

**RESPONSES TO NAVY COMMENTS RECEIVED ON THE
DRAFT ACCIDENT PREVENTION PLAN
FORMER NAVAL FUEL DEPOT POINT MOLATE
July 13, 2007**

N30519_000499
NFD POINT MOLATE
SSIC NO. 5090.3.A

The following presents the ChaduxTt JV responses to Navy comments on the Draft Accident Prevention Plan (APP), Soil Sampling at Installation Restoration (IR) Site 3, Former Naval Fuel Depot (NFD) Point Molate, Richmond, California. Navy comments were provided by Alan B. Freeman, Naval Facilities Engineering Command (NAVFAC) Southwest Division Environmental Safety Engineer, dated July 2, 2007; and also by Mr. Donald J. Coons, Navy Environmental Health Center, in an email dated July 11, 2007. In addition, Mr. Izzat Amadea, Resident Officer in Charge of Construction (ROICC), reviewed the Draft APP and described in an email dated July 5, 2007 that the APP/Health and Safety Plan (HASP) was in compliance with the EM 385-1-1 requirements; no additional comments were provided by Mr. Amadea.

RESPONSES TO COMMENTS FROM ALAN B. FREEMAN, ENVIRONMENTAL SAFETY ENGINEER, NAVFAC SOUTHWEST DIVISION

General Comment

Comment 1: What is your process for updating AHAs as more job information is known for a particular activity?

Response: The Activity Hazard Analyses (AHA) included in the APP will be updated when more job information is known. Replacement pages of the modified AHAs will be inserted into the field copy, file copy, and will also be submitted to the Navy Remedial Project Manager (RPM). Handwritten changes will be made to the field copy if changes are determined while in the field.

Specific Comments

Comment 1: *APP Paragraph 7.0:* Who conducts monthly inspections, how are deficiencies tracked and follow up procedures initiated. Are there any activities that require a competent or qualified person?

Response: The last sentence in the first paragraph of APP Section 7.0 has been modified since the sampling work at NFD Point Molate is expected to last 2 days, and not a month or more as the text suggested. The Site Safety Coordinator (SSC) will conduct daily site safety inspections and will record the inspection results on the Field Audit Checklist (Form AF-1).

Comment 2: *APP Paragraph 9.0:* What is the process for notifying the Navy should an accident occur and what is the process for major accident notification?

Response: The first paragraph of APP Section 9.0 has been updated to explain that all accidents, both major and minor, will be reported by the SSC to the Navy ROICC

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and RPM, in addition to the Project Manager, Navy Health and Safety Officer (NHSO) or Subsidiary Health and Safety Representative (SHSR).

Comment 3: *APP Paragraph 10.0:* It is understood the names of the trained site personnel for First Aid/CPR may not be known at this time, please provide their names when known in updated AHAs.

Response: The second to the last paragraph of APP Section 10.0 has been changed to note that all ChaduxTt personnel will be trained in First Aid, cardiopulmonary resuscitation (CPR), and blood-borne pathogen criteria, and that at least two ChaduxTt personnel trained in these areas will be on-site at all times.

Comment 4: *USACE EM 385-1-1, Section 16:* After utility survey has been performed, please provide locations on a site layout plan with the AHA for drilling.

Response: Since the utility location survey will be conducted after the APP is submitted as final, a site map showing the proposed boring and alternate boring locations will be provided in Appendix A of the APP, along with the activity hazard analyses provided by the utility locator (Precision Locating LLC). This site map of proposed boring locations will be the same map that will be given to the utility locator.

RESPONSES TO COMMENTS FROM DONALD J. COONS, NAVY ENVIRONMENTAL HEALTH CENTER

General Comment

Comment 1: We compared this HASP to federal requirements found in references (a) through (d), and have noted discrepancies in this HASP from these primary references. The acronyms used in our comments are included as Attachment (1).

Response: Comment noted.

Comment 2: The information provided in the accident prevention plan and Section 15.0. "Health and Safety Plan," is of good quality and generally meets the requirements of references (a) and (b) with the exception to the specific comments listed below. However, the information could be presented in a more exact, streamlined format. For example, there are several instances where information presented is redundant, not applicable to the scope of work, and difficult to locate. Furthermore, information required to be in the site specific HASP is located in the APP and vice versa.

Response: Comment noted. The APP was developed based on, and is compliant with, the technical directive received by NAVFAC Southwest Division, dated March 19, 2007.

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Comment 3: References (c) and (d) provide the minimum requirements and instruction for developing an Accident Prevention Plans. Appendix A of reference (d) provides a description of each of the required components. Section 12.t lists the requirement for a Site Safety and Health Plan for hazardous waste operations. There is no requirement that two separate documents have to be maintained but there is a requirement that the SSHP be developed and attached to the APP. Therefore, to streamline and simplify the requirements to develop and implement the APP and the SSHP, as well as meeting all of the regulatory requirements, we suggest the following whenever work involving hazardous waste site cleanup is being conducted:

- a. Develop an APP containing the requirements described in the minimum basic outline in Appendix A of reference (d).
- b. Develop a “stand alone” SSHP meeting the requirements of Section 28 of reference (d), and the regulatory requirements of references (a) and (b).
- c. Where duplicate information is required by both the APP and the SSHP, include the information only in the SSHP. In return, the APP will reference the reader to the appropriate section of the SSHP for the required information.

Response: Please see the response to Mr. Coons’ general Comment 2.

Comment 4: For future reference when preparing a site-specific health and safety plan meeting the requirements of 29 CFR 1910.120 or 29 CFR1926.65, we suggest the following site for assistance in preparing an acceptable health and safety plan, <http://www.osha.gov/dep/etools/ehasp>. This e-tool can be downloaded and used for creating site-specific health and safety plans. An additional source of guidance can be found at <http://www-nehc.med.navy.mil/downloads/ep/checklist002.pdf>. This site provides a checklist which will assist in preparing the HASP ensuring all required information is included.

The information provided should be easily understood and easy to use. A properly prepared site-specific health and safety plan does not need to be a massive document, but it must address all required information. Additionally, it has been our experience that HASPs prepared in the formats presented above are easier to develop and easier to incorporate in the field.

Response: Please see the response to Mr. Coons’ general Comment 2.

Comment 5: Several AHAs bearing the ChaduxTt JV logo and prepared by Jessica Beck of ChaduxTt JV are noted in the APP. Information provided on page 1, Section 1, last sentence of the first paragraph states, “Due to the nature of the work ChaduxTt JV

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typically performs (environmental consulting, no construction) many requirements and provisions of EM 385-1-1 are not applicable.” It is unclear what portions of the EM 385-1-1 are not applicable as Section 28.0 addresses those issues relating to hazardous waste operations which are codified at 29 CFR 1910.120 and 29 CFR 1926.65. As ChaduxTt is serving in a consulting function it is unclear if Chadux employees will be potentially exposed to hazardous materials at or above the PEL during this scope of work. Additionally, as ChaduxTt will not be performing the tasks described it may be more appropriate for the subcontractor(s) to provide their own site-specific health and safety plans, and, as the subject matter experts, provide their own properly completed AHAs for the tasks they are contracted to perform. The subcontractors are not identified in either the APP or Chapter 15, “Health and Safety Plan.” Required information includes the following:

- a. Information describing an air monitoring program and who on-site will be qualified to perform it.
- b. Information provided must be site-specific. Much site-specific information is provided in the APP but not in the HASP. The HASP is intended and should be written as a stand alone document.
- c. Include a requirement for any/all subcontractors to submit as a minimum, a properly completed activity hazard analysis for all tasks they will be contracted to perform, for review and approval by the prime contractor prior to start of on-site work.
- d. Information stating that the medical surveillance program is performed by or under the direct supervision of a licensed physician board certified in occupational medicine is not provided.

Response: ChaduxTt will be conducting oversight of the planned soil drilling and will conduct sampling and decontamination activities. AHAs for the planned activities are provided in APP Section 14.0 for field personnel to be aware of potential dangers and their countermeasures. As noted in Section 5.0, both of the subcontractors (Woodward Drilling and Precision Locating LLC) have developed and submitted task-specific AHAs, which are included in Appendix A of the APP. Contact information for the subcontractors on this project has been added to the Emergency Contacts table on APP Page viii, and is listed in the table of project personnel included in Section 15.1.1.

Section 15.4 presents the air monitoring program that ChaduxTt will follow while onsite. Text in Section 15.4 has been changed to note that the SSC is qualified to and responsible for performing air monitoring at the site.

Section 10.0 has been changed to note that the examining physician is a licensed physician who is board certified in occupational medicine.

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Comment 6: It is unclear if the information provided in Section 15.11, "Emergency Response Planning" represents an Emergency Response Plan meeting the requirements of 29 CFR 1910.120 and 29 CFR 1926.65 or an Emergency Action Plan meeting the requirements of 29 CFR 1910.38. Ensure an Emergency Response Plan meeting the requirements of 29 CFR 1910.120 or 29 CFR 1926.65, or, an Emergency Action Plan meeting the requirements of 29 CFR 1910.38 is included in the document. If site personnel will provide emergency response in the event of an emergency situation arising, then an Emergency Response Plan meeting the requirements of 29 CFR 1910.120 or 29 CFR 1926.65 must be provided. If site personnel will evacuate the site in the event an emergency arises, then an Emergency Action Plan meeting the requirements of 29 CFR 1910.38 must be provided. Additionally, include a requirement to exercise the plan and critique lessons learned from an event or exercise.

Response: Section 15.8, "Emergency Response Planning" is intended to meet the required components of an Emergency Response Plan (29 CFR 1910.120) and Emergency Action Plan (29 CFR 1926.65). However, should an emergency situation arise, site personnel will not be providing emergency response activities at the site. Rather, site personnel will contact local emergency response officials, ROICC, and the RPM. Furthermore, in an event of an emergency, site personnel will evacuate the site per the procedures noted in Sections 15.8.4, 15.8.9, and 15.1.13, which satisfy the requirements cited in 29 CFR 1910.38.

Specific Comments

Comment 1: *Page 37, Section 15.1.1, "Project Personnel":* It is unclear which company official is tasked with establishing contact with all potential emergency response organizations prior to commencing on-site work.

Recommendation: Assign an appropriate company official in a timely manner so this important function may be accomplished in a timely manner.

Response: The SSC is responsible for contacting the local authorities prior to commencing on-site work. Text in Section 15.1.1.2 has been changed to include this task.

Comment 2: *Pages 21 through 35, of the APP "Activity Hazard Analyses (AHAs), Various":* The AHA 3.0 for the task of "Hollow Stem Auger Drilling" does not provide guidance or information regarding potential noise hazard to exposed personnel operating/or in close proximity to operational drilling equipment and use of hearing protective devices. Additionally, a requirement directing that air monitoring be performed using direct reading instruments is not included in the AHA.

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Recommendation: Revise the AHA to include guidance for determining the need for hearing protection and for the performance of air monitoring.

Response: AHA 3.0 (Hollow Stem Auger Drilling) has been updated to include vapor inhalation and loss of hearing as potential hazards and their recommended actions.

Comment 3: *Pages 53 and 54, "Tick and Mosquito Transmitted Illnesses and Diseases":*

- a. Information provided in the last sentence of the first paragraph states, "Tick bites are common and usually harmless." This information is misleading and may actually decrease personnel awareness/alertness to the potential health problem and proper care criteria. It should be noted that in most cases, Lyme disease are thought to be caused by the smaller nyphal tick, since the adult tick is more easily felt crawling on the skin.
- b. Information provided in the third paragraph states that mosquitoes have been identified in the transmission of Lyme disease. This is speculative and has not been confirmed. Additionally, as the bacteria that cause Lyme disease are not often found in blood or other body fluids, except for a short period immediately after the infection, it is unlikely that these modes of transmission are common. Further, information states that mosquitoes have been identified in the transmission of malaria. As California is not a malarial region it is unclear why this information is included in the site-specific HASP.

Recommendations:

- a. We recommend deleting "Tick bites are common and usually harmless" from the final HASP and include guidance for avoiding the ticks using insect repellants such as DEET, wearing light colored clothing and performing periodic buddy checks.
- b. We recommend deleting the reference to malaria as it is not pertinent to the geographical region.

Response: Text in subsection "Tick and Mosquito Transmitted Illnesses and Diseases" of Section 15.2.4.2 (Insects and Spiders) was changed to delete the statement that tick bites are harmless. Further guidance was included in the subsection for avoiding ticks and also recommends buddy checks.

References to malaria were removed from the subsection. However, since mosquitoes are capable of transmitting the West Nile Virus, guidance was included in the subsection for avoiding mosquitoes. Common symptoms of the West Nile Virus were also listed in the subsection.

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Comment 4: *Page 57, Section 15.3, "Medical Surveillance":* The reader is directed to Section 10.0 of the APP for information. Information stating that the medical surveillance program is performed by or under the direct supervision of a licensed physician board certified in occupational medicine as required by reference (c) is not provided in either location. Additionally, a list of various medical tests to be provided to ChaduxTt JV personnel is noted in the APP. This information is more appropriate to the corporate program and not generally pertinent to site-specific HASPs.

Recommendation: Include information in the final HASP indicating that the medical surveillance program is performed by or under the direct supervision of a licensed physician board certified in occupational medicine.

Response: Section 10.0 of the APP has been changed to note that the examining physician is a licensed physician who is board certified in occupational medicine.

Comment 5: *Page 65, Section 15.5, "Use and Maintenance of Survey Equipment":* Information stating that all direct reading air monitoring equipment will be calibrated before and after each period of use in accordance with manufacturers' instructions and standard industrial hygiene practices is not included in the HASP.

Recommendation: Revise the document to include information stating that all direct reading air monitoring equipment will be calibrated before and after each period of use in accordance with manufacturers' instructions and standard industrial hygiene practices.

Response: Text will be added to the second paragraph of Section 15.5 to state that all direct reading air monitoring equipment will be calibrated before and after use in accordance with the manufacturer's instructions and standard industrial hygiene practices.

Comment 6: *Page 75, "References":* We recommend including 29 CFR 1910.120 and 29 CFR 1926.65 "Hazardous Waste Operations and Emergency Response" guidance to this reference section.

Response: The references for 29 CFR 1910.120 and 29 CFR 1926.65 "Hazardous Waste Operations and Emergency Response" guidance have been added to the reference section.

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Comment 7: *Appendix D, "Safe Work Practices, SWP 6-15, Heat Stress":*

- a. Guidance directing that physiological monitoring commence when ambient temperatures reach 70 degrees Fahrenheit or above and site workers are required to wear semi-permeable (i.e., Tyvek or similar) or impermeable protective clothing is not included in the HASP.
- b. Table 2, "Heat Stress Conditions," includes incorrect or incomplete information/guidance. For example, incorrect information is provided in the column titled, "Signs and Symptoms" third bullet for "Heat Stroke," which states that "a body temperature of 105 to 106 degrees Fahrenheit or higher is a sign of heat stroke." A more appropriate temperature is 104 degrees Fahrenheit or above.
- c. Table 2, "Heat Stress Conditions, third column "Treatment," is incomplete in that guidance is not provided directing the removal of PPE for persons experiencing heat stroke or heat exhaustion or loosening personal clothing, and/or in the case of heat stroke, removing as much personal clothing as decency permits; laying the person on their back, head and shoulders slightly elevated (heat stroke) and sponging with cool water, vice dousing with water and fanning. If the victim is conscious and not nauseated, small sips of cool water or an electrolyte solution may be provided. Additionally, guidance directing the expeditious medical evacuation of heat stroke victims via ambulance is not included. Additional guidance for performing a heat stress monitoring program can be found in the U. S. Environmental Protection Agency *Standard Operating Guides*, Publication 9285.1-03, June 1992 and the NIOSH/OSHA/USCG/EPA *Occupational Safety and Health Guidance Manual for Hazardous Waste Site Activities*, DHHS (NIOSH) Publication No. 85-115, October 1985, or the latest iteration of the ACGIH TLV/BEIs publication.
- d. Page 4, SWP 6-15, "Heat Stress" second bullet directs the use of a clinical oral thermometer for monitoring worker temperatures.

Recommendations:

- a. Include guidance directing that physiological monitoring commence when ambient temperatures reach 70 degrees Fahrenheit or above and site workers are required to wear semi-permeable (i.e., Tyvek or similar) or impermeable protective clothing is not included in the HASP.
- b. Revise the final HASP and cite an oral temperature of 104 degrees Fahrenheit or above as a sign of heat stroke.
- c. Revise the final site-specific HASP to include guidance for the proper field treatment and management of site workers suffering from the effects of heat stress injury. Heat stroke casualties are not to return to work until released by the company occupational health physician. Additionally, it may be of

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value to consider medical evaluation of persons experiencing heat exhaustion prior to their return to work.

- d. We recommend considering the use of an ear temperature sensor or a disposable oral thermometer in the field for monitoring worker temperatures.

Response: The Safe Work Practice 6-15, Heat Stress, is a document prepared by a Tetra Tech, Inc. (Tetra Tech) certified industrial hygienist (CIH) for employees of Tetra Tech and its subsidiaries. The information within the Safe Work Practice 6-15 document was derived from factual documentation obtained from literature from the American Conference of Governmental Industrial Hygienists when it was developed, which ChaduxTt JV feels is a reasonable industry standard.

TRANSMITTAL/DELIVERABLE RECEIPT

Contract No. **N62473-07-D-3213**

Document Control No. CHAD.3213.0012.0016

TO: Contracting Officer
Beatrice Appling
Naval Facilities Engineering Command
Southwest Division
1220 Pacific Highway, Bldg 127
San Diego, CA 92132-5190

DATE: 07/13/07
CTO: 0012
LOCATION: NFD Point Molate, Richmond, California

FROM:



Steven Bradley, Contract Manager

DOCUMENT TITLE AND DATE:

Responses to Navy Comments Received on the Draft Accident Prevention Plan, Installation Restoration Site 3; July 13, 2007

TYPE: Contractual Deliverable Technical Deliverable (DS) Other (TC)

VERSION: Final REVISION #: NA
(e.g., Draft, Draft Final, Final)

ADMIN RECORD: Yes No CATEGORY: Confidential

SCHEDULED DELIVERY DATE: 07/17/07 ACTUAL DELIVERY DATE: 07/17/07

NUMBER OF COPIES SUBMITTED TO NAVY:

O/5C/6E/1D

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