



DEPARTMENT OF THE NAVY

NAVY ENVIRONMENTAL HEALTH CENTER
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25 JAN '94

From: Commanding Officer, Navy Environmental Health Center
To: Commander, Atlantic Division, Naval Facilities Engineering Command

Subj: MEDICAL REVIEW OF INSTALLATION RESTORATION PROGRAM
DOCUMENTS FOR NORFOLK NAVAL BASE, NORFOLK, VA

Ref: (a) LANTNAVFACENCOM memo of 11 Jan 94,
Contract N62470-93-C-3032

Encl: (1) Health and Safety Plan Review

1. As you requested in reference (a), we completed a medical review of the "Site Specific Health and Safety Plan for Soil and Debris Removal Action, Camp Allen Landfill, Area B, Norfolk Naval Base, Norfolk, VA." Our comments are provided in enclosure (1).

2. The technical point of contact for comments is noted in the enclosure. We are available to discuss the enclosed information by telephone with you and, if necessary, with you and your contractor. If you require additional assistance, please call Ms. Sheila Berglund, P.E., Head, Installation Restoration Program Support Department at (804) 444-7575 or DSN 564-7575, extension 430.


W. P. THOMAS
By direction

HEALTH AND SAFETY PLAN REVIEW

Ref: (a) 29 CFR 1910.120
(b) Navy/Marine Corps Installation Restoration Manual (February 1992)

General Comments:

1. The "Site Specific Health and Safety Plan for Soil and Debris Removal Action, Camp Allen Landfill, Area B, Norfolk Naval Base, Norfolk VA, Contract N62470-93-C-3032 Remedial Action H & S Plan, Delivery Order No. 003" was prepared for LANTNAVFACENGCOM by OHM Remediation Services Corporation and forwarded to the Navy Environmental Health Center on 11 January 1994. The document was dated 3 January 1994.
2. This review addresses both health and safety and emergency response sections of the plan.
3. The method used for the review is to compare the health and safety plan to federal requirements under OSHA regulations (29 CFR 1910.120) and to Department of the Navy requirements under the "Navy/Marine Corps Installation Restoration Manual" (see references (a) and (b) above). We noted deviations and/or differences in the plan from these two primary references.
4. The point of contact for review of the health and safety plan is Ms. Mary Ann Simmons, Industrial Hygienist, who may be contacted at (804) 444-7575, or DSN 564-7575, extension 477.

Specific Comments:

1. Page 2-1, Section 2.1, "Certified Industrial Hygienist": This section states that the Certified Industrial Hygienist (CIH) should be responsible for the contents of this health and safety plan (HASP) and should ensure it complies with all federal, state and local health and safety requirements. However, the title page of the plan indicates the plan was not prepared by a CIH and there is no indication that the CIH has reviewed this document.
2. Page 2-1, Section 2.5, "Employee Safety Responsibility": Reference is made to two OHM policy documents. Indicate where these documents can be found. While it is not necessary to duplicate the information contained in these policy documents, all pertinent information should be included in the HASP or maintain copies of the referenced documents on-site.

Enclosure (1)

3. Page 2-1, Section 2.7, "Key Safety Personnel": The Site Safety Officer is yet to be determined. In view of the significance of this person's functions and the need for timely interface with local agencies, we recommend designating this person as soon as possible.

4. Page 3-1, Section 3.1, "Chemical Hazards": Recommend revising this section to alphabetize chemical names, indicate where the material may be found (soil, water, air), and indicate anticipated concentrations. Review the PEL/TLV figures; those for trichloroethylene and 1,2 dichloroethene do not appear to be correct. Check the spelling for "1,2 dichloroethene" (perhaps it should be 1,2 dichloroethane). Include MSDSs for all the chemicals cited as stated in the second sentence.

5. Page 3-4, Section 3.3.1, "Heat Stress": The rest time cited in the third sentence is different from the minimum time specified in this section, page 3-5, last sentence of the first paragraph. Include additional heat stress information such as heat illness symptoms, how consumption of liquids for replacement of lost body fluids will be encouraged, and methods by which ambient and physiological temperatures will be obtained.

6. Page 3-6, Section 3.3.3, "Biological Hazards": In the section discussing ticks, using a "repellant or an insect containing DEET" is listed as a control measure. We suggest using an insect *repellant* containing DEET is more appropriate. Further, in the first aid sub-section, the employee is directed to save any tick with which he has been bitten. The value of trying to save the tick is questionable since the increased handling will also increase the potential for disease transmission if the tick is infected. During all times when ticks are anticipated, we recommend OHM personnel buddy-up and routinely check each other for ticks every few hours or as frequently as possible. After returning indoors and removing clothing, instruct employees to check their bodies very carefully, paying particular attention to the warm, moist areas, for ticks.

7. Page 3-8, Section 3.4, "Task-Specific Risk Assessment":

a. Several of these assessments list high noise levels as a potential hazard. The plan does not address how noise levels will be measured.

b. High ambient temperatures are also frequently listed as potential hazards. The control for this hazard is to monitor in accordance with OHM Health and Safety Procedures Manual. We recommend that pertinent information from the OHM Manual be made part of the HASP or that it is available, on-site, for ready reference.

c. Some of the risk assessments are not called the same thing as the activities listed in the "Scope of Work" in section 1.2. An example of this are the assessments called "Surface Water Management Procedures" and "Water Treatment Operations." No tasks in the scope of work relate to these assignments. Recommend revising the document so that similar terminology is used throughout and that the activity hazard analysis items reflect the scope of work activities.

8. Page 5-1, Section 5.1, "Anticipated Protection Levels":
 - a. Hearing protectors are not included as necessary PPE equipment.
 - b. For the "Test Pit Excavation" task, Levels C/B are cited as the PPE level(s). However, in the "Comments/Modifications" column, direction is given to upgrade to a Level C under certain circumstances. Review and revise to provide consistent information.
 - c. In the section dealing with CRZ workers, Level D is cited as the required PPE level. Some tasks require workers to use Level B PPE. We recommend that personnel assigned to support functions in the CRZ be required to employ, at the minimum, Level C PPE especially during the time when other workers will be wearing Level B PPE.
9. Page 5-3, Section 5.2.5, "Level A": Level A PPE has not been mentioned as a requirement for this site. Unless it is anticipated, recommend deleting this section to make the HASP as site-specific as possible.
10. Page 5-3, Section 5.3, "Supplied-Air Respirators": Describe the source of the air for the airline respirator. Include where it will be located.
11. Page 5-3, Section 5.5, "Air-Purifying Respirators: MSA "Ultra-Twin" air purifying respirators are specified in this section. It is unlikely that all employees will be able to be successfully fitted to a single type of respirator. Recommend revising this section to allow for individual fitting variation.
12. Page 5-5, Section 5.14 "Site-Specific Respiratory Protection Program": The second sentence states, "The primary objective of respiratory protection is to prevent atmospheric contamination." This is generally not the purpose of a respiratory protection program. Review and revise as necessary.
13. Page 6-1, Section 6.1, "Personnel Decontamination": It appears that OHM personnel will be wearing four pairs of gloves. Recommend review of decontamination procedures and revision of this section as necessary.
14. Page 6-1, Section 6.2, "Equipment Decontamination": No hazard analysis provided for this task. Provide and incorporate in appropriate section.
15. Page 7-1, Section, 7.0, "Air Monitoring": Nothing in this section describes personal sampling that is used to document employee exposure levels and to determine the adequacy of PPE. Include a monitoring schedule and where the monitoring will occur.
16. Page 7-1, Section 7.2, "Photoionization Detector (PID)": The eV potential of the lamp to be employed is not given. Also, monitoring should be performed at the start of work,

periodically and whenever conditions or work change occurs. The instrument is to be calibrated before and after each period of use.

17. Page Section 7.3, "Portable Total Dust Monitor": Review the instruction manual for the Mini-Ram Model PDM-3 to determine a calibration method and the recommended zeroing frequency. Recommend the instrument is zeroed before and after each period of use.

18. Page 7-2, Section 7.4, "Air Monitoring Log": The air monitoring log should contain information on weather conditions, date and time the sample was taken, and be signed by the person taking the sample.

19. Page 8-1, Section 8.1, "Pre-Emergency Planning":

a. Include a map showing the route to the nearest medical facility in the finalized version of this HASP.

b. Prior to the start of work coordinate with the medical facility to determine their capabilities in dealing with hazardous material emergencies.

c. Include the method that will be used to contact off-site (off-base) emergency assistance.

d. Since OHM employees are expected to respond to emergencies, describe the additional training they will receive to safely perform in this capacity.

e. There is no indication that a procedure exists to rehearse the plan as part of the training program.

f. Phone numbers for the Agency for Toxic Substances and Disease Registry (ATSDR), a recognized authority for emergency response was not included. Verify all phone numbers prior to start of work.

g. Coordinate with the Navy On-Scene Commander/Coordinator (NOSCDR/NOSC) as well as the Local Emergency Planning Committee (LEPC) prior to the start of work. Include phone numbers for the NOSC/NOSCDR.

20. Page 8-9, Section 8.6.3, "Emergency Response Equipment": Reference is made to the Site Safety Officer or other specially trained personnel as required to provide first aid in an emergency situation. We recommend a minimum of two employees trained and certified in first aid/CPR on-site at all times. A blood-borne pathogen program, in accordance with 29 CFR 1910.1030, needs to be developed and included for these employees. The eyewash/safety showers must conform to ANSI Z358.1.

21. Page 8-10, Section 8.6.4, "Personal Protective Equipment": This section states that emergency response personnel will also be provided with protective clothing as warranted. Include information on the training and medical clearance that is necessary for the response personnel prior to utilizing this type of PPE.
22. Page 9-1, Section 9.0, "Training Requirements": No provision is made for the required supervised field work of employees. No information pertaining to qualifications and training status of heavy equipment operators is included. Define the term "HSO." This person has not been previously identified.
23. Page 10-1, Section 10.0, "Medical Surveillance Program": Reference (b) requires that a board-certified occupational medicine physician be involved with the medical surveillance program and that the contents of the program are to be determined by the occupational medicine physician. There is no indication that this has occurred for this site.
24. Appendix C, "MSDS List": MSDSs in this appendix do not match the chemicals listed in Table 3.1. No sheet is provided for petroleum distillates or for chlordane. Sheets are given for arsenic trioxide, barium chloride, chromic acid, dichloroethylene, lead monoxide, zinc sulfate and trichloroethylene. These all differ from the chemicals listed in Table 3.1. Recommend reviewing site background information and revising the plan to include consistent information.
25. Appendix E, Procedure 24, "Confined Space Entry": Paragraph 2 refers to "proposed" OSHA criteria in 29 CFR 1910.146. This now is required criteria vice proposed.
26. Appendix F, Procedure 30, "High Pressure Washers": No provisions for the use of respiratory protective devices or for containment and disposal of wash waters are made in this appendix.