

APPENDIX A

**INITIAL ACTION MEMORANDUM FORMAT FOR REMOVALS
LESS THAN 12 MONTHS AND \$2 MILLION**

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, Appendix 6.



MODEL INITIAL ACTION MEMORANDUM FOR REMOVALS
LESS THAN TWELVE MONTHS AND \$2 MILLION

Below is a recommended format for OSCs to follow in preparing their removal Action Memoranda. While use of this model format is not mandatory, OSCs must cover all of the topics presented in the model in order to demonstrate that the incident meets the removal criteria of section 300.65 of the NCP and that all actions in the scope of work are consistent with both CERCLA, as amended by SARA, and the NCP. SARA raised the statutory limitations for removal actions from six months and \$1 million to twelve months and \$2 million. SARA also established a new requirement that all removal actions contribute, to the extent practicable, to the efficient performance of any long-term remedial action performed by EPA, the State, the locality, or a private party. OSCs must include in the Action Memorandum a discussion of how the proposed removal action contributes to the long-term efficiency of ongoing or future remedial actions, whether Federal, State or PRP. In addition, OSCs should attach to their removal Action Memoranda all appropriate ATSDR Health Advisories.

The structure of the recommended format is a representative sample of the type of Action Memoranda frequently prepared by the Regions. In addition to this sample format, OSCs are encouraged to use the Decision Rationale (Appendix 5) as supplemental guidance in preparing a request for removal actions. When it is initially known that the removal action will exceed the \$2 million limitation, OSCs should prepare an initial Action Memorandum and \$2 million exemption request in accordance with Appendix 7.

I. HEADING

DATE: Month/Day/Year

SUBJECT: Request for Removal Action Approval at the Site, City, State
ACTION MEMORANDUM

Site/Spill-ID:

Category of Removal: All removal actions are considered time-critical unless otherwise indicated (e.g., classic emergency or non-time-critical)

National Significance: Indicate whether the removal is of national significance

FROM: On-Scene Coordinator

TO: Regional Administrator (or to the file, thru the RA, if the response is initiated under the OSC's \$50K authority and will not exceed that cost)

THRU: Regional Division Director, as appropriate

II. ISSUE

Briefly state that the site meets the criteria for initiating a removal action under section 300.65 of the NCP and is anticipated to require less than twelve months and \$2 million for completion.

III. 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.

Give distances from nearest populations and points of reference, as appropriate. Also state the population size. For example, a school is within one-quarter of a mile and there are 1,000 residences within a mile of the site; ten of these residences are adjacent to the site. The area is mainly suburban residential with some industrial areas.

Describe the areas adjacent to the incident or site in terms of nearby vulnerable or sensitive populations, habitats and natural resources. For example, the site is adjacent to wetlands and a tributary to the river flows nearby. Describe how sensitive areas, such as floodplains, could impact the removal.

Describe any areas protected by statute, such as parks, historic sites, and sensitive ecosystems and cite the statute. This may include areas such as the New Jersey Pinelands, wetlands areas, or wild and scenic rivers.

2. Discuss the general character of the site.

Describe the current use of the site (e.g., active facility, vacant lot, or recreational area). Also describe the nature and type of the facility or vessel, as well as the business activities undertaken at the site that may have contributed to the incident (for example, a sanitary landfill that accepted industrial wastes or a midnight dump of PCB wastes).

Describe any existing structures, measures, or conditions that would either mitigate or accelerate the release of any materials on-site (e.g., an unstable dike, a temporary containment system, adverse weather conditions, site security, fencing, condition of containers and similar situations). State whether the release is widespread and/or is migrating rapidly.



Include any pertinent information on the site's owners, past and present. This should reflect information on whether the current or previous owners contributed to the conditions on-site. Note whether this is the first removal at the site or is a restart.

3. Indicate NPL status.

Indicate whether the site is on the NPL. If the site is on the NPL, then state when remedial action is expected. If the site has not been promulgated on the NPL, indicate whether it has received an HRS rating, is likely to be proposed or already has been proposed for inclusion on the NPL. Indicate if the site has appeared on the NPL, but that no remedial action is to be taken (e.g., because of removal or PRP response).

4. Provide supporting documentation.

Pictures, diagrams, maps, and/or sketches are encouraged if they substantiate OSC findings. They may be included as attachments or incorporated into the text. This documentation may help to substantiate the threat at the site.

B. Incident/Release Characteristics

Discuss the history of the incident or release. Describe the type of incident that occurred (e.g., a classic emergency) and why it occurred. For example, a storage lagoon overflowed due to heavy rains. Be sure to list all of the site's key problem areas (e.g., drums, bulked liquids, lagoons, or contaminated soils).

Describe the exact location of the incident at the site. For example, the release occurred at an overflowing lagoon in the south corner of the site. Include the time and date (if known) of the incident. State whether the release is new or has just recently been discovered. Also describe when and how the incident was discovered. For example, drums washed up on the beach and were discovered by park rangers.

C. Quantities and Types of Substances Present

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

List all materials known on-site at the time of the approval request and indicate whether these materials are hazardous substances or are pollutants or contaminants. Sections 104(a)(1)(A) and (B) of CERCLA state the different criteria that are used depending on whether the release is a hazardous substance or a pollutant or a contaminant (NOTE: pollutants and contaminants must pose an imminent and substantial danger in order to elicit CERCLA response). Also highlight any substances of critical concern (e.g., PCBs, dioxins). If this information is provided



in chart form, identify in column format the substance, quantity, location (e.g., well #1) and existing standards (e.g., DWEL), if there are any, for comparison. Later discussion of threats should refer to, not duplicate, the information on this chart.

Describe briefly the results of the sampling (e.g., most affected residences showed elevated levels of trichloroethylene in tap water) and give estimates of quantities of the classes of materials if they are available (for example, 220,000 ppm of PCBs in the soil). Indicate whether they are "reportable quantities" as set forth in 40 CFR 302.

CERCLA's definition of "hazardous substance" in section 101(14) includes substances designated or toxic pollutants listed in sections 311(b)(2)(A) and 307(a) of the Federal Water Pollution Control Act; any hazardous air pollutant listed under section 112 of the Clean Air Act; and substances with respect to section 7 of the Toxic Substances Control Act and section 3001 of the Solid Waste Disposal Act. In addition, categories of hazardous substances are listed in Appendix VIII of RCRA, "Hazardous Constituents" and in 40 CFR Table 302.4 "List of Hazardous Substances and Reportable Quantities."

2. Describe the sampling methodology.

Briefly describe the sampling methodology as well as methods for maintaining consistency, reliability and quality control. Mention who performed the data collection and the lab analysis (e.g., EPA, contractor, local health authorities). Indicate the time frame in which the samples were taken.

D. State and Local Authorities' Roles

1. Briefly describe State and local actions to date.

State whether State and/or local governments requested EPA assistance and the name of specific agencies/officials making the request. Summarize any "first-responder" or other actions these or other agencies have taken to protect public health and the environment (e.g., evacuated individuals within one square mile, posted police to restrict public access). Provide the dates for and indicate the effectiveness of such actions. Indicate State/local cooperation in assessing the release and threat and whether State and local government personnel remain at the site.

2. Summarize the potential for continued State and local response.

Describe any actions State and local government personnel are currently taking and their anticipated future roles. Examples of roles could be providing site security or hookups to the water main. Indicate whether the State mechanism for obtaining funding is available, is depleted or will require delaying the response for an unacceptable period of time given the threat. Indicate whether the State/locality will fund these activities or require funding under a letter contract. Indicate whether the State is going to lead the response and enter into



a Cooperative Agreement. This is most likely to occur for non-time-critical removals at NPL sites, although Cooperative Agreements also may be executed for removals at non-NPL sites. Indicate if the State or locality wants to be reimbursed for participation in response actions under SARA section 123.

E. Other Actions to Date

1. Discuss any previous actions to abate threat.

Describe any Federal or privately-sponsored activities that have been performed and are not previously described. Give the dates, costs, and effectiveness of such actions. Indicate if response has been initiated under OSC's \$50,000 authority. Actions to abate the threat may include advice from the locality advising residents not to drink their water. Other actions may include the provision of bottled water.

2. Discuss any current actions to abate threat.

Any Federal or privately-sponsored activities that are currently underway (but not previously discussed) should be described. This information should include estimated costs and completion dates of these activities. Discuss how proposed EPA actions will interrelate with current activities.

IV. THREAT TO PUBLIC HEALTH OR WELFARE OR THE ENVIRONMENT

Section 300.65(b)(2) of the NCP combines three previously distinct types of Superfund responses into the category of "removals": immediate removals, planned removals and initial remedial measures. Removals address two distinct requirements. The first is a threat to the public health, welfare and environment. The second requirement is the availability of non-CERCLA response mechanisms. The following threats are considered in determining the appropriateness of a removal action:

- Actual or potential exposure to hazardous substances or pollutants or contaminants by nearby populations, animals, or food chain;
- Actual or potential contamination of drinking water supplies or sensitive ecosystems;
- Hazardous substances or pollutants or contaminants in drums, barrels, tanks, or other bulk storage containers, that may pose a threat of release;
- High levels of hazardous substances or pollutants or contaminants in soils largely at or near the surface, that may migrate;
- Weather conditions that may cause hazardous substances or pollutants or contaminants to migrate or be released;
- Threat of fire or explosion;



- . The availability of other appropriate Federal or State response mechanisms to respond to the release;
- . Other situations or factors which may pose threats to public health or welfare or the environment.

OSCs should make sure that their Action 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

Describe the threats to public health and welfare. List all of the current and potential threats, starting with the most serious, that adversely affect human health or welfare (e.g., fire/explosion, drinking water contamination). Identify any human exposure that already has occurred, the kind of exposure (e.g., inhalation, ingestion, dermal contact) and the exposure pathway (e.g., food supply, water supply, indoor air pollution). Describe any reports of illness, injury or death that appear to be linked to the exposure. Be as specific as possible about the number of individuals exposed, the proximity of sensitive populations (e.g., hospitals, schools), the geographic area affected and whether exposure was acute or chronic. Also describe any anticipated exposure and whether it is imminent.

Describe all actual and potential impacts on human health and welfare. Describe any known effects of human exposure to the chemical released (e.g., nausea, respiratory dysfunction, cancer) and any actual or projected manifestations of these effects.

Compare amounts of hazardous substances shown to background or health standards as appropriate. If a chart is provided in Section III.C.1, it should be referenced, not duplicated, here. It may be necessary to consult policy on compliance with other environmental statutes. This policy may be found in OSWER directive #9234.0-05, "Interim Guidance on Compliance with Applicable or Relevant and Appropriate Requirements" (July 9, 1987). If written ATSDR or other health advice is given, include this as an attachment to the Action Memorandum. The health advice should also be referenced in the discussion. If health advice is given orally, it should be documented in the Action Memorandum.

B. Threats to the Environment

Describe threats to the environment. List all the current and potential threats, starting with the most serious, that adversely affect the environment (e.g., damage to ecosystem, animals, ground water). Identify any natural resource or environmental damage that already has occurred and the extent of exposure (e.g., acute or chronic). Indicate whether there have been reports of deaths of flora or fauna (e.g., fish kills). If so, state how much environmental damage has occurred (e.g., 20,000 acres of wetlands contaminated or 1 million fish killed). Discuss potential damage to the environment and indicate a time frame within which damage will occur if response actions are not taken.



Discuss all actual and potential impacts on the affected area. Describe any anticipated exposure and whether it is imminent. Indicate whether the release threatens endangered species, critical wetlands, or other resources protected under law. State whether natural resources trustees have been notified.

V. ENFORCEMENT

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 or 106 orders 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 Action Memorandum may be prepared by enforcement personnel.

A. Enforcement Strategy

1. Briefly summarize the enforcement strategy.

Summarize the enforcement strategy for notifying, negotiating with, and litigating against responsible parties. Indicate whether the State or Federal enforcement attorneys are actively pursuing informal negotiations, are actively pursuing litigation, or have decided to postpone or forgo litigation (e.g., no enforcement actions are currently underway or the RP has agreed to a cleanup). Describe what enforcement actions are planned (e.g., negotiations or Administrative Orders).

If an enforcement strategy has not yet been developed, describe the strategy that is recommended by the Regional enforcement attorney. For example, discuss any decisions to pursue Federally-funded action or continue litigation or negotiations. Indicate whether concurrence to proceed with removal is conditional. If so, state the conditions.

2. Briefly summarize the enforcement actions.

Indicate if litigation is proceeding or is contemplated. Cite under what statutory authority the action will be or is being taken (e.g., RCRA section 7003, CERCLA).

B. Status of Enforcement Actions

1. Potentially responsible parties.

Describe the number and types of potentially responsible parties (e.g., transporters and owners or operators of production facilities or waste disposal facilities). Indicate whether the PRP is known. If a site has one or two primary responsible parties, they may be named. If a search has been completed, the results should be summarized.



Indicate if the PRP has taken action. If so, mention whether or not the action was adequate. Indicate whether the PRP is financially capable and likely to act within a time frame that adequately protects public health and the environment. Cite, do not repeat, descriptions of PRP actions discussed previously in the request.

Describe what efforts are being undertaken to obtain additional PRP response. Discuss the status of the potentially responsible party search. Mention if search efforts are underway and whether there is time to continue the search before response must begin. If not, indicate that PRP search will continue as the removal proceeds and a PRP may later take over removal actions. Describe the attempts that have been made to locate PRPs (e.g., oral inquiries both on and off site). Include whether the PRP has been notified (e.g., orally contacted, written follow-up).

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.

Estimate the solvency of the major responsible parties. Evaluate the ability to obtain the necessary actions in a timely fashion through litigation. This should be included if it explains why actions are being requested of the EPA when responsible parties are financially able to undertake these actions.

VI. PROPOSED ACTIONS AND COSTS

The purpose of this section is to provide guidelines for presenting information on proposed and alternative actions, estimated costs and the project schedule. Also included is information on how the action addresses the threat.

A. Proposed Actions

1. Describe the proposed actions and what they will accomplish.

Describe the specific tasks involved and the results sought by the removal action as they pertain to the threat(s) discussed in Section III of this model Action Memorandum. For example, "The primary objective of the proposed action is the mitigation of the direct contact threat to nearby residents by provision of alternate potable water supplies to the affected homes." The NCP provides examples of types of action that may be taken for this type of incident. The list in the NCP is not exhaustive, however, and actions are not limited to these examples.

Describe the procedures to be undertaken in the proposed actions. For example, "A two-phase removal action is planned. The first phase is the installation of activated carbon columns. The second phase is the



installation of water mains and hookups to public water supply." Describe any impediments to the proposed action (e.g., lack of public acceptance or problems with access).

If off-site storage, treatment or disposal is proposed, indicate the amount or type of waste(s) requiring off-site treatment or disposal, the facility selected and the extent to which the substance can be treated. In cases where the type or amount of waste is not available for inclusion in the Action Memorandum, indicate the intent to comply with all requirements of the Off-site Policy. For detailed information on the Off-site Policy, OSCs should refer to Chapter IV of the Superfund Removal Procedures manual.

Indicate whether any further information is needed before all response actions can be decided (e.g., sampling to address ground-water or drinking water contamination or a RCRA permit and compliance verification are needed for selecting the disposal option).

State why proposed actions are appropriate for this situation and explain the rationale for choosing this option. Describe the technical feasibility and probable effectiveness of the proposed action. Address intermedia relationships, temporary versus long-term solutions, and adverse impacts.

2. Provide a discussion of how the proposed actions will contribute to the efficient performance of long-term remedial actions.

For all removals, discuss how, to the extent practicable given the exigencies of the situation, the proposed actions will contribute to the efficient performance of long-term remedial actions. The primary objective of this provision is to avoid the need for removal restarts. The following questions should be considered when preparing this discussion:

- . What is the long-term cleanup plan for the site?
- . Which threats will require attention prior to the start of the long-term action?
- . How far should the removal action go to assure that the threats are adequately abated?
- . Is the proposed removal action consistent with the long-term remedy?

For additional guidance on this requirement, see OSWER directive #9360.0-131, "Guidance on Implementation of the 'Contribute to Remedial Performance' Provision."

If no remedial plans are available, describe how proposed removal actions are consistent with the remedial actions that would be expected to be undertaken based on site conditions. Discussion should be based



on best professional judgement using the information available. In-depth analyses of remedial actions are not required. For example, indicate that the proposed actions will address near-term threats that may require attention prior to the start of remedial action as well as more urgent threats. Also discuss how, wherever appropriate, removal actions will provide a suitable foundation for future remedial actions. In general, removal actions should not interfere with future remedial actions, nor should proposed actions eliminate any feasible remedial alternatives.

3. Describe the project schedule.

Give the time frame needed to stabilize or clean up the site and include how quickly response can begin. Give the estimated period of performance. State whether the proposed action will exceed twelve months. (Note: Previous actions count toward the twelve-month and \$2 million limits.) If the twelve-month clock has started, state when the twelve months end.

If the proposed action is expected to exceed the twelve-month statutory limit, then a twelve-month exemption request approved by the RA should be included this removal Action Memorandum. If post removal site control will be required, the State or other authority must provide it. Indicate a commitment to provide post removal site control.

4. Describe alternative actions considered.

Describe other actions considered (e.g., providing hookups to city water instead of providing bottled water, alternatives to off-site disposal). Briefly describe the technical feasibility and probable effectiveness of each alternative. Address intermedia relationships, temporary versus long-term solutions, and possible adverse impacts. State any impediments to each alternative, e.g., public acceptance or access to the site. Give the estimated period of performance for alternative actions. State how quickly response can begin. State the duration of the alternative. State whether it will exceed twelve months. For example, "The first phase should be completed within approximately 3 weeks of initiation of the action. The second can be expected to be completed by July 1988." Give further detail for each component of the phases. State whether post removal site control will be required and who would provide it or if this would be an impediment to cleanup or stabilization of the site.

B. Estimated Costs

Detail the estimated total project ceiling and an itemized breakdown of the following cost categories that comprise that ceiling. This includes extramural cleanup costs allowed under the RA's \$2,000,000 authority (which consist of cleanup contractor costs, letter contracts with States and other commercial entities, and site-specific IAGs); TAT costs; EPA intramural costs; National Contract Lab Program analytical costs; and ERT/REAC costs. If applicable, include the cost of previous removal actions taken at the site. An example is provided on the following page.



Summary of Costs

Estimated Costs

Extramural Costs

Extramural Cleanup Contractor (includes ERCS, Mini-ERCS, Subcontractors, Letter Contracts, Alternative Technology Contracts, IAGs with other Federal agencies, etc.; contingency can be 10-20%.)	\$711,450 (15% contingency) <u>125,550</u> 837,000
IAT costs	10,000
CLP analytical services	20,000
ERT/REAC	<u>20,000</u>
Subtotal Extramural Cost	887,000
15% Contingency of above costs (round to nearest thousand)	<u>133,050</u>
Total Extramural Cost	\$1,020,050

Intramural Costs

Intramural Direct Labor (HQ, ERT and Region)	19,000
Intramural Indirect Costs*	<u>33,000</u>
TOTAL PROJECT CEILING ESTIMATE	<u>\$1,072,050</u>

If CERCLA funds have been obligated for past actions, then indicate the obligations:

TOTAL PROJECT CEILING REQUESTED	\$1,072,050
Previous Removal (1982) Obligations	<u>200,000</u>
TOTAL CEILING TO DATE	<u>\$1,272,050</u>

A statement of obligations is necessary because these costs count toward the \$2 million limit.

* Formula for calculating indirect-costs:

Region-Specific Indirect Cost Rate	X	Estimated Regional Direct Labor Hours	=	Indirect Costs
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Regional indirect cost rates may be found in the Comptroller Policy Announcement No. 87-15, "New Method for Determination of Indirect Costs in Superfund Removal Project Ceilings" (7/15/87).

VII. EXPECTED CHANGE IN THE SITUATION SHOULD NO ACTION BE TAKEN OR ACTION 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:

- . Spread in scope of contamination. For example, the ground-water contaminant plume may spread through a larger area.
- . 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.
- . 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 gas may be produced.
- . 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.

VIII. 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:

- . 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 a release and a remedial action is ultimately undertaken at the site)
- . The division of responsibilities among Federal and/or State agencies
- . Off-site disposal availability and compliance with OSWER's Off-site Policy
- . Compliance with other environmental statutes
- . Special coordination needs/issues of national significance (e.g., dioxin) and similar issues
- . Noncontiguous 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.

IX. RECOMMENDATION

The purpose of this section is to briefly present the Region's recommendations, rationale and projected costs for the action. For example, "Because conditions at the site meet the NCP section 300.65(b)(2) criteria for a removal, I recommend your approval of the proposed removal action. The total project ceiling is \$X, of which \$Y are for extramural cleanup contractor costs (Regional allowance). I recommend your approval to initiate response actions due to the nature of the threat described herein."

Approved: _____ Date: _____
(Name and Title)

Disapproved: _____ Date: _____
(Name and Title)

Attachments

