UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
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OFFICE OF
SOLID WASTE AND EMERGENCY RESPONSE

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MEMORANDUM

SUBJECT: Interim RCRA/CERCLA Guidance on Non-Contiguous Sites and On-Site Management of Waste and Treatment Residue

FROM: J. Winston Porter
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TO: Regional Administrators
Regions I - X

Region VI has recently raised several RCRA/CERCLA interface issues that have broad implications for remedial actions at many other Superfund sites. The purpose of this memorandum is to lay out EPA policy on several of these issues, including:

1. Combined treatment of CERCLA waste from non-contiguous locations;

2. On-site disposal of treatment residue;

3. Limitations on the construction of hazardous waste incinerators for on-site CERCLA use; and

4. Off-site treatment of waste and redisposal on-site.

This memorandum and attachment represent interim guidance which should be used now, but will be refined following regional review. Please submit your comments on this interim guidance to Betsy Shaw (FTS 382-3304) of the Hazardous Site Control Division, Office of Emergency and Remedial Response by April 28, 1986. We are particularly interested in comments which address the implications of this guidance for Superfund removal actions at both NPL and non-NPL sites.

Select RCRA/CERCLA Issues:

1. Combined treatment and/or disposal of CERCLA waste from non-contiguous NPL sites

NPL sites may be combined for remedial action if the following statutory criteria are met: the sites must be geographically close or pose similar threats to public health and the environment (CERCLA §104 (d)(4)). If combined remedial actions will involve the transport of waste from one site to another site, the wastes must be compatible for the selected treatment or disposal method and managed in a manner that is part of the highly reliable long-term remedy selected for that site or group of sites. Combined remedies must be cost-effective and should not result in any significant additional short-term impacts on public health and the environment at the receiving site. As in every case, CERCLA waste which is transported must be manifested. The Record of Decision (ROD) for a remedial action that involves more than one site should state that several sites are being treated as one and that their combined treatment constitutes on-site action. (See attachment.)

2. On-site management of waste and treatment residue

EPA interprets CERCLA to require that off-site treatment, storage and disposal of hazardous wastes comply with all RCRA requirements, including permitting. With respect to on-site disposal, the National Contingency Plan (50 FR 47912, November 20, 1985) requires that CERCLA activities meet the technical requirements of RCRA (and other Federal environmental requirements) that are applicable or relevant and appropriate[1] while the procedural requirements, such as permitting, need not be met.

Waste and treatment residues may be managed on-site in several ways. The approach selected will depend on the cost-effectiveness analysis at each site. One approach is to remove the waste (and treat if desired) and dispose of the waste and/or treatment residue in a new on-site land disposal unit. This unit would meet the technical RCRA Subtitle C land disposal requirements of 40 CFR Part 264 (e.g. §264.301 design and operating requirements; and land disposal closure and post closure care requirements in §264.310).

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[1] "Applicable requirements" are those Federal requirements that would be legally applicable if the response actions were not undertaken pursuant to CERCLA §104 and §106. "Relevant and appropriate requirements" are those Federal requirements that, while not applicable, are designed to apply to problems sufficiently similar to those encountered at CERCLA sites that their application is appropriate.

The second approach allows waste to be removed, treated and the residuals to be replaced in the area from which they originated. The area would then be capped and monitored consistent with the technical requirements of land disposal closure (§264.310). Under this approach, a double liner/ leachate collection system would not be required if the wastes are removed during closure for the purpose of treating them to enhance the effectiveness of the closure.

A third approach requires no further management of waste or treatment residue if the waste can be evaluated, determined to be non-hazardous and delisted. This would normally entail preparing a delisting analysis using the Vertical and Horizontal Spread (VHS) model (50 FR 48886, November 27, 1985) or other similar generic models that do not consider site specific factors. A delisting petition is not required for on-site CERCLA actions.

Finally, the National Contingency Plan (40 FR 47947 - 47948) provides for selection of a remedy that does not attain applicable or relevant and appropriate requirements if: 1) the alternative is only an interim remedy; 2) the need to use the Fund at other sites outweighs the need to implement a remedy that fully attains all requirements; 3) it is technically impractical to implement a remedy that meets all applicable or relevant and appropriate requirements; 4) meeting all such requirements will result in an unacceptable environmental impact; or 5) there is an overriding public interest related to enforcement.

The determination that RCRA requirements for treatment, storage and disposal will be met should be made during the Remedial Investigation and Feasibility Study (RI/FS). In the case of incinerator residue, a waste analysis should be conducted during the RI to provide the necessary data. Subsequent analyses, including a test burn, may be conducted during Remedial Design (RD) as appropriate on a case by case basis. Assurance of the consistency of the remedy with RCRA and other applicable or relevant and appropriate Federal requirements should be presented in the ROD, and, if appropriate, reviewed again during RD.

3. <u>Limitations on the construction of hazardous waste incinerators for on-site CERCLA use</u>

If an incinerator is to be constructed for on-site remedial action, there should be a clear intent to dismantle or remove the unit after the CERCLA action is completed. Dismantling or removal should be a part of the remedy presented in the ROD and funds should be included in the financial or contractual documents. Should there be plans to accept commercial waste at the facility after the CERCLA wastes have been treated or destroyed, it is EPA policy that a RCRA permit be obtained before the unit is constructed. (See attachment.)

4. Off-site treatment of waste and redisposal on-site

On-site disposal may involve transport of waste off-site for treatment or storage if the CERCLA waste or treatment residue is ultimately disposed of at the site of waste origin. For this activity, the CERCLA waste is manifested to and from the site and maintained separately throughout all off-site activities.

If you have any questions regarding this memorandum or attachment, please call Betsy Shaw or Bill Hanson (FTS 382-2345).

Attachment

Attachment: Interim RCRA/CERCLA Guidance on Non-Contiguous Sites and On-Site Management of Waste and Treatment Residue

Combining Hazardous Waste Sites for Remedial Action

Background:

Several situations have arisen where it may be advantageous to combine several NPL sites together for the purpose of conducting a more effective remedial action. Subject to the requirements in CERCLA §104 (d)(4), sites in proximity to one another, sites with similar wastes, and sites with the same PRPs may be good candidates for combined remedial actions. A treatment system or incinerator, for example, may be more efficient treating wastes from several sites. Expected economies of scale would lower the unit costs and favor more reliable technologies. Overall, protection of public health and the environment may increase if the waste of several smaller sites are combined at a central treatment or disposal location.

Legislative Authority: Section 104(d)(4) of CERCLA states that non-contiguous sites may be treated as one site when the separate sites are reasonably related on the basis of:

1) Geography; or
2) Threat or potential threat to public health and the environment.

Cost-Effective Reasons for Combining NPL Sites for Remedial Action

Several different circumstances may occur that favor combining site remedial actions.

Example 1: Incineration is effective for destroying wastes at several closely arrayed sites. One alternative is to use a mobile incinerator at each site. Another alternative that may be cost effective is to incinerate the wastes of several sites at one location. The residue could be disposed at the original site but, again, it would probably be more cost-effective to dispose of all ash at the same location.

Example 2: Construction of a new on-site land disposal facility has been found to be cost effective at site A. Wastes at nearby site B are similar in character and a small quantity needs to be managed.

Site B wastes could be managed on-site but it could be less expensive and more effective to dispose of the waste at Site A.

Example 3: Site A and Site B have similar wastes and are close to one another. RCRA closure with a cap has been found to be cost effective at both sites. It may be cost effective to design and remediate both sites at the same time. Therefore, the State or Region would like to contract with one design firm and one construction company to undertake both remedies.

Regions should identify opportunities to combine RI/FSs for several NPL sites in the Site Management Plan or other pre-remedial activities. Combining RI/FSs may improve the timing and effectiveness of remedial actions and should be shown in the Superfund Comprehensive Accomplishments Plan (SCAP).

Criteria for Treating Non-Contiguous Sites as One

The September 21, 1984 NPL listing (40 FR 37076) provides the flexibility to respond to several sites listed separately on the NPL with a single response if the statutory factors are met and it appears cost-effective to do so.

The following criteria would be used to treat non-contiguous sites as one when transportation of the waste is involved:

1. Sites are reasonably close to one another;

2. Wastes must be compatible for the selected treatment or disposal approach;

3. Wastes that are transported to another site need to be managed in a manner that is part of a highly reliable, long-term remedy;[1] and

4. Incremental short-term impacts (e.g. sudden releases, fugitive dust and fumes) to public health and the environment at the receiving site will be minimal. (This factor is important when the receiving site is located near a residential community.)

Of course, the remedy must also be cost-effective by either costing less or by providing increased or more reliable protection of public health and environment than two separate remedies.

When short-term impacts are found to be significant, combining sites may be determined to be inappropriate and the remedy may be reconfigured. Options include but are not limited to:

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[1] This type of remedy generally is defined as:
a. Requiring little or no long-term active O/M;
b. Relatively low probability of release to the environment;
c. If a release did occur, it would not endanger public health or the environment.

1. Use another hazardous waste site where there would be fewer impacts;

2. Pretreat wastes at the original site locations (e.g., metal extraction) or improve materials handling procedures;

3. Dispose of treated residuals (e.g., incineration ash) at originating sites.

If incremental short-term impacts are significant and cannot be mitigated, then non-contiguous sites should not be treated as one for the purpose of combined treatment or disposal regardless of cost-effectiveness.

CERCLA Compliance with Other Environmental Laws

Under response actions occuring at non-contiguous sites which are treated as on-site actions, Superfund or PRPs under an EPA approved enforcement action would:

1. Manifest hazardous wastes transported to another site;

2. Meet the applicable or relevant and appropriate technical requirements of RCRA TSD facilities but would not be required to obtain RCRA permits.

Limitation: The cost of dismantling or removing a treatment or storage unit constructed as part of an on-site remedy should be factored into the determination of the cost-effectiveness of that remedy. If that alternative is selected, funds for the dismantling of the unit should be included in the remedy obligation. Should there be plans for a treatment or storage unit constructed as part of an on-site remedy to accept commercial wastes after the CERCLA waste has been processed, it is EPA policy that a RCRA permit be obtained before the unit is constructed. The cost and scheduling implications of obtaining a permit should also be factored into the analysis of cost-effectiveness.

Proposed Implementation Process:

1. Initial evaluation of NPL sites to determine if the RI/FSs of several sites should be combined. Show combined RI/FSs on SCAP.

2. Feasibility Study recommends that a combined site action would be cost-effective. Further, the Feasibility Study shows that the selected remedy meets the necessary criteria of this policy. (The NPL need not be amended.)

3. A joint public comment period is held to seek comment from all interested parties on the proposed consolidation of sites and a responsiveness summary is written.

4. Regional Administrator or Assistant Administrator signs Record of Decision for non-contiguous site action.

5. A new Record of Decision, public comment period and responsiveness summary would be required if additional sites are added to the response plan after the first Record of Decision.

NATIONAL PRIORITIES LIST
CHECKLIST OF DATA REQUIREMENTS

Site Name: _____

Notes: _____

DATA ELEMENT/PATHWAY	Available	Not Appropriate
Ground and Surface Water and Air		
1. Waste physical state	_____	
2. Persistence	_____	
3. Toxicity	_____	
4. Quantity	_____	
Ground Water		_____
1. Monitoring data OR	_____	
1a. Depth of aquifer	_____	
1b. Net precipitation	_____	
1c. Permeability	_____	
2. Ground water use	_____	
3. Distance to nearest down-gradient well	_____	
4. Population served by wells within 3 miles	_____	
Surface Water		_____
1. Monitoring data OR	_____	
1a. Slope and terrain	_____	
1b. Rainfall intensity	_____	
1c. Distance to surface water	_____	
1d. Flood potential	_____	
2. Surface water use	_____	
3. Critical habitats	_____	
4. Population served	_____	
Air		_____
1. Monitoring data	_____	
2. Waste reactivity	_____	
3. Incompatibility	_____	
4. Toxicity	_____	
5. Distance to nearest population	_____	
6. Population within 1 mile	_____	
7. Critical environments	_____	
8. Land use	_____	