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NCBC GULFPORT  
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TRANSMITTAL MEMORANDUM AND OUTLINE OF RESOURCE CONSERVATION AND  
RECOVERY ACT ALTERNATIVES TO DELISTING FOR THE MANAGEMENT OF ASH AT  
SITE 8 NCBC GULFPORT MS  
5/25/1995  
NAVFAC SOUTHERN DIVISION

39501-SITE 8 INCINERATION  
19.01.08.0024

MEMORANDUM

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TO: Dan Owens/SouthDiv  
COPIES: Art Conrad/SouthDiv, Marland Dulaney/ABB  
FROM: Penny Baxter   
DATE: May 25, 1995  
SUBJECT: Options - Herbicide Orange site  
PROJECT: 8504.xx

19.1.8.24

Enclosed is a copy of a fax received from Phil Stapleton outlining alternative options or possible options to consider for Site A. I was waiting for the original but either missed it or didn't get it. Hope this sparks some ideas we can use for this site.

Groundwater No. 5 was collected on May 18-19 and is in the lab. Duplicate samples were also sent to the Canviro lab for analysis (at their cost). I expect raw data in mid- to late June and validated data 30 days afterward. We will then frame a letter to the State presenting the data.

[8504.015]

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March 20, 1995

**MANAGEMENT OF ASH AT GULFPORT NCBC:  
RCRA ALTERNATIVES TO DELISTING**

This memo discusses several alternatives for managing the ash found at the Gulfport NCBC. These alternatives might be considered if the delisting petition were denied or otherwise became unworkable (for example, if the length of time needed for the State of Mississippi to review / approve the delisting petition was unacceptable to the Navy).

**Regulatory Status of Ash Under RCRA**

Soil at Site A was contaminated from storage of Herbicide Orange (HO) over time. This contaminated soil is considered a hazardous waste under RCRA (Waste Code F027) via the "mixture rule". A quantity of soil was incinerated at Gulfport NCBC under a RCRA Research & Development permit between December 1986 and November 1988.

The ash from incineration of the contaminated soil also is considered a listed hazardous waste under RCRA (Waste Code F028). The ash currently is managed at Site A in a number of piles. There is no RCRA permit for these ash piles, nor has interim status been obtained. Thus, it appears that the current management of the ash at Site A is not in compliance with Federal and State hazardous waste regulations.

**Summary of Alternatives Discussed**

A number of alternatives to delisting of the ash are discussed in this memo. These alternatives include:

- shipping the ash to a permitted RCRA TSDF,
- obtaining a RCRA permit for an on-site TSDF,
- awaiting promulgation of the HWIR rule (which might provide some regulatory relief),
- obtaining designation of Site A as a "corrective action management unit",
- obtaining a waiver from the RCRA regulations (under 40 CFR 260.20), and
- cleaning-up Site A under CERCLA.

A brief description of each alternative follows. In addition, significant implications, timing issues and uncertainties are summarized.

## ALTERNATIVE 1- TRANSFER ASH TO OFF-SITE TSDF

### Description Of Alternative

Ash could be transported to a RCRA-permitted treatment, storage and disposal facility (TSDF) for disposal. At this time, it appears that at least one TSDF has been permitted under RCRA for the disposal of certain dioxin-containing hazardous wastes (at levels less than 1 ppb.). The facility is:

Highway 36 Land Development Company  
Deer Trail, CO

Assuming that all of the ash could be shipped to this facility, the Navy's remaining RCRA obligations for Site A could be limited. However, even if the ash were managed off-site, it is quite possible that EPA and / or the State of Mississippi would require some demonstration of "clean closure" of Site A after the ash is removed.

### Issues

One significant issue related to this alternative would be the cost of off-site disposal. Based on a telephone quotation from 1992 (*Penny--any more recent data?*), the cost of disposing of the ash at the Highway 36 site would be approximately \$250 per cubic yard of ash. Costs for ash handling and transportation would be additional.

Disposal of the ash would require compliance with the Land Disposal Restrictions (LDR) treatment standards (40 CFR Part 268). The cost estimate shown above assumes that the ash already meets LDR treatment standards (and thus no additional treatment would be needed prior to land disposal). It is possible that existing ash sampling results would be sufficient to demonstrate that the ash satisfies the treatment standards for all F028 constituents. If this were not the case, then additional sampling might be required. Exemptions from Part 268 are possible in certain limited cases. Treatment standards for F028 wastes are provided in Table 1.

In addition to the off-site management of ash, this alternative might require that "clean closure" be accomplished. Since Site A is not currently managed as a permitted or interim status RCRA facility, the applicability of RCRA closure requirements is not "automatic" (at least in the procedural sense). However, the regulatory agency might attempt to apply RCRA closure requirements to Site A in any event. Clean closure would require a demonstration (via soil and groundwater testing) that Site A does not pose risks to human health or the environment.

Assuming that the Highway 36 site could accept the ash for disposal, implementation of this alternative could be accomplished in a relatively short period of time. Review and approval of the site's clean closure would be less straightforward. It should be noted that if the regulatory agency decided to apply RCRA closure requirements and Site A could not be clean-closed, then post-closure care and permitting might be required. Public participation is a mandatory element of the RCRA permitting process.

Finally, the Navy might also assume some (unquantified) liability for off-site disposal of the ash under this alternative.

## ALTERNATIVE 2- OBTAIN RCRA PERMIT FOR ON-SITE MANAGEMENT

### **Description of Alternative**

A RCRA permit could be obtained for disposal of the ash, either at Site A or at another location on the base. In concept, obtaining a permit for a land disposal unit would allow the ash to remain on-site in perpetuity.

### **Issues**

This alternative would require the preparation of a RCRA permit application. As part of this application, a unit design and operating plan for the disposal facility would be required. In addition, a RCRA disposal permit would require post-closure monitoring of the site. Duration of post-closure monitoring is typically 30 years for landfills.

Costs associated with this alternative include the preparation of the permit application, as well as the construction, operation, closure and post-closure monitoring of the disposal unit, all of which would be specified in the permit's conditions.

Perhaps the most significant implication of obtaining a RCRA permit for Site A would be that this action would open up the entire base for potential **corrective action** at solid waste management units (SWMU's). Adding this RCRA authority for study and remedial action would complicate any on-going CERCLA actions at the base, and could add significantly to the time and cost of study and clean-up.

Construction of a land disposal unit for the ash at Site A could limit future uses of the site to some degree. However, if another location on the base were selected for the disposal unit, clean closure requirements might still be applied to Site A.

Time required for implementation of this alternative would be measured in years (for preparation of the permit application, regulatory agency review, public participation and permit approval). As noted earlier, all RCRA permits require public participation. Of course, it is also possible that the permit application might be denied, in which case the Navy would be "back to the drawing board". The application of LDR treatment standards might also come into play, depending on how the ash was to be disposed of at the site.

### ALTERNATIVE 3 - WAIT FOR PROMULGATION OF HWIR RULE

#### **Description of Alternative**

It is possible that EPA's long-awaited Hazardous Waste Identification Rule (HWIR) could make the need for a delisting petition moot. As currently envisioned, the HWIR rule would amend the RCRA "mixture" and "derived-from" rules, particularly with regard to contaminated media, mixtures of solid and hazardous wastes, and hazardous waste treatment residues.

The HWIR rule would establish concentration limits for hazardous constituents in listed hazardous wastes. If the constituent concentrations in the ash were below the concentration limits established for F028 under the HWIR rule, then (theoretically) the ash would no longer be considered a hazardous waste. There would likely be some type of demonstration that constituent concentrations in ash were in fact below the concentration limits established by the rule.

It has been suggested that the RCRA delisting program could become obsolete once EPA promulgates HWIR limits for all listed hazardous wastes.

#### **Issues**

There is still considerable uncertainty with regard to the timing of the HWIR standards. Although EPA has committed to proposing HWIR standards by August 1995 and to finalizing these standards by December 1996, the rule could be held up by lawsuits or internal Agency problems. In addition, there is currently little basis for knowing what concentration limits might be set for F028 constituents under this rule. This is particularly the case with EPA's on-going dioxin re-assessment.

Thus, while this alternative might significantly limit RCRA impacts (and associated costs) at Site A, it would also involve deferring any action on the site until the end of 1996. Even at that time, there is no assurance that the ash would meet the (as-yet undefined) concentration limits for F028 that might eliminate its regulation as hazardous waste.

## ALTERNATIVE 4 - OBTAIN DESIGNATION OF SITE A AS A CORRECTIVE ACTION MANAGEMENT UNIT

### **Description of Alternative**

EPA has recognized some of the difficulties associated with site remediation, particularly where hazardous wastes may be involved. The Navy may be able to use some relatively new concepts employed in the RCRA corrective action program to obtain a new "designation" for Site A.

EPA has established RCRA standards for **Corrective Action Management Units (CAMU)** and **Temporary Units (TU)** in order to facilitate RCRA Subtitle C corrective action. CAMU and TU are intended to provide flexibility and promote expeditious site clean-up under RCRA. A CAMU is an area within a facility that is designated for the management of remediation wastes generated during the implementation of corrective action requirements. A TU is a temporary tank or container storage area used solely for treatment or storage of hazardous remediation wastes during remediation activities.

CAMU's and TU's can also be used at CERCLA clean-ups through their designation as "applicable or relevant and appropriate requirements" (ARAR). CAMU's and TU's that are designated as ARAR could be incorporated into CERCLA decision documents rather than into RCRA permits or orders.

### **Issues**

Obtaining EPA concurrence on designation of Site A (or some portion thereof) as a CAMU would involve some challenges. First, since CAMU are designed for the management of remediation wastes, one key challenge would be to get EPA to agree that the ash should be considered remediation waste. Second, EPA would need to make several specific findings related to the Navy's remediation plans prior to approving the designation of Site A as a CAMU (see *Federal Register*, Volume 58, Number 29; February 16, 1995). Finally, public review and comment are required on all CAMU decisions.

Despite these challenges, this alternative should be given some consideration. It could offer the Navy the opportunity to treat and dispose of the ash on-site without the need for a RCRA permit (or meeting LDR treatment standards), thus minimizing the time and costs associated with several of the other alternatives discussed in this memo. However, these advantages might be negated if the Navy were required to obtain a RCRA permit in order to use the CAMU concept (as opposed to using CAMU as an ARAR and remediating Site A under CERCLA).

## ALTERNATIVE 5 - OBTAIN RCRA WAIVER

### **Description of Alternative**

Under 40 CFR 260.20, the Navy could petition EPA to revoke or modify any provision of the RCRA regulations, as these regulations apply to specific circumstances. To support such a petition, the Navy would need to submit a statement of need and justification for the proposed action, along with other supporting documentation. Upon making a tentative decision on such a petition, EPA would be required to publish a notice in the *Federal Register* and request public comment.

### **Issues**

The potential success of this alternative should be considered a long-shot at best. If EPA or the State of Mississippi were unable to approve a delisting petition under 40 CFR 260.22, it is unlikely that the regulatory agencies would look favorably on a more general petition under 40 CFR 260.20. To my knowledge, there is little to no case history of EPA granting such waivers, so the Agency would have few precedents to draw upon in making a decision. In addition, the amount of time that would be required for EPA to consider and approve such a petition are unknown.

## ALTERNATIVE 6 - CLEAN-UP UNDER CERCLA

### **Description of Alternative**

If all of the regulatory options under RCRA (including the delisting petition, off-site disposal, and on-site RCRA permitting) were to fail, the Navy would have a strong case for arguing that clean-up under CERCLA would be the only viable alternative.

### **Issues**

Since other areas of the base (including Sites B and C) might be addressed under CERCLA, EPA and the State might be amenable to including Site A in an overall base remediation strategy. This comprehensive approach might offer the Navy certain advantages from an investigation and remediation perspective.

However, the timing of this alternative might be problematic. If EPA and the State were to require that all RCRA alternatives be explored in a sequential fashion, it could be several years before the Navy could demonstrate that all RCRA options have been exhausted. Investigation and remediation of other areas of the base could be completed during this time period.

**TABLE 1**  
**Treatment Standards for F208**  
**(40 CFR 268.40)**

<b>Regulated Constituent</b>	<b>Wastewaters</b> <b>(milligrams per liter)</b>	<b>Nonwastewaters</b> <b>(milligrams per kilogram)</b>
All hexachlorodibenzo-p-dioxins	0.000063	0.001
All hexachlorodibenzo-furans	0.000063	0.001
All pentachlorodibenzo-p-dioxins	0.000063	0.001
All pentachlorodibenzo-furans	0.000035	0.001
All tetrachlorodibenzo-p-dioxins	0.000063	0.001
All tetrachlorodibenzo-furans	0.000063	0.001
2,4,5-trichlorophenol	0.18	7.4
2,4,6-trichlorophenol	0.035	7.4
2,3,4,6-tetrachlorophenol	0.030	7.4
pentachlorophenol	0.089	7.4