



PA

Department of
Toxic Substances
Control

700 Heinz Avenue,
Bldg. F, Suite 200
Berkeley, CA
94710

June 22, 1998

Pete Wilson
Governor

Peter M. Rooney
Secretary for
Environmental
Protection

Commanding Officer
Engineering Field Activity, West
Naval Facilities Engineering Command
Attn: Mr. George Kikugawa, Code 1831.2
900 Commodore Drive
San Bruno, CA 94066-2402

**ALAMEDA POINT, ALAMEDA, CALIFORNIA: IR SITES 1, 2, 5,
AND 10 RADIOLOGICAL REMOVAL ACTION SITE QUALITY
ASSURANCE PLAN, SITE WORK PLAN, AND SITE HEALTH AND
SAFETY PLAN (APRIL, 1998)**

Dear Mr. Kikugawa:

The Department of Toxic Substances Control, in conjunction with the Department of Health Services, has reviewed the Site Quality Assurance Plan, Site Work Plan, and Site Health and Safety Plan for the radiological removal action at IR Sites 1, 2, 5, and 10 at Alameda Point, dated April, 1998. The Site Health and Safety Plan does not contain all of the elements specified by regulation. Areas identified in the enclosed comments must be corrected or clarified and resubmitted for further review. For the Site Work Plan, please provide justification for 100 dpm/100 for loose Radium-226 contamination. For the Site Quality Assurance Plan, please provide specific details for the determination of Radium-226 concentration in soil.

Mr. George Kikugawa
June 22, 1998
Page 2

Specific comments are enclosed. If you have any questions regarding this letter, please contact me at (510)540-3814.

Sincerely,



Mary Rose Cassa, R.G.
Engineering Geologist
Office of Military Facilities

enclosures

cc: Ms. Anna-Marie Cook (SFD-8-2)
U. S. Environmental Protection Agency, Region IX
75 Hawthorne Street
San Francisco, CA 94105

Mr. Steve Edde
BRAC Environmental Coordinator
950 Mall Square, Building 1, Room 245
Alameda Point, Alameda, CA 94501

Mr. Dennis Mishek
San Francisco Bay
Regional Water Quality Control Board
2101 Webster Street, Suite 500
Oakland, CA 94612

LCDR Lino Fragoso
Department of the Navy
Naval Sea Systems Command Detachment
Radiological Affairs Support Office
NWS P.O. Drawer 260
Yorktown, VA 23691-0260

Ms. Elizabeth Johnson
Alameda Reuse and Redevelopment Authority
950 Mall Square, Building 1
Alameda Point, Alameda, CA 94501

Mr. George Kikugawa
June 22, 1998
Page 3

Mr. Tony Dover
3142 California Street
Oakland, CA 94602

Ms. Penny Leinwander
Department of Health Services
Environmental Management Branch
601 N. 7th Street, MS 396
P. O. Box 942732
Sacramento, CA 94234-7320

DEPARTMENT OF HEALTH SERVICES REVIEW

ACTIVITY: *Review of Storm Water Drain Excavation, Clean, Removal, and Replacement at Buildings 5 and 400, Revision 1*, dated April 1998
(DTSC/DHS Work Form #383)

FACILITY: Alameda Point (formerly Alameda Naval Air Station), Alameda, CA

GENERAL COMMENTS:

Note: This report was submitted to DHS in three separate binders entitled Site Quality Assurance Plan (SQAP), Site Work Plan (SWP), and Site Health and Safety Plan (SHASP).

SPECIFIC COMMENTS:

SHASP, page 38. Section 3.2.22 states that excessive generation of dust can create contamination, which can increase the extent of contamination. How will it be determined if dust generation is significant? What kind of air monitoring will be done to demonstrate that airborne radium-226 is not a problem? (Will the mini Ram aerosol monitor be used to collect samples for radioactivity?) How will the air samples be analyzed and by whom? Information related to the air sample analyses needs to be added to the SQAP.

SHASP, page 69. This report states that air samples for Radon will be collected when contaminants are confirmed "by other means". What are the "other means"? How will the Radon air samples be analyzed and by whom? Has it been determined that the air concentrations will not exceed 10% of the ALI's? Has it been determined that radiation dose is not expected to exceed 10% of the occupational limit since personal dosimetry is not required?

SHASP, page 73. Airborne radionuclides has an action level of $>3 \times 10^{-10}$ $\mu\text{Ci/ml}$. What is this based on?

SHASP, page 18. Section 3.2.5 should discuss radiological standards also.

SWP, page 12, 6.4.18. Regulatory Guide 1.86 specifies 20 dpm/100 cm^2 for loose Radium-226 contamination. Please provide justification for 100 dpm/100 cm^2 .

SQAP, page 6. EPA Method No. 901.1 does not provide specific details for the determination of Radium-226 concentration in soil. Please state sample preparation requirements, holding times for ingrowth of daughters, and the gamma peak used to quantify the concentration.

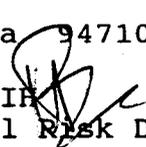
DEPARTMENT OF TOXIC SUBSTANCES CONTROL

REGION 1
TOLLHOUSE ROAD
CLOVIS, CA 93611
(209) 297-3901



M E M O R A N D U M

TO: Mary Rose Cassa
Site Mitigation Program
Office of Military Facilities
700 Heinz Avenue
Berkeley, California 94710

FROM: Marc Boswell, MS, CIH 
Human and Ecological Risk Division
Industrial Hygiene Section
1515 Tollhouse Road
Clovis, California 93611
8-451-3908

DATE: June 17, 1998

SUBJECT: BUILDING 5 AND 400, ALAMEDA POINT, ALAMEDA HEALTH AND
SAFETY PLAN
PCA 14742 - 200004 - 47

Activity Requested

The Site Mitigation Program, Office of Military Facilities, requested that the Health and Safety Plan for Buildings 5 and 400, Alameda Point, Alameda, California be reviewed for conformity with applicable standards and guidelines. Additionally, a memorandum citing deficiencies and recommendations was requested.

Document Reviewed

The Industrial Hygiene Section (IHS) has reviewed the Site Health and Safety Plan prepared by New World Technologies for the U.S. Army Industrial Operations Command dated April 1998. IHS received the document on May 26, 1998. The criteria used by the IHS is based upon the requirements found in CCR Title 8, 5192, California Health and Safety Code, Department of Toxic Substances Control policies and guidelines, and the NIOSH/OSHA/USCG/EPA Guidance Manual.

Discussion/General Comments

1. The IHS review is technical in nature and therefore does not address minor grammatical, typographical or technical errors which do not substantively affect the interpretation of the document.

2. The Site Health and Safety Plan (HASP) is intended to be a functional stand alone document. The Plan is used to educate and familiarize the on-site workers with the site history, proposed work activities, known or potential health hazards, emergency action plans and the site safety information that is necessary to mitigate the risks from the identified hazards. Therefore, the final Health and Safety Plan should be available at all times for on-site personnel to reference.

3. An Industrial Hygienist from the Human and Ecological Risk Division may perform a field audit in order to confirm the implementation of the provisions and specifications presented in the HASP.

4. Appendix A and B were not included in the copy of the SHASP provided for the IHS review.

Specific Comments

In utilizing the Health and Safety Plan, field staff must be able to obtain sufficient information to compile an accurate assessment of the site safety issues associated with every site job function. The IHS review finds the Health and Safety Plan fails to provide or requires additional information and/or clarification of the items listed below.

1.0 Introduction

Provide a description of the project, including work tasks, objectives, and personnel requirements. Identify whether subcontractors will be used and what their specific role will be.

2.0 Responsibilities

Include the extent of the Site Health and Safety Officer's (SHSO) authority to halt work and to correct site Safety problems as well as the overall project responsibilities of the SHSO (i.e. what the SHSO will be doing besides site Health and Safety activities). Also include, when available, the site and office telephone numbers of key personnel and contractor/responsible party and agency personnel.

3.0 Project Hazard Analysis

Include the PELs/TLVs/RELS or a calculated reasonable exposure level for each contaminant anticipated for this project.

Provide an exposure guideline for radion/radon to be used during site activities (include this guideline in table 3-2).

Provide additional information on anticipated weather conditions, including historic mean temperatures and relative humidities. Since stress potential is indicated (ambient temp >70°F), discuss its symptoms and the attendant hazards.

Ensure that Underground Service Alert (USA) is contacted for guidance regarding underground utilities. Article 6 of the Construction Safety Orders (in Title 8, California Code of Regulations) contains specific regulatory requirements for trenching operations, as does 29 CFR 1926.

8.0 Site Monitoring

Provide a plan for all aspects of area, worker and community exposure monitoring. Describe rationales and methodologies for each program, and locations for area and community monitoring.

CFR 29 1910.120 and CCR 8 5192 require personal monitoring of those employees likely to have the highest exposures. DTSC interprets this as requiring personal sample collection devices such as pumps and sampling media, or passive dosimeters, with the media quantitatively analyzed for the contaminants of concern by an AIHA-certified laboratory. The personal sampling should be performed in the accordance with NIOSH methods, if possible. Summaries of the methods used should be included in the monitoring plan. Note that this sampling is performed in addition to direct reading instrument (DRI) monitoring. If no personnel monitoring is anticipated, provide the decision logic.

8.1 Monitoring

The appropriateness of the use of colormetric tubes is open to debate, and is at best subject to site-and-situation-specific activities. Due to the cross-sensitiveness and other sources of error found in most tubes, follow-up personal sampling using NIOSH methods is recommended.

Provide additional information regarding dust monitoring. Provide the rationale used to establish the dust action levels in table 8-1. A determination should be made to estimate the worse-case concentration of contaminants (such as radioactive materials and semi-volatile organics) present in 10 mg/m³ of airborne particulates. These estimated concentrations are then compared with established standards for individual compounds to determine if the standards would be exceeded. In the event the calculated level may be exceeded, then the portable aerosol monitors should be supplemented with personal sampling for the specific contaminant(s) using NIOSH methods.

8.3 Heat Stress

Heat stress issues should include: anticipated temperatures, worker acclimatization, symptoms of the various stages of heat stress, first aid, atmospheric monitoring, personal (physiological) monitoring, and parameters for establishing work-rest cycles.

Work-rest cycles must consider the following criteria: personnel work load (energy expended), degree of acclimatization, and the type of protective clothing used. The most readily available work-rest cycle tables assume that workers will be clothed in cotton overalls or work clothes, since workers may be wearing semi-impermeable or impermeable garments, such tables will be invalid unless substantial adjustments are made.

8.2 Noise

Include a description of the hearing conservation program that will be employed at the work site. Note that heavy equipment, particularly drill rigs, has the potential

to generate enough noise to exceed the PEL. Identify the frequency of noise monitoring, the location and type of equipment to be used.

Contractors must also be aware of local noise ordinances and be prepared, particularly if working in or near a residential area, to use engineering controls such as mufflers and temporary noise barriers to suppress noise.

5.0 Personal Protective Equipment (PPE)

Include the rationales for the PPE selected (selections must take into account the potential for additive effects of chemical exposures). Provide the decision logic used to assign the levels of protection used in Table 5-1.

6.0 Site Control

Provide a site and area map with exclusion, contamination reduction and support zones outlined, and show the location of the decontamination area. Define the site control/security measures (i.e. fencing, locked gates, security guards, flagging, etc.). Describe on-and-off-site communications methods and systems.

7.0 Decontamination Measures

Describe the decontamination (decon) procedures to be used for personnel, personal protective equipment, sampling equipment, and construction equipment. Detail the decon procedures, including how the decon line and rest area will be set up, the steps in the decon process (for each level of protection), provisions for collection and disposal of contaminated materials and liquids, and a listing of decon equipment and solutions that will be used (i.e., soap and water, steam cleaner, etc.). Include provisions for personal hygiene (hand/face wash, showers; see "Sanitation" below).

12.0 Emergency Response Plan and Contingency Procedures

The plan must include a map and narrative describing the route to the nearest emergency room. Personnel with current CPR/First Aid training need to be identified.

Decontamination requirements for personnel injured or exposed in the work zone should be described. Provide a site map with evacuation routes, procedures and signals. Describe means of contacting emergency services (local phone, cellular phone, radio, etc.), and note the location of such equipment. Ensure that the medical facility is capable of handling injured workers who may be chemically contaminated.

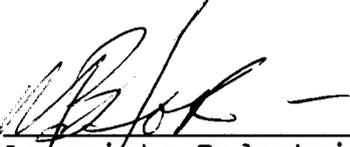
DTSC's review of the submitted HASP does not extend to verification of compliance with the requirement for an illness and injury prevention program contained in CCR 8, 1509 and 3203 or other occupational health and safety regulations. DTSC refers the employer to Cal-OSHA's General Industrial Safety Orders for specific requirements regarding record keeping, worker exposure monitoring, engineering controls and training.

The Department is unable to foresee all health and safety hazards associated with this remedial action. There may be health and safety hazards which were not apparent during the review of the HASP and if uncorrected could cause serious illness or injury. It should be noted that the employer is ultimately and directly responsible to provide a safe and healthful working environment. The IHS's review of this document does not constitute nor imply approval by the Department or compliance with all occupational health and safety regulations.

Conclusions

The submitted HASP does not contain all of the elements specified by regulation. Areas identified as deficient must be corrected or clarified and resubmitted for further review.

Thank you for the opportunity to comment on the Health and Safety Plan for Building 5 and 400, Alameda Point. If you have any questions regarding these comments, please contact me at 8-451-3908.

Peer Review by: 

Associate Industrial Hygienist
Human and Ecological Risk Div.
Industrial Hygiene Section

cc: HERD