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DEPARTMENT OF THE NAVY
NAVY ENVIRONMENTAL HEALTH CENTER
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NORFOLK, VIRGINIA 23513-2617

Investigation on ATSDR file for this type info.

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1 SEP '93

From: Commanding Officer, Navy Environmental Health Center

Subj: MEDICAL DEPARTMENT SUPPORT OF THE INSTALLATION RESTORATION PROGRAM

Ref: (a) COMNAVFACENGCOM/CHBUMED APOW (1993)

Encl: (1) Navy Environmental Health Center Health and Safety Plan Review Checklist
(2) Health and Safety Plan Field Review Checklist

1. Per reference (a), the Navy Environmental Health Center is tasked to provide medical support to the Installation Restoration (IR) Program. Part of that support includes a requirement to review Health and Safety Plans (HASPs). A copy of our Health and Safety Plan Review Checklist is forwarded as enclosure (1). This draft checklist represents the minimum standard to which we compare all HASPs. My staff and I take pride in maintaining a high standard of review and are determined to provide timely, technically accurate support services to all Navy Facilities Engineering Command (NAVFACENGCOM) Field Divisions (EFDs)/ Engineering Field Activities (EFAs).

2. Review of the HASP document is only the first step. The second, and more important, aspect is to ascertain the degree to which the contractor is implementing the HASP. The degree of implementation requires on-site review and evaluation. My staff is prepared to provide a critical review of contractor implementation efforts from the perspective of the medical department. Enclosure (2) contains the criteria by which we propose to support on-site EFD/EFA review of contractor efforts once the remediation phase has begun. My plan would be to have my Site Support Department staff accompany and report directly to the Resident Officer In Charge of Construction on items that are identified as deficient in the field checklists.

3. As a member of the NAVFACENGCOM IR team, my staff and I would appreciate the opportunity to assist you in your efforts to review the contractors' safety and health programs. These services are available at no additional cost and would include not only a review of the initial HASP, but a review of the degree to which the contractor has implemented the HASP once the remediation project begins. Comments and questions pertaining to either of the enclosures is strongly encouraged.

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Subj: MEDICAL DEPARTMENT SUPPORT OF THE INSTALLATION RESTORATION PROGRAM

4. If you have any questions or comments, please call Commander H. D. Kennedy, Jr., MSC, USN, Special Projects Officer, at (804) 444-7575, extension 434 or DSN 654-7575 extension 434.

W. P. THOMAS
Acting

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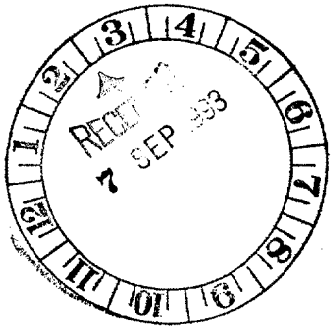

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HEALTH & SAFETY PLAN REVIEW

The following information should be included in the site specific health & safety plan (HASP). References are provided from OSHA and the Navy/Marine Corps IR Manual.

1. Names of key personnel and health and safety personnel.
1910.120(b)(2).

a. Are key personnel identified in the HASP? Comment:	Yes	No
b. Are health and safety personnel, including alternates identified in the HASP? Comment:	Yes	No

2. Has a site specific safety & health risk analysis been accomplished for each site task and operation found in the workplan?
1910.120(b)(4)(ii)(A)

a. Does the HASP address methods to deal with potential safety problems on the site? Comment:	Yes	No
b. Has an adequate risk analysis for each site task and operation been provided? Comment:	Yes	No
c. Does the risk analysis include as a minimum: Chemical contaminants Affected media Concentrations Potential routes of exposure Associated health effects Comment:	Yes	No
d. Are appropriate levels of PPE identified for each site task and operation? Comment:	Yes	No

3. Employee Training
1910.120(b)(4)(ii)(B) (note this paragraph refers to specific requirements found in 1910.120(e).

a. Does the HASP indicate that all on-site employees meet appropriate training requirements? Regulatory Reference: Certificates are to be provided per 1910.120(e)(6) and 11.13. Comment:	Yes	No
b. Have all on-site employees received initial 40-hour training and certificates either provided or provisions for the certificates being provided on-site? Regulatory Reference: 1910.120(e)(3), 11.6.1 Comment:	Yes	No

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c. Do all supervisory personnel have 8-hour supervisory training and are certificates either provided or provisions for the certificates being provided on-site? Regulatory Reference: .120(e)(4), 11.6.1 Comment:	Yes	No
d. Do all employees working on-site have a minimum of three days actual field experience under the direction of a skilled supervisor and is provisions made for it being available on-site? Regulatory Reference: .120(e)(3)(i), 11.6.1 Comment:	Yes	No
e. Is refresher training current and are certificates provided or provisions made for the certificates to be provided on-site? Regulatory Reference: .120(e)(8), 11.6.1 Comment:	Yes	No
f. Have employees been trained to recognize the symptoms and signs of over-exposure to chemical hazards? Regulatory Reference: .120(e)(8) Comment:	Yes	No
g. Have employees been trained in First Aid/CPR as necessary? Regulatory Reference: 1956.50(e) Comment:	Yes	No
h. Have any chemical/physical/toxicological properties of each substance been identified and communicated to the employee? Regulatory Reference: .120(e)(8) Comment:	Yes	No

4. Personnel Protective Equipment
1910.120(b)(4)(ii)(C) - refers to more specific requirements found in 1910.120(g)(5). Also, IR Manual 12.8
A written program must address the following:

a. Has the PPE been selected based upon the site hazards? Regulatory Reference: .120(g)(5)(i), 12.8.1 Comment:	Yes	No
b. Has the use and limitations of the PPE been described? Regulatory Reference: .120(g)(5)(ii), 12.8.3 Comment:	Yes	No

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c. Has the work mission duration been described? Regulatory Reference: .120(g)(5)(iii), 12.8.3 Comment:	Yes	No
d. Have decontamination and disposal procedures been established? Regulatory Reference: .120(g)(5)(iv), .120(g)(5)(v), 12.8.3 Comment:	Yes	No
e. Have employees been properly fitted with the PPE and trained in its use? Regulatory Reference: .120(g)(5)(vi), 11.6.2, 12.8.3 Comment:	Yes	No
f. Have employees been trained in proper donning and doffing procedures? Regulatory Reference: .120(g)(5)(vii), 12.8.3 Comment:	Yes	No
g. Have inspection procedures been established? Regulatory Reference: .120(g)(5)(viii), 12.8.3 Comment:	Yes	No
h. Are procedures established to monitor the effectiveness of the PPE program? Regulatory Reference: .120(g)(5)(ix), 12.8.3 Comment:	Yes	No
i. Are provisions for limitations of use of the PPE in temperature extremes and for heat stress described? Are other appropriate medical considerations included? Regulatory Reference: .120(g)(5)(x), 12.8.3 Comment:	Yes	No

5. Medical Surveillance

1910.120(b)(4)(ii)(D), this refers to specific requirements found in .120(f). Also, IR Manual 12.6

The HASP must include site specific medical monitoring provisions. This should include respirator clearance exams as well as other specific tests specified by the examining physician after he/she reviews the site specific information.

a. Has site specific medical surveillance requirements been included in the HASP? Has all necessary information been provided to the physician? Regulatory Reference: .120(f)(5), 12.6.5 Comment:	Yes	No

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b. Was the examination performed by or under the supervision of a certified occupational medicine physician? Regulatory Reference: 12.6.4 Comments:		

6. Air Monitoring
1910.120(b)(4)(ii)(E) - refers to more specific comments found in 120.(h), also IR Manual 12.7

a. Does the HASP include the frequency and types of air monitoring? Regulatory Reference: .120(b)(4)(ii)(E), (h)(3), 12.7 Comment:	Yes	No
b. Does the HASP describe methods for personal monitoring? Regulatory Reference: 120.(b)(4)(ii)(E) Comment:	Yes	No
c. Does the HASP describe environmental sampling? Regulatory Reference: 120.(b)(4)(ii)(E) Comment:	Yes	No
d. Are the various types of instrumentation for site sampling described as well as methods for maintenance and calibration? Regulatory Reference: 120.(b)(4)(ii)(E) Comment:	Yes	No

7. Site Control
1910.120 (b)(4)(ii)(F) - refers to specific requirements found in *1910.120(D)*
The following items must be contained in the site control section of the HASP:

a. Is a site description and map provided to include size, location, etc.? Regulatory Reference: .120(d)(3) Comment:	Yes	No
b. Have site work zones been established? Regulatory Reference: .120(d)(3) Comment:	Yes	No
c. Is the use of the "buddy system" established? Regulatory Reference: .120(d)(3) Comment:	Yes	No

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d. Have type(s) of site communications, including alerting means for emergencies, been described? Regulatory Reference: .120(d)(3) Comment:	Yes	No
e. Are safe operating procedures or safe work practices described? Regulatory Reference: .120(d)(3), see 12.5 for specific SOPs Comment:	Yes	No
f. Has the nearest medical assistance source been described? Regulatory Reference: .120(d)(3) Comment:	Yes	No

8. Emergency Response Plan
1910.120(b)(4)(ii)(H) refers to specific requirements found in .120(l)
The plan should provide sufficient detail to ensure prompt, safe mitigation of potential site emergencies. The plan should indicate how emergencies would be handled at the site and how the risks with a response would be minimized. Specific Department of the Navy arrangements should be explicitly stated; in particular, any involvement with the Navy Medical Department should be identified.
Emergency telephone numbers listed in the plan should be verified by the reviewer.

a. Has pre-emergency planning been completed? State/Local/Local Emer Planning Committee NOSC/NOSCDR Hazardous Materials Team Medical Treatment Facility Ambulance Navy Medical Department Medical Treatment Facility Ambulance Regional Poison Control Center Agency for Toxic Substances & Disease Registry Other Regulatory Reference: .120(l)(2)(i), 12.9.2, 12.9.3, 12.9.5 Comment:	Yes	No
b. Have personnel roles, lines of authority and communications been established? Regulatory Reference: .120(l)(2)(ii), 12.9.2 Comment:	Yes	No
c. Is emergency recognition and prevention discussed? Regulatory Reference: .120(l)(2)(iii), 12.9.2 Comment:	Yes	No
d. Have safe distances and places of refuge been described by specific maps and written descriptions for each site? Regulatory Reference: .120(l)(2)(iv), 12.9.2 Comment:	Yes	No

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e. Have site security and control measures been described? Regulatory Reference: .120(l)(2)(v), 12.9.2 Comment:	Yes	No
f. Have evacuation routes and procedures been described by specific maps and written descriptions for each site? Does this include the route to the MTF? Regulatory Reference: .120(l)(2)(vi), 12.9.2, 12.9.5 Comment:	Yes	No
g. Are decontamination measures, not discussed elsewhere in the HASP, described? Is the priority for field decontamination vice emergent medical assistance discussed? Regulatory Reference: .120(l)(2)(vii), 12.9.2 Comment:	Yes	No
h. Have provisions for emergency medical treatment and first aid been established? Who is providing the assistance? Civilian MTF? Civilian Ambulance? Navy MTF? Navy Ambulance? Are these facilities equipped and trained? Regulatory Reference: .120(l)(2)(viii), 12.9.2, 12.9.3, 12.9.5 Comment:	Yes	No
i. Has information on the chemical hazard(s) been provided to the MTF/ambulance personnel? Regulatory Reference: 12.9.2, 12.9.3, 12.9.5 Comment:	Yes	No
j. Has emergency alerting and response procedures established? Regulatory Reference: .120(l)(2)(ix), 12.9.2, 12.9.5 Comment:	Yes	No
k. Are the telephone numbers listed for emergency response correct? Regulatory Reference: .120(l)(2)(ix), 12.9.3, 12.9.5 Comment:	Yes	No
l. Are the site topography, layout, and prevailing weather conditions described? Regulatory Reference: .120(l)(3)(i)(A), 12.9.3 Comment:	Yes CLW	No

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m. Are PPE and emergency equipment provided and their location clearly indicated? Regulatory Reference: .120(l)(2)(xi), 12.9.2, 12.9.5 Comment:	Yes	No
n. Are procedures to report incidents to Local, State, Navy, and other authorities listed? Regulatory Reference: .120(l)(3)(i)(B), 12.9.3 Comment:	Yes	No
o. Are procedures to rehearse the plan included? Regulatory Reference: .120(l)(3)(iv), 12.9.3 Comment:	Yes	No
p. Are procedures to review and update the plan included? Regulatory Reference: .120(l)(3)(v), 12.9.3 Comment:	Yes	No
q. Are procedures to evaluate and critique emergency response and follow-up included? Regulatory Reference: .120(l)(2)(x), 12.9.3 Comment:	Yes	No

9. Confined Space Entry Procedures
1910.120(b)(4)(ii)(I), 12.3.1
If these are required, they must be in accordance with 1910.120(j)(9).

10. Spill Containment Program
1910.120(b)(4)(ii)(J) refers to specific requirements in 1910.120(j), 12.3.m
Elements to be potentially addressed include:

- Drum and container handling
- Opening of drums and containers
- Material handling equipment
- Radioactive wastes
- Shock sensitive wastes
- Laboratory waste packs
- Sampling of drum and container contents
- Shipping and transport of drums and containers
- Appropriate procedures for tank and vault entry

Does the HASP contain a section discussing site specific spill containment procedures? Comment:	Yes	No

11. Decontamination Procedures
1910.120(k), 12.8.3
Decontamination procedures should be chosen based on site specific contaminants.

a. Does the HASP contain site specific decontamination methods for personnel and for equipment? Regulatory Reference: .120(k)(2)(i) and .120(k)(2)(ii) Comment:	Yes	No

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b. Are the decontamination methods appropriate for the site conditions and contaminants? Regulatory Reference: .120(k)(i) Comment:	Yes	No
c. Are decontamination methods monitored by the site safety and health supervisor to determine their effectiveness? Regulatory Reference: .120(k)(iv) Comment:	Yes	No

12. Other requirements:

a. Have provisions been made for pre-entry briefings? Regulatory Reference: 12.3 Comment:	Yes	No
b. Are inspections of the job site conducted? Regulatory Reference: 12.3 Comment:		
c. Is the plan periodically reviewed? Regulatory Reference: 12.3 Comment:		
d. Have all known contaminants been identified? Is a PEL, AL or TLV listed for each? (AL = 1/2 PEL or TLV)? Does the plan state what action will occur if the AL is reached? Regulatory Reference: 12.3 Comment:		
e. Is a provision made for daily situational meetings to be held before and after work? Regulatory Reference: 12.9.1 Comment:		

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f. For site characterizations, have the requirements of 1910.120(c)(4) been obtained?		
Location and approximate size of the site.		
Description of the response activity and/or the job task to be performed.		
Duration of the planned employee activity.		
Site topography and accessibility by air and roads.		
Pathways for hazardous substance dispersion.		
Present status and capabilities of emergency response teams that would provide assistance to hazardous waste clean-up site employees at the time of an emergency.		
Hazardous substances and health hazards involved or expected at the site and their chemical and physical properties.		

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13. Summary:

Is the plan site specific?	Yes	No
Is the plan understandable and functional?	Yes	No
Does the plan use consistent terminology?	Yes	No
Does the plan include Navy unique aspects?	Yes	No
Is the plan consistent with 29 CFR 1910.120?	Yes	No

Other Comments:

Required follow-up?	Yes	No
Contact RPM/ROICC?		
Contact local Navy Medical Department?		

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HASP FIELD REVIEW

SITE:_____ **DATE:**_____

1.1 Informational Programs	YES	NO
1.1.1 Are site employees informed about the site emergency response procedures and any potential fire, explosion, health safety or other hazards of the hazardous waste operation that have been identified? [12.3; 1910.120(b)(1)(iv)]		
1.1.2 Is the HASP available on-site for inspection by employees and designated representatives? [12.3.2; 1910.120(b)(4)(i)]		
1.1.3 Have health and safety briefings been held prior to the start of site activities and as necessary to ensure that employees remain appraised of the HASP? [12.3.5, 12.5(b)(1); 1910.120(b)(4)(iii)]		
1.1.4 Are documented inspections of the site being conducted by the site safety and health supervisor or designee to verify compliance with the HASP? [12.3.6; 1910.120(b)(4)(iv)]		
Explain "no" responses:		

1.2 Site Control	YES	NO
1.2.1 Is there a site map in the HASP which identifies safe distances, place(s) of refuge and evacuation routes? [12.5.b.7; 1910.120(d)(3)]		
1.2.2 Are site work zones clearly defined on-site (e.g. barrier guards, tape or other appropriate methods)? [1910.120(d)(3)]		
1.2.3 Are on-site communications systems such as walkie talkies or air horns available to alert employees in the event of a site evacuation (depending on site conditions)? [12.5.b.8; 1910.120(d)(3)]		
1.2.4 Has the route to the nearest comprehensive medical treatment facility been made available to employees? [12.5.b.7;1910.120(b)(3)]		
1.2.5 Is the site perimeter indicated appropriately and labeled with appropriate warning signs? [12.4; 1910.120(b)(4)(ii)(F)]		
Explain "no" responses:		

1.3 Training	YES	NO
1.3.1 Have the employees working on-site been trained appropriately in safety, health and other hazards present on the site? [11.6; 1910.120(e)(1)(i)]		
1.3.2 Is documentation available for all employees working on-site to indicate that they have received appropriate health and safety training? [11.13; 1910.120(e)(6)]		
1.3.3 Is documentation available which meets the on-the job training requirements for employees per 1910.120(e)? [11.3; 1910.120(e)(6)]		
1.3.4 Do on-site managers and supervisors have documentation of additional supervisory training? [11.6.1.b ; 11.13; 1910.120(e)(6)]		
Explain "no" responses:		

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1.4 Engineering Controls, Work Practices, and Personal Protective Equipment (PPE)	YES	NO
1.4.1 Is a written PPE program that meets the elements listed below available for inspection? [12.8.1; 12.8.3; 1910.120(g)(5)] If the answer is no, ask employee(s) these questions and/or observe for the program elements below: a. Are the employees trained regarding on-site hazards? b. Are the employees trained in selection of PPE? c. Are employees trained in the use and limitations of PPE? d. Are the employees informed of the estimated lengths of time for job tasks and estimated time of project duration? e. Do employees store and maintain PPE correctly? f. Do employees know how to decontaminate and dispose of PPE properly? g. Are employees properly fitted for PPE? h. Do employees know how to don and doff PPE? i. Do employees know how to adequately inspect PPE (e.g. inspection of gloves , fully encapsulating suits, etc.) prior to, during and after each use? j. Are employees knowledgeable about the limitations on PPE related to temperature extremes, heat stress and other appropriate medical considerations? k. Is there a system in place to evaluate the effectiveness of the PPE program?		
1.4.2 Is there sufficient PPE available for the personnel involved in the performance of site operations? [12.8.3; 1910.120(g)(3)(i)]		
1.4.3 Is PPE appropriate for the chemical and physical hazards on-site? [12.8.1; 1910.120(g)(3)(ii)]		
1.4.4 Have all employees wearing a respirator been successfully fit tested? [12.8.3; 1910.120(g)(3)(vi)]		
1.4.5 If there are overhead hazards on-site, do employees wear hard hats that meet the requirements of 1910.135? [12.8; 1910.120(g)(3)(i)]		
1.4.6 If heat or cold stress is a concern, are engineering and administrative controls being considered to ensure that appropriate PPE can be worn by employees and still be protective for them? [12.8; 1910.120(g)(5)(x)]		
1.4.7 If radiation is a concern are engineering, administrative and/or PPE selections appropriate for the tasks at hand? [12.8; 1910.120(g)(1)(iv)]		
1.4.8 If 8-hour time weighted average noise measurements indicate that noise levels may be greater than or equal to 85 dBA, are ear muffs or ear plugs worn? [12.8; 1910.120(g)(1)(iv)] NOTE: OPNAV 5100.23 series requires HP at 84 dBA		
1.4.9 If "hot work is occurring on-site the following questions apply: a. Is appropriate combustible gas indicator monitoring being conducted? [12.7; 1910.120(h)(1)(ii); 1910.120(h)(3)(iii)] b. Is the employee wearing task specific protective goggles and fire retardant clothing? [12.3; 1910.120(g)(3)(i)]		
1.4.10 If there are other unique physical hazards (e.g., explosives, deep and /or rapidly moving water) , is other appropriate PPE being worn on-site to address such problems? [12.8; 1910.120(g)(3)(i)]		
Explain "no" responses: CLW 00000023 15		

1.5 Monitoring

	Yes	No
1.5.1 Is air monitoring being conducted to identify and quantify airborne levels of hazardous substances in order to determine appropriate levels of PPE? [12.7; 1910.120(h)(1)(ii)]		
1.5.2 Is air monitoring being conducted first to identify immediately dangerous to life or health situations and other acutely dangerous situations such as presence of flammable atmospheres, oxygen deficient environments, toxic levels of airborne contaminants, and radioactive materials (as appropriate)? [1910.120(h)(2)]		
1.5.3 Is air monitoring being performed any time new work begins on a different portion of the site? [12.7.1.a; 1910.120(h)(3)(i)]		
1.5.4 Is air monitoring being performed any time new contaminants are discovered that differ from those initially encountered? [12.7.1.b; 1910.120(h)(3)(ii)]		
1.5.5 Is air monitoring being performed every time a different operation is initiated? [12.7.1.c; 1910.120(h)(3)(iii)]		
1.5.6 Is air monitoring being performed whenever employees are working in an area with obvious liquid contamination (e.g., spill, lagoon, leaking drums)? [12.7.1.d; 1910.120(h)(3)(iv)]		
1.5.7 Are the employees who are likely to have exposures above the established OSHA PELs participating in a personal air sampling program? [12.7.2; 1910.120(h)(4)]		
1.5.8 Are there maintenance and calibration logs on-site for the air monitoring equipment? [12.3.4.g]		
Explain "no" responses:		

1.6 Handling Drums and Containers

	Yes	No
1.6.3 Are drums or containers handled on-site? If yes, is a fire extinguisher on-site during any drum or container moving operation. [1910.120(j)(1)(xii)]		
1.6.4 Is there a potential for a major spill during transfer of drums or containers? If yes, is there a spill containment program in place to contain and isolate the entire volume of the spill? [12.3.4.m; 1910.120(j)(1)(viii)]		
1.6.5 Is a detection system being used to estimate location and depth of drums and containers on-site prior to excavation? (as appropriate) [1910.120(j)(1)(x)]		
1.6.6 Are employees provided detailed drum and container opening training? [1910.120(j)(2)(i) - (xii)] 1.6.6.1 Are only required personnel present during drum or container openings and are other personnel at a safe distance from the operation? [1910.120(j)(2)(ii)] 1.6.6.2 Does an instructional program for the employees indicate either that drum openings will occur remotely with pressure relief or that an appropriate shield will be placed between employees and the drum or container during opening? [1910.120(j)(2)(iii)] 1.6.6.3 Are workers informed not to stand upon drums, or, work in proximity to drums except when the task requires this? [1910.120(j)(2)(vii);		
1.6.7 Are sampling procedures for drums, tanks, containers, vaults, etc. appropriately documented? [1910.120(j)(7)]		
Explain "no" responses:		

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1.7 Decontamination	Yes	No
1.7.1 Has the decontamination plan been communicated to employees and implemented prior to any employee or equipment entering areas where potential exposure to hazardous substances exists? [12.3.4.j; 1910.120(k)(2)(i)]		
1.7.2 Are standard operating procedures and good work practices being used to minimize employee contact with hazardous substances and with equipment that has contacted hazardous substances? [12.5; 1910.120(k)(2)(ii)]		
1.7.3 Are all employees, clothing and equipment decontaminated properly prior to leaving a contaminated area? [12.5.b.12; 1910.120(k)(2)(iii)]		
1.7.4. Are decontamination areas situated to minimize the potential for contamination of uncontaminated employees or equipment (e.g., is the CRZ located properly)? [1910.120(k)(3)]		
1.7.5 Are all protective clothing and equipment decontaminated, cleaned, laundered, maintained, or replaced as needed to maintain effectiveness? [1910.120(k)(5)(i)]		
1.7.6 Are all equipment and solvents used for decontamination disposed of or decontaminated properly? [1910.120(k)(4)]		
1.7.7 Where decontamination procedures indicate a need for showers and change rooms, are soap, hot and cold water, individual clean towels, and separate storage facilities for street and work clothes available as stated in 1910.141(d)? [1910.120(k)(8)]		
1.7.8 Are unauthorized employees (e.g., administrative and support staff) denied access to decontamination areas, decontamination equipment and change rooms? [1910.120(k)(6)]		
Explain "no" responses:		

1.8 Emergency Response	Yes	No
1.8.1 Are personnel roles, lines of authority and communication among employees evident in the field (e.g., is the person who would be in charge during an emergency incident clearly identifiable)? [12.9.2.b; 1910.120(l)(2)(ii)]		
1.8.2 Are employees able to demonstrate emergency recognition and prevention? [12.9.2.c; 1910.120(l)(2)(iii)]		
1.8.3 Are site security and control measures evident in the field? [12.9.2.e; 1910.120(l)(2)(v)]		
1.8.4 Are employees aware of evacuation routes and procedures (including route to the MTF)? [12.9.2.f; 12.9.5.d; 1910.120(l)(2)(vi)]		
1.8.5 Are employees familiar with emergency decontamination procedures? [12.9.2.g; 12.9.5.g; 1910.120(l)(2)(vii)]		
1.8.6 Are emergency medical treatment and first aid available to employees? [12.9.2.h; 12.9.5.e; 1910.120(l)(2)(viii)]		
1.8.7 Are emergency alerting and response procedures addressed and in evidence in the field? [12.9.2.i; 12.9.3; 1910.120(l)(2)(ix)]		
1.8.8 Is a procedure in place to enable field personnel to critique a response and to provide follow-up actions? [12.9.2.j; 1910.120(l)(2)(x)]		
1.8.9 Are PPE and emergency equipment readily available to employees in the field? [12.9.2.k;1910.120(l)(2)(xi)]		
1.8.10 Are procedures in place for reporting emergencies to the Navy and local, state, and federal governmental agencies? [12.9.3; 1910.120(l)(3)(B)]		
1.8.11 Has the Emergency Response Plan been coordinated with local response agencies and appropriate information provided to the designated receiving medical treatment facility? [12.9.3; 12.9.5; 1910.120(l)(3)(B)(iii)]		
Explain "no" responses:		

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1.9 Medical Surveillance	Yes	No
1.9.1 Is documentation available to indicate that the on-site employees participate in a medical monitoring program that meets the requirements of 1910.120(f)? [12.6.7]		
1.9.2 Are employees provided with written medical opinions from the attending physician? [12.6.6; 1910.120(f)(7)]		
1.9.3 Are employee medical records available to the employee upon request? [12.6.6.d; 1910.120(f)(7)(C)]		
1.9.4 Is documentation available to certify that employees who wear respiratory protection are physically able to wear the respirator? [12.6.1.b; 1910.120(f)(7)(A)]		
Explain "no" responses:		

1.10 Illumination	Yes	No
1.10.1 If site work is anticipated in dimly lighted areas, is additional lighting provided? [1910.120(m)]		
Explain "no" response:		

1.11 Sanitation at Temporary Workplaces	Yes	No
1.11.1 Is potable water labeled as safe for drinking? [1910.120(n)(1)(iii)]		
1.11.2 Are non-potable water sources labeled as unfit for drinking, washing and cooking purposes? [1910.120(n)(2)]		
1.11.3 If there are fewer than 20 employees on-site, is there a minimum of one toilet available? [1910.120(n)(3) Table H-120.2] Note: Mobile work crews with transportation readily available to equivalent toilet facilities are exempt from the requirements of this paragraph)		
1.11.4 If there are greater than 20 employees on-site, have additional toilets and urinals been provided for each additional 40 employees? [1910.120(n)(3)(i) Table H-120.2]		
1.11.5 Is food handled in accordance with local food handling regulations (as appropriate)? [1910.120(n)(4)]		
1.11.6 If temporary sleeping quarters are present, are they heated, ventilated and lighted? [1910.120(n)(5)]		
1.11.7 Are washing facilities away from hazardous substances and are they adequate to permit employees to remove hazardous substances from their bodies? [1910.120(n)(6) & (7) thru (7)(iv)]		
Explain "no" responses:		

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2. Comments/Recommendations: (attach additional sheets as necessary)

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SITE SAMPLING REVIEW

Note: The Site Sampling review is divided into several sections. The first section will always be utilized while the remainder will be utilized as site-specific activities dictate.

1.0 General Procedures:	YES	NO
1.1 Were sampling locations adequately documented in a bound field log book using indelible ink?		
1.2 Were photos taken and a photo log maintained?		
1.3 Were field instruments properly calibrated and a calibration log maintained in a bound field log book?		
1.4 Was sampling equipment properly wrapped and protected from possible contamination prior to sample collection?		
1.5 Was sampling equipment constructed of Teflon, glass, or stainless steel?		
1.6 Were samples collected in proper order? (least suspected contamination to most contaminated?)		
1.7 Were clean disposable latex or vinyl gloves worn during sampling?		
1.8 Were gloves changed for each sample station?		
1.9 Was equipment field cleaned using proper procedures?		
1.10 Were equipment rinse blanks collected after field cleanings?		
1.11 Were proper sample containers used for samples?		
1.12 Were any duplicate samples collected?		
1.13 Were samples properly field preserved?		
1.14 Were preservative blanks utilized?		
1.15 Were field and/or trip blanks utilized?		
1.16 Were samples adequately identified with labels or tags?		
1.17 Were samples sealed with custody seals after collection?		
1.18 Were adequate security measures taken to ensure custody of the samples after they were collected?		
1.19 Were chain-of-custody and receipt for samples properly completed?		
1.20 Were samples shipped to a laboratory properly packed?		
1.21 Was a chain-of-custody notebook maintained?		
1.22 If shipped to a CLP lab, were Traffic Report Forms properly completed?		

COMMENTS:

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Ground Water Sampling

2.0 Ground Water Sampling	YES	NO
2.1 Were sampling wells locked and protected?		
2.2 Were identification marks and measurement points affixed to the wells?		
2.3 Were the boreholes sealed with a concrete pad to prevent surface infiltration?		
2.4 Was there a dedicated pump in the well?		
2.5 Was clean plastic sheeting placed around the wells to prevent contamination of sampling equipment and containers?		
2.6 Were total depths and depths to water determined before purging?		
2.7 *Were measurements made to the nearest 0.01 ft.?*		
2.8 Was the measuring device properly cleaned between wells?		
2.9 Was the standing water volume in each well determined?		
2.10 Was a sufficient volume purged prior to sampling?		
2.11 Was the purged volume measured?		
2.12 Were pH, conductivity and temperature measurements taken and recorded at least once during each well volume purge?		
2.13 If a pump was used to collect the sample, was it properly cleaned before and/or between wells?		
2.14 Did bailers have Teflon coated wire leaders to prevent rope from coming into contact with water?		
2.15 Was a clean bailer and new rope used at each well?		
2.16 Were samples properly transferred from the sampling device to the sample containers? (i.e., purgeable sample first - not aerated, etc.)		
2.17 Was the pH of preserved samples checked to ensure proper preservation?		
2.18 Were samples iced immediately after collection?		
2.19 Were samples taken according to the prior accepted sampling plan?		

COMMENTS:

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Soil Sampling

3.0 Soil Sampling	YES	NO
3.1 Were background and or control samples collected?		
3.2 Were representative samples collected?		
3.3 Were composite samples areal or vertical?		
3.4 Were samples thoroughly mixed prior to putting them into the sample containers and items such as rocks and sticks removed?		
3.5 Were samples properly placed into sample containers with zero head space?		
3.6 Were samples iced immediately after collection?		
3.7 Was a drilling rig, back hoe, etc. used to collect soil samples?		
3.8 Were the drilling rig, backhoe(s), etc., properly cleaned prior to arriving on-site?		
3.9 Was a decontamination area located where the cleaning activities would not cross-contaminate clean and/or drying equipment?		
3.10 Was clean equipment properly wrapped and stored in a clean area?		
3.11 Was the drilling rig(s) properly cleaned between well borings?		
3.12 Were samples taken according to the prior accepted sampling plan?		

COMMENTS:

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Surface Water Samples

4.0 Surface Water Samples	YES	NO
4.1 Were background and/or control samples collected?		
4.2 Were samples collected directly into sample containers?		
4.3 If the sampler waded in the stream to collect the samples, were the samples collected upstream from the sampler?		
4.4 Did the sampler ensure that roiled sediments are not collected along with the water samples?		
4.5 Were representative samples collected?		
4.6 Was the pH of preserved samples checked to ensure proper preservation?		
4.7 Were samples iced immediately after collection?		
4.8 Were samples taken according to the prior accepted sampling plan?		

COMMENTS:

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Waste Sampling

5.0 Waste Sampling (Drums, Tanks, Barrels, etc.)	YES	NO
5.1 Were the drums or tanks sampled according to the sampling plan?		
5.2 Have all instrumentation been used in accordance with the manufacturers instructions (to include calibration and maintenance ?		
5.3 Are all sampling procedures documented within the field logbook?		

COMMENTS:

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Monitoring Well Installation

6.0 Monitoring Well Installation	YES	NO
6.1 Were the wells installed in the proper location according to the sampling plan?		
6.2 Were samples of the drilling mud, water, bentonite pellets, filter pack materials, etc., collected for quality control analysis?		
6.3 Were the drilling rig(s), backhoe(s) etc., properly cleaner prior to arriving on-site?		
6.4 Was the equipment in good condition when it arrived on-site?		
6.5 Was a decontamination area located where the cleaning activities would not cross-contaminate clean and/or drying equipment?		
6.6 Was clean equipment properly wrapped and stored in a clean area?		
6.7 Was the drilling rig(s) properly cleaned between well borings?		
6.8 Were the cleaning and decontamination procedures conducted in accordance with the site sampling plan?		
6.9 Was the drilling method used the same as proposed in the sampling plan?		
6.10 Were soil samples collected for logging and analysis as the wells were installed?		
6.11 If air rotary was used, was an in-line organic air filter or a cyclone velocity dissipator used?		
6.12 Were the wells double cased?		
6.13 Were the type of well casing(s) and screen(s) used the same as proposed in the sampling plan?		
6.14 Was the well casing and the well screen diameters the same as proposed in the sampling plan?		
6.15 Was the length and slot size of the well screen the same as proposed in the sampling plan?		
6.16 Was the well screen commercially manufactured?		
6.17 Was the bottom of the well screen plugged or capped?		
6.18 Were sand and/or gravel (filter) packs installed?		
6.19 Were materials used in 6.18 the same as proposed in the sampling plan?		
6.20 Was a sieve analysis conducted to determine well screen slot size and filter pack grain size?		
6.21 Was the tremie tube method used to place the filter packs?		
6.22 Was the vertical thickness of the seal a minimum of two feet?		
6.23 Is documentation available from the manufacturer stating recommended hydration time?		
6.24 Was the tremie tube method used to place the bentonite pellets?		
6.25 Was the annulus grouted from the seal to within two feet of the ground surface or below the frost line?		
6.26 Was the type of grout used to seal the annulus the same as proposed in the sampling plan?		
6.27 Was the grout mix ratio and density the same as proposed in the work plan?		
6.28 Was the grout allowed to set a minimum of 24 hours before the surface pad was installed?		
6.29 Was a concrete surface pad installed with an outer protective casing and locking cap?		
6.30 Was the concrete pad constructed in accordance with the sampling plan?		
6.31 Did the well casings extend to a minimum of 2.5 feet above the ground surface?		

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	YES	NO
6.32 Did the outer protective casings have weep holes?		
6.33 Were the wells properly developed?		
6.34 Were the wells constructed IAW the prior accepted sampling plan?		

COMMENTS:

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