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HUNTERS POINT
SSIC NO. 5090.3

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION IX

215 Fremont Street
San Francisco, Ca. 94105

Commanding Officer
Naval Station Treasure Island
Building 1 (Code 70)
San Francisco, CA 94130-5000
ATTN: Mr. Kam Tung

June 15, 1989

Dear Mr. Tung:

This is in response to your April 14, 1989 letter proposing implementation of time critical removal actions for three sites at the Hunters Point Annex.

We appreciate your inclusion of EPA in the review process for these proposed actions. Because Hunters Point Annex is not currently listed on the National Priorities List of hazardous waste sites, our resources to review your submittal have been very limited. Accordingly, the comments we are providing are necessarily limited largely to procedural and administrative concerns.

I would like to preface our comments by noting that Section 120 of the Superfund law (CERCLA/SARA) requires that Federal facilities comply with all CERCLA/SARA rules, regulations, criteria and guidelines, including the National Contingency Plan (NCP). Many of the requirements for conducting removal actions are embodied in the existing NCP, proposed revisions to that document, published December 21, 1988, and EPA guidance. Accordingly, we have reviewed your submittal for compliance with these documents.

We disagree with your designation of the proposed actions as "time-critical" removal actions. As you may recall from our November 2, 1987 letter concerning removals proposed for the Hunters Point Annex, EPA has historically used three designations to differentiate types of removal actions, each of which has its own procedural requirements. These designations are discussed in the preamble to the proposed NCP. "Emergency" removals occur when a release requires that response activities must begin within hours of a lead agency's determination that a removal action is appropriate. "Time-critical" removals are those where the lead agency determines that a removal action is appropriate and that there is a period of less than six months available before response activities begin on-site. "Non-time critical" removals are those where, based on the site evaluation, the lead

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agency determines that a removal action is appropriate and there is a planning period of more than six months before on-site activities must begin. You initially stated your intent to conduct removal activities at one of the three sites in question (the Pickling and Plate Yard) through the "Draft Interim Remedial Action Plan" presented to agencies at a meeting on June 18, 1987. Though this plan was put on hold, we were again informed of proposed removal actions for the Pickling and Plate Yard, as well as for Tank S-505 and the Tank Farm, on April 14, 1989. At the most recent Technical Review Committee meeting, it was stated that these actions would not commence for at least six months due to requirements to provide notice to affected tenants. It seems clear that a planning period of more than six months was available before on-site activities must begin. These proposed actions should therefore be redesignated "non-time critical removals."

According to EPA guidelines, which are now embodied in the proposed NCP, the following requirements apply to non-time critical removals, and should be observed by the Navy in considering the proposed actions:

A) PREPARATION OF AN EE/CA

The lead agency shall conduct an engineering evaluation/cost analysis (EE/CA) or its equivalent (proposed NCP Section 300.415(b)(4)). I am enclosing for your reference an EPA memorandum entitled "Outline of EE/CA Guidance," dated March 30, 1988. This memorandum summarizes the requirements for an EE/CA. The draft EE/CA guidance itself will be provided upon request.

The purposes of the EE/CA are to document for the administrative record the appropriateness of conducting the proposed action as a removal as well as the decision process for selecting the proposed action, and to present considered cleanup options to the community. In general, the EE/CA requires a characterization of site conditions which justify a removal action (including a summary of analytical data and of the risks presented by the contamination); identification of removal action objectives (including a discussion of the scope of action, schedule, how the actions will meet applicable or relevant and appropriate requirements, etc.); an identification and comparison of removal action alternatives considering relative effectiveness, implementability, and cost; and designation of a proposed alternative.

Your "action memoranda" generally address some of the criteria for an EE/CA. However, some elements have not yet been adequately addressed:



1) According to the NCP [40 CFR 300.71(a)(4)], response actions (including removals) conducted by Federal facilities shall comply with all applicable or relevant and appropriate Federal, State and local requirements (ARARs). Your current proposals neither identify ARARs (example: cleanup levels to be achieved, compliance with the land disposal ban, compliance with the CERCLA offsite disposal policy, identification and protection of endangered species), nor indicate how the proposals will achieve those requirements.

2) The proposals were general in nature, and contained insufficient information to judge the nature of the threats posed prior to removal actions, by the removal actions, or to assess the overall scope of the project. It is unclear why these actions pose actual or threatened imminent and substantial threats to human health or the environment. Specifically, for the tank farm, there is minimal discussion of how contaminants themselves pose a threat, who is likely to be exposed, how contamination is likely to impact groundwater, or how impacted groundwater could pose an imminent endangerment. In addition, little information is presented concerning the scope of the removals. For example, how much soil is expected to be excavated, to what depth, and over what area? Will the contents of drained tanks be sampled? Will post-excavation samples be conducted to determine if cleanup goals have been met? How will excavated materials be disposed?

2) No substantive information has been presented concerning the schedules for undertaking and completing these removal actions.

3) Alternatives have not been evaluated individually based on the major criteria (effectiveness, implementability and cost), nor have the subcriteria noted in the guidance been addressed.

4) The proposals do not adequately address protection of the community or of workers (example: justification for buffer zone, description of dust prevention methods during excavation, treatment or transport of wastes, days of week and hours of the day that removal actions are likely to be conducted, specification of transport routes).

5) The extent of threat reduction to be achieved via removal action has not been addressed (example: what cleanup level is being sought, comparison of current risks versus risks during and after removal).

6) The duration of removal action hasn't been provided (i.e., the time until threat is abated).



7) The potential adverse environmental impacts that may result from the removal action haven't been discussed.

8) Technical difficulties that may be encountered leading to delays and/or prolonged exposure have not been addressed, nor have environmental factors which may affect the removal action and resultant exposure (example: high winds, runoff to Bay during removal). Contingency measures for these possibilities should be addressed.

9) Availability of treatment, storage or disposal capacity for removed wastes must be discussed. In regard to this point, please note that the EE/CA must demonstrate that the removal action will be consistent with the longterm remedy for the site. CERCLA is very clear in its preference for remedies which use treatment technologies to reduce the toxicity, volume or mobility of wastes, and also clearly indicates that offsite disposal of wastes without such treatment is the least preferred remedy. Your EE/CA proposals should indicate how you plan to meet these CERCLA preferences, thereby ensuring consistency with the final remedy. At this point, disposition of removed wastes has not been adequately addressed.

B) COMMUNITY RELATIONS REQUIREMENTS

Specific community relations requirements applicable to non-time critical removal actions are set forth at 300.415(n)(4) of the proposed NCP. These include conducting interviews with the community to solicit concerns, preparing a formal community relations plan specifying community relations actions to be taken during the removal, and establishing an information repository. In addition, a notice must be published in a major local newspaper of the availability of the EE/CA (including a description of the EE/CA), and a comment period of at least 30 days must be provided after completion of the EE/CA. Finally, a response to comments must be prepared.

C) OTHER CONCERNS

As you may be aware, the NCP establishes time and dollar restrictions intended to limit actions conducted as removals (proposed limits are 2 million dollars and 1 year). It is EPA's expectation that the Navy will strive to conduct removal actions within these general limitations, as actions which do not generally meet these criteria are probably more appropriately conducted as remedial actions. Therefore, we anticipate that a Record of Decision formalizing remedial actions for these sites will be signed within 1 year.

While EPA strongly supports early action to abate legitimate environmental or public health threats, we must also stress that not all actions will be candidates for removals. Removals should



be reserved for those actions which pose an actual or threatened imminent and substantial threat to public health or the environment.

Finally, please note that any actions performed as "removals" must be considered as interim actions only, and will not necessarily constitute final remedial actions. Accordingly, the final selected remedy may differ substantially from actions conducted as removals, requiring additional investigation and significant cleanup costs (an example would be installation of a cap as a removal action to abate direct contact threats, which may be followed by excavation and treatment of soils).

I hope these comments are helpful to you in fulfilling the requirements of CERCLA and SARA concerning your conduct of response activities at Hunters Point Annex. If you have any questions, please contact me at (415) 974-8904.

Sincerely,



Julie Anderson, Chief
Federal Enforcement Section

cc: Ric Notini, CA DOHS
Louise Lew, NAVFACENCOM
Lester Feldman, RWQCB
Dave Wells, City & County of S.F.
Scott Lutz, BAAQMD
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UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

3/30/88

MAR 30 1988

OFFICE OF
SOLID WASTE AND EMERGENCY RESPONSE

MEMORANDUM

SUBJECT: OUTLINE OF EE/CA GUIDANCE

FROM: Timothy Fields, Jr., Director
Emergency Response Division

TO: Superfund Branch Chiefs, Regions I-X
OHM Coordinators, Regions I-X

In June 1987, the Emergency Response Division (ERD) issued the first draft guidance on Engineering Evaluations/Cost Analyses (EE/CA) for non-time-critical removal actions. The goals of the EE/CA are to: 1) satisfy environmental review requirements for removal actions; 2) satisfy administrative record requirements for improved documentation of removal action selection; and 3) provide a framework for evaluating and selecting alternative technologies.

ERD delayed issuance of a second draft EE/CA guidance pending the outcome of several issues related to the upcoming National Contingency Plan (NCP) revisions. Most of these issues have now been resolved and ERD is preparing a new draft EE/CA guidance for Regional review this spring.

Attached is an outline of the EE/CA guidance ERD is developing. Because there have been a number of questions from the Regions on EE/CAs, we thought it would be helpful to provide an outline at this time to assist the Regions in preparing EE/CAs until the new draft is available. Note that the EE/CA process no longer includes an initial screening of the alternatives and that the selection criteria have changed somewhat.

If you have questions on the attached outline, please call Jean Schumann of my staff at FTS (382-4671).

Attachment

cc: Hans Crump
Paul Madau
Bill Hanson
Don White
Lloyd Guerci
Frank Russo
John Cross

Earl Salo
Lee Tyner
Joe LaFornara
Bruce Engelbert
John Riley
Cristina Griffin
Jean Schumann



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ENGINEERING EVALUATION/COST ANALYSIS GUIDANCE OUTLINE

I. INTRODUCTION

- EE/CAs are required only for non-time-critical removal actions/Expedited Response Actions (ERAs). The Regions may choose to prepare an EE/CA for other actions.
 - Non-time-critical removal action: Those releases or threats of releases not requiring initiation of on-site activity within 6 months after the lead agency determines, based on the site evaluation, that a removal action is appropriate. (In other words, based on threat, there is at least a 6 month lead-time available before cleanup action must begin.)
- Steps in the EE/CA process (apply only to actions that are determined at the outset to be non-time-critical):
 - A. Site evaluation. Removal PA/SI results indicate that the site meets the criteria for initiating a removal action and that the threat is non-time-critical. (At an NPL site, RPMs should continually evaluate site conditions to determine if a removal action is appropriate.)
 - B. Issue PRP notice. General notice required; special notice discretionary.
 - C. EE/CA Approval Memorandum. Documents that the site meets the criteria for initiating a removal action and secures management approval to conduct the EE/CA. (To be resolved: Format and approving official)
 - OSC/RPM should notify the community relations staff of the upcoming EE/CA.
 - Designate site spokesperson.
 - Open Administrative Record (AR) and publish notice of availability.
 - Begin community interviews and preparation of Community Relations Plan (CRP).
 - D. Contract for EE/CA preparation. TAT, REAC, REM, site-specific.
 - E. EE/CA study and report preparation. See II below for more detail. May include on-site activities to better define site and characterize waste (104(b) activities), but may not include cleanup measures.
 - F. EE/CA completed.
 - Place EE/CA in AR and publish notice of EE/CA availability plus brief summary of EE/CA.
 - CRP should be completed by this time.



F. Thirty-day public comment period. On EE/CA and other documents in AR.

G. Action Memorandum, attaching responsiveness summary. Describes proposed removal action and secures management approval to conduct the action. Responsiveness summary is a summary of significant public comments and EPA's response to these comments.

- ° AR closes when Action Memorandum is included. At this point, all information relating to the selection of the removal action must be included in the AR. EPA may add documents generated after the Action Memorandum is signed only if they concern issues which were specifically reserved for future action or if they support an amended Action Memorandum.

H. Implementation of removal action. \$2 million/12 month statutory limits apply only to the implementation of the removal action, not to previous 104(b) activities.

- ° Note that an EE/CA and public comment period are not required if a removal action will be used to implement a signed ROD. In that case, the RI/FS and remedial public participation procedures fulfill the EE/CA requirements.

II. EE/CA REPORT

The EE/CA report should follow the format below.

A. Site Characterization

1. Site Description

Location, facility type, surrounding land use, hydrology, nature and extent of contamination, etc.

2. Site Background

Prior site use, operational history, regulatory involvement, etc. (Confidential information must be placed in confidential portion of AR.)

3. Analytical Data

Summary of results of analytical data (considering the quality of that data).

4. Site Conditions That Justify a Removal Action

Information contained in the EE/CA Approval Memorandum should be used here.



B. Identification of Removal Action Objectives

1. Statutory Limits on Removal Actions

Brief explanation for the public of the \$2 million/12 month limits on removal actions and two types of statutory exemptions available ("emergency" and "consistency"). Stated objective should be to remain within these limits, unless site qualifies for one of the statutory exemptions.

2. Removal Action Scope

Description of the scope of the project, e.g., total site cleanup, site stabilization, completion of operable unit (NPL sites), surface cleanup only. Include description of principal threats to be addressed. Particularly important to clearly define scope if removal action will not address the entire universe of threats at the site.

3. Removal Action Schedule

General scheduling objectives for the removal action, identifying any time constraints (e.g., must complete action prior to winter, threat requires initiation of action within 1 year).

4. Applicable or Relevant and Appropriate Requirements (ARARs)

Identification of chemical-specific and location-specific Federal and State ARARs for the site. (Compliance with identified ARARs will be discussed in the analysis of removal alternatives in section D below.) States are required to identify promulgated State ARARs in a timely manner.

Removal actions should attain ARARs to the extent practicable.

C. Identification of Removal Action Alternatives

Description of appropriate removal action alternatives for site (including description of necessary equipment, personnel, etc.). Based on OSC/RPM experience and best professional judgment.

A "no action" alternative is not required.

Additional resources available to assist in identifying appropriate technologies: ERT, SITE program, Superfund Regional Technology Transfer contacts, industry publications, best demonstrated available technologies (BDATs) identified in the land disposal restriction rules.



D. Analysis of Removal Alternatives

Each alternative should be evaluated individually based on the criteria below.

1. Effectiveness

a. Protectiveness

- ° Protection of the community during the removal action

Description of threats that may result from implementing the removal action, such as air quality impacts from an incinerator that may affect human health, and mitigative measures that can be taken.

- ° Protection of workers during the removal action

Description of threats that may result from implementing the removal action, such as dust from excavation, and mitigative measures that can be taken.

- ° Threat reduction

Evaluation of the extent to which the completed action will reduce risk or mitigate the threats identified in the description of removal scope (B.2). Measured qualitatively or quantitatively (e.g., cleanup levels or cancer risk levels achieved), as appropriate.

- ° Time until protection achieved

Determination of the time until protection is achieved for the principal threats at the site, compared to the removal action schedule (B.3) where appropriate.

- ° Compliance with chemical- and location-specific ARARs

Determination of whether ARARs identified in section B.4 can be met or whether a waiver may be appropriate.

- ° Compliance with criteria, advisories, guidances

Description of compliance with other criteria, advisories or guidances that are not ARAR, but could appropriately be applied to the site. For example, if PCB-contaminated soil will be excavated in the alternative, EE/CA may compare the cleanup level the alternative will achieve (the level described under "threat reduction" above) to the appropriate cleanup levels in the EPA PCB Spill Cleanup Policy.

- ° Environmental impacts

Description of the potential adverse environmental impacts



that may result from implementing the removal action and mitigative measures that can be taken. (If overlap with ARARs evaluation occurs, simply refer reader to the appropriate ARARs discussion in the EE/CA report.)

- Potential exposure to remaining risks

Assessment of potential for future exposure to residuals remaining on-site.

- Long-term reliability for providing continued protection

Assessment of potential for failure of the alternative and need for replacement, and description of potential threats from such failure or replacement. Should address the reliability of engineered components of the alternative (cap, treatment system), non-engineered components (fences), and any institutional controls (deed notices), as appropriate.

- b. Use of Alternatives to Land Disposal

Description of the degree to which the alternative utilizes treatment or recycling. Removal program policy encourages the use of alternatives to land disposal where practicable.

2. Implementability

- a. Technical Feasibility

- Ability to construct and operate technology

Description of the ability to construct the technology and to keep it running during operation, considering difficulties and unknowns that may lead to schedule delays. Compare to removal action schedule (B.3) where appropriate.

- Compliance with action-specific ARARs

Identification of Federal and State action-specific ARARs and determination of whether ARARs can be met or whether a waiver is appropriate.

- Ability to meet process efficiencies or performance goals

If overlap with ARARs evaluation occurs, simply refer reader to appropriate ARARs discussion in the EE/CA report.

- Demonstrated performance

Evaluation of maturity of technology and whether it has been used under similar conditions for similar wastes.



- Environmental conditions

Evaluation of impact of environmental conditions, such as terrain and climate. For example, a generally reliable oil/water separator may be inoperable in freezing temperatures without the use of heaters. A site located in a valley may pose a problem for a technology if surrounding air currents provide insufficient dispersion of particulates.

- Compliance with SARA requirement that removal actions should contribute to the efficient performance of long-term remedial action to the extent practicable

Is the action designed to prevent the need for removal restarts to address the same threats? Is the action consistent with the long-term remedy for the site?

- b. Availability

- Availability of necessary equipment, materials, and personnel

Compare to removal action schedule (B.3) where appropriate.

- Availability of adequate offsite treatment, storage, and disposal capacity, if appropriate

Compare to removal action schedule (B.3) where appropriate.

- Post-removal site control (PRSC)

Description of any PRSC measures that will be required at completion of the action, including monitoring, and availability of another party to assume these activities at the end of the removal action.

- c. Administrative Feasibility

- Likelihood of public acceptance of the alternative, including State and local concerns

- Activities needed to coordinate with other agencies

- Ability to obtain any necessary approvals or permits (permits are not required for actions conducted on-site)

- 3. Cost

- a. Total Cost (Present Worth) of the Alternative

Include direct capital costs, indirect capital costs, and any post-removal site control costs. The draft NCP recommends use of discount rate of 5 percent before taxes and after inflation.



b. Statutory Limits

Comparison of total cost to the \$2 million statutory limits on removal actions.

E. Comparative Analysis

Qualitative assessment of strengths and weaknesses of each alternative relative to the others. Summary tables would be helpful, with alternatives along one axis and evaluation criteria along the other axis. (Include post-removal site control costs when comparing costs of alternatives.)

F. Proposed Removal Action

Identification of the proposed removal action. If proposed action will exceed \$2 million, include justification of need to exceed the statutory limits.

3.0 CONTRACTING CONSIDERATIONS

To avoid potential conflict-of-interest, the contractor who conducts the EE/CA may not be used to perform the site cleanup.

4.0 COST MANAGEMENT

5.0 EE/CA FUNDING

6.0 ENFORCEMENT-LEAD ACTIONS

