

APPENDIX F

FORMAT FOR EE/CA APPROVAL MEMORANDUM

***** DRAFT *****

A FINAL VERSION WILL BE FORWARDED WHEN AVAILABLE



EE/CA APPROVAL MEMORANDUM OUTLINE

This memorandum format is to be used for documentation of threat pursuant to Section 300.65 of the NCP and is a record of decision for both HQ and RA approved engineering evaluation/costs analyses (EE/CAs).

I. HEADING

SUBJECT: EE/CA Request for the ABC Site, XYZ State
EE/CA APPROVAL MEMORANDUM

Site/Spill-ID:

Category of Removal: (State that the removal is 1) a non-time-critical action and/or 2) of national significance)

FROM: On-Scene Coordinator/Remedial Project Manager

TO: Regional Administrator (or AA, OSWER, if appropriate)

THRU: Regional Division Director, as appropriate

II. BACKGROUND

The background section should contain information on the location of the site, the incident characteristics (including the history of the site, general character of the site, and issues relevant to waste management), summary of quantity and types of substances present, State and local authorities' role, and actions to date, including previous and current actions to abate threat. Each of these information points is described below.

A. Site Description

1. Describe the site's physical location.
2. Discuss the general character of the site.
3. Provide supporting documentation.

B. Incident Characteristics

1. Discuss the history of the incident.
2. Discuss the relevant issues relating to current waste management practices.



C. Quantities and Types of Substances Present

1. Describe the hazardous substances in terms of categories or classes of chemicals.
2. Describe the sampling methodology.

D. State and Local Authorities' Roles

1. Briefly describe State and local actions to date.
2. Summarize the potential for continued State and local response.

E. Actions to Date

1. Discuss any previous actions to abate threat.
2. Discuss any current actions to abate threat.

**III. THREAT TO PUBLIC HEALTH OR WELFARE OR THE ENVIRONMENT
(Include determination that threat is non-time-critical)**

Removals address two distinct criteria. The first is a threat to the public health, welfare and the environment. The second criterion is the availability of non-CERCLA response mechanisms. The following threats are considered in determining the appropriateness of a removal action:

- o Actual or potential exposure to hazardous substances or pollutants or contaminants by nearby populations, animals, or food chain;
- o Actual or potential contamination of drinking water supplies or sensitive ecosystems;
- o Hazardous substances or pollutants or contaminants in drums, barrels, tanks, or other bulk storage containers, that may pose a threat of release;
- o High levels of hazardous substances or pollutants or contaminants in soils largely at or near the surface, that may migrate;
- o Weather conditions that may cause hazardous substances or pollutants or contaminants to migrate or be released;
- o Threat of fire or explosion;
- o The availability of other appropriate Federal or State response mechanisms to respond to the release;
- o Other situations or factors which may pose threats to public health, welfare or the environment.



OSCs should make sure that their Approval Memoranda discuss the ways in which the release meets these NCP criteria. Sections A and B below provide some specific examples of the type of material to include.

A. Threats to Public Health and Welfare

1. Describe the threats to public health and welfare.
2. Describe all actual or potential impacts on human health and welfare.

B. Threats to the Environment

1. Describe threats to the environment.
2. Discuss all actual or potential impacts on the affected area.

IV. ENFORCEMENT (not for public release)

The purpose of this section is to assist in making the determination of the potential for response action by PRPs. This information should be referenced here as "see attachment" and placed on a separate page entitled "Enforcement Sensitive." This section includes information on the enforcement strategy (summarized), the status of notice letters and/or negotiations, the available enforcement authority, potentially responsible parties, previous enforcement actions, the probability of recovering costs, and the recommended enforcement strategy if there is no strategy currently in place. This section also should contain information on the potential for responsible party response. In some Regions, this section of the Approval Memorandum may be prepared by enforcement personnel.

A. Enforcement Strategy

1. Briefly summarize the enforcement strategy.
2. Briefly summarize the enforcement actions.

B. Status of Enforcement Actions

1. Potentially responsible parties.
 - a. Describe the number and types of potentially responsible parties (e.g., transporters and owners or operators of production facilities or waste disposal facilities).
 - b. Indicate if the PRP has taken action. If so, mention whether or not the action was adequate.



c. Describe what efforts are being undertaken to obtain additional PRP response.

d. Give the date(s) that notice letter(s) were sent and a summary of the responses of the recipients (e.g., the PRPs have agreed to clean up the site or the PRPs have denied involvement at the site). If negotiations are underway, describe the activities under discussion.

2. Discuss the probability of recovering costs.

V. PROPOSED PROJECT AND COSTS

A. Objectives of the EE/CA: A short statement should be made describing the specific tasks involved in preparation of the EE/CA, including any on-site activities necessary (e.g., drum excavation), and the results sought by the EE/CA as they pertain to the threat(s) discussed in IV.

B. The estimated total EE/CA project ceiling (104(b) costs) and an itemized breakout of the following cost categories which comprise the total ceiling: TAT costs, intramural costs, National Contract Lab Program analytical costs, and ERT/REAC costs. (REM contractor costs would be included at NPL sites, if appropriate.) For example, the total project ceiling may be established in the following manner:

TAT costs	10,000
NCLP analytical services	20,000
ERT study	20,000
Indirect (HQ and Region)	<u>45,000</u>
TOTAL 104(b) COSTS	\$95,000

If any CERCLA funds have already been allocated for this site, give the amount and tasks involved. Indicate obligations to date, if appropriate.

C. EE/CA Schedule: The estimated period of performance should be given, with interim milestones, as appropriate.

D. Estimated Cost and Duration of Removal Action: The approximate cost and duration of the final removal action, based on the nature of the site problems and waste volume and characteristics.

VI. EXPECTED CHANGE IN THE SITUATION SHOULD NO ACTION BE TAKEN OR SHOULD ACTION BE DELAYED

Describe any expected changes in the situation should no action be taken or action be delayed. Include a description of a worst-case scenario should no action be taken. These changes may include:

- o Spread in scope of contamination. For example, the ground water contaminant plume may spread through a larger area.
- o Change in nature of contamination. For example, incompatible substances may come into contact with each other, producing added threats such as fire/explosion or formation of poisonous gases such as hydrogen cyanide.
- o Increased threat to human health and the environment if action is delayed or denied. For example, the contaminant plume may soon reach drinking water wells or phosphine gas or other poisonous gases may be produced.
- o Additional response actions required if the initial response is delayed or denied resulting in a longer, more costly removal. For example, the drums will deteriorate further, leaking additional contaminants into the ground.

VII. IMPORTANT POLICY ISSUES (Only as necessary and applicable)

If applicable, include a separate section on important policy issues that are significant to this request. These issues may include:

- o Provision for cost sharing (cost sharing is applicable only in a small number of cases and applies only to removals at NPL sites that were publicly operated, either by a State or a political subdivision thereof, at the time of the release and a remedial action is ultimately undertaken at the site)
- o The division of responsibilities among Federal and/or State agencies
- o Off-site disposal availability and compliance with OSWER's Off-site Policy
- o Compliance with other environmental statutes
- o Special coordination needs/issues of national significance (e.g., dioxin) and similar issues
- o Contiguous sites (if multiple locations are recommended by the Region for consideration as one site, give justification for such consideration).

Issues should be fully explained and include a discussion on the efforts being made to resolve the issue and/or decisions that must be made before a resolution is reached.



VIII. REGIONAL RECOMMENDATION

Use a paragraph such as: "Because conditions at the XYZ Site meet the NCP Section 300.65 criteria for a removal action, I recommend your approval of the engineering evaluation/cost analysis (EE/CA) request. The estimated total costs of performing the EE/CA are \$X. You may indicate your approval or disapproval by signing below."

Approve: _____

Date: _____

Disapprove: _____

Date: _____



APPENDIX G

NON-ALLOWABLE COSTS UNDER SUPERFUND

Source:

**Superfund Removal Procedures, OSWER Directive 9360.0-03B (Revision #3),
U.S. Environmental Protection Agency, Office of Emergency and Remedial
Response, Emergency Response Division, Washington, DC, 1988, Section III-F-2-c.**





NON-ALLOWABLE COSTS UNDER SUPERFUND

Permissible uses of money from the Hazardous Substances Response Trust Fund ("Superfund") are circumscribed by CERCLA and the NCP. There are certain expenditures which cannot be charged to Superfund, including:

1. State and local costs for which prior authorization was not specifically given by the OSC or addressed in a cooperative agreement or Superfund State Contract or procurement contract (e.g., municipal services, such as use of police or fire departments, and State personnel who are on-scene performing tasks not specifically requested by the OSC).
2. Costs to restore release-related damages to property (as opposed to response-related damages). Release-related damages are those that occur as a direct result of the release of a hazardous substance (e.g., poisoning of fish or livestock). Payment for restoring, rehabilitating, or acquiring the equivalent of costs to natural resources damaged by the release may be made upon the trustee's request for preauthorization under the claims regulations, which are under development.
3. Costs for the research and development of equipment and response technologies used in conjunction with a removal action; e.g., alternative disposal technologies. Funding may be available, however, through sources other than the CERCLA Trust Fund. If such situations arise, the OSC should contact the Hazardous Response Support Division (HRSD) in Headquarters.
4. Costs for removal of petroleum, including crude oil and any fraction thereof which is not otherwise specifically listed or designated as a hazardous substance, natural gas, natural gas liquids, liquefied natural gas, or synthetic gas usable for fuel (or mixtures of natural gas and such synthetic gas).
5. Costs incurred by a contractor to provide response measures, for which that contractor is later found to be liable.

More complete guidance on allowable costs is currently being developed by OERR.





APPENDIX H

**COST TABLES FOR EPA INDIRECT PROVISIONAL RATES
AND THE NATIONAL CONTRACT LABORATORY PROGRAM**





Estimating EPA National Contract Laboratory Program (CLP) Costs

<u>Routine Analytical Services (RAS)</u>	<u>Sample Matrix</u>	<u>Cost(\$)/Sample¹</u>
Organics-EPA Hazardous Substances List (Volatiles, Base/Neutral/Acid, Pesticides/PCBs)	Water and Soil/Sediment	1389
Inorganic - 23 metals and cyanide	Water and Soil/Sediment	209
Dioxin - 2,3,7,8-TCDD	Soil/Sediment Only	200
Volatile Organics Only	Water and Soil/Sediment	Not Available at this Time

Special Analytical Services (SAS)

Cost may be requested from the CLP Sample Management Office (SMO) through the EPA Regional Sample Control Centers (RSCC).

To estimate CLP laboratory cost:

1. From information in Chapter 2 (Steps 1-6), estimate the number of samples and the type of analyses for each sample matrix (i.e., water or soil/sediments). Remember to include field blanks if applicable.

Example:

<u>Matrix</u>	<u>Analysis</u>	<u>No. of Samples</u>
Water	Inorganics	7
Soil	Inorganics	27
Water	Organics	17
Sediments	Dioxin	5

¹ Reflects the highest cost/sample presently paid in the CLP for each analysis category.



2. EPA requires contract laboratories to perform quality control (QC) sample analyses (i.e., matrix spikes, duplicates, and method blanks) for each sample matrix at an interval of every 20 samples or per case whichever is more frequent. (A case is designated as a group of samples collected at one site or geographic location during a specific time period usually one to two weeks.) The cost of the QC analyses is not included in the cost per sample listed above. Therefore, contract laboratories charge the EPA the same cost per sample listed above for each required QC sample analysis. To determine the total number of samples to use in estimating costs, add four QC samples per 20 samples or per case whichever is more frequent of each sample matrix analysis request. For example:

<u>Matrix</u>	<u>Analysis</u>	<u>No. of Samples</u>	<u>Total</u>	
			<u>QC Samples</u>	<u>Samples</u>
Water	Inorganic	7	4	11
Soil	Inorganic	27	8	35
Water	Organic	17	4	21
Sediment	Dioxin	5	4	9

3. Multiply the total number of samples (Step 2) for each analysis by the cost per sample listed in the table and subtotal.

<u>Matrix</u>	<u>Analysis</u>	<u>Total No. of Samples</u>	<u>Cost (\$)</u> <u>Sample</u>	<u>Estimated Cost (\$)</u>
Water	Inorganic	11	209	2299
Soil	Inorganic	35	209	7315
Water	Organic	21	1389	29169
Sediments	Dioxin	0	200	<u>1800</u>

Subtotal \$408583

4. Add a fifteen percent contingency allowance to the laboratory costs to cover labels, bottles, packaging materials, sample shipment and other miscellaneous costs related to CLP costs.

Provisional FY 1987 EPA Indirect Cost Rates¹

<u>Region</u>	<u>Organizations to Which the Rates Apply</u>	<u>FY 87 Provisional Rates</u>
I	Air, Water, Environmental Services, and Waste Management Division	\$60 per hour
II	Caribbean Field Office; Emergency and Response, Air and Waste Management, Water Management, and Environmental Services Divisions	\$68 per hour
III	All Regional Organizations	\$52 per hour
IV	All Regional Organizations	\$54 per hour
V	Directors Office - Waste Management/ Emergency Response; Hazardous Waste Enforcement Branch, Great Lakes Coordinator; Central Regional Lab; Eastern and S&A Central District Offices; and Waste Management, Air, Water, and Environmental Services Divisions	\$61 per hour
VI	Houston Lab; and Air, Pesticides and Toxics, Water Management, Hazardous Waste Management, and Environmental Services Divisions	\$60 per hour
VII	Water Management, Air and Toxics, Environmental Services, and Waste Management Divisions	\$65 per hour
VIII	Air and Hazardous Material Branch; Montana Office; and Water, Air and Hazardous Material, and Environmental Services Divisions	\$62 per hour
IX	Toxics and Waste Management, Water Management, and Air Management Divisions	\$63 per hour
X	Alaska, Oregon, Idaho, and Washington Operations Offices; and Air and Toxics, Water, Hazardous Waste, and Environmental Services Divisions	\$61 per hour

¹From Comptroller Policy Announcement No. 87 - 15: New Method for Determination of Indirect Costs in Superfund Removal Project Ceilings; July 15, 1987.

APPENDIX I

COST PROJECTION EXAMPLE





REMOVAL PROJECT CEILING ESTIMATE

Extramural Costs

Extramural Cleanup Contractor (includes ERCS, letter contracts, IAGs, CAs, Regional ERCS, and a contingency contingency can be 10 - 20%)	\$750,000 <u>+ \$112,500</u> (15% contingency)
	\$862,500
TAT Costs	\$50,000
NCLP Analytical Costs	\$100,000
ERT Contract (REAC)	<u>+ \$100,000</u>
Subtotal -- Extramural Costs	\$1,112,500
15% Contingency of Above Costs (round to nearest thousand)	<u>+ \$167,000</u>

TOTAL -- EXTRAMURAL COSTS \$1,279,500

Intramural Costs

Direct Costs [\$30 x 500 labor hours (400 Regional/40 HQ/60 ERT)]	\$15,000
Indirect Costs	\$24,000
Other Direct Costs	<u>+ \$1,000</u>
TOTAL -- INTRAMURAL COSTS	\$40,000

TOTAL REMOVAL PROJECT CEILING ESTIMATE: \$1,319,500

Indirect Cost Formula:

Region-Specific Indirect Cost Rate	x	Estimated Regional Direct Labor Hours	=	Indirect Costs
\$60		400 hours		\$24,000

