRA facilities unable to secure insurance. On July 11, 1986, EPA promulgated a rule allowing an alternative instrument, the parent corporate guarantee, to be used to demonstrate financial assurance for liability coverage. The Agency is also developing another rule that will authorize more instruments for providing liability coverage and will also amend current insurance requirements that may be limiting the availability of insurance coverage to hazardous waste facilities.

I hope this information on Mr. Shondell's situation and on liability insurance is useful. If I can be of any further assistance, please let me know.

Sincerely,

/S/ J. Winston Porter
Assistant Administrator

Enclosure

RCRA/SUPERFUND HOTLINE MONTHLY SUMMARY

JUNE 87

7. Liability Requirements of Subsidiaries

EPA requires that all hazardous waste firms comply with the RCRA third party liability requirements. Besides insurance, compliance can be obtained through the use of the financial test for liability and the corporate guarantee for liability. A hazardous waste company has six different subsidiary firms. This parent corporation has met the requirements of the financial test. Can all six subsidiaries obtain a corporate guarantee from the parent corporation?

Nothing in the regulation prevents the parent from using the corporate guarantee for more than one sub-contractor. But, the required multiples for the financial test must be based on a true aggregate of liability guaranteed.

Source: Carlos Lago (202) 382-4780
Research: George Kleevic

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

NOV 10 1987

OFFICE OF
SOLID WASTE AND EMERGENCY RESPONS

Harry Shuford
Environmental Protection Insurance Company
220 E. 42nd Street, Suite 500
New York, NY 10017

Dear Mr. Shuford:

I am writing you, at Robert F. Schiff's request, in response to Mr. Schiff's letter of November 2, 1987 to the EPA Office of Solid Waste. In his inquiry, Mr. Schiff sought our view of whether the Resource Conservation and Recovery Act (RCRA) requirements that hazardous waste management facilities demonstrate financial assurance for liability can be satisfied by a policy issued by a risk retention group.

The RCRA regulations at 40 CFR Subpart H require, in part, that to satisfy the financial assurance requirements, an insurance policy must be issued by an insurer licensed to transact business in one or more states. (40 CFR 264.147(a)(1)(ii), (b)(1)(ii) and 265.147(a)(1)(ii), (b)(1)(ii)). A risk retention group which meets the requirements of the Risk Retention Act of 1986 and which is licensed to transact the business of insurance in at least one state would satisfy this regulatory requirement. Your letter indicates that the Environmental Protection Insurance Company (EPIC) has met these conditions. Accordingly, policies issued by EPIC in conformance with all other requirements of Subpart H could be used to satisfy the Federal RCRA requirements for liability coverage, or the requirements of an authorized state that adopted the Federal regulatory language.

I should add, however, that compliance with Federal requirements may not be sufficient to fulfill state requirements. State RCRA requirements may be more stringent than the Federal requirements. In states authorized to

administer the RCRA program, therefore, state regulations must be examined to determine whether your specific mechanism satisfies the RCRA financial assurance requirements and is otherwise consistent with state law.

Sincerely,

Bruce R. Weddle
Director
Permits and State Division

cc: Robert F. Schiff
RCRA Waste Management Division Directors, Region I-X

November 10, 1987

Honorable Nancy Johnson
House of Representatives
Washington, D.C. 20515

Dear Ms. Johnson:

In my letter to you of March 19, 1987, I indicated that the Office of Solid Waste was attempting to identify how many land disposal facilities subject to the 1988 permitting deadline were unable to meet the RCRA liability coverage requirements and, among these, how many faced permit denial solely because of this non-compliance.

I am happy to be able to share the results of our inquiry with you. Information from our Regions indicates that the number of existing land disposal facilities out of compliance with the RCRA liability coverage requirement (40 CFR Part 264.147) for facilities totals no more than 19 and may, in fact, be as few as 13. Unfortunately, difficulties in clearly separating liability coverage violations from non-compliance with other RCRA financial responsibility regulations prevents me from being more precise.

In regard to the number of land disposal facilities for which liability coverage is the only impediment to permit issuance, according to the best judgment of our Regional experts, only one facility falls into this category. The remaining 12-18 facilities are either unable to comply with other RCRA permit requirements or else are expected to decide to close instead of pursuing an operating RCRA permit.

This information is good news to me and, I hope, also to you. The results indicate that most land disposal facilities actively seeking a RCRA operating permit at this time have made concerted efforts to acquire insurance or otherwise demonstrate their ability to provide coverage for third-party liability. EPA's Regional offices, the States, and my own office continue to work with the non-complying RCRA facilities to secure the necessary liability coverage to comply with current regulations.

In our meeting of late March, you also inquired as to the mechanisms that facilities rely on for demonstrating liability coverage. Although not all of our Regions have been able to provide us this information yet, I can share some illustrative information. Region I, for instance, reported that six out of eight existing land disposal facilities seeking a RCRA permit use the financial test to comply with §264.147 liability coverage requirements; the remaining two facilities use insurance policies. In another EPA region, almost half (47%) rely upon the

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financial test while the rest are either insurance (43%) or the corporate guarantee (10%), which became effective as a liability coverage instrument in September 1986. I will forward a more complete tabulation of this information as soon as it is available.

Please feel free to contact me if I can provide further information on this issue.

Sincerely,

J. Winston Porter
Assistant Administrator

Enclosure

This has been retyped from the original document.

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

1 0 1987

OFFICE OF
SOLID WASTE AND EMERGENCY RESPONSE

Richard Crain, Vice President
R&D Fabricating & Manufacturing, Inc.
Box 31225
Lafayette, LA 70503

Dear Mr. Crain,

Thank you for consenting to participate in a pre-test of a questionnaire developed by the Environmental Protection Agency (EPA) for the purposes of gathering information on difficulties associated with third-party liability coverage requirements of the Resource Conservation and Recovery Act (RCRA). The RCRA liability coverage requirements, contained in 40 CFR Parts 264.147 and 265.147, are briefly described below.

The enclosed questionnaire is intended to help EPA better understand the problems that owners and operators of hazardous waste treatment, storage, and disposal facilities have encountered in obtaining liability coverage, in particular through insurance, to meet the current RCRA requirements. The information will provide EPA with a factual basis for determining necessary modifications to regulatory requirements and policies. Responses to our questions will not be used for enforcement purposes. Your participation in our pre-test, along with that of several other hazardous waste management facilities or firms, will enable EPA to determine whether our questions are clear and understandable, and also whether our instructions provide helpful guidance. Because of your willingness to participate in this pre-test, you will not be required to respond to the final questionnaire.

Currently, RCRA financial responsibility regulations in 40 CFR Parts 264.147 and 265.147 (§§264.147 and 265.147) require owners or operators of hazardous waste treatment, storage, and disposal facilities to provide liability coverage for third-party bodily injury and property damage by sudden accidents arising from facility operations. The RCRA regulations also require owners or operators of most types of hazardous waste land disposal facilities to maintain third-party liability coverage for bodily injury and property damage due to nonsudden accidents. The respective coverage levels for sudden and nonsudden

accidents must be at least $1 million and $3 million per occurrence, with annual aggregates of at least $2 million and $6 million, exclusive of legal costs. These requirements apply to owners and operators of interim status (§265.147) and permitted (§264.147) facilities or groups of facilities.

Financial instruments that can be used to provide third-party liability coverage are also specified in the 264.147 and 265.147 regulations. Insurance and a financial test were initially included as allowable instruments for liability coverage. In July, 1986, in response to difficulties that hazardous waste management facilities experienced in obtaining liability insurance, EPA authorized the corporate guarantee as an additional financial instument. We intend to further amend the regulations to allow other instruments to be used to demonstrate compliance with the RCRA liability coverage requirements.

EPA has authorized most States to administer their own hazardous waste programs in lieu of the federal RCRA program. While the liability coverage requirements of authorized States may differ from the federal requirements of §§264.147 and 265.147, they must be at least as stringent. Since your facility is located in an authorized State, please base your responses to our questions on your State's liability coverage regulations.

You should answer all questions contained in the enclosed questionnaire that are applicable to your facility or the group of facilities owned or operated by your firm. If a response to a question requires more space than is provided please use the back of the questionnaire or attach a separate sheet of paper. Please feel free to consult with your insurance agent or broker, if necessary, to respond to any of the questions.

As a pre-test participant, any comments that you may have regarding rephrasing either the questions or the instructions for further clarity are welcome. We encourage you to note, on the questionnaire itself or on a separate piece of paper, any additional instructions that might be useful, or any particular difficulty you encountered in answering our proposed questions. Your estimate of the amount of time needed to respond, including preparation and research time, would also be helpful to EPA in estimating the burden that our inquiry places upon owners/operators. At any time as you read through the questions or answer them, you should feel free to contact Elizabeth Cotsworth at 202-382-4746 to discuss the purpose of the question, EPA's expectations regarding the form or content of an answer, or to provide general comments directly to us.

Upon completion of the questionnaire, please return it in the enclosed envelope, along with any written comments, to:

Elizabeth Cotsworth
Office of Solid Waste, WH-563
U.S. Environmental Protection Agency
401 M Street, S.W.
Washington, D.C. 20460

We are requesting this information under authority of Section 3007 of RCRA. Information obtained under RCRA Section 3007 must be made available to the public unless you demonstrate to EPA that it is confidential. The treatment of confidential business information is provided for by Section 3007(b) of RCRA and regulations contained in 40 CFR Part 2.

We look forward to your response to our pre-test. We expect it to provide EPA with useful information for finalizing our questionnaire.

Sincerely,

Marcia Williams
Director
Office of Solid Waste

Enclosure

RCRA/SUPERFUND HOTLINE MONTHLY SUMMARY

NOVEMBER 87

3. Financial Assurance

Corporation A owns 100% of the voting shares of corporation B. Corporation B owns over 50% of the voting shares of corporation C. Can corporation A fulfill the requirements as a parent company of corporation C for the purpose of financial assurance, via corporate guarantee as required in Sections 264.143, 264.145, 265.143 and 265.145?

In this situation corporation A is a "grandparent" corporation which indirectly owns over 50% of the voting shares of corporation C. Corporation A does not fulfill the definition of a parent corporation stated in Section 264.141(d) (see April 7, 1982 Federal Register, 47 FR 15037) as: "A corporation which directly owns at least 50% of the voting stock of the corporation which is the facility owner or operator; the latter corporation which is deemed a "subsidiary" of the parent corporation."

The Agency adopted this definition to ensure that the connection between the two firms will be close and direct, and the parent company is likely to have a strong interest in the satisfactory performance of the subsidiary.

Since corporation A is not a parent corporation, it may not be used to demonstrate financial assurance via a corporate guarantee for corporation C.

Source: Carlos Lago (202) 382-4780
Research: Craig Campbell

This has been retyped from the original document.

9477.1988(01)

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

FEB 25 1988

OFFICE OF
SOLID WASTE AND EMERGENCY RESPON

MEMORANDUM

SUBJECT: OSWER Directive No. 9477.00-6 Guidance for Reviewing Exclusions for Pre-Existing Conditions in RCRA TSDF Insurance Policies

FROM: Jeffery D. Denit, Acting Director
Office of Solid Waste (WH-562)

TO: Robert L. Duprey, Director
Hazardous Waste Management Division, Region VIII

This memorandum is in response to your memorandum dated January 22, 1988 regarding OSWER Directive No. 9477.00-6 and Subpart H liability insurance coverage.

The guidance in this Directive, "Reviewing Exclusions for Pre-Existing Conditions in RCRA TSDF Insurance Policies," was developed because the Regions differed in their willingness to accept policies that contained pollution exclusions. The guidance is based on the Agency's interpretation of the existing Subpart H regulations. Since the insurance certificate or endorsement is a statement that the policy fulfills the "insured's obligations to demonstrate financial responsibility under 264/265.147" such certificates or endorsements should provide evidence that the issued policies do not contain unacceptable exclusions.

As pointed out in the guidance, you may continue to rely upon the insurance certificate and the insurance endorsement required by Subpart H regulations to ensure that insurance mandated by RCRA is in place. As part of your oversight role, however, the guidance suggests that you routinely review the pollution exclusions endorsements to policies. Directive No. 9477.00-6 should provide adequate guidance in reviewing these contract endorsements. If problems or questions do arise, please do not hesitate to contact either OSW or OWPE for assistance. OSW and OWPE are also currently ascertaining whether the Agency has funds to retain a contractor to assist in the review of insurance policies. If the project is undertaken,

the task for the contractor would most likely entail an analysis of one "form" contract from each of the companies issuing liability insurance to RCRA TSDFs.

In reference to your last point concerning the expansion of liability insurance coverage for nonsudden events to all TSDFs, there are currently no plans to revise the regulations. In developing the distinction between sudden and nonsudden coverage, EPA relied on evidence contained in case histories concerning damages associated with waste facilities. As a result of this analysis the Agency determined that storage and treatment facilities were more likely to experience a sudden, rather than nonsudden accident. We believe that this distinction is still appropriate; however, the regulations are quite flexible. If a Regional Administrator or State determines there is a significant risk to human health and the environment from nonsudden accidents at a treatment or storage facility, such coverage may be required (264/265.147(d)).

Should your staff have further questions concerning these issues, they may contact Mark Pollins at FTS 382-4780.

RCRA/SUPERFUND HOTLINE MONTHLY SUMMARY

JULY 88

1. Tank Replacement

A permitted storage facility has several above-ground storage tanks that are managed in compliance with Subpart J of 40 CFR 264. If the owner/operator replaces one of the tanks, would he be subject to any closure requirements? Would it make any difference if it were a facility with only one tank?

Section 264.112(d) requires notification of partial closure for surface impoundments, waste piles, land treatment units and landfills. This same section requires notification regarding treatment, tank storage, container storage or incinerator facilities only in the case of final closure. Replacement of a storage tank would not constitute final closure per Section 264.197, and partial closure is not applicable to a storage tank facility per Section 264.112(d). While not specifically required, the owner/operator should decontaminate the removed equipment and notify the state or region of the change. However, equipment that is not decontaminated must be managed as a hazardous waste.

Source:	Bill Kline	(202) 382-7924
	Chester Oszman	(202) 382-4499
Research:	Laurie Huber	

RCRA/SUPERFUND HOTLINE MONTHLY SUMMARY

OCTOBER 88

2. Financial Assurance

Three treatment, storage and disposal facilities (TSDFs) are wholly owned subsidiaries of one company. The three facilities need financial coverage for nonsudden accidental occurrences: $3 million per occurrence and $6 million annual aggregate. Must the parent company provide the $3 million/$6 million for each facility (a cumulative of $9 million/$18 million) or can all of the facilities be covered by the $3 million/$6 million?

An owner or operator of a hazardous waste treatment, storage, or disposal facility, or a group of such facilities must demonstrate liability coverage in the amounts of $3 million per occurrence and $6 million aggregate (40 CFR Section 264.147(b)). As explained in the April 16, 1982 Federal Register (47 FR 16544), liability coverage is required on an owner or operator basis rather than a facility basis. The annual aggregate coverage requirement takes into account the risk of multiple occurrences among facilities owned by one company (47 FR 16546). Therefore, the company that owns three TSDFs as subsidiaries is only required to have $3 million/$6 million nonsudden accidental coverage, not $9 million/$18 million.

Source: Mark Pollins (202) 382-4780
Research: Renee Pannebaker

RCRA/SUPERFUND HOTLINE MONTHLY SUMMARY

NOVEMBER 88

1. Adjustment of Post-Closure Trust Funds Used for Financial Assurance

A TSD facility has been in post-closure care for one year. The facility owner or operator had established a post-closure trust fund to meet their financial assurance obligations. Can the facility owner or operator remove from the trust fund the amount which exceeds the remaining cost of post-closure care?

According to Section 264.145(a)(10), during the period of post-closure care, the Regional Administrator (RA) may approve a release of funds if the owner or operator demonstrates to the RA that the value of the trust fund exceeds the remaining cost of post-closure care. Therefore, the facility owner or operator must receive approval for the release of excess funds from the RA, prior to removing that amount from the trust fund.

Source: Mark Pollins (202) 382-6259
Research: Kim Jennings

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

MEMORANDUM

MAY 16 1989

SUBJECT: Acceptable Bond Ratings for Use in Subtitle C Financial Test

FROM: Joseph S. Carra, Director
Permits and State Programs Division

TO: RCRA Branch Chiefs, Regions I - X

We have recently received specific inquiries concerning whether certain types of bond ratings meet the conditions required by the bond rating alternative of the Subtitle C financial test. 40 CFR §§264/265.143(f), 264.145(f), 265.145(e), and 264/265.147(f). Specifically, whether a BBB- rating from Standard and Poor's (S&P) or a Baa3 rating from Moody's satisfies the minimum ratings required by regulation. In brief, these ratings can be used to satisfy the bond rating alternative of the financial test.

Regulations relating to the bond rating alternative of the financial test specify that the owner or operator must have a bond rating "of AAA, AA, A, or BBB as issued by Standard and Poor's or Aaa, Aa, A, or Baa as issued by Moody's." At the time these regulations were promulgated, S&P had not yet begun the practice of adding a "+" or "-" suffix to bond ratings, and Moody's had not yet begun adding a "1", "2", or "3" suffix. The bond rating suffix indicates the relative standing of a bond within a major rating category. In other words, a BBB- bond has a lower relative standing than a BBB bond or a BBB+ bond, but all three bonds fall within the major rating category of BBB bonds. The BBB- bond would have been rated as a BBB bond prior to the time when S&P began adding a rating suffix. Similarly, a bond rated Baa3 by Moody's would have been rated Baa prior to the time when Moody's began adding the rating suffix.

In summary, pursuant to current regulations, a Moody's rating of Baa3 or better, or a S&P rating of BBB- or better satisfies the legal requirements of the financial test. We note that revisions to the financial test are currently being considered. The question of bond ratings will be fully re-examined during this effort.

If you have any questions, please call Mark Pollins on FTS 382-6259.

cc: RCRA Hotline
Regional Subpart H Contacts

PINK FILE COPY

9477.1990(01)

JAN 25 1990

MEMORANDUM

SUBJECT: Clarification of 40 CFR § 264.147(a)(7), (b)(7), and § 265.147(a)(7), (b)(7)

FROM: Sylvia K. Lowrance, Director /S/
Office of Solid Waste, (OS-300)

TO: RCRA Branch Chiefs, Regions I-X

This memorandum clarifies the regulations at 40 CFR §§264.147(a)(7), (b)(7) and 265.147(a)(7), (b)(7), which require an owner or operator of a hazardous waste treatment, storage, or disposal facility (TSDF) to report to the Agency claims for bodily injury or property damage that result from operation of the facility. We believe this clarification is necessary because the Agency has been asked what types of information owners and operators must report to comply with those provisions.

The reporting requirement in those sections was promulgated as part of a rulemaking related to liability coverage on September 1, 1988 and became effective on October 3, 1988. Those sections state that owners or operators must notify the Regional Administrator in writing within 30 days (i) whenever a claim for bodily injury or property damages caused by the operation of a TSDF facility is made against the owner or operator or an instrument providing financial assurance for liability coverage under this section, and (ii) whenever the amount of financial assurance for liability coverage under this section provided by a financial instrument authorized by this rule is reduced. We have been asked to define the extent of the first requirement, that is, the meaning of the language, "whenever a claim ... is made."

The purpose of the notification requirement is to provide the Agency with early warning of potential instrument failure due to pending claims and to provide the Agency with data concerning the incidence of valid third-party claims. To achieve these

goals the Agency envisions that TSDF facilities will report to the Regional Administrator whenever:

1) a claim results in a reduction in the amount of financial assurance for liability coverage provided by an authorized financial instrument, or

2) a certification of a valid claim for bodily injury or property damages caused by a sudden or non-sudden accidental occurrence arising from the operation of a hazardous waste treatment, storage, or disposal facility is entered into between the owner or operator and a third-party claimant for liability coverage, or

3) a final court order establishing a judgment for bodily injury or property damage caused by a sudden or non-sudden accidental occurrence arising from the operation of a hazardous waste treatment, storage or disposal facility is issued against the owner or operator or an instrument providing financial assurance for liability coverage.

The regulation is not intended to require owners or operators to report all types of claims that potentially could be filed against a facility. Section 264.151, a related provision promulgated in the same rulemaking, authorizes the payment of funds from the financial instruments only for valid third-party claims and expressly excludes payment for certain categories of damages or obligations such as claims under worker's compensation law or resulting from automobile accidents involving vehicles owned by the facility. Similarly, the Agency intended to require owners or operators to report only valid claims to the Regional Administrator.

The Agency did not intend that the reporting requirement extend beyond the three situations listed above and plans to clarify the regulatory language in the near future. This memorandum interprets the provision as it stands pending formal clarification in the Federal Register. It should be noted that the Agency is clarifying this provision in the interim through use of a memorandum because of the particular circumstances of this case.

If you have any questions about this issue, please contact Barbara Foster at 382-4696.

9477.1990(02)

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

MAY 28

OFFICE OF
SOLID WASTE AND EMERGENCY RESPONSE

MEMORANDUM

SUBJECT: Post-Closure Notices

FROM: Sylvia K. Lowrance, Director
Office of Solid Waste (OS-300)

TO: Robert L. Duprey, Director
Hazardous Waste Management Division (8HWM-RM)

This responds to your memorandum dated 26 March 1990, in which you requested modification of the RCRA regulations regarding release of owners and operators from financial responsibility requirements. You expressed concern that owners and operators do not comply with the deed notification requirements of the regulations, and that because such a deed notation has a negative effect on the value of the property, there is a strong incentive for them not to comply. You suggested that the regulations should explicitly require such compliance with the deed notice requirements as a condition for release from financial responsibility requirements.

As you discussed in your memorandum, sections 264.119 and 265.119 require owners and operators to record notations on the property deeds within 60 days of certifying closure. The deed notification must specify that: (a) the land has been used to manage hazardous waste, (b) use of the land is restricted under 40 CFR Subpart G regulations, and (c) a record of the hazardous wastes disposed of on the site has been submitted to the local zoning authority. At the same time, sections 264.143(i) and 265.143(h) require the Regional Administrator to release owners and operators from financial assurance requirements within 60 days of receiving certification that final closure has been completed in accordance with the approved closure plan. The certifications mentioned in sections 264.143(i) and 265.143(h) are those in sections 264.115 and 265.115. Thus, there is no explicit language stating that release from financial assurance requirements is conditioned upon a demonstration that the owner or operator has fully complied with the requirements of sections 264.119 and 265.119.

We plan to amend the regulations to clarify that release of financial assurance is conditioned on full compliance with sections 264.119 and 265.119 in the next available rulemaking vehicle. Although enforcement is an available option to obtain compliance with sections 264.119 and 265.119, we encourage you to incorporate the requirements of sections 264.119 and 265.119 into

closure plans to avoid the need for such enforcement action. This will ensure that compliance with those sections will be complete before the release from financial responsibility.

If you have any questions or comments regarding this memorandum, please feel free to contact Ed Coe at FTS 382-6259.

TSDF Technical Requirements (Parts 264 and 265)

9480 – TSDF TECHNICAL REQUIREMENTS

Parts 264 & 265

ATK1/1104/39 kp

MAR 13 '87

TO THE STATES AND COMPACT REGIONS:

SUBJECT: COMBINED NRC-EPA SITING GUIDELINES FOR DISPOSAL OF MIXED LOW-LEVEL RADIOACTIVE AND HAZARDOUS WASTE

As you are aware, the Low-Level Radioactive Waste Policy Amendments Act of 1985 (LLRWPAA) established milestones (and penalties for not meeting these milestones) to ensure adequate development of future disposal capacity for commercial low-level radioactive waste (LLW). The penalties are quite severe and the deadlines do not leave much room for slippage.

We would like to call to your attention the January 1, 1988 milestone (Section 5(e)(1)(B)) which requires that each non-sited compact or non-member state develop a siting plan for a LLW disposal facility. These siting plans must include detailed procedures and a schedule for establishing a disposal facility location and preparing a license application. Among other things, Section 5(e)(1)(B)(iii) provides that the siting plan shall:

> "... identify, to the extent practicable, the process for (1) screening for broad siting areas; (2) identifying and evaluating specific candidate sites; and (3) characterizing the preferred site(s), ..."

This letter serves four purposes:

(1) to inform states and compacts that, under current Federal law, the U.S. Nuclear Regulatory Commission (NRC) and the U.S. Environmental Protection Agency (EPA) have dual jurisdiction over mixed low-level radioactive and hazardous waste (Mixed LLW); (2) to state that both NRC and EPA do not consider the absence of EPA's final comprehensive location standards to be justification for states and compacts to not meet their obligations under the LLRWPAA; (3) to convey that both NRC and EPA are committed to providing guidance to states and compacts who request help in their efforts to meet the January 1988 LLRWPAA milestone for siting plans; and (4) to jointly transmit the NRC-EPA combined siting guidelines for Mixed LLW (enclosed).

Dual statutory authority exists for Mixed LLW, which is regulated by the NRC under the Atomic Energy Act (AEA), as amended, and by EPA under the Resource Conservation and Recovery Act (RCRA), as amended. Mixed LLW is defined as waste that satisfies the definition of LLW in the LLRWPAA and contains hazardous waste that either is listed in 40 CFR Part 261 Subpart D or causes the LLW to exhibit any of the hazardous waste characteristics identified in 40 CFR Part 261 Subpart C. Both the NRC and EPA staffs consider that Mixed LLW

can be disposed of in accordance with the above statutes and NRC and EPA regulations.

In 1982, the NRC promulgated regulations containing minimum site suitability requirements for LLW land disposal facilities under 10 CFR Part 61. In 1981, EPA promulgated minimum location standards for hazardous waste treatment, storage, and disposal facilities in 40 CFR Part 264. Section 3004(o)(7) of RCRA, which was added by the Hazardous and Solid Waste Amendments of 1984 (HSWA), requires EPA to publish guidance identifying areas of vulnerable hydrogeology; this guidance was completed and issued in July 1986. Section 3004(o)(7) of RCRA also requires EPA to specify criteria for the acceptable location of new and existing hazardous waste treatment, storage, and disposal facilities as necessary to protect human health and the environment. EPA anticipates proposing these location standards in September 1987 and promulgating them by September 1988. This schedule provides affected states and compacts with a preview of the final standards and an opportunity to comment on the standards before promulgation.

Because of uncertainty about the precise content of EPA's future location standards, states and compacts may have questions regarding the site selection process. Both NRC and EPA are committed to providing guidance to states and compacts who request help in developing their siting plans by the January 1, 1988 deadline. Technical questions pertaining to siting a disposal facility for Mixed LLW should be submitted in writing to either the NRC or EPA contacts listed below, as appropriate.

For questions about the LLRWPAA siting deadline or NRC's site suitability requirements, contact:

Dr. Sher Bahadur
Division of Waste Management
Mail Stop 623-SS
U.S. Nuclear Regulatory Commission
Washington, D.C. 20555

For questions relating to EPA's location standards contact:

Mr. Burnell Vincent
Waste Management Division
Mail Code WH-565
U.S. Environmental Protection Agency
Washington, D.C. 20460

In summary, if states and compacts observe the enclosed NRC-EPA combined siting guidelines and keep abreast of the developing EPA location standards, the absence of final RCRA location standards should not prevent states and compacts from meeting their obligations under the LLRWPAA.

Sincerely,

Hugh L. Thompson, Jr., Director
Office of Nuclear Material
Safety and Safeguards
U.S. Nuclear Regulatory Commission

J. Winston Porter
Assistant Administrator
Office of Solid Waste
and Emergency Response
U.S. Environmental Protection Agency

Enclosure:
As stated

COMBINED NRC-EPA SITING GUIDELINES FOR DISPOSAL OF COMMERCIAL MIXED LOW-LEVEL RADIOACTIVE AND HAZARDOUS WASTES

Introduction

The Low-Level Radioactive Waste Policy Amendments Act of 1985 (LLRWPAA) requires states and compacts to develop siting plans for low-level radioactive waste (LLW) disposal facilities by January 1, 1988. These disposal facilities may receive commercial mixed low-level radioactive and hazardous waste (Mixed LLW), which is regulated by the U. S. Nuclear Regulatory Commission (NRC) under the Atomic Energy Act (AEA), as amended, and by the U. S. Environmental Protection Agency (EPA) under the Resource Conservation and Recovery Act (RCRA), as amended. Mixed LLW is defined as waste that satisfies the definition of LLW in the LLRWPAA and contains hazardous waste that either is listed in Subpart D of 40 CFR Part 261 or causes the LLW to exhibit any of the hazardous waste characteristics identified in Subpart C of 40 CFR Part 261. To assist in applying that definition, NRC and EPA recently developed joint guidance entitled "Guidance on the Definition and Identification of Commercial Mixed Low-Level Radioactive and Hazardous Waste and Answers to Anticipated Questions" (Jan. 8, 1987). NRC has promulgated LLW regulations and EPA has promulgated hazardous waste regulations that pertain to the siting requirements for disposal facilities for Mixed LLW. Because of uncertainty about the precise content of EPA's future location standards, states and compacts may have questions regarding the site selection process. This document provides combined NRC-EPA siting guidelines, to be used before EPA's new location standards are promulgated, to facilitate development of siting plans for disposal facilities that may receive Mixed LLW.

Section 5(e)(1)(B) of the LLRWPAA requires states and compacts to develop siting plans for LLW disposal facilities by January 1, 1988. In addition to other information, these siting plans must identify, to the extent practicable, the process for (1) screening for broad siting areas, (2) identifying and evaluating specific candidate sites, and (3) characterizing the preferred site(s). It is anticipated that this process will be based primarily on the site suitability requirements that apply to LLW disposal. If facilities also receive Mixed LLW, their siting requirements will reflect additional requirements that apply to disposal of hazardous waste as defined by RCRA.

In 1982, NRC promulgated regulations which contain minimum site suitability requirements for LLW land disposal facilities in 10 CFR 61.50. EPA has also promulgated minimum location standards for hazardous waste treatment, storage, and disposal facilities in 40 CFR 264.18. Considerations affecting siting are also found in 40 CFR 270.3, 270.14(b) and (c). Although both NRC and EPA have incorporated siting requirements in existing regulations for LLW and hazardous waste disposal, respectively, the 1984 Hazardous and Solid Waste Amendments (HSWA) to RCRA require EPA to publish guidance identifying areas of vulnerable

hydrogeology. In July 1986, EPA published this guidance in "Criteria for Identifying Areas of Vulnerable Hydrogeology under the Resource Conservation and Recovery Act--Statutory Interpretative Guidance, July 1986, Interim Final (PB-86-224953)." The 1984 HSWA also requires (in Section 3004(o)(7)) that EPA specify criteria for the acceptable location of new and existing hazardous waste treatment, storage, and disposal facilities. EPA anticipates proposing these location standards in September 1987 and promulgating them in final form by September 1988.

EPA's scheduled date for promulgating its final location standards is nine months after the LLRWPAA January 1, 1988, milestone for non-sited states and compacts to develop siting plans. Therefore, states and compacts may require some assistance in their efforts to develop siting plans for LLW disposal facilities that may receive Mixed LLW. The two agencies are issuing these combined guidelines to promote the development of siting plans by states and compacts. Both NRC and EPA consider that the absence of EPA's final comprehensive location standards for hazardous waste disposal facilities is not an adequate basis for states and compacts to delay development of siting plans for LLW disposal.

States and compacts should proceed at this time to develop siting plans in accordance with the existing NRC and EPA requirements. The following combined NRC-EPA guidelines are provided for use by the states and compacts, and are based on existing NRC regulations in 10 CFR Part 61 and EPA regulations in 40 CFR Parts 264 and 270. As EPA continues its development of location standards, both agencies will strive to keep states and compacts informed about the status of the developing siting requirements.

Combined NRC-EPA Siting Guidelines

Site suitability requirements for land disposal of LLW are provided in 10 CFR Section 61.50. These requirements constitute minimum technical requirements for geologic, hydrologic, and demographic characteristics of LLW disposal sites. Several of these requirements identify favorable site characteristics for near-surface disposal facilities for LLW. The majority of the site suitability requirements, however, identify potentially adverse site characteristics that must not be present at LLW disposal sites. The site suitability requirements in 10 CFR Part 61 are intended to function collectively with the requirements for facility design and operation, site closure, waste classification and segregation, waste form and packaging, and institutional controls to assure isolation of LLW for the duration of the radiological hazard. The NRC Technical Position entitled "Site Suitability, Selection, and Characterization" (NUREG-0902) provides detailed guidance on implementing the site suitability requirements in 10 CFR Part 61.

EPA has also promulgated certain minimum location standards for hazardous waste treatment, storage, and disposal facilities. These standards are provided in

40 CFR Section 264.18. As previously noted, the hazardous waste regulations also include other location considerations as well as applicable provisions of other Federal statutes. For example, Subpart F of 40 CFR Part 264 requires establishment of ground-water monitoring programs capable of detecting contamination from land disposal units. While not a siting criterion per se, this requirement can preclude siting in locations that cannot be adequately monitored or characterized. A further description of location-related standards and applicable provisions of other Federal statutes can be found in the "Permit Writers' Guidance Manual for Hazardous Waste Land Storage and Disposal Facilities: Phase I Criteria for Location Acceptability and Existing Applicable Regulations" (Final Draft - February 1985). This guidance manual describes five criteria for determining location acceptability: ability to characterize, exclusion of high hazard and unstable terrain, ability to monitor, exclusion of protected lands, and identification of areas of vulnerable hydrogeology. The first four of these criteria have a basis in the regulations and are fully described in the manual. The fifth criterion, vulnerable hydrogeology, is defined in the RCRA interpretive guidance manual mentioned above (Criteria for Identifying Areas of Vulnerable Hydrogeology under the Resource Conservation and Recovery Act--Statutory Interpretive Guidance, July 1986, Interim Final (PB-86-224953)).

However, since HSWA also added other requirements in addition to location standards to prevent or mitigate ground-water contamination, EPA recognizes that vulnerable hydrogeology must be considered in conjunction with design and operating practices. Vulnerability should not be the sole determining factor in RCRA siting decisions. Rather, this criterion provides a trigger for more detailed evaluation of sites that are identified as having potentially vulnerable hydrogeology. The extent of necessary site review and evaluation is related directly to the extent to which a location "fails" or "passes" the vulnerability criterion. Sites that are determined to be extremely vulnerable will require much closer examination than sites that are deemed non-vulnerable. The results of this more detailed review may then provide a basis for eventual permit conditions or modifications in design or operating practices.

By combining the above technical requirements, standards, and guidance of both agencies, NRC and EPA have formulated the eleven guidelines listed below. The use of terms in the guidelines is consistent with their regulatory definitions in 10 CFR Part 61 and 40 CFR Parts 260 and 264. The combined set of location guidelines is intended by the agencies to apply only as guidance to states and compacts developing siting plans for LLW disposal facilities that may receive Mixed LLW. These combined guidelines are not intended to displace existing standards and guidance. In addition, the independent guidance of both agencies should be considered in any application of the combined siting guidelines.

The combined siting guidelines for a commercial Mixed LLW disposal facility are as follows:

1. Primary emphasis in disposal site suitability should be given to isolation of wastes and to disposal site features that ensure that the long-term performance objectives of 10 CFR Part 61, Subpart C are met.

2. The disposal site shall be capable of being characterized, modeled, analyzed, and monitored. At a minimum, site characterization must be able to (a) delineate ground-water flow paths, (b) estimate ground-water flow velocities, and (c) determine geotechnical properties sufficiently to support facility design. At a minimum for site ground-water monitoring, disposal site operators must be able to (a) assess the rate and direction of ground-water flow in the uppermost aquifer, (b) determine background ground-water quality, and (c) promptly detect ground-water contamination.

3. The disposal site must be generally well-drained (with respect to surface water) and free of areas of flooding or frequent ponding.

4. The disposal site shall not be in the 100-year floodplain.

5. The site must be located so that upstream drainage areas are minimized to decrease the amount of runoff that could erode or inundate waste disposal units.

6. Disposal sites may not be located on lands specified in 10 CFR Section 61.50(a)(5), including wetlands (Clean Water Act) and coastal high hazard areas (Coastal Zone Management Act). Location of facilities on the following lands must be consistent with requirements of applicable Federal statutes: archeological and historic places (National Historic Places Act); endangered or threatened habitats (Endangered Species Act); national parks, monuments, and scenic rivers (Wild and Scenic Rivers Act); wilderness areas (Wilderness Protection Act); and wildlife refuges (National Wildlife Refuge System Administration Act).

7. The disposal site should provide a stable foundation for engineered containment structures.

8. Disposal sites must not be located in areas where:

(a) tectonic processes such as faulting, folding, seismic activity, or vulcanism may occur with such frequency and extent to affect significantly the ability of the disposal facility to satisfy the performance objectives specified in Subpart C of 10 CFR Part 61, or may preclude defensible modeling and prediction of long-term impacts; in particular, sites must be located more than 200 feet from a fault that has been active during the Holocene Epoch;

(b) surface geologic processes such as mass wasting, erosion, slumping, landsliding, or weathering occur with such frequency and extent to affect

significantly the ability of the disposal facility to meet the performance objectives in Subpart C of 10 CFR Part 61, or may preclude defensible modeling and prediction of long-term impacts;

(c) natural resources exist that, if exploited, would result in failure to meet the performance objectives in Subpart C of 10 CFR Part 61;

(d) projected population growth and future developments within the region or state where the facility is to be located are likely to affect the ability of the disposal facility to meet the performance objectives in Subpart C of 10 CFR Part 61; and

(e) nearby facilities or activities could adversely impact the disposal facility's ability to satisfy the performance objectives in Subpart C of 10 CFR Part 61 or could significantly mask an environmental monitoring program.

9. The hydrogeologic unit beneath the site shall not discharge ground water to the land surface within the disposal site boundaries.

10. The water table must be sufficiently below the disposal facility to prevent ground-water intrusion into the waste, with the exception outlined under 10 CFR Section 61.50(a)(7).

11. In general, areas with highly vulnerable hydrogeology deserve special attention in the siting process. Hydrogeology is considered vulnerable when ground-water travel time along any 100-foot flow path from the edge of the engineered containment structure is less than approximately 100 years (Criteria for Identifying Areas of Vulnerable Hydrogeology Under RCRA--Statutory Interpretive Guidance, July 1986, Interim Final (PB-86-224953)). Disposal sites located in areas of vulnerable hydrogeology may require extensive, site-specific investigations which could lead to and provide bases for restrictions or modifications to design or operating practices. However, a finding that a site is located in an area of vulnerable hydrogeology alone, based on the EPA criteria, is not considered sufficient to prohibit siting under RCRA.

9480.1984(01)

JUN 12 1984

Mr. Lou A. Bellone, #339789
Eastham Unit
P.O. Box 16
Lovelady, TX 75851

Dear Mr. Bellone:

Thank you for your recent letter to Administrator Ruckelshaus regarding the use of cavities produced as a result of nuclear weapons testing for the disposal of hazardous waste. Mr. Ruckelshaus has asked me to respond to your letter.

The major concern in the disposal of hazardous waste is in containing the waste so that the potential for migration of hazardous constituents is minimized. For this reason, EPA generally requires the installation of a liner that will prevent migration of hazardous constituents during the active life of the land disposal facility and a cover to minimize infiltration of precipitation at facility closure.

The deposition of hazardous wastes in deep underground rock formations that are capable of containing the wastes without use of liners or covers is not currently among the options that EPA allows, although we are actively developing regulations to address this type of disposal. However, severe fracturing of underground rock formations can be expected as a result of underground nuclear testing. Such fracturing would likely provide conduits through which hazardous constituents could migrate. Furthermore, prediction of the routes of migration would be impossible. Additional detonation where hazardous wastes have been placed could result in the generation of hazardous byproducts of unknown character and contribute to the dispersal of hazardous constituents underground. Nuclear test sites, therefore, are probably unsuitable for hazardous waste disposal.

I hope that this information is helpful to you. Mr. Ruckelshaus deeply appreciates your concern for the proper disposal of hazardous waste.

Sincerely yours,

Kenneth A. Shuster
Chief, Land Disposal Branch
Office of Solid Waste

WH-565E:Rich Stessel:pj:S206:382-4654:WSM:6/12/84

9480.1985(01)

April 1, 1985

MEMORANDUM

SUBJECT: Applicability of the HSWA Minimum Technological Requirements Respecting Liners and Leachate Collection Systems

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

TO: Waste Management Division Director
Regions I - X

We have received numerous inquiries regarding the applicability of the HSWA-imposed minimum technological requirements for liners and leachate collection systems at hazardous waste landfills, surface impoundments, and waste piles. This memorandum outlines the most critical factors for determining the applicability of the minimum technological requirements. The guidance contained herein will be incorporated into an upcoming version of the Reauthorization Statutory Interpretation (RSI) for the minimum technological requirements. Other important applicability issues, such as definition of the term "replacement unit," will be addressed in the RSI.

As you know, the new minimum technological requirements are contained in sections 3004(o) and 3015 of RCRA. Among other things, these sections require that (a) new landfill and surface impoundment units and lateral expansions and replacements of existing landfill and surface impoundment units must have two or more liners and a leachate collection system above (in the case of a landfill) and between the liners; and (b) new interim status waste pile units and lateral expansions and replacements of existing interim status waste pile units must meet the current regulations for new, permitted waste piles. RCRA Subtitle C permits issued after November 8, 1984, must include these provisions, and interim status facilities must meet the requirements with respect to waste received after May 8, 1985.

This has been retyped from the original document.

The key term in understanding the applicability of the minimum technological requirements is "existing unit," because all other types of units (i.e., new units, lateral expansions, and replacements) are required to meet the minimum technological requirements. (However, interim status units that do not receive hazardous waste after May 8, 1985, are excepted. In addition, units permitted prior to November 8, 1984, are not addressed under section 3004(o).)

In order for a unit or portion of a unit to qualify as an "existing unit" and, therefore, be exempt from the minimum technological requirements, all of the following criteria must be met.

1. The unit must have received solid or hazardous waste in some portion of the unit as of November 8, 1984.

2. The area was identified in operating records, closure plans, state permits, etc., as being part of the unit as of November 8, 1984.

3. The area was "operational" as of November 8, 1984 (i.e., the area was constructed by that date in accordance with Federal, State, and local requirements, including licenses and permits).

The attached memorandum, regarding a facility in Region 7 that has recently proposed to place waste above a landfill trench that is reaching its physical capacity, may provide you with additional useful guidance.

Attachment

This has been retyped from the original document.

JUL 17 1985

RE: WIBCJ0285

MEMORANDUM

SUBJECT: Status of Sludges in Surface Impoundments or Land Treatment Units when Wastewater Treatment Sludges are Listed in §261.31 & §261.32

FROM: John H. Skinner, Director
Office of Solid Waste

TO: James H. Scarbrough, Chief
Residuals Management Branch, Region IV

In your June 20, 1985 memorandum, you asked if wastewater treatment sludge listings under §261.31 or §261.32 would apply in all situations where land disposal or storage of the associated wastewaters was practiced. You cited a previous memorandum from this office dated November 23, 1984, wherein a determination was made that wastewaters from wood preserving facilities treated in spray irrigation fields generated listed K001 wastewater treatment sludges, and that such units are subject to the hazardous waste facility permitting standards.

Any pollution abatement technique such as the land treatment, disposal, or storage of a wastewater will invariably generate a sludge. The mechanisms for sludge formation involve either precipitation, adsorption, or accumulation of biomass. These units would be subject to regulation if the associated wastewater treatment sludges are listed in §261.31 and §261.32, if the sludges exhibit a characteristic, or if the wastewaters themselves are listed or exhibit a characteristic. These units would therefore be subject to §264, 265 and 270 requirements.

cc: Regional Administrators
Regional Branch Chiefs

RCRA/SUPERFUND HOTLINE MONTHLY SUMMARY

MAY 87

A tank owner closed a tank which contained waste solvent in 1977. The waste solvent was an unlisted, ignitable waste (D001) which was pumped out of the tank. Some ignitable residues remained in the tank. The tank was sealed and has not been used since 1977. Is the tank a RCRA disposal facility?

The preamble of the May 19, 1980 Federal Register (40 CFR 264 and 265, page 33170) specifically states that the regulatory scheme of Subtitle C is prospective, i.e., it applies to hazardous waste management which takes place after the effective date of the Subtitle C regulations. Inactive (either closed or abandoned) disposal facilities could be subject to RCRA §7003 enforcement authorities and CERCLA. If the tank was closed in accordance with existing industry practices, it would be an inactive disposal facility not subject to RCRA Subtitle C regulation unless the waste in the tank is subsequently managed in a manner that would constitute treatment storage or disposal.

Source: Chet Oszman (202) 382-4499
Research: Becky Cuthbertson

9480.1987(02)

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

OCT 29 1987

OFFICE OF
SOLID WASTE AND EMERGENCY RES

MEMORANDUM

SUBJECT: Union Carbide Agricultural Products Company Waiver Request Under §3004(o)(2) of HSWA

FROM: Marcia Williams, Director
Office of Solid Waste

TO: Robert E. Greaves, Acting Chief
Waste Management Branch (3HW30)

Per your memorandum of September 16, 1987 requesting our assistance in responding to Union Carbide Agricultural Products Company's (UCAPCO) application for a variance under §3004(o)(2) of RCRA, our views are set forth below.

Section 3005(j) requires the installation of double liners and a leachate collection system by November 8, 1988 for all surface impoundments that existed on November 8, 1984 and that qualified for interim status. Certain exceptions from these requirements, however, are authorized under §3005(j)(2),(3),(4) & (13). One other means of obtaining a waiver of §3005(j) requirements is set forth in §3004(o)(2). That section authorizes the Administrator to grant variances from the double liner and leachate collection system requirements if:

> the owner or operator demonstrates to the Administrator, and the Administrator finds for such landfill or surface impoundment, that alternative design and operating practices together with location characteristics, will prevent the migration of any hazardous constituents into the ground water or surface water at least as effectively as such liners and leachate collection systems.

Unsuccessful in its attempt to obtain an exemption pursuant to §3005(j)(3), UCAPCO now proposes to satisfy the requirements of obtaining a variance under §3004(o)(2) by a combination of intragradient cut-off walls and the removal and treatment of contaminated ground water within such walls. UCAPCO submits that these design and operating practices coupled with the particular hydrogeologic setting of its facility will ensure that the ground water and surface water beyond the waste management area will be protected as effectively as it would with the

installation of liners and a leachate collection system. A fundamental premise of UCAPCO's proposal is that an evaluation for effectiveness occur at the edge of the waste management area and not at the point hazardous constituents enter the ground water. Whereas hazardous constituents will be allowed to contaminate ground water beneath the units, UCAPCO claims that its proposed system will not allow migration beyond the waste management area. In UCAPCO's view, "any degree of contamination [of the ground water] within the waste management area is authorized" provided that the ground water outside the area is protected. Accordingly, UCAPCO's proposal attempts to demonstrate that the system will control the escape of hazardous constituents from the ground water beneath the unit to ground water beyond the waste management area as opposed to the escape of hazardous constituents to the ground water beneath the unit.

In our view, UCAPCO's proposal fails to meet the requirements of §3004(o)(2) on its face. Section 3004(o)(2) authorizes a waiver of the double liner and leachate collection system requirements only upon a demonstration that a proposed alternative will "prevent the migration of any hazardous constituents <u>into the ground water</u> or surface water" at least as effectively as a double liner and leachate collection system. UCAPCO's proposal, however, is specifically designed to allow migration of hazardous constituents <u>into the ground water</u>. The term "ground water" in §3004(o)(2) is not qualified by the phrase "beyond the waste management area." Nor is there any evidence of Congressional intent that the term "ground water" means only ground water beyond the waste management area. Surely if Congress had intended such a test for waivers of the double liner and leachate collection system requirement, it would have stated so clearly.

To the contrary, in amending §3004 of RCRA, Congress devised a threefold scheme to ensure protection of human health and the environment from hazardous waste treatment, storage and disposal activities. The first "line of defense" is the requirement of a liner and leachate collection system to prevent the escape of hazardous constituents from landfills or surface impoundments. The second line of defense is the requirement for ground-water monitoring to detect any failure of such containment device. And, the third line of defense is the requirement to take corrective action to clean up any problems resulting from such failure. Containment with collection and removal of leachate within the unit to prevent leakage to ground water as the intended purpose of the liner and leachate collection system requirement is supported not only by the language of §3004(o)(2) in authorizing waivers of such

requirements only for methods equally effective at preventing migration to ground water but also by the language of §3004(o)(5)(B). That section provides that the liner requirement of §3004(o)(1)(A)(i) can be satisfied pending issuance of regulations by construction of a liner system" ... to prevent the migration of any constituent through such liner...." Any system, therefore, that only controls constituent migration after it enters ground water cannot meet the equivalency test of §3004(o)(2). The system proposed by UCAPCO fully allows migration of hazardous constituents to the ground water beneath the unit and therefore does not prevent the migration of hazardous constituents "into the ground water." Moreover, because migration of hazardous constituents freely occurs with respect to such ground water, UCAPCO's proposed system cannot be "as effective as" a double liner and leachate collection system in preventing migration to the ground water.

UCAPCO's argument that EPA regulations express an intent on EPA's part to "write off" ground water beneath hazardous waste management units because they only require compliance with ground-water standards at the edge of the waste management area demonstrates UCAPACO's fundamental misunderstanding of EPA regulations. Compliance with ground-water standards is determined at the edge of the waste management area simply because the installation of ground-water monitoring wells directly through a unit was considered to put at risk the effectiveness of containment devices underlying such unit. As the preamble to the regulations establishing the ground-water monitoring system stated:

> EPA does not believe that the placement of wells required in this regulation presents a significant risk that monitoring wells will become conduits for leachate passing to ground water.... [T]he regulation calls for monitoring at the edge of the waste management area rather than under the solid waste itself. This is to eliminate any suggestion that the wells should be drilled through any natural or artificial barrier that may contain the waste. The problem of migration of leachate will be reduced by plac[ing] monitoring wells outside of any containment barrier. ... 45 FR 33066, 33193 (May 19, 1980).

Thus, this requirement in no way evidences an intent on EPA's part to allow contamination of ground water beneath a unit. Accordingly, any reference to EPA regulations in the legislative history of §3004(o) cannot support the conclusion that Congress intended to forfeit the quality of ground water beneath hazardous waste management units. In fact, EPA has expressly stated its contrary views with respect to the meaning of "ground water" in guidance addressing a

waiver provision similar to §3004(o)(2). Section 3005(j)(4) authorizes a waiver from the double liner and leachate collection system requirements upon a showing of, among other things:

> that such surface impoundment is located, designed and operated so as to assure that there will be no migration of any hazardous constituent into ground water or surface water at any future time. The Administrator or the State shall take into account locational criteria established under Section 3004(o)(7).

EPA's guidance regarding the meaning of "ground water" states:

> EPA interprets this provision as referring to the closest source of ground water or surface water, whether contaminated or noncontaminated, usable or nonusable, as the point to which there must be no migration of any hazardous waste or constituents. As used in this provision, "ground water" includes, but is not limited to, all USDW's and all aquifers; it encompasses "all water below the land surface in a zone of saturation" (40 CFR 260.10). A demonstration of no migration in saturated soil would not be appropriate for this exemption because waste migration into the saturated zone is interpreted as ground-water contamination. Because Section 3005(j) is concerned with migration that could be prevented through the installation of a double liner and leachate collection system and because the escape of hazardous wastes or constituents through overtopping, surface water runon and runoff, and/or erosion are addressed independently in various sections of 40 CFR Part 264, the demonstration of no migration to surface waters for this exemption should address migration in subsurface soils. The demonstration of "no migration" to both ground water and surface water should therefore be made for the unsaturated soil beneath the facility. Interim Status Surface Impoundments Retrofitting Variances, EPA/530-SW-86-017 (July 8, 1986).

In sum, §3004(o)(2) allows for waivers of the liner and leachate collection system requirements only for alternatives at least as effective as the first line of defense against migration of hazardous constituents, i.e., containment within the unit and maximizing the collection and removal of leachate before it can migrate out of the unit. Congress did not authorize substitution of a corrective action type system that is responsive only to the <u>further</u> migration of hazardous constituents as a substitute for <u>initial</u> containment requirements. <u>See</u> Senate Report No. 98-284 at 28. In fact, Congress specifically amended §3004 "to correct the deficiency in existing regulations allowing double liners and ground-water monitoring to be alternatives." H.R. 2867, Conf. Rep. at 89. Accordingly, substitution of UCAPCO's

proposed system for the double liner and leachate collection system requirement would undermine Congress' and the Agency's carefully crafted, tiered strategy for ensuring protection of human health and the environment.

We are therefore unable to conclude that the proposed alternative would be as effective as the liner and leachate collection system requirement in preventing migration of hazardous constituents into the ground water.

cc: Bruce Weddle
Susan Bromm
Joe Carra
Bob Tonetti
Suzanne Rudzinski
Bob Kayser
Les Otte
Tina Kaneen
Charles Openchowski
Pamela Savage
Chris Rhyne

Ground Water Protection Standards (Subpart F)

9481 – GROUND-WATER PROTECTION STANDARDS

Parts 264 & 265 Subpart F

ATK1/1104/40 kp

OCT 15 1985

MEMORANDUM

SUBJECT: Requirements for Analysis of Appendix VIII Constituents in Groundwater

FROM: Marcia Williams, Director
Office of Solid Waste (WH-562)

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

Your memorandum of September 20 relating the problems associated with the analysis of Appendix VIII constituents in ground water raises a number of valid concerns. The adequacy of the current SW-846 methods for routine determinations of all constituents is being evaluated, and the rationale for requiring a complete Appendix VIII analysis in ground water is being reexamined.

As you know, the existing permit regulations (§270.14(c)(4)) require the permit applicant to identify the concentration of each Appendix VIII constituent in any plume of contamination. In response to numerous requests for selective waivers of the regulatory requirements, the Office of Enforcement and Compliance Monitoring (OECM) and OSWER issued a joint memo to the Regions (Price/Thomas, August 16, 1984). This memorandum, however, only exempted a small number (21) of the 375 Appendix VIII constituents from monitoring requirements through enforcement discretion, based on the constituents' instability in water or the lack of EPA-accepted, standardized test procedures. The Agency has also proposed to eliminate the need to test for these substances in ground water in a proposed rule (49 FR 38786, October 1, 1984).

Currently, several Agency activities are underway that should address many of the concerns outlined in your memorandum. A workgroup has been formed to examine the need for changes in the regulatory requirement for the analysis of all Appendix VIII constituents. In order to justify a regulatory amendment, the workgroup is gathering data and considering several options that may lead to a more limited set of parameters for ground-water analysis. This work and the subsequent regulatory development process could lead to a proposed rule by late 1986, and the promulgation of a final rule a year later. For more details on the progress of the Appendix VIII workgroup, contact Bob April, Land Disposal Branch (382-4684).

In support of the workgroup effort the Agency is examining which constituents (beyond those cited in the Price/Thomas memorandum) should be dropped from the monitoring requirement because of instability in water or lack of analytical methods. Methods evaluation work is also underway to support promulgation of the analytical methods assigned to the Appendix VIII constituents in the rule proposed on October 1, 1984. Additional methods evaluation is being conducted through the Superfund program and the Ground-Water Monitoring Task Force. Any questions concerning these efforts, or other questions on the adequacy of current EPA methods, should be directed to Paul Friedman, Studies and Methods Branch (382-4796).

The current regulations are very specific in requiring that each Appendix VIII constituent be determined. Therefore, a strict reading of the regulations would not allow either of the alternatives put forward by the Army to be deemed acceptable under current EPA policy. The Agency is aware of the implementation problems involved in permit issuance that arise from the current rigid regulatory approach. Other Regions are also wrestling with the implementation questions you are facing in Region III. For assistance in resolving permit-related Appendix VIII questions, you may contact Bob Kayser of the Permit Assistance Team (382-4536).

As noted above, any regulatory changes in the Appendix VIII monitoring requirement would not become effective until the end of 1987. I realize, however, that permitting needs are more immediate. As increasing numbers of facilities are required to submit Appendix VIII analyses, the lack of a realistic policy may create a slowdown in the permitting process as well as inconsistent compliance.

Therefore, I have initiated efforts by OSW to expand the number of Appendix VIII constituents exempted from ground-water monitoring requirements beyond those listed in the proposed rule of October 1, 1984. I intend to issue some form of interim guidance early next year. In addition, I have made the completion of the tasks supporting a regulatory change a high priority.

Finally, in regard to your concern about whether the Army facility can certify compliance with applicable ground-water monitoring requirements by November 8, I would refer you to the Federal Register notice of September 25, 1985 (50 FR 38948). That notice indicates that the applicable requirements are those in Part 265. Therefore, compliance with Part 264 or 270 requirements involving Appendix VIII should not be an issue for certification.

cc: Waste Management Division Directors, Regions I, II, and IV-X
Bruce Weddle
Jack Lehman
Eileen Claussen
Peter Guerrero
Terry Grogan
Bob April
Bob Kayser
Paul Friedman
Dave Friedman
Lloyd Guerci
Mike Barclay
Mark Greenwood
Sohraim King

OCT 28 '85

MEMORANDUM

SUBJECT: Ground-Water Monitoring Variance Requirements

FROM: Marcia Williams, Director
Office of Solid Waste (WH-562)

Original Signed By
Marcia E. Williams

TO: Conrad Simon, Director
Air and Waste Management Division (2AWM)

This memorandum is in response to your memorandum of May 29, 1985, concerning the possibility of a ground-water monitoring variance at the CECOS site in Ponce, Puerto Rico (EPA I.D. Number PRD000010231). The variance your memorandum describes is based on engineered safeguards at the waste management unit. The standards for ground-water monitoring variances based on engineered structures for landfills operating under permits are set by new Section 3004(p) of the Resource Conservation and Recovery Act. As EPA explained in the preamble to the final "codification" rule for the 1984 RCRA amendments, Section 3004(p) invalidated the "engineered structures" variance regulations for land disposal units EPA promulgated on July 26, 1982, and substituted more stringent standards. See 50 Fed. Reg. 28716-28717 (July 15, 1985).

The "codification" rule deleted the existing variance rules for landfills in 40 C.F.R. 264.302. It inserted the new variance standards required by the statute into 40 C.F.R. 264.90(b)(2) (copy attached). This regulation also delegates the authority to grant variances to the Regional Administrators.

The standards you have outlined in your memorandum resemble, but do not precisely match the new variance regulations. For example, the regulations also require the Regional Administrator to find, to a reasonable degree of certainty, that the unit will not allow migration of hazardous constituents beyond the outer

layer of containment before the end of the post-closure care period. You will need to evaluate the Ponce landfill against the regulatory requirements. The regulation does not appear to grant the Regional Administrator authority to impose more stringent requirements.

If you or your staff have any questions concerning this matter, please telephone Bob April of my staff (FTS-382-4654).

Attachment

RCRA/SUPERFUND HOTLINE MONTHLY SUMMARY

OCTOBER 85

Definition of "Physical Compliance"

Owners or operators of land disposal facilities which have interim status prior to November 8, 1984, will have their interim status terminated on November 8, 1985, unless a Part B permit application is submitted prior to that date and the owners/operators certify that the facilities are in compliance with all applicable ground-water monitoring and financial responsibility requirements per §270.73(c), of the July 15, 1985, Federal Register (50 FR 28753). The notice of implementation and enforcement policy for this provision in the September 25, 1985, Federal Register (50 FR 38946), states that to certify compliance a facility must be in "physical compliance" with the Federal or State ground-water monitoring and financial responsibility requirements. What is "physical compliance" for the Federal ground-water monitoring requirements?

> Owners or operators must certify "physical compliance" with applicable ground-water monitoring requirements defined in 40 CFR Part 265, Subpart F (see Appendix A, 50 FR 38949). "Physical compliance" for purposes of certification under §3005(e) means that unless the owner/operator meets the waiver requirements under §265.90, the facility must have a ground-water monitoring system which meets all of the specifications of §265.91. This system must be physically in place at the unit for which certification is required and sampling and analysis under §265.92 must be underway.

Source: Jackie Tenuszak (202) 475-9328

This has been retyped from the original document.

RCRA/SUPERFUND HOTLINE MONTHLY SUMMARY

OCTOBER 85

6. Ground-Water Monitoring Well Construction

A bladder pump is used instead of a bailer to obtain ground-water samples. What construction material is required for the bladder pump and the sample tubing in the well?

When a bladder pump is used, it is connected to a sample tube that runs inside the well casing to the surface. The RCRA Ground-Water Monitoring Technical Enforcement Guidance Document (Draft) (Sections 3.2.1 & 3.6) dated August 1, 1985 recommends that the well casing, bladder pump, and sample tube be made of Teflon 316 stainless steel. In the case where an existing well is constructed of different materials, this guidance document recommends that the enforcement official decide if the well allows for the collection of representative ground-water samples as it is built or whether another well should be built with more inert, resistant materials (Section 3.7) adjacent to it.

Source: Ken Jennings (202) 475-9328

RCRA/SUPERFUND HOTLINE MONTHLY SUMMARY

DECEMBER 85

Compliance to Detection Groundwater Monitoring

6. As part of his RCRA permit, the owner/operator of a land disposal facility must conduct compliance monitoring in accordance with §264.99. If, after several years of compliance monitoring, the owner/operator can show that Appendix VIII constituent levels are no longer present above background levels, is it possible for the owner/operator to revert to detection monitoring levels per §264.98?

   Once the facility has been triggered into compliance monitoring and it becomes part of the permit, the owner/operator must conduct compliance monitoring for the number of years equal to the active life of the facility (including any waste management activity prior to permitting, and the closure period per §264.96(a)). Upon conclusion of the compliance period, the owner/operator may be able to return to detection monitoring for any remaining period of post-closure care, provided that: (1) no corrective action is required (§264.99(i) or §264.100); (2) the constituent levels are at or below background levels; (since the detection monitoring program is designed to detect increases over background levels, a facility which was meeting a ground-water protection standard set at a level above background would continually be required to switch from detection monitoring to compliance monitoring; hence, the return to detection monitoring would not have any practical value unless constituent levels were at or below background levels); and (3) the owner/operator submits an application for a permit modification (§270.41(a)(5)(v)).

   Source: Mark Salee (202) 382-5742

This has been retyped from the original document.

9481.1986(01)

May 15, 1986

MEMORANDUM

SUBJECT: Identification of Uppermost Aquifer in Fill

FROM: Marcia E. Williams, Director
Office of Solid Waste (WH-562)

TO: Harry Seraydarian, Director
Toxics and Waste Management Division
Region IX

I am writing in response to your memorandum of February 27, 1986, concerning ground-water monitoring at the IT Corporation's Vine Hill facility. I agree that the IT Corporation must monitor the uppermost saturated zone regardless of whether the saturated zone is manmade fill or natural rock.

The intent of the regulations is to monitor the first ground-water contamination, not to link monitoring to a commercially productive aquifer. The preamble to the regulations (33192 FR, May 19, 1980) states "The monitoring program seeks to detect contamination of the uppermost aquifer because that will be the first ground water affected by a leaking disposal facility." The draft Technical Enforcement Guidance Document (August 1985) states "The uppermost aquifer extends from the water table to the first confining layer (or ten feet into bedrock) and includes any overlying perched zones of saturation." Such monitoring provides essential information on the direction and concentration of the flow of contaminants from hazardous waste units since formations of low permeability (e.g., aquitards and aquicludes) may divert the flow of contaminants to surface water, upgradient wells, or beyond downgradient wells so that the contaminants are not discernable to lower monitoring wells at the waste boundary.

The arguments of the IT Corporation seem to center around semantic arguments over the nature of a "geologic formation." Instead, IT should focus on the saturated zone and early detection of contaminant flow from the site. As a policy matter, this office supports the location of wells so as to most efficiently detect contamination.

This has been retyped from the original document.

If you have any further questions concerning this matter, please telephone me (FTS-382-4627) or have your staff telephone Arthur Day of my staff (FTS-382-4658).

cc: Regional Waste Management Division Directors,
Regions I-VIII, X
John Lehman
Bruce Weddle
Kenneth Shuster
Arthur Day

This has been retyped from the original document.

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

JUL 25 1986

OFFICE OF
SOLID WASTE AND EMERGENCY RESPONS

Mr. Alan McConnell, Legislative Director
Office of the Honorable Newt Gingrich, MC
House of Representatives
Washington, D.C. 20515

Dear Mr. McConnell:

This is a follow-up to our phone conversation concerning the issues raised by Mr. William Gardiner of Analytech in Georgia.

The document, "Minimal Cost Instrumental Approaches to Ground Water Monitoring," by Mr. William Gardiner applies to organic analysis for ground water monitoring as specified in 40 CFR Part 261, Appendix VIII. The Administrator has signed, and will place in the Federal Register, a new ground water monitoring requirement in 40 CFR Parts 264 and 270 Appendix IX. This proposal will replace existing requirements with new requirements to analyze ground water for 250 specific chemicals derived from the Appendix VIII, plus additional chemicals designated by Regional Administrators on a site specific basis.

Except for the chemicals which may be designated on a site specific basis, the organic chemicals listed in Appendix IX may be determined by a combination of gas chromatographic (specific detector) methods or a combination of gas chromatographic (specific detector) and gas chromatographic/mass spectrometric methods. Mr. Gardiner may employ, from the Agency's point of view, any combination of the above-mentioned techniques as specified in the appropriate methods of SW-846.

We hope this information helps you in aiding Mr. Gardiner.

Respectfully yours,

Paul H. Friedman

Paul Friedman
Chemist
Technical Assessment Branch

cc: Bob April
David Friedman
Peter Guerrero

RCRA/SUPERFUND HOTLINE MONTHLY SUMMARY

JULY 86

3. Ground-Water Monitoring: Establishing Background Values

According to 40 CFR 264.98(c) the owner/operator (o/o) of a land disposal facility must establish background values for the ground-water monitoring parameters specified in the facility permit. The o/o must establish these background values using the procedure specified in 40 CFR 264.97(g) which requires that background data be based on quarterly sampling of upgradient wells for one year.

(a) Interim status facilities may not have the necessary ground-water monitoring data needed for a permit since the 40 CFR 265 ground-water monitoring requirements are very general and not specific for individual constituents. How does an o/o of an interim status facility meet the 40 CFR 264.98(c) standard?

(b) New facility owner/operators must obtain a permit prior to construction of the facility per 40 CFR 270.10(f) (50 FR 28751). Does drilling ground-water monitoring wells constitute construction? If so, how does the o/o meet the 40 CFR 264.98(c) standard?

(a) An interim status facility may fulfill the background data requirement for permitting in a number of ways. Assuming the facility o/o has been conducting an indicator evaluation program as required by 40 CFR 265.92 and 265.93(b), the o/o may submit the data that have been collected to that point with the permit application. As required by 40 CFR 270.14(c)(6), the o/o must also submit a proposed list of indicator parameters or hazardous constituents which could reasonably appear in the ground-water at the site, and background values for each proposed constituent (40 CFR 264.98). If the o/o cannot submit background values for every one of the proposed constituents, the o/o must submit procedures to calculate these values (40 CFR 270.14(c)(6)(iii) and (iv)). The o/o would then generate the background data during the first year of the permit. The final background values would automatically become part of the permit. (See the July 26, 1982 Federal Register, 47 FR 32306.)

(b) 40 CFR 270.14(c)(6) requires owners and operators of new facilities to submit only plans for detection networks prior to permit issuance. Well installation may take place after the permit issues. Well construction could constitute facililty construction.

Source: Vernon Myers (202) 382-4658
Research: Jennifer Brock

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

9481.1986(06)

6 AUG 86

Honorable Bob Dole
United States Senator
444 S.E. Quincy
Topeka, Kansas 66683

Dear Senator Dole:

Thank you for your June 24, 1986, letter on behalf of Ms. Sharilyn Dienst. Ms. Dienst expressed concern about the use of alternate concentration limits at RCRA/CERCLA sites. Specifically, Ms. Dienst raised questions regarding the RCRA/CERCLA consent orders on the N.I.E.S. facility in Kansas.

The ground-water protection standard (GWPS) under Subpart F of 40 CFR Part 264 requires a concentration limit for each hazardous constituent entering the ground-water from a RCRA regulatory unit. This concentration limit is established in the facility permit and serves as a concentration limit beyond which degradation of ground-water quality will not be allowed. These concentration limits determine when corrective action is required.

There are three possible concentration levels that can be used to establish the GWPS:

1. Background levels of the hazardous constituent;

2. Maximum concentration limits listed in Table 1 of Section 264.94(a) of the regulations; or,

3. Alternate concentration limits (ACLs).

The first two levels are established in the facility permit unless the facility owner or operator applies for an ACL.

To obtain an ACL, a permit applicant must demonstrate that the hazardous constituents detected in the ground-water will not pose a substantial present or potential hazard to human health or the environment. The factors used to evaluate ACL requests are nineteen specific items related to potential adverse effects on ground-water quality or hydraulically-connected surface water quality.

An ACL demonstration is essentially a risk assessment and risk management process in which a determination of acceptable ground-water contamination is made. If the ACL demonstration relies on a showing that adverse effects on human health and the environment will be delayed rather than prevented, then the ACLs will not be granted. The permit applicant must provide evidence that the adverse impacts will be prevented.

The Agency has a draft ACL guidance which includes six case studies; including the case study which Ms. Dienst requested. The draft guidance is subject to change and is not EPA's official policy. The guidances, when finalized will serve to elaborate on the ACL criteria and to provide examples of acceptable ACL arguments through case study examples. We expect to finalize the guidance by the end of October, 1986.

EPA's Region VII office in Kansas City, Kansas, has the lead role in reviewing the NIES facility ACL application and making the final decision on the concentration limits.

Regarding Ms. Dienst's question about appeal rights, I suggest she call Mr. Lloyd Guerci, Director of EPA's RCRA Enforcement Division. His telephone number is (202) 382-4808. The process for orders under RCRA is presently under review. However, the RCRA process is expected to operate in the same manner as that for CERCLA orders. Under the CERCLA order process, public comment is sought by the respective EPA Regional Office. Once corrective action alternatives have been agreed upon by EPA and the responsible party, a draft consent order is usually published for public comment. Based on public comments EPA may renegotiate the order. In this way the public's views are taken into account. There often are ongoing discussions, such as public meetings, with the public involved throughout the process.

ACLs are usually granted through the permit process. Nationally, neither EPA nor authorized States have approved any ACL applications to date. However, Region IV, with Headquarter's concurrence, has given tentative approval for an ACL for nickel at a facility in Alabama. This ACL is awaiting permit issuance. The CERCLA program has made ACL-like decisions at one site: Sylvester, NH.

I hope this letter addresses Ms. Dienst's concerns. If I can be of any further assistance, please let me know.

Sincerely,

/S/ J. Winston Porter
Assistant Administrator

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

9481.1986(08)

SEP 26 1986

Honorable Newt Gingrich
House of Representatives
Washington, D.C. 20515

Dear Mr. Gingrich:

Thank you for your September 8, 1986, letter concerning the State of Georgia's choice of analytical methods for ground-water monitoring. Georgia Environmental Protection Division's requirement that only gas chromatography/mass spectrometry (gc/ms) be used for organic analysis is not inconsistent with the Federal program.

As Mr. Friedman explained in his July 25 letter to which you referred, the Environmental Protection Agency (EPA) has approved both methods: gc and gc/ms. It is possible to perform Appendix VIII (40 CFR Part 261) organic analysis using only gc. However, EPA's Ground-Water Task Force chose to use gc/ms, as the State of Georgia has. In many cases conventional gc detectors cannot discriminate between the compounds of interest and the interfering compounds that are present. We prefer gc/ms because it provides certain structural information that can minimize interferences. Using gc only, it may be possible for a laboratory to demonstrate the ability to overcome the problem by employing a second column containing a different stationary phase. However, in the case of analyzing complex samples for a number of pollutants, this technique would be quite expensive. The gc/ms allows for the simultaneous or rapid sequential measurement of large numbers of different organic pollutants. This method is especially useful in the Appendix VIII analyses to which you referred. Thus, it is EPA's preference to use gc/ms.

Under Section 3006 of the Resource Conservation and Recovery Act, EPA has granted authorization to the State of Georgia. Therefore, it is Georgia's, rather than EPA's, analytical requirements that apply. Consistent with its authorization, Georgia may require use of the gc/ms method. Please contact Georgia's Department of Natural Resources Commissioner, Leonard Ledbetter, for further information on Georgia's requirements. He can be reached on (404) 656-4713.

I hope I have clarified this situation for you. If I can be of any further assistance, please let me know.

Sincerely,

Lee M. Thomas

Lee M. Thomas

WH-562/GARMAN/T.MCMANUS - 475-8613/sld/9-18-86/Control No: AL602860/Due Date: 9-22-86/CONTROLLED CORRESPONDENCE #5

RCRA/SUPERFUND HOTLINE MONTHLY SUMMARY

OCTOBER 86

7. Corrective Action for New Facilities

Is an owner/operator seeking a pre-construction permit for a new RCRA treatment, storage, or disposal facility subject to corrective action under Section 3004(u) of RCRA?

Yes, Section 3004(u) states that corrective action is required "for all releases of hazardous waste or constituents from any solid waste management unit at a treatment, storage, or disposal facility seeking a permit..." under Subtitle C of RCRA, "... regardless of the time at which waste was placed in such unit..." Therefore, any solid waste management unit located on a site which is involved in a permit application is subject to corrective action (§264.101) even if there has never been any previous authorization for hazardous waste activity at the site. Examples of units which could be included in corrective action under these circumstances are sanitary landfills, dumps, and units in which waste which is normally exempt from RCRA regulation have been stored or disposed. Releases of hazardous waste would include releases of listed (§261.31-33) or characteristic hazardous wastes. Releases of hazardous constitueuts from both hazardous and solid wastes are also covered. This would include any of the hazardous constituents listed in 40 CFR Part 261, Appendix VIII.

Source: Dave Fagan (202) 382-4740
Research: Betty Wilson

9481.1987(01)

February 25, 1987

MEMORANDUM

SUBJECT: Applicability of Vulnerability Guidance

FROM: Arthur Day, Chief
Technical Guidance Section

TO: Doug McCurry
Residuals Management Branch, Region IV

During the question and answer period at the recent seminar on Land Disposal Technology, you asked whether the guidance on ground-water vulnerability was applicable to the RCRA permitting standards. I took you questions to refer to whether a permit should be denied solely because the facility is located in a vulnerable setting. My reply stated that the guidance was not intended to be a national siting policy, and that it was, in this sense, not applicable to the RCRA permitting standards. I believe that this response failed to fully convey the purpose of the guidance.

The intended use of the guidance by the RCRA permit writer is stated in Section 1.2 of the guidance (attached). You should carefully note that the guidance is applicable to the RCRA program in at least the following ways:

- It provides the permit writer with a standardized method for assessing the adequacy of hydrogeologic aspects of a Part B application. An adequate site characterization is a permit application requirement, as explained in the so-called Phase I Location Guidance (note attached copy, see section 2.1). Adequate site characterization is needed for ensuring that ground-water monitoring wells are properly located.

- Permit writers should consider requiring a contingent corrective action plan in permits issued to facilities in vulnerable settings, when such facilities are not already conducting corrective action. This is meant to reduce the time between plume detection and response that is associated with permit modification. The TOT method also provides a trigger for more detailed review and evaluation by the permit writer. The results of this review may provide a basis for changes in design or operating practices.

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- The vulnerability definition can be used by a Region to prioritize site analyses, although the existing Facility Management Plan system would take precedent. It is also referenced in the guidance on Interim Status Impoundment Retrofitting Variances, under the "no migration" exemption.

- It provides a framework for assessing leachate migration potential and impact along each of the three pathways of concern (i.e., water well, discharge to surface water, basement seepage). The last pathway has often been overshadowed by concern for water well protection.

Let me elaborate on these points. First, I recommend that your permit writers ensure that data on hydraulic conductivity are collected in accordance with the methods presented in Appendix A. This is important, because such information influences monitor well placement and corrective action plan design. These methods are about to also appear in SW-846. I also think that permit writers should approach their reviews of site characterization/monitorability using the flow net methods presented in Appendix B. Please note that the TEGD also recognizes the role of flow net analysis for this purpose. The vulnerability guidance recommends (pages 1-6) that an objective method that can reduce the number of negotiations with an applicant's site characterization be tested by installing additional piezometers (in order to verify a flow net), this is an applicant to reach closure on the adequacy of site characterization. Finally, the flow net methods will also help reveal to permit applicants and permit writers whether significant migration pathways exist beyond the aquifer contamination route; this can be particularly important where above-grade or shallow trench landfills are constructed in low-permeability sediments or rocks, such as in parts of the Atlantic and Gulf Coastal Plan.

I recognize that the analytical methods presented in the Guidance (such as flow nets) may be unfamiliar to many permit writers. I do not maintain that permit writers should evaluate flow nets for all of their projects. The method might be most immediately useful where site characterizations are in dispute. However, I think that you will find that a one-time effort made by your staff in applying these tools will be productive in the longer term. I am pleased to note that one member of the EPA Science Advisory Board particularly praised Appendix B (flow nets) as the best discussion on this common geotechnical tool that he had seen for hazardous waste facility analysis.

As I mentioned in response to another question, OSW is developing additional location standards for TSDs, which we plan

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to propose by 9/87. We are considering whether a "degree of vulnerability" concept should be incorporated into these standards. We are also considering incorporating the flow net verification concept described above as a site characterization performance requirement.

I hope that these comments clarify our earlier discussion. Please contact me at FTS-382-4680 if I can provide further information.

Attachments

cc: James Scarbrough
Bob Tonetti
Terry Grogan
Suzanne Rudzinski
Matt Hale

This has been retyped from the original document.

March 10, 1987

MEMORANDUM

SUBJECT: International Paper Company, Wiggins, Mississippi

FROM: Susan Bromm, Acting Director
Permits and State Programs Division

TO: Patrick Tobin, Director
Waste Management Division

I am writing in response to your January 29, 1987 memo to Marcia Williams concerning "alternate concentration limits" (ACLs) in a draft HSWA permit for International Paper Co. (IP), Wiggins, MS. The materials you sent were reviewed by Mark Salee, Janette Hansen, and Bob Kayser of the Land Disposal Permit Assistance Team (PAT). The PAT also consulted with the corrective action work group. The comments below are based on the PAT's recommendations for approaches to corrective action for continuing releases to ground water at solid waste management units. Final Agency regulations and guidance may be different on some issues.

The draft HSWA permit contains ground-water cleanup standards (concentration limits) for 15 hazardous constituents. Seven of the concentration limits are based on an ACL-type demonstration, set at human health criteria levels. These concentration limits are consistent with currently available EPA Verified Reference Doses and proposed recommended maximum contaminant levels.

Your memo highlighted two issues of concern in the draft permit. The first issue dealt with the use of human health criteria versus taste and odor criteria as the basis for the concentration limit for pentachlorophenol. This issue has been analyzed by the Region IV Ground-water Technology and Management Section. Their conclusions were summarized in a November 5, 1986 memo from B. Stallings Howell to Doug McCurry. Their rationale for the use of taste and odor thresholds is consistent with the most recent draft ACL guidance and policy. However, their application of the rationale does not appear to be fully consistent with the ACL guidance and policy. For example, the memo states,

> ... ACLs based on human health criteria be adopted for phenol and pentachlorophenol at International Paper for the following reasons:

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1. The probability that concentrations above the taste and odor threshold will reach a drinking water well is low at the site...

Although not explicitly addressed in the draft ACL policy and guidance, we believe that concentration limits can be set at human health criteria levels that are above taste and odor thresholds if the resource value of the ground water is not degraded. In this case, it must be shown, to a reasonable degree of certainty, that attenuation of the contaminant plume between the point of compliance and the property boundary will result in contaminant concentrations at the property boundary equal to or below the taste and odor thresholds. This type of evaluation should be performed for the IP site to ensure the protection of the ground water for future use in the area.

The second issue identified in your January 29, 1987 memo concerned the use of the minimum detection limit (MDL) to establish background as a ground-water protection standard. This is a valid approach to establishing background. However, to ensure that the permittee follows a method acceptable to EPA, the permit should contain a specified method to determine the MDLs, or specify criteria to follow when choosing a method. A method that could be used is presented in Section 1.3 of the latest version of Test Methods for Evaluating Solid Waste, SW-846. Copies of this document will be available for distribution in late March. The permit should include a reference to this SW-846 method or a more appropriate method for establishing MDLs.

During our review of the draft permit, we identified an area of concern in addition to the issues highlighted in your memo to Marcia Williams. The comments below focus on Section II.C., Corrective Action Procedures of the permit, specifically, the concentration limit for creosote, the identification of additional Appendix VIII constituents, the lack of any requirements for the treatment of the contaminated ground water, and the termination of monitoring at a well upon reaching the concentration limit at the well.

The concentration limit for creosote in Section II.C.1. is defined by an analysis for phenanthrene and carbazole. Another definition may be more appropriate for two reasons. First, carbazole is not listed on Appendix VIII of Part 261 or on the proposed Appendix IX to Part 264 (51 FR 26632) for ground-water monitoring, and there is no standard method for analyzing carbazole in SW-846. Second, creosote was not included on the proposed Appendix IX list. Instead, a list of polynuclear aromatic hydrocarbons (PAHs) representative of the major components of creosote was included in Appendix IX. A more appropriate analysis for creosote would be to analyze for a list of PAHs. Such a list should include chrysene, fluoranthene,

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naphthalene, acenaphthene, phenanthrene, fluorene, and pyrene. The permit should include concentration limits for all of these PAHs.

Section II.C.1.c. of the draft permit lists requirements to be performed by the permittee if additional Appendix VIII constituents are identified. However, the permit lacks a specific condition requiring the permittee to identify any additional Appendix VIII constituents. The draft permit only requires quarterly monitoring for the 15 hazardous constituents listed in Section II.C.1. Assuming that an initial Appendix VIII (or proposed Appendix IX) scan was performed to identify these 15 constituents, we recommend that the permit include explicit language requiring periodic (i.e., annually or less) monitoring for a comprehensive list of hazardous constituents from Appendix VIII (or proposed Appendix IX) reasonably expected to be in or derived from waste in the solid waste management units.

The permit does not address any treatment standards or methods for contaminated ground water that has been pumped from the subsurface. While ground water in itself is not a hazardous waste, ground water that contains hazardous waste must be handled as if it were hazardous waste because the contaminants in it are subject to regulation under Subtitle C. Once the hazardous waste is removed from the water, the water is no longer subject to Subtitle C regulation (see memo from Marcia Williams to you, dated November 13, 1986). The permit should, at a minimum, contain a schedule of compliance for the submittal of plans for the handling and/or treatment of the contaminated ground water. (The Agency's authority to stipulate treatment standards as part of a corrective action permit condition comes from §264.101 and Sec. 3005(c)(3) of HSWA). As was stated in the permit, the permittee should comply with all other State and Federal laws regarding treatment and discharge of the water. You should also be aware that "source control" can be an important aspect of RCRA corrective action. You may also want to consider directing the permittee to study source control options.

Part II.C.5. of the permit states that: "Upon reaching the concentration limits at any monitoring well further monitoring of that well may be terminated...." This condition may not be fully protective of human health and the environment, as contaminants in the ground water do not necessarily occur in one continuous plume. There may actually be several plumes of varying compositions. A ground-water sample which indicates allowable concentrations of contaminants may just represent an area between two plumes. I suggest that the permit require some type of less frequent, short-term verification monitoring (i.e., three consecutive years as discussed in §264.100(f)) before monitoring and/or corrective action is terminated.

This has been retyped from the original document.

If you or your staff have any questions or concerns about any of the comments or recommendations presented in this memo, feel free to call Mark Salee of my staff at (FTS) 382-4692.

cc: Marcia Williams
Suzanne Rudzinski
Matt Hale
Terry Grogan
James Scarbrough, Region IV
Lloyd Guerci
Doug McCurry, Region IV
Beverly Spagg, Region IV
Vernon Myers
Mark Salee
Janette Hansen

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

JUN 3 1987

OFFICE OF
SOLID WASTE AND EMERGENCY RESPONSE

Mr. Richard J. Gimello
Executive Director
Hazardous Waste Facilities Siting Commission
State of New Jersey
CN 406, Trenton, New Jersey 08625

Dear Mr. Gimello:

This is in response to your letter dated April 27, 1987, requesting the Environmental Protection Agency's (EPA) opinion on the applicability of EPA's vulnerable hydrogeology guidance criteria to the Millstone, New Jersey proposed incinerator site.

I must first point out that the document referred to in your letter titled, "Criteria for Identifying Areas of Vulnerable Hydrogeology Under RCRA - Statutory Interpretive Guidance" (issued in July, 1986), is simply an Agency guidance. It does not have the force and effect of law that would require full compliance with the stated criteria. Further, the guidance is applicable only to landfills, surface impoundments, and waste piles (i.e., land-based units) and does not apply to incinerators. It is the Agency's opinion that the potential for ground-water contamination resulting from an incinerator is typically not a concern due to the manner that waste is contained during incineration. It is unclear from your letter, however, whether other waste management units associated with the incinerator will be present. The vulnerability guidance might be relevant to the facility if one of these additional units were land-based.

Your letter contained questions on the extent of site-specific investigations and types of restrictions or modifications to design or operating practices that would result in response to a finding that the hydrogeology of a site was considered "vulnerable". If a site were found "vulnerable" using the Agency guidance, further site-specific investigations may be appropriate. For example, a site owner or operator may be requested to install additional groundwater piezometers in order to verify hydrogeologic information provided in the permit application or to construct a groundwater flow net for the site in order to more fully document flow patterns. These investigations would aid in verifying plans for ground-water monitoring. Similarly, the owner or operator might be directed

to establish a contingent corrective action plan prior to any actual release to ground water, in order to more quickly respond to any release in the future. More stringent unit design and operating controls might be appropriate in certain locations. For example, additional engineered barriers may be appropriate in shallow, subsurface flow areas. In another case, an increase in the length of the post-closure care period may assure that ground-water contamination will be prevented or responded to quickly. Finally, we do not believe these investigations are more extensive than those required under Title 40 of the Code of Federal Regulations (CFR) Part 270.

As you know, we are now developing location standards for hazardous waste management facilities in response to Section 3004 (o)(7) of RCRA. The relationship (if any) between the vulnerability criteria (and any associated site investigations or design and operating measures) and the nature of these future standards has not yet been established. I welcome your continued participation in the workgroup helping to develop these standards, as well as your suggestions on this specific topic.

I hope this information responds to your concerns. However, if you need more specific information, please contact Arthur Day in the Office of Solid Waste, at (202) 382-4680.

Sincerely,

J. Winston Porter
Assistant Administrator

JUN 19 1987

MEMORANDUM

SUBJECT: Review of Alternate Concentration Limits Proposed by Union Carbide Corp., Institute, West Virginia

FROM: Bob Kayser, Acting Chief
Land Disposal Permit Assistance Section (WH-563)

TO: Robert E. Greaves, Acting Chief
Waste Management Branch, Region III

As requested, the Land Disposal Permit Assistance Team (PAT) has reviewed the ACL proposal submitted by Union Carbide Corp. (UCC) in September, 1984. The review was performed by Mark Salee of the PAT. The following comments and recommendations have been developed based upon the PAT's interpretation of the current draft ACL guidance and policy.

The ACL Guidance document has gone through the Agency's Red Border review and is currently being reviewed by the Office of Management and Budget. A number of issues were raised during Red Border review of the ACL Guidance document. Decisions on these issues have been made and the document has been revised to reflect the recent decisions. An issue that impacts the Union Carbide ACL proposal pertains to ACLs based on discharge of contaminated ground water to surface water bodies. Part of the ACL policy is that contaminant plumes in usable ground water will not be allowed to increase in size. This applies to the areal extent of the contamination and contaminants at concentrations above allowable health or environmental exposure levels within the plume. Contaminants at concentration levels below allowable health or environmental exposure levels at the point of compliance could have ACLs established at the allowable health or environmental exposure levels.

ACLs based on contaminant discharge into a surface body can be set at current contaminant concentrations that are above allowable health or environmental exposure levels at the point of compliance if the following conditions are met: 1) the facility property boundary is immediately adjacent to the surface water body, 2) the contaminant plume must have already reached the surface water body, and 3) the hazardous constituents are not causing a statistically significant increase in constituent concentrations over the background concentrations in the surface water body.

The following discussion assumes that all of the contaminant plume is discharging into the Kanawha River. However, from the information submitted in the proposal, it appears that the contaminant plume may be migrating off-site along the eastern property boundary, near well 6 (Well 6 has shown bis(2-chloroethyl) ether levels between 26 and 59 ppb). The proposal does not contain any information on the ownership, land use, or ground-water use off-site in this area. A more detailed investigation into the extent of migration of the plume in this area, and the land and water uses in this area is needed to fully evaluate the impacts from the ground-water contamination.

The ACLs proposed by UCC have been evaluated based on the above policy. After a comparison of the highest constituent concentrations detected in the monitoring wells, the allowable health or environmental exposure levels for those constituents, and the proposed ACLs (see Table I), the PAT concludes that the proposed ACLs for the three constituents are unacceptable. The proposed ACLs are greater than the highest detected concentrations of the constituents in the monitoring wells. Also, the highest detected concentrations of bis(2-chloroethyl) ether and antimony are greater than the allowable exposure levels for these constituents.

The concentration limits for these constituents could be set at the highest concentrations detected in the ground water if the constituents are not causing a statistically significant increase in their concentrations over their background concentrations in the Kanawha River. The reviewed proposal does not contain adequate surface water quality data to make this determination, nor does the proposal contain sufficient information to verify that all of the contaminated ground water is discharging into the Kanawha River.

Union Carbide states that,

> "no information exists within the wastewater treatment plant area concerning the piezometric surface in the underlying bedrock. However, the Kanawha River valley is known to be a major ground-water discharge area. Consequently, ground water in the bedrock flows vertically upward, entering the alluvium and ultimately the Kanawha River."

Additional information concerning the horizontal and vertical migration of the contamination is needed to verify this claim. Additional surface water quality data is also needed to determine if the discharge of contamination into the Kanawha River is causing a statistically significant increase over background concentrations in the surface water. Samples should be collected within the discharge zone of the contaminant plume during a period in which stream flow is near average conditions for the specific season. These samples should include water samples taken at mid-depth and sediment samples.

June 17, 1987

MEMORANDUM

SUBJECT: Ground-Water Monitoring at Regulated Units Near SWMUs That Have Impacted Ground-Water

FROM: Marcia E. Williams, Director
Office of Solid Waste (WH-562)

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

TO: Robert Duprey, Director
Waste Management Division
Region VIII

We are responding to your memorandum of March 19, 1987, on the above subject. Your inquiry has raised several good questions. Situations in which either the background ground-water quality at a regulated unit is highly contaminated or the regulated unit is constructed on an old solid waste management unit (SWMU) that has affected ground water are common. Your memorandum contained a series of questions but did not include sufficient detail for us to specifically respond to each question for each site. Instead, we offer a general approach for each site, to which you may apply site-specific considerations.

In the case of the refinery which has an interim status land treatment area downgradient of an unlined, non-regulated surface impoundment, you may issue a permit, if the following conditions are satisfied:

- The land treatment unit is in compliance with applicable land treatment requirements, including those involving unsaturated zone monitoring (especially soil care monitoring);
- The unsaturated zone monitoring indicates that there has been no migration of hazardous constituents from the treatment zone;
- Upgradient ground-water monitoring well(s) are not affected by the land treatment unit (a showing by soil core monitoring that there has been no migration would be an important indication that the upgradient well(s) are unaffected by the regulated unit); and
- Ground-water contamination is being addressed through HSWA corrective action provisions (either §3004(u) or §3008(h)).

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In the case where the regulated unit is an interim status landfill that is constructed on a SWMU, you may issue a permit, if the following conditions are satisfied:

- Upgradient ground-water monitoring well(s) are not affected by the regulated landfill (this will probably require use of background wells upgradient of the SWMU, because of the apparent stability to determine whether contamination is from the landfill or the SWMU);

- Downgradient ground-water monitoring wells represent the quality of ground water passing the point of compliance (this approach assumes for regulatory purposes that all releases are from the regulated unit); and

- Ground-water contamination is being addressed through HSWA corrective action provisions and §264.100 (the permit could include a reopener clause to modify the ground-water standard if corrective action is able to clean up the contamination).

In both of these cases, we would like to emphasize the importance of dealing with the ground-water contamination problem at the sites. Corrective action for these releases is the critical element of any site strategy.

For further guidance on the subject of various regulatory requirements of ground-water monitoring, we would refer you to the RCRA Ground-Water Monitoring Compliance Order Guidance (Final - August 1985).

We appreciate the opportunity to be of assistance to you. If you have any further questions, please contact Suzanne Rudzinski at (FTS) 382-4206 or Ken Jennings at (FTS) 475-9874.

cc: Bruce Weddle
Joe Carra
Elaine Stanley
Amy Svoboda
John Haggard, Region VIII
Jean Bolinske, Region VIII
Debbie Sherer, Region VIII

This has been retyped from the original document.

RCRA/SUPERFUND HOTLINE MONTHLY SUMMARY

JUNE 87

Groundwater Monitoring For Radionuclides

How are radionuclides, which are present in mixed low-level radioactive waste, monitored in the groundwater at an interim status disposal facility?

When the facility is in interim status, the initial background monitoring required by 40 CFR 265.92(b) and (c) consists of monitoring for drinking water parameters specified in §265.92(b)(1)-(3) Appendix III and 265.92(b)(1) references. One of the parameters specified in Appendix III is gross Alpha radiation. The regulations require quarterly monitoring for these constituents for one year. Part 265 does not address the requirement to monitor the groundwater for radiation beyond the original four background measurements.

Source: Burnell Vincent (202) 382-4658
Research: Becky Cuthbertson

9481.1987(07)

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

JUL 24 1987

OFFICE OF
SOLID WASTE AND EMERGENCY RESPONSE

MEMORANDUM

SUBJECT: Alternate Concentration Limit (ACL) Policy for HSWA Provisions

FROM: Marcia E. Williams, Director
Office of Solid Waste (WH-562)

TO: Robert E. Greaves, Acting Chief
Waste Management Branch (3HW30)
Region III

This is in response to your June 19, 1987, memorandum concerning the applicability of alternate concentration limits (ACLs) to the surface impoundment retrofitting provision under § 3005(j)(3). The facility in question is located in West Virginia, which has a ground-water nondegradation policy under a delegated RCRA program (pre-HSWA).

The retrofitting exemption in § 3005(j)(3) for aggressive biological treatment surface impoundments requires that the interim status impoundment be in compliance with ground-water monitoring requirements that are generally applicable to permitted facilities. For facilities that have not been issued a final Part B permit, we have interpreted this requirement, in the July 1986 guidance entitled "Interim Status Surface Impoundments Retrofitting Variances," to mean compliance with 40 CFR Parts 264 and 270.

Facility permits must include either a detection, compliance, or corrective action monitoring program. Facilities that have detected leakage of contaminants to the ground water must propose concentration limits, which could include ACLs, for each hazardous constituent detected in the ground water. The ACLs, like the other concentration limits, are used to determine which ground-water monitoring program (i.e., compliance or corrective action) should be included in the facility permit. Therefore, ACLs should be considered part of the ground-water monitoring requirements that are generally applicable to permitted facilities.

Section 3005(j)(7)(C) states that if a qualified waste-water treatment impoundment is found to be leaking, the impoundment must retrofit unless EPA determines retrofitting is not necessary to protect human health and the environment. One way for an owner/operator of a leaking surface impoundment to demonstrate protection of human health and the environment is to obtain an ACL. Generally, ACLs are applicable and should be reviewed to determine compliance with § 3005(j)(7)(C).

For a facility in a State authorized for RCRA, the applicability of ACLs in EPA's evaluation of an exemption request under §§ 3005(j)(3) and (j)(7)(C) is governed by State law and regulations. As previously stated, the statutory language under § 3005(j)(3) states that to qualify for this exemption the facility must be "in compliance with generally applicable ground-water monitoring requirements for facilities with permits . . ." The retrofitting exemption should be reviewed based on West Virginia's ground-water monitoring permit requirements, which include a nondegradation standard (i.e., they do not provide for the setting of ACLs). As a result, ACLs would not be applicable under the §§ 3005(j)(3) and (j)(7)(C) provisions for this specific case.

Should you have any questions on this matter please contact either Paul Cassidy of the Land Disposal Branch at 8-382-4682 or Mark Salee of the Technical Assistance Branch at 8-382-4755.

cc: Joseph Carra
Bruce Weddle
Bob Tonetti
Suzanne Rudzinski
Art Day
Mark Salee
Paul Cassidy

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON D.C. 20460

JAN 2 8 1988

OFFICE OF
SOLID WASTE AND EMERGENCY RESPONSE

MEMORANDUM

SUBJECT: New Jersey Zinc Company

FROM: Marcia E. Williams, Director
Office of Solid Waste (WH-562)

TO: Robert E. Greaves, Chief
Waste Management Branch (3HW30)

This is in response to your memo dated November 3, 1987, in which you requested that the Office of Solid Waste (OSW) provide assistance on a number of regulatory issues surrounding the New Jersey Zinc Company site in Palmerton, PA.

AMC v. EPA.

A Federal Register notice (attached) interpreting the AMC decision was signed by the Administrator December 31, 1987. Our reading of the AMC opinion is that the New Jersey Zinc Company's operation is not affected by the AMC opinion, i.e., it still involves solid waste management (at least up until it is burned in an industrial furnace) and the company must still obtain a RCRA permit for their K061 storage pile. Further, we do not think the opinion affects EPA's speculative accumulation provisions at all. (You should note, however, that the speculative accumulation provision determines when certain secondary materials are solid wastes; it does not distinguish between storage and disposal. "Disposal" is defined in the regulations at Section 260.10.)

The last of your first set of questions concerned partially reclaimed zinc oxide that requires further reclamation. Normally, a partially reclaimed solid waste remains a solid waste as long as it must still be reclaimed before use, and the Section 261.3(c)(2)(i) "derived-from" rule would make the partially reclaimed material a hazardous waste. As I understand the situation at New Jersey Zinc, the partially reclaimed zinc

oxide is both a solid and a hazardous waste. However, as is discussed below in the context of the Waelz Kiln residue, if New Jersey Zinc were to change their process so that the only hazardous waste they were to burn in the kiln was K061, the residues from that kiln may then not be hazardous waste.

Regulatory Status of Waelz Kiln Residue

The regulatory status of the kiln residue (and the partially reclaimed zinc oxide) depends on the type of feed to the kiln. As I understand the process currently employed at New Jersey Zinc, I concur with Sam Rotenberg's assessment that the residue is a hazardous waste via the derived-from rule, and further, that the residue has been a hazardous waste since 1980. The following are the factors upon which this determination is based.

- The kiln residue is not exempt under RCRA Section 3001(b)(3)(A)(ii) because the K061 feedstock is a waste from the primary steelmaking industry. Steelmaking constitutes an alloying process, which the Agency has determined not to be "processing of ores or minerals." Waste produced by reclamation of other minerals from non-Bevill waste is not itself a Bevill Waste.

- The "indigenous secondary material" discussions that have appeared in the Federal Register over the last 3 years (see 50 FR 630-1, January 4, 1985; 50 FR 49167, November 29, 1985; and 52 FR 16989-91, May 6, 1987) are not applicable to this unit because I understand that F006 and F019 are introduced to the furnace -- these wastes are certainly not indigenous to a zinc smelting process.[1]

1/ Your letter also stated that K062 is added to the furnace. We would not view K062 as indigenous to zinc smelting either, but as I understand it, what is actually introduced to the furnace is sludge from lime stabilization from waste pickle liquor that is exempt from the derived-from rule under Section 261.3(c)(2)(ii). Therefore, introducing this exempt sludge into the furnace does not affect the regulatory status of the kiln residue.

You should note that New Jersey Zinc might be able to change the status of the kiln dust by ceasing to add any hazardous waste but K061 to the kiln. Under the May 6, 1987 proposal (52 FR 16990), K061 would be considered indigenous to a zinc smelting operation because K061 is generated in furnaces used in primary steel production (i.e., both are forms of metal smelting). If this rule is finalized as proposed, then the derived-from rule will no longer apply to residue from smelting of K061. Of course, if New Jersey Zinc continues to add F006 and F019 to the kiln, the kiln residue would continue to be hazardous no matter what is decided concerning K061. In fact, as a final point, the introduction of F006 and F019 to the kiln calls into question the kiln's status as a reclamation device. (See 50 FR 630-1, January 4, 1985.) That is, the F006 and F019 wastewater treatment sludges are not ordinarily associated with zinc smelting, and these wastes may contain Appendix VIII constituents different than normal zinc smelter feed materials. (Id.) The kiln, as it is currently operated, may be more properly classified as a hazardous waste incinerator as opposed to a reclamation furnace.

Regulating Exempted Waste Under RCRA Corrective Action

Your second set of questions concerned the applicability of RCRA Section 3004(u) corrective action authority to releases from exempt units. The units you asked about are:

1. Bevill exempt;
2. Pre-RCRA inactive units, and
3. AMC opinion exemptions.

(1) The question about units containing Bevill wastes was settled recently when EPA issued the second HSWA Codification Rule, signed by the Administrator on November 16, 1987. EPA determined that the RCRA Section 3001(b)(3) exemptions (i.e., those established for "Bevill wastes") do not extend to Section 3004(u). This decision is explained fully in the preamble of the second Codification Rule. (See FR 45790, December 3, 1987.)

(2) Releases from pre-RCRA inactive units are certainly within the authority of RCRA Section 3004(u). 40 CFR Section 264.101 provides that an owner or operator of a facility seeking a RCRA permit must institute correction action for releases from units at the facility, "...regardless of the time at which waste was placed in such unit."

(3) Releases from units excluded from RCRA jurisdiction under the AMC opinion, should there be such exclusions, would be handled the same as other product or process releases. That is, the unit holding the product is not a SWMU, but areas contaminated by "routine and systematic discharges" from the unit are SWMUs.

If you have further questions in these areas, contact Michael Petruska of my staff at FTS 475-9888.

Attachment

7. Ground-Water Monitoring—Assessment Monitoring/Corrective Action at Closed Facilities

An interim status landfill must comply with the requirements in Part 265, Subpart F, Ground-Water Monitoring, during the post-closure care period (see 40 CFR Section 265.90(b)). Section 265.93(d)(7)(i) states that the owner or operator conducting an assessment monitoring program must determine the nature and extent of contamination in the uppermost aquifer below the facility "on a quarterly basis until final closure of the facility (emphasis added)...if such a program was implemented prior to final closure of the facility." Section 265.93(d)(7)(ii) states that the owner or operator may cease to make regular analyses of the ground-water quality if the assessment plan is implemented during the post-closure care period. An interim status landfill stopped receiving waste before July 26, 1982, and certified closure closed prior to January 26, 1983. The facility is now performing post-closure care activities. The facility recently "triggered into" an assessment monitoring mode. With what ground-water monitoring requirements must he comply? What authority may be used to institute corrective measures?

After the owner/operator implements the specific assessment plan detailed in Section 265.93(d)(1)-(5) no further monitoring would be required. According to EPA, if the confirmed detection of hazardous constituents in the ground-water first occurs during the post-closure care period, "the sources of contamination are expected to be relatively stable [as no additional wastes are currently being placed in the unit] such that repeated assessments would only confirm the initial determination of contamination. For this reason only one ground-water quality assessment which demonstrates contamination is required during the post-closure care period" (see May 19, 1980 Federal Register, 45 FR 33195). The post-closure monitoring requirements referred to in Section 265.90(c) would therefore include only any detection monitoring and this one-time assessment of the ground-water quality. A facility who stopped receiving waste on or before July 26, 1982, and who closed on or before January 26, 1983, would not be required to obtain a post-closure permit (see December 1, 1987 Federal Register, 52 FR 45798). This being the case, EPA could not require additional ground-water monitoring under these regulations alone.

EPA may compel the owner or operator of such a facility to perform ground-water (or other media) monitoring via a RCRA Section 3013 order. A Section 3013 order may be issued when the Administrator gains knowledge of the presence of a hazardous waste at a facility, or knowledge of the release of any waste from a facility. The corrective action authority applicable to interim status facilities (RCRA Section 3008(h)) may also be applied if any remedial activities are desired. This order may be issued when the Administrator has information that there has been a release of hazardous waste into the environment from an interim status facility.

Source:	Kirsten Engle	(202) 382-7706
	Vernon Myers	(202) 382-4685
Research:	Deborah McKie	
	Andy O'Hare	

RCRA/SUPERFUND HOTLINE MONTHLY SUMMARY

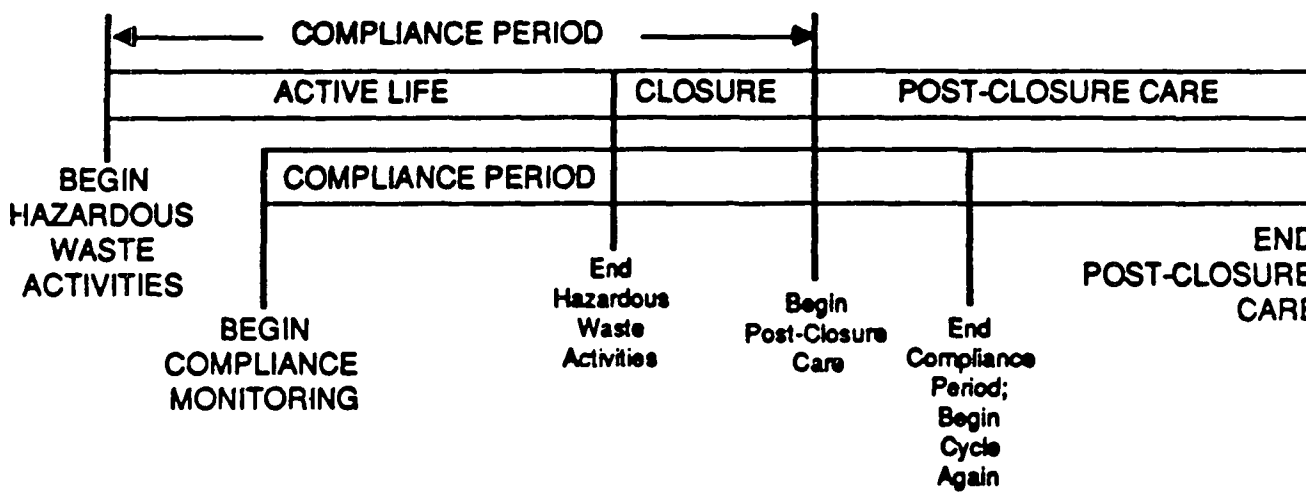
APRIL 88

8. Ground-Water Monitoring—Compliance Period/Post-Closure Care Period

The "compliance period" is defined in 40 CFR Section 264.96(a) as "the number of years equal to the active life of the waste management area (including any waste management activity prior to permitting, and the closure period)." The compliance period begins when a compliance monitoring program is initiated (40 CFR Section 264.96(b)). Section 270.1(c) states that the regulations in Part 264, Subpart F apply during the post-closure care period if the land disposal facility received wastes after July 26, 1982, or certified closure after January 26, 1983 (see December 1, 1987 Federal Register, 52 FR 45798). The post-closure care period "must begin after completion of closure of the unit and continue for 30 years after that date" (emphasis added). (See 40 CFR Section 264.117(a).) If the compliance period ends before the post-closure care period ends, do the requirements to perform ground-water monitoring also cease at the facility?

No. The July 26, 1982 Federal Register, (47 FR 32287) discusses the concept behind the establishment of the compliance period. EPA views the active life of a land unit as the "time period during which the release of leachate to the [ground-water] is likely to be greatest." Therefore the timeframe for the ground-water compliance period must be at least equal to the active life of the facility to allow sufficient time to track the plume of contamination.

Compliance Period/Post-Closure Care Period



The July 26, 1982 Federal Register (47 FR 32294) also states that when the compliance period ends before the close of the post-closure care period, a detection monitoring program must be reinstated. Section 264.90(c)(2) infers that a detection monitoring program (Section 264.98) should be conducted during the post-closure care period when the facility is not implementing a compliance or corrective action program. Once the detection monitoring program is reinstated, the facility could conceivably proceed to a compliance or corrective action program. If a statistically significant increase over background values for the parameters and constituents of concern is identified, a compliance program or a corrective program must be initiated (see 40 CFR Section 264.98(h)). If, after the compliance period ends, there are still "hazardous constituents under Section 264.93...at the compliance point under Section 264.93, the owner or operator must institute a compliance monitoring program under Section 264.99" (Section 264.91(a)(1)). Once the post-closure compliance monitoring program recommences, the compliance period "clock" would begin anew. (See 40 CFR Section 264.96(b).)

Source:	Kirsten Engle	(202) 382-7706
	Vernon Myers	(202) 382-4685
Research:	Deborah McKie	
	Steve Campbell	

9481.1991(01)

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

OFFICE OF
SOLID WASTE AND EMERGENCY RESPONSE

October 16, 1991

Glen D. Johnson
Commonwealth of Pennsylvania
Dept. of Environmental Resources
P.O. Box 2063
Harrisburg, Pennsylvania 17105-2063

Dear Mr. Johnson,

Four questions were raised in your letter of August 21. Hopefully our responses will be satisfactory. If you still have any concerns please feel free to contact us again.

First, concerning the "Analysis of Retesting Procedures" paper, we have re-examined our simulation code used to generate the power results given in that paper and have examined the code you provided as well. It seems that the discrepancy between our results can be traced to the method by which you generate future values for comparison to the simulated prediction limits.

The theory behind prediction intervals assumes that not only are the background measurements drawn at random from a (Normal) distribution, but that the future values to be compared against the prediction limits are also randomly drawn from the same population. That is, two sources of variability are built into the equation used to calibrate the width of a prediction interval: variability in the background measurements (accounted for by the quantity $t_{99,n-1}$ and by 1/n under the root symbol) and variability in the future values (accounted for by adding 1 to 1/n under the root symbol).

In your SAS code, the future values for a given effect size are always fixed at the expected mean level of the downgradient well. No variation is built into these numbers; consequently our power results differ. We have made an additional run of our simulations (based again on 10,000 iterations) to give you approximate power levels in the table below for each of the effect sizes you used. These results make sense from the standpoint that if the alternative mean is close to the background mean, adding variation to the future values should increase how often these numbers fall above the prediction limit and hence increase the power over what you derived. The reverse situation should be true when the background and alternative means are far apart, as seen in the table, for then the alternative mean will generally be above the prediction limit, and variability in the future values will tend to lower the power somewhat.

EFFECT	YOUR POWER	OUR POWER
0.0	0.0000	0.0100
0.5	0.0008	0.0257
1.0	0.0051	0.0613
1.5	0.0301	0.1189
2.0	0.1116	0.2073
2.5	0.2698	0.3319
3.0	0.4756	0.4802
3.5	0.6946	0.6256
4.0	0.8473	0.7570
4.5	0.9386	0.8568
5.0	0.9801	0.9223

With regard to the article by Robert Gibbons in **Ground Water** (Vol. 29, No. 4, 1991), our basic reaction to the method Gibbons proposes for monitoring large networks of downgradient wells is not wholly unfavorable. There do seem to be advantages to employing some type of retesting strategy in order to verify results from wells that show possible contamination. EPA has in fact already approved a proposal from the State of California that adopts a retesting strategy. However, the specific strategy put forward by Gibbons, that is, an initial tolerance interval followed by a prediction interval on any resampled wells, may or may not be the best retesting strategy. The approved California proposal, for instance, consists only of prediction intervals with double resampling of downgradient wells that initially exceed the prediction limit. Both resamples must be immediately collected from the monitoring well, and both must pass the retest to verify that the initial failure was a false positive.

In addition, Gibbons' article raises a few questions concerning the statistical logic used. First, Gibbons' basic example hypothesizes a network of 20 downgradient wells, each being monitored quarterly for five constituents. As Gibbons notes, this results in 100 sample measurements per quarter that must be tested statistically. It is not true, however, that all 100 values would be compared to single tolerance (or prediction) limit calculated from the background data. Rather, each constituent would have to be tested separately, leading to five separate tolerance (or prediction) limits each used to test 20 measurements. Clearly, it would not be the case that all five constituents would have similar distributions of concentration values. This point is not crucial to Gibbons case, but it is worth emphasizing that his hypothetical framework should actually lead to more conservative prediction limits than he describes.

Another point is that Gibbons' discussion of Type I error rates when comparing the performance of tolerance and prediction limits without resampling, particularly in

regard to Figure 1 on p. 568, is somewhat misleading. Gibbons argues for instance that "the 95% prediction limit for the next 1000 measurements achieves its nominal error rate of 5%. However, the false positive rate for the 95% confidence 95% coverage tolerance limit is over 70%. Even 99% coverage produces a false positive rate of approximately 17%." What Gibbons means by false positive rate here is not the traditional Type I error probability; rather, it represents the frequency with which any of the 100 sample measurements falls above the prediction or tolerance limit.

For prediction limits these two definitions of error are the same, since the prediction limit is designed to contain all of the 100 samples. For tolerance limits, however, Gibbons' definition of the false positive rate is not correct, because a tolerance limit is designed to "miss" a certain fraction of the tested measurements. Under 95% coverage, a tolerance limit is expected to miss approximately 5 out of every 100 new samples. The tolerance limit only fails in the Type I error sense, if the actual coverage of the limit is less than expected amount (e.g., 10 out of 100 samples fall above the limit instead of the expected 5 or less). It is true enough that some measurements in a large enough sample will fall above the tolerance limit; however, this does not indicate a failure of the tolerance limit to do its job. If 100 new measurements were collected from a single downgradient well, and at least 95 of those values fell below the tolerance limit, there would be no need to designate the well as possibly contaminated.

Granting the above comments, Gibbons does recognize a basic problem in applying a tolerance limit approach to a set of measurements taken one per downgradient well. That is, measurements which fall above the tolerance limit may indeed indicate contamination at particular wells, because distinct wells may have different distributions of the constituent being tested. If data from many downgradient wells are pooled together, the tolerance limit approach assumes that each well has the same distribution of sample values and that values fall above the tolerance limit only because a large enough sample from any (normal) distribution will have a few extreme measurements. This assumption may not be true if just one or two downgradient wells have been contaminated, so that some of the extreme values are the result of contamination rather than just random variation in a large set of measurements. In other words, by allowing a certain fraction of the values to be above the tolerance limit (typically 1% or 5% of the concentrations), actual contamination at a very few wells could be missed.

One solution to this problem is as Gibbons suggests to retest each well for which the sample measurement falls above the tolerance limit. A more practical alternative not discussed in the article relates to the likely nature of contaminated wells for many constituents. Experience with monitoring data suggests that an actual spill or leak from a monitored facility results in concentration levels elevated typically by one or more factors of magnitude above background levels. Samples from wells contaminated in this way should be much greater in concentration than even extreme values from uncontaminated wells. Consequently, it may be easy to identify contaminated wells by

comparing the relative magnitudes of those samples which fall above the tolerance limit, even in the absence of any retesting strategy.

Your inclination concerning ground-water sample independence with respect to quarterly measurements is consistent with our experience in evaluating ground-water monitoring data. Keep in mind, however, that the 40 CFR Part 264, Subpart F regulations require at least semiannual sampling, which may improve the likelihood of sample independence in slow moving ground water. Further, well purging procedures that are implemented prior to sample collection also improve sample independence.

EPA is in the process of developing software for assisting Regional and State personnel in evaluating ground-water monitoring data. The system (GRITS-ground-water research information system) is an enhancement to an EPA Region VII data base that uses Lotus files for data input and will perform all of the Subpart F statistical procedures. We plan to provide training on the system and the included statistical procedures throughout the late summer and fall of 1992 (Philadelphia or a nearby metropolitan area will be a host training site).

I hope that these comments have been useful. Please contact me at (202) 260-3240 if I can be of further assistance.

Sincerely,

James R. Brown

James R. Brown

cc: Denise Keehner
Vernon Myers

Containers (Subpart I)

9482 – USE AND MANAGEMENT OF CONTAINERS

Parts 264 & 265 Subpart I

NOV 26 1985

Honorable Bill Alexander
Member, United States
House of Pepresentatives
Gathings Building, Room 211-A
615 South Main
Jonesboro, Arkansas 72401

Dear Mr. Alexander:

This is in response to your letter of October 21, 1985, requesting assistance for your constituent, Mr. Jack Hendricks, President of Crown Rotational Molded Products Inc., regarding the development of a container for the safe and economical storage, transport, and disposal of hazardous waste.

While EPA does not directly regulate the manufacturing of containers, we do regulate the storage of hazardous waste in containers (40 CFR, Part 264, Subpart I). A copy of these standards is enclosed. These performance standards require that hazardous waste not be stored in containers that leak or are incompatible with the wastes. Anyone who stores hazardous waste in containers must obtain a RCRA permit and comply with these standards.

In many cases hazardous wastes are stored in containers made to meet Department of Transportation (DOT) standards. For waste handling and safety reasons, it is frequently cost effective for a generator to store his hazardous waste in the same container in which it will be transported and, often, ultimately disposed. As a result, most containers storing hazardous waste are ultimately slated for transfer to a disposal or treatment facility (e.g., landfill, incinerator). EPA has concluded that containers that meet DOT standards for the transportation of containerized materials (49 CFR, Part 173) are also acceptable from an environmental protection perspective for the storage of hazardous waste.

If Mr. Hendricks is interested in pursuing EPA assistance with his research project, his first step in the process of seeking a grant is to submit an application for Federal assistance. Mr. Hendricks can obtain the necessary forms from:

Grants Operations Branch (PM-216)
Grants Administration Division
Environmental Protection Agency
401 M Street, S.W.
Washington, D.C. 20460

However, it may be to Mr. Hendricks benefit to discuss the technical aspects of his research project with EPA's Office of Research and Development prior to submitting any paperwork to the Grants Administration Division. Such a discussion would ensure that the salient technical points are addressed in Mr. Hendrick's application and micht also give him an indication of the merits of his proposal. If Mr. Hendricks is interested, he should contact:

Mr. Don Carey (RD-675)
Office of Exploratory Research
Office of Research and Development
Environmental Protection Agency
401 M Street, S.W.
Washington, D.C. 20460
Phone: 202/382-7899

Since regulations addressing container design specification are primarily within the realm of DOT, Mr. Hendricks may also want to contact DOT regarding his proposal for hazardous waste containers. If you need further information on this topic from EPA, please call Mr. William Kline in the Office of Solid Waste at (202) 382-7917.

Sincerely,

J. Winston Porter
Assistant Administrator

Enclosures

bcc: Don Carey

JAN 21 1986

Mr. Joseph J. Donahue, President
Connelly Containers, Inc.
Bala- Cynwyd, Pennsylvania 19004

Dear Mr. Donahue:

At the request of Mr. Irvin A. Lavine of Mason, Fenwick and Lawrence law offices, I am writing to you to explain the role of the Environmental Protection Agency (EPA) with regard to approving containers for the storage of hazardous waste, particularly with respect to the design of such. EPA promulgated interim status and permitting standards for the storage of hazardous waste in containers on May 19, 1980, and January 12, 1981, respectively. A copy of these standards is enclosed.

These standards are simply performance standards that require containers used to store hazardous waste not to leak and to be compatible with the hazardous waste stored. In the process of developing these regulations, EPA considered promulgating design standards for containers. Since most containers storing hazardous waste are ultimately slated for transfer to a disposal or treatment facility (e.g., landfill, incinerator), however, it is most cost effective for the generator to store his hazardous waste in the same container in which it will be transported.

EPA has concluded that containers that meet Department of Transportation (DOT) standards for the transportation of containerized materials (49 CFR, Part 173) are also acceptable from an environmental protection perspective.

As part of the permit application, the owner or operator must indicate that the container he plans to use will be compatible with the waste to be stored, as required in §264.172. If compliance with this and the other Subtitle C requirements is demonstrated, EPA can then approve the permit to store hazardous waste in containers.

To confirm the point made in your letter, a manufacturer of containers cannot apply for a storage permit in lieu of the actual owner or operator of the facility seeking the permit. It would, however, be advisable that the owner or operator obtain confirmation from the container manufacturer that the containers being purchased will be compatible with the waste to be stored.

I hope that we have satisfactorily addressed your concern. If you should have any questions, please feel free to call Bill Kline of my staff at (202) 382-3081.

Sincerely,

John P. Lehman
Director
Waste Management and
Economics Division

Enclosures