

DEPARTMENT OF TOXIC SUBSTANCES CONTROLDIVISION 2
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(510) 540-3724



July 29, 1994

Mr. Stewart Cheang
Western Division
Naval Facilities Engineering Command
900 Commodore Drive
San Bruno, California 94066-2402

Dear Mr. Cheang:

DRAFT SHELL WORKPLAN FOR BRAC SITE INVESTIGATION PROGRAM

The California Environmental Protection Agency, Department of Toxic Substances Control and Regional Water Quality Control Board have reviewed the draft "Shell Workplan for BRAC Site Investigation Program". The following are the comments of the DTSC. Attached to this letter are the comments of the Regional Water Quality Control Board and comments from the DTSC, Office of Scientific Affairs toxicologist.

General Comments

1. The objectives of the workplan should be clearly spelled out as well as how this workplan relates to the Environmental Baseline Survey (EBS) and the overall remediation program at Naval Air Station (NAS), Alameda.

The first objective of the workplan should be to conduct Parcel Specific Environmental Baseline Surveys (Parcel Specific EBS). Secondly, the workplan prepares for the implementation of Preliminary Endangerment Assessments (PEA). Parcel Specific EBSs are needed for all non-CERFA qualified parcels. The Parcel Specific EBS will be used to support Finding of Suitability to Lease (FOSL) or Finding of Suitability to Transfer (FOST). If, through EBS, a determination is made that a release may have occurred at a parcel, a Preliminary Endangerment Assessment must be prepared. A single report may satisfy the reporting requirements for both the Parcel Specific EBS and the PEA. A PEA is also required for all sites identified in NAS, Alameda's RCRA Facility Assessment.

2. The current title, "Shell Workplan for BRAC Site Investigation Program" does not convey the purpose and objectives of the workplan. A suggested title is: "Workplan for Conducting

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Parcel Specific Environmental Baseline Surveys and Preliminary Endangerment Assessments." This title informs the reviewer what the workplan intends to do.

3. In the Executive Summary it states, "This Workplan provides the basis for the second step in the EBS process: a limited site investigation." This is only partially correct. The original EBS, conducted by ERM-West for the Navy was limited in scope in that it only identified Community Environmental Response Facilitation Act (CERFA) type parcels. Parcels that were not potential CERFA candidates were not investigated further. The first modification to the EBS contract provided for site visits, employee interviews and parcel specific background research for non CERFA parcels. Information collected from the first modification should have enabled further site screening. This should be the second step in the EBS process. The problem with the scope of this workplan is the absence of prior site screening. This workplan assumes Sampling and Analysis Plan are necessary for all 213 Parcels. What is necessary in this process is the analysis of data collected from the first modification to the EBS. This analysis should answer the question: is further evaluation necessary? If the answer to this question is yes, then a Sampling and Analysis Plan, which meets the requirements of an PEA is required.

4. The PEAs are intended to satisfy the requirements for RCRA Corrective Action as identified in NAS, Alameda's RCRA Hazardous Waste Facility Permit (Permit), Sections V, Corrective Action Schedule of Compliance. Section (V)(F) of the Permit requires that Navy notify the DTSC of any newly-identified Solid Waste Management Units (SWMUs) not identified during the RCRA Facility Assessment. Section (V)(G) requires the Navy to notify the DTSC of any previously unreported release(s) of hazardous waste including hazardous constituents. The RCRA Facility Investigation (RFI) Workplan is discussed in Section (V)(H). According Section (V)(H) the Navy shall submit RFI Workplan to the DTSC for review and either approval or disapproval. Therefore, the Navy shall: 1) report to the DTSC any newly discovered SWMUs or releases of hazardous waste or constituents that were identified during the implementation of the EBS; 2) submit for review and approval or disapproval a workplans for conducting PEAs at parcels where a suspected release of hazardous waste or constituents has occurred. The background sections of the PEAs shall include any reporting requirements identified in the Permit.

5. The Shell Workplan is considered by the DTSC to be a secondary document as defined in the not yet signed Federal

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Facility Site Remediation Agreement (FFSRA). Therefore, this document does not require DTSCs approval. Any disagreement about this document that can not be resolved, shall be resolved in the dispute resolution process of the Shell Workplan's corresponding Primary Document. The workplans for conducting the PEAs is the corresponding Primary Document.

6. Groundwater sampling should be included in the Shell Workplan if contamination at parcels is to be investigated thoroughly.

Specific Comments

1. Page 1-4, Parcel Delineation

Parcels that have Installation Restoration (IR) sites located within them should be immediately placed into Category 6. A PEA type investigation is not required for those parcels.

2. Page 1-5, Document Organization

The Waste Minimization Plan should be renamed to Investigation Derived Waste Management Plan. The purpose of this plan is to determined how IDW will be managed. If Waste Minimization is part of IDW management that is fine; however, the title should relate to the documents primary objective.

3. Section 3, FOSL Action Levels, and Appendix A

See attached comments prepared by DTSC, Office of Scientific Affairs.

4. Section 4, FOST Action Levels, and Appendix B

See attached comments prepared by DTSC, Office of Scientific Affairs.

5. Section 5, Sampling Protocols, Page 5-2

In almost every case, if soil contamination is identified, groundwater sampling will be required.

6. Section 5, Sampling Protocols, Page 5-10

SVOC contamination at NAS Alameda is not limited to surface soil. Subsurface or vadose zone sampling is also required when investigating sites with suspected SVOC contamination.

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7. Section 5, Sampling Protocols, Screening-Level Protocol for Underground Storage Tanks, Page 5-27

The Protocol for Underground Storage Tanks (USTs) must be more coordinated with the UST Program for NAS, Alameda. Under the UST program, USTs will be pulled, contaminated soil removed, and soil and groundwater samples taken. Please explain how this protocol integrates with the UST program. The removal and investigation of USTs requires strict coordination.

The first step in the process is the removal of the UST. If an abandoned UST has not yet been pulled from the ground, the UST investigation protocol should not be implemented. Further investigation of pulled USTs should concentrate on defining the extent of soil and groundwater contamination.

The protocol detailed in this section may be appropriate for active USTs. However, if there is no evidence that the UST has leaked, the UST does not require investigation. If there is evidence that the UST has leaked, the UST should be removed.

The DTSC will not provide further comments on the UST Protocol until after it is integrated with the UST Program.

8. Section 5, Screening-Level Protocol for Sanitary, Industrial, and Storm Sewers, Page 5-31

Sanitary, storm and industrial sewers lines should not be investigated as one similar system. The investigations of each type of sewer lines should follow a logical protocol. Sampling of sewer lines at lateral tie-ins should not be the first step in the investigation. A determination if any release has occurred into a sewer line should first be decided.

If there is a potential that a release has occurred sampling of storm sewers should begin at the storm sewer inlets. The integrity of the sewer line should also be investigated before sampling around sewer lines occur.

The investigation of industrial sewer lines should follow a different protocol. If the industrial sewer line was part of a Permitted Hazardous Waste Treatment System, then closure and sampling would be required. Closure of an industrial sewer line will require the draining and cleaning of all lines. Sampling should occur at biased or random locations along the line.

Sanitary sewer lines should only be investigated if there is evidence a release of a hazardous substance has occurred.

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Otherwise, sanitary sewer lines should not be investigated under Cal/EPAs oversight.

If you have any questions regarding this letter, please call me at (510) 540-3809.

Sincerely,



Thomas P. Lanphar
Project Manager
Base Closure Branch

Attachment

cc. Mr. James Nusrala
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Lt. Mike Petouhoff
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DEPARTMENT OF TOXIC SUBSTANCES CONTROL

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**MEMORANDUM**

TO: Tom Lanphar, Project Manager
Site Mitigation Branch, Region 2
700 Heinz, Building F, Second Floor
Berkeley, CA 94710

FROM: James M. Polisini, Ph.D.
Staff Toxicologist
Office of Scientific Affairs
Human and Ecological Risk Section

A handwritten signature in black ink, appearing to read "J.M. Polisini", written over the printed name and title.

DATE: July 21, 1994

SUBJECT: NAVAL STATION ALAMEDA BRAC SITE INVESTIGATION

Background

We have reviewed the document titled *Draft Shell Workplan for BRAC Site Investigation Program, Volume I - Text, Naval Air Station Alameda, Alameda, California*, dated June 28, 1994 and prepared by ERM-West, Inc. in response to your written request received in our offices July 5, 1994.

In addition, we participated in a telephone conference call to discuss the draft BRAC workplan on Tuesday, July 12, 1994. As a follow-up to that first telephone conference call we also reviewed a memorandum from ERM-WEST, dated July 13, 1994 titled *Proposed Approach to FOSL/FOST Action Levels* which was forwarded to our offices by facsimile on July 14, 1994. We also participated in a second telephone conference call on Monday, July 18, 1994.

Naval Air Station (NAS) Alameda occupies the western third of Alameda Island and has been a military installation since 1930. NAS Alameda occupies 2842 acres of land, water and airspace easement, including 1734 acres of land. The majority of the land at NAS Alameda was created by filling existing tidelands with dredged material from San Francisco Bay and the Oakland Inner Harbor.



General Comments

There are several proposals in the draft BRAC to which we would object if implemented. These proposals are:

1. Use of a list of preliminary remediation goals (PRGs) other than the list of PRGs agreed to by U.S. EPA Region 9 and the California Department of Toxic Substances Control (DTSC).
2. Elimination of incidental ingestion from the derivation of Finding of Suitability to Lease (FOSL) action levels.
3. Not accounting for additivity in the use of preliminary remediation goals (PRGs).
4. Setting projected land-use prior to evaluation of potential risk or hazard using an unrestricted land-use scenario.
5. Lack of a method to determine whether parcels judged suitable for transfer or lease could be impacted by adjacent parcels which require remediation.
6. Use of a 10,000 ppm total petroleum hydrocarbon (TPH) criterion.

These points were addressed in the telephone conference call on Tuesday, July 12, 1994 and the memorandum titled *Proposed Approach to FOSL/FOST Action Levels*, dated July 13, 1994 addresses the agreement reached on screening parcels in that first telephone conference call. Discussion in the second telephone conference call, on July 18, 1994 centered on the need for separate FOSL and FOST flow charts and a suggestion by Sophia Serda of EPA Region 9 that the third "tier" of parcel assessment, after comparison of soil concentrations with EPA Region 9/DTSC residential PRGs and with EPA Region 9/DTSC commercial PRGs, be a parcel-specific calculation of risk or hazard by exposure route.

Specific Comments

It is unclear how any applicable migration pathways, such as volatilization from the water table (Volume I, page 4-4), will enter into the assessment of parcels if they "...will be addressed as part of a separate evaluation." Incremental risk or hazard is based on total exposure, which should include volatilization from groundwater if that pathway is complete. The shell workplan for BRAC parcels must clearly state in the first discussion of the methodology that groundwater impacts on human health and ecological risk are excluded from consideration in this methodology.

Additivity must be addressed when comparing parcel soil concentrations with the EPA Region 9/DTSC PRGs. One method is to express the parcel-specific soil concentration for each contaminant as the of fraction of the PRG and express the carcinogenic risk as the sum the PRG fractions for all carcinogenic parcel contaminants

and the incremental hazard as the sum of the PRG fractions for all non-carcinogenic contaminants.

A fairly extensive sampling plan has been developed without inclusion of a discussion of data quality objectives, field method limitations and limits of detection (Volume I, Section 5). Parcels are currently designated "potential", "suspect" and "probable" based on past land-use and release information. We propose that parcels be placed into two groups for the purpose of setting preliminary sampling effort. One group with documented release information and another group of all other parcels. In addition, if we are interpreting Table 5-2 correctly, a minimum of two (2) field samples and one (1) laboratory sample for most analytes may be insufficient to judge a parcel suitable for transfer or lease depending on the size of the parcel being evaluated. We understand from the July 18, 1994 telephone conference call that the minimum number of samples would only apply to a portion of a parcel smaller than 1000 ft². The approximate size of a parcel which would be sampled by the minimum number of samples listed in Table 5-2 should be indicated in the table.

The memorandum titled *Proposed Approach to FOSL/FOST Action Levels*, dated July 13, 1994 adequately portrays the agreements reached in the telephone conference call on July 12, 1994. The date of this telephone conference call is mistakenly listed as "Wednesday, July 13, 1994." We understand from the July 18, 1994 conference call that separate FOSL and FOST flowcharts will be prepared for review.

If FOSL/FOST 'action levels' were to be used in evaluation of parcels which fail both the EPA Region 9/DTSC residential screen and the EPA Region 9/DTSC commercial screen there must be agreement with regulatory agencies that all appropriate exposure pathways are included in calculation of the FOSL/FOST 'action levels'. However, we understand from the July 18, 1994 conference call that the third tier of parcel evaluation will be a simple calculation of risk or hazard by all exposure pathways instead of a comparison with FOSL/FOST assessment concentrations developed by ERM-WEST.

We have not reviewed the July 13, 1994 ERM-WEST memorandum titled *Proposed Approach to Industrial Hygiene Concerns* in detail because we understand from the DTSC project manager that review is being conducted by a DTSC industrial hygienist. However, we believe that comparison with industrial hygiene PELs is appropriate only if the samples for comparison with the PEL are taken when the building-specific industrial/commercial process is in operation.

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Conclusions

The proposed approach to evaluating parcels at Naval Air Station Alameda contained in the July 13, 1994 memorandum and discussed in the July 12, 1994 and July 18, 1994 telephone conference calls is appropriate given the agreement on the minimal parcel-specific exposure pathway assessment which will be conducted when evaluating parcels which fail both the EPA Region 9/DTSC residential and commercial screen. The proposed minimum number of samples per parcel (Table 5-2, Volume I) also requires some additional discussion.

Reviewed by : Michael J. Wade, Ph.D., DABT *MJW*
Senior Toxicologist
Human and Ecological Risk Section

cc: Steven DiZio, Ph.D., Region 2 Liaison, HERS

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD

SAN FRANCISCO BAY REGION

1001 WEBSTER STREET, SUITE 500

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Mr. Tom Lanphar
Department of Toxic Substances Control
700 Heinz Avenue, Suite 200
Berkeley, CA 94710

July 19, 1994

Subject: Draft Shell Workplan for BRAC Site Investigation Program, June 28, 1994

Dear Mr. Lanphar,

Regional Water Quality Control Board staff have reviewed the above mentioned report. Comments from this review are listed below.

1. The discussion of Finding of Suitability to Lease (FOSL) Action Levels in Section 3 of the Shell Workplan should somewhere state that the Navy reserves the right to put land reuse restrictions on the party who would be leasing a parcel. This would allow the Navy to freely perform any remediation at that parcel.

2. Finding of Suitability to Transfer (FOST) Action Levels, described in Section 4 of the Shell Workplan, need to consider both impacts to the beneficial uses of the groundwater, as well as impacts to ecological receptors. As Section 4 is written now, the Action Levels only consider impacts to humans, i.e. they are strictly human-health based. All possible effects that a given parcel could have on the environment and all of its inhabitants, whether humans or animals, must be addressed and remediated for before that parcel can be considered suitable for FOST.

3. On page 5-2 of the Shell Workplan, in the second paragraph, the report states: "The presence or absence . . . will likely be implemented on a larger scale." Please add to this paragraph that the report assumes that any contamination which would be found in the groundwater at a given parcel would be detected by either soil sampling at that parcel, or by looking at groundwater migration onto that parcel on a larger scale. This approach would cover both the horizontal and vertical contaminant migration pathways for the groundwater at a certain parcel.

If you have any questions on the above, please contact me at (510) 286-0301.

Thank you,

A handwritten signature in cursive script that reads "James Nusrala".

James Nusrala
Remedial Project Manager