

DEPARTMENT OF TOXIC SUBSTANCES CONTROL

Region 4
245 West Broadway, Suite 425
Long Beach, CA 90802-4444

M60050.000933
MCAS EL TORO
SSIC # 5090.3



(310) 590-4868

May 10, 1995

Mr. Joseph Joyce
BRAC Environmental Coordinator
U.S. Marine Corps Air Station - El Toro
P. O. Box 95001
Santa Ana, California 92709-5001

Dear Mr. Joyce:

REVIEW COMMENTS ON THE HEALTH AND SAFETY PLAN (HASP) PORTION OF THE PHASE II REMEDIAL INVESTIGATION WORKPLAN

The Department of Toxic Substances Control (Department) has completed its review of the HASP. The HASP as provided is incomplete. The Department's general and specific comments are enclosed.

The enclosed comments have been transmitted via facsimile to your office in El Toro. DTSC will make an Industrial Hygienist available to the Navy to correct the workplans, if requested. In addition the DTSC's Industrial Hygienist will perform an assesment of the risks posed by the sites on May 10, 1995. You are cordially invited to participate in this assesment.

We look forward to working with you on these and other issues. Feel free to contact me at (310) 590-4919.

Sincerely,

Juan M. Jimenez
Remedial Project Manager
Region 4, Base Closure Unit
Office of Military Facilities

Enclosures

cc: See next page.

WLFEE:JJ



Mr. Joseph Joyce
May 10, 1995
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San Francisco, California 94105-3901

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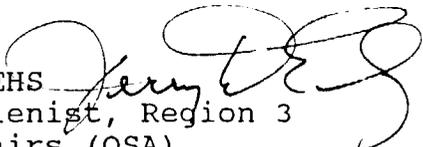
DEPARTMENT OF TOXIC SUBSTANCES CONTROL

1011 N. GRANDVIEW AVENUE
GLENDALE, CA 91201
(818) 551-2800



M E M O R A N D U M

TO: Juan Jimenez
Hazardous Substances Scientist
Office of Military Facilities, Region 4
245 West Broadway, Suite 425
Long Beach, CA 90802

FROM: Jerry D. Earley, M.A., REHS 
Associate Industrial Hygienist, Region 3
Office of Scientific Affairs (OSA)
Industrial Hygiene Section (IHS)

DATE: April 14, 1995

SUBJECT: EL TORO MARINE CORPS AIR STATION (MCAS)
Phase II, REMEDIAL INVESTIGATION AND FEASIBILITY STUDY
PCA Code: 14740 Site Number: 400055 WP: 45
MPC: 00 OC: 02

BACKGROUND

The Office of Military Facilities in Region 4 requested OSA-IHS review of the Health and Safety Plan (HASP) for the Remedial Investigation/Feasibility Study (RI/FS) activities to be conducted at sites 2-17, 19-22 and 24-25. MCAS is located in Tustin, California approximately 40 miles south of Downtown Los Angeles near the center of Orange County.

MCAS was originally commissioned in the Fall of 1942 as a Navy blimp base. MCAS is currently used as a base for the Marine Corps medium and heavy helicopter training and operations.

The areas of concern during this phase of the investigation are as follows:

- Site 2 - Magazine Road Landfill
- Site 3 - Original Landfill
- Site 4 - Ferrocene Spill Area
- Site 5 - Perimeter Road Landfill
- Site 6 - Drop Tank Drainage Area
- Site 7 - Drop Tank Drainage Area No. 2
- Site 8 - Defense Reutilization Marketing Office Storage Yard
- Site 9 - Crash Crew Pit No. 1
- Site 10 - Petroleum Disposal Area
- Site 11 - Transformer Storage Area
- Site 12 - Sludge Drying Beds
- Site 13 - Oil Change Area
- Site 14 - Battery Acid Disposal Area
- Site 15 - Suspended Fuel Tanks Area

- Site 16 - Crash Crew Pit No. 2
- Site 17 - Communication Station Landfill
- Site 19 - Aircraft Expeditionary Refueling Site
- Site 20 - Hobby Shop
- Site 21 - Materials Management Group
- Site 22 - Tactical Air Fuel Dispensing System
- Site 24 - Potential VOC Source Area
- Site 25 - Major Drainage

The RI/FS will evaluate the extent of soil and groundwater contamination resulting from site operations. The RI/FS consists of the following activities:

- non-intrusive geophysical survey prior to intrusive work;
- soil gas survey;
- mud rotary boring;
- groundwater sample collection;
- soil sample collection;
- monitoring well installation;
- shallow hand auger boring and sampling; and,
- hollow-stem auger and air rotary boring.

The chemicals of concern, detected during phase I RI/FS activities (soils only), are as follows:

ORGANIC COMPOUNDS	
Volatile Aromatic Organics	ethylbenzene, toluene, benzene, xylene
Volatile Aliphatic organics	methane, carbon disulfide
Petroleum hydrocarbons	diesel fuel, gasoline, solvents
Ketone	2-hexanone (MIBK), acetone
Esters	dimethylphthalate
HALOGENATED HYDROCARBONS	
Chlorinated solvents	1,1,1-trichloroethane, trichloroethylene, methyl chloride, methylene chloride, carbon tetrachloride, chloroform, 1,1 and 1,2- dichloroethene, 1,2-dichloroethane, tetrachloroethane, tetrachloroethylene
Vinyl chloride	vinyl chloride
Polychlorinated biphenyls	Aroclor 1254, Aroclor 1260

METALLIC COMPOUNDS	
Heavy metals	arsenic, cadmium, copper, chromium, lead, zinc, antimony, vanadium, molybdenum, mercury, nickel, silver, barium, cobalt
Other metals	selenium
MINERALS	
Silica	
Asbestos	demolition debris
INORGANIC SALTS	
Inorganic salts	nitrates, nitrites
PESTICIDES	
Pesticides	4,4-DDE, 4,4-DDD, 4,4-DDT, endrin aldehyde, endosulfan II, dalapon, MCPP
RADIOACTIVE MATERIALS	
Uranium, Radium	uranium-238, radium-226

DOCUMENT REVIEWED

OSA-IHS reviewed "Final Health and Safety Plan Supplement Phase II RI/FS" and the previously approved "Program Health and Safety Plan" dated January 7, 1994. This document was prepared by Bechtel National, Inc., for the Southwest Division Naval Facilities Engineering Command. It was dated March 1995 and received by OSA on April 3, 1995. This Phase II HASP supplemental addresses sections of the Clean II HASP that have been modified specifically for this phase of the RI/FS.

GENERAL COMMENTS

The Department of Toxic Substances Control (DTSC) reviewed the HASP for compliance with Title 8, California Code of Regulations (T8 CCR), section 5192: "Health and Safety for Hazardous Waste Operations and Emergency Response" as well as other appropriate State and Federal Occupational Health and Safety Regulations. Please note that in addition to the requirements of this section, the employer is responsible for the implementation of an Illness and Injury Prevention program which is required by the T8 CCR, sections 1509 and 3203. The requirements of those sections have not been included in this review.

Juan Jimenez
April 14, 1995
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An industrial hygienist from OSA-IH may perform a field audit in order to confirm the implementation of the provisions and specifications presented in the HASP.

DTSC is unable to foresee all the health and safety hazards in the work-place by the review of the submitted plan. Continuous surveillance of the work-site and creation of an effective health and safety program by the employer will reduce work place injuries and reduce liability.

OSA-IH review of the HASP is not a guarantee that it will be properly and safely implemented. HASP implementation is the employer's responsibility. The approval is limited to concurrence that all the required elements of a safety plan are present.

SPECIFIC COMMENTS

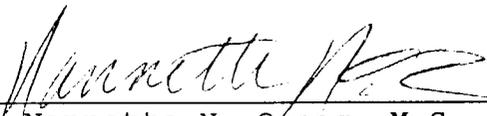
The site HASP is intended to be a functional stand alone document. The plan is used to educate and familiarize the on-site workers with the site history, proposed work activities, known or potential health hazards, emergency action plans and the site safety information that is necessary to mitigate the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

CONCLUSIONS

The submitted HASP does not contain all of the elements specified in T8 CCR, section 5192. Areas identified as deficient must be corrected or clarified and resubmitted for further review. Recommendations are attached for review and consideration.

OSA-IHS is available to participate in conference. Thank you for the opportunity to review the HASP. Should questions arise, contact Jerry Earley at (818)551-2855.

PEER REVIEW BY: _____


Nannette N. Oseas, M.S., CIH
Senior Industrial Hygienist
Office of Scientific Affairs

Attachments: Table of Deficiencies and Recommendations

cc: Site File
OSA

HEALTH AND SAFETY PLAN REVIEW

Site Name: MARINE CORPS AIR STATION, TUSTIN, CALIFORNIAReviewed by: J. Earley, AIHOC: 02 PCA: 14740 Site Code: 400055 Work Phase: 45

PG.	ITEM	DEFICIENCY	RECOMMENDATIONS
		The document states, "This document refers to specific....." Section numbering corresponds to....." Sections in the HASP supplemental do not correspond with the January 94 HASP.	The supplemental document's numbering system should correspond to the original document as stated.
iv		The document states, "Section not modified." For clarification purposes each section should be titled.	Provide the title of each section in the index.
		The HASP does not adequately describe the range and matrix of soil contamination.	Provide and resubmit.
1-1	1.4	Standard Operating Procedures (SOPs) and Policy and Procedures (P&Ps) were referenced but not provided for review.	Provide a copy of the referenced documents for review.
3-1	3.2	The document does not specify which 17 sites are scheduled for hollow stem auger boring. T8 CCR 5192 (b)(4)(B)1.	Clarify and resubmit.
3-2	3.4	Provide an estimate of the number of employees for each major task listed in table 3-1. T8 CCR 5192 (b)(2)(A)4.	Provide and resubmit.
5-1	5.2.1	Provide details of the heat stress management program which includes monitoring methods and criteria and work/rest procedures. T8 CCR 5192 (b)(4)(B)5.	Provide and resubmit. (Note: NIOSH/OSHA/USCG/EPA Occupational Safety and Health Guidance Manual for Hazardous Waste Site Activities, October 1985 is an appropriate reference. Also, if this is part of your corporate P&P, provide the P&P.

PG.	ITEM	DEFICIENCY	RECOMMENDATIONS
5-1	5.2.2	<p>Provide details of how alpha, beta and gamma radiation levels will be differentiated. (Note: The quality factor of alpha is 20.)</p> <p>T8 CCR 5192 (b)(4)(B)5.</p>	Provide and resubmit.
5-7	5.2.9	<p>This section states that Level C will be worn at sites 2, 5, 9, 16 & 17. Section 11.1 indicates sites 2, 3, 5, 9 & 16 will require Level C. The two sections are not consistent.</p> <p>T8 CCR 5192 (b)(4)(B)3.</p>	Clarify and resubmit.
6-9	6.3.1	<p>1. The document states "Initial noise monitoring.....in accordance with P&P H.S. 3.3." This document was not provided. When and where will noise monitoring be conducted?</p> <p>2. "Personal dosimeters will be usedconsistently greater than 85 dBA." "Consistently" is a vague term and requires clarification.</p> <p>T8 CCR 5192 (b)(4)(B)5.</p>	<p>1. Provide and resubmit.</p> <p>2. Clarify and resubmit.</p>
8-1	8.3	<p>The HASP fails to provide details of the gross decontamination procedures while in the exclusion zone. This section must address specific radiological concerns, as well as, other chemical hazards.</p> <p>T8 CCR 5192 (b)(4)(B)7.</p>	Clarify and resubmit.

PG.	ITEM	DEFICIENCY	RECOMMENDATIONS
8-1	8.4	<p>The HASP fails to provide details of the decontamination procedures in the contamination reduction corridor. The necessary details include decontamination line explanation and a narrative describing each station.</p> <p>T8 CCR 5192 (b) (4) (B) 7.</p>	Provide and resubmit.
8-2	8.10.2	<p>The IDWMP was referenced as a supporting document but not provided for review.</p>	The pertinent sections should be provided in appendices for review.
6-6	Tables 6-2 and 6-3	<p>Tables 6-2 and 6-3 do not list the permissible exposures level and action levels for the hazards of concern.</p> <p>T8 CCR 5192 (b) (4) (B) 1.</p>	Provide and resubmit.
11-2		<p>Full face respirators with organic vapor/HEPA filter cartridges are not acceptable for all organic vapors listed.</p> <p>T8 CCR 5192 (b) (4) (B) 3.</p>	Clarify and resubmit. (NOTE: When specifying air-purifying respirators, the warning properties must be considered.)
		<p>The HASP does not adequately describe the range and matrix of soil contamination.</p> <p>T8 CCR 5192 (c)</p>	Modify and resubmit.