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FINAL

HEALTH AND SAFETY PLAN

FOR SITE INSPECTIONS
AT
SITES 3, 7, 43, 44, 54, 63, 65, 80, AND 82

CAMP LEJEUNE MILITARY RESERVATION
JACKSONVILLE, NORTH CAROLINA

AUGUST 1991

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B INCIDENT REPORT
C OSHA POSTER
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E EMERGENCY PHYSICIAN ACCESS PLAN

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1.0 BACKGROUND

Site Name: Camp Lejeune Military Reservation

Address: Onslow County, North Carolina

Client Contact: Ms. Laurie Boucher — Phone No.: (804) 445-1814

Base Contacts: Ms. Stephany Del Re' Johnson — Phone No.: (919) 451-5094

Other Contacts: _____ — Phone No.: _____

_____ — Phone No.: _____

Date Plan Requested: October 29, 1990

Purpose of Site Visit: Drill soil borings, install groundwater monitoring wells, and obtain soil, groundwater, surface water, and sediment samples.

Proposed Dates of Work: Begin June 10, 1991 and last for approximately 4 weeks

Proposed Site Investigation Team:

NUS Personnel:	Discipline/Tasks Assigned:
Andrew Kendrick	Field Operation Leader
TBA	Sampler/Site Safety Officer (SSO)

Other	Purpose:
Daryl Hutson	Project Manager
Alan Margraf	Health and Safety Officer (HSO)
Matt Soltis	Office Health and Safety Supervisor (OHSS)

Plan Preparation:

Prepared by: Alan B. Margraf (11/21/90)

Reviewed and Approved by: _____ (__/__/__)

Reviewed:

NUS Project Manager: _____

Follow Up Report:

Responsible Person: Andrew Kendrick

(Must fill out Follow-up Report)

2.0 FACILITY DESCRIPTION

Camp Lejeune covers approximately 170 square miles and is bounded to the southeast by the Atlantic Ocean, to the west by U.S. 17 and to the northwest by State Road 24. The base is bisected by the New River estuary which occupies approximately 30 square miles.

2.1 PRINCIPAL DISPOSAL METHOD

As a results of Marine operations and activities, substantial quantities of waste that contain hazardous and toxic organic and inorganic compounds have been generated at the base. This has resulted in the storage, disposal, and/or spillage of these wastes within base boundaries.

For example, Site 54, the Crash Crew Burn Pit, is believed to have been used in the mid-1950s for crash crew training. Contaminated fuels and waste fuels were used in the training exercises. Originally,the training was conducted on the ground surface with the area surrounded by a berm. Later a burn pit was used which was lined in approximately 1975.

Some of the other sites on the military reservation which are included in this study are suspected to have had similar disposal practices.

2.2 HISTORY

Previous investigations of hazardous waste sites at the Camp Lejeune Military Reservation, which include Marine Corps Base (MCB), Camp Lejeune and Marine Corps Air Station (MCAS), New River, have been conducted under a confirmation study, Phase 2 of the NACIP Program. As a result of the Superfund Amendment and Reauthorization Act of 1986 (SARA), the Navy has changed its program to follow EPA requirements for the Superfund program. An initial assessment Study (IAS) was performed during the NACIP Program. This Installation Restoration (IR) Program is a continuation of this study and will determine whether each site investigated requires a Remedial Investigation/Feasibility Study (RI/FS).

3.0 SCOPE OF WORK

The Scope of Work involves site investigations at nine (9) sites on the military reservation. These sites require site inspections to determine whether the site requires a Remedial Investigation/Feasibility Study or no further action.

Site inspections shall include the installation of monitoring wells, collection of soil samples, groundwater samples, surface water and sediment samples, and performance of soil borings. For a summary of the work to be performed at each site, number and depth of wells, parameters of sampling analysis, etc., see Table 3-1 (Remedial Investigation Scope Outline).

TABLE 3-1

CAMP LEJEUNE SITE ASSESSMENT
RI SCOPE OUTLINE

No.	Site Name	Wells	SW/SED Samples	Borings (15-Foot)	Required Analysis	Comments
IAS 7	Tarawa Terrace Dump	3 @ 25'	NA	5	TCL Organics TCL Inorganics	Use Heliflux
IAS 63	Verona Loop Dump	3 @ 25'	2	6	TCL Organics TCL Inorganics Cyanide	Use Heliflux
IAS 54	Crash Crew Burn Pit	1 @ 25'	5	2	TCL Inorganics, Cyanide, PCBs, Hexavalent Chromium, TPH, BTEX	Resample 2 existing wells
NEW 82	Piney Green Road Voc	3 @ 25'	6	6	VOA, Pesticides, PCBs	Use Heliflux Resample 2 existing wells
NEW 80	Paradise Point Golf	3 @ 25'	5	4	Pesticides, VOA, PCB, TPH, Herbicides	Use Heliflux
IAS 3	Old Creosote Plant	3 @ 25'	2 (sed. only)	5 (5 feet only)	Acid, Base Extractables	Subsurface soil samples in pile; five 5-foot borings;
IAS 43	Agan Street Dump	3 @ 25'	5	5	TCL Organics TCL Inorganics Cyanide	Use Heliflux
IAS 44	Jones Street Dump	3 @ 25'	2	6	TCL Organics TCL Inorganics Cyanide	Use Heliflux
NEW 65	Engineer Area Dump	3 @ 25'	3	5	TCL Organics TCL Inorganics Cyanide	Use Heliflux
	Background Samples		3		TCL Inorganics	3 different locations

4.0 RISK ANALYSIS FOR EACH SITE

4.1 SITE DESCRIPTIONS/CHEMICALS PRESENT

Based on analytical data from previous studies including other data obtained regarding past and present operations, the nature of materials used/dumped at each site, the following hazard assessment for each site location has been established.

4.1.1 Site 7: Tarawa Terrace Dump

The Tarawa Terrace Dump was primarily a construction dump containing construction debris, STP filters, sand, and household trash. The dump is about 3 acres in size and was closed in 1972. It is believed that no hazardous waste was ever dumped in this area, therefore, minimal exposure potential is expected.

4.1.3 Site 63: Verona Loop Dump

The Verona Loop Dump was a disposal site for wastes generated during bivouac exercises. Since the area was restricted due to war games, no hazardous waste was dumped on this site. Exposure to hazardous substances during the investigation on this site is not expected.

4.1.3 Site 54: Crash Crew Fire Training Burn Pit at Air Station

The Crash Crew Burn Pit is a 1.5-acre site within MCAS, New River. This area of concern is believed to have been used in the mid-1950s for crash crew training. Contaminated fuels (principally JP-type and possibly leaded fuels) and waste solvents were used in training exercises. Originally the training was conducted on the ground surface with a berm around the perimeter. A lined, burn pit was built in 1975.

Analytical data from the 1984,1986, and 1987 sampling efforts show evidence of total chromium, hexavalent chromium, oil and grease, lead, and phenols at low levels in the groundwater. Surface water samples detected chromium, oil and grease, phenols, and lead. Soil samples indicatedwaste petroleum, oil, and lubricants (POL). The data is located in Section 5.0 of the Work Plan.

4.1.4 Site 82: Piney Green Road

No previous study was conducted for this site, however, contaminants from Site 6 may be used as the "contaminants of concern," as migration of the materials from Site 6 is a possibility.

Site 6 was and still is used to store hazardous materials. DDT is reported to have been disposed of at Lot 203 when it served as a waste disposal area in the 1940s. Transformers containing PCBs have also been stored in the area, although no spills or leaks of PCBs have been reported.

It is reasonable to assume that pesticides (DDT) could be encountered, although this is not expected. PCBs may also be present, however, the chance of this is very slight since no reports of spills were recorded.

4.1.5 Site 80: Paradise Point Golf

No previous study was conducted for this site, therefore, the nature of past operations and the materials used will serve as the basis for the hazard assessment.

The major concerns associated with this site are spills and leaks of materials in and around the machine shop, which serviced golf carts, and the storage of pesticides and herbicides in various areas of the site. The extent of contamination is expected to be minimal since spills and leaks from containers would have been the primary means of contaminating the area, along with fuel and oil spills from work relating to the machine shop.

4.1.6 Site 3: Old Creosote Plant

This site was primarily used as a construction dump. It contains boards, trash, wastewater treatment process (WTP), sludge, and fiberglass. The IAS study shows no evidence of hazardous materials; only inert materials were indicated.

4.1.7 Site 43: Agan Street Dump

The Agan Street Dump was a waste disposal area for general debris, trash, fiberglass, and wastewater treatment plant sludge. It is believed that no hazardous waste was disposed of in this area; therefore, minimal exposure is expected.

4.1.8 Site 44: Jones Street Dump

This site, used in the 1950s, was a waste disposal area for general debris, cloth, boards, and old paint cans. Although minor quantities of potentially hazardous wastes were disposed of in this area, the extent of contamination is expected to be minimal.

4.1.9 Site 65: Engineer Area Dump

This dump was used as a burn dump for construction debris from pre-1958 to 1972. The site is 4 to 5 acres in size. It is believed that POL (petroleum, oil, lubricants) waste and battery acid waste was also dumped on this site at one point in time. Potential exposure to these wastes is possible and, therefore, will be controlled through the use of PPE and respiratory protection(if needed).

4.2 CHEMICAL HAZARDS

The primary hazards associated with this investigation include potential exposure to site contaminants via direct skin and/or eye contact with potentially corrosive waste material from battery waste (Site 65); skin contact with other site contaminants such as petroleum products, solvents, PCBs, etc.; inhalation of vapors and/or acid gases from volatilizing site contaminants; inhalation/ingestion of various metals, lead, PCBs, and other contaminants via suspended particulates.

For methods of detection, action levels, and control of health hazards see Section 5.0 of this HASP. For a description of PPE requirements for each site see Section 6.0 of this HASP.

4.3 CHARACTERISTICS OF WASTE

Corrosive	X	Flammable	X	Radioactive			
Toxic	X	Volatile	X	Reactive		Inert	X

4.4 PHYSICAL HAZARDS OF SITE

Aside from the hazards presented by chemical substances, physical hazards must also be addressed. Some of the physical hazards which could be encountered are as follows:

- Contact with electrically energized sources.
- Exposure to moving machinery during coring/drilling activities.
- Exposure to noise in excess of 85 dBA.

- Falls from elevated surfaces.
- Heat stress.
- Overhead bump hazards.
- inadequate lighting.

Control measures for these physical hazards are included in Section 10.0, "Standard Work Practices," of this HASP.

4.5 PERSONAL PROTECTION USED ON PREVIOUS SITE VISITS

Level C and Level D protection have both been used within the past year at specific sites for monitoring well sampling, monitoring well (deep) development, surface and subsurface soil sampling, and various other activities. Level C is known to have been worn specifically for activities in the vicinity of Site 22.

TABLE 4-1

MAJOR CONTAMINANTS OF CONCERN

Substance	CAS[3] Number	Sites Contamination is Known to be Present	In Sample (Soil, Water, Air, Waste)	Toxicity			C[1]
				SEL[2]	Route of Exposure	Comments	
Chromium	7440-47-3	54	Water, Soil	0.5 mg/m3[4]	Ingestion Skin or Eye Contact	• Poison by ingestion • Dermatitis	Suspected
Lead	7439-92-1	54, 65	Soil, Water	0.05 mg/m3	Inhalation Ingestion Skin or Eye Contact	• Insomnia • Low weight • Constipation • Abdominal pain • Anemia	Suspected
Phenols	108-95-2	54	Soil, Water	5 ppm[5]	Inhalation Ingestion Absorption Skin or Eye Contact	• Irritant to eyes, nose, throat • Muscle aches • Dark urine • Dermatitis	Suspected
PCBs	11097-69-1	82	Unknown	0.001 mg/m3	Inhalation Absorption Ingestion Skin or Eye Contact	• Irritating to eyes, nose, throat • Dermatitis • Dark urine	Suspected
Creosote	8001-58-9	3	Unknown	0.1 mg/m3	Ingestion	• Moderately toxic by ingestion	No
Pesticides (DDT)	50-29-3	82, 80	Unknown	0.5 mg/m3	Ingestion Skin or Eye Contact	• Poison by ingestion and skin contact	Suspected
Turbine Fuel (JP-4)	Mixture	54	Unknown	10 ppm	Inhalation Absorption	• Irritation to eyes, nose, throat • Dermatitis	No
Sulfuric Acid	7664-93-9	65	Unknown	1.0 mg/m3	Inhalation Ingestion Skin or Eye Contact	• Eyes, nose, throat irritant • Pulmonary edema • Dermatitis	No
Benzene	71-43-2	54	Water	0.32 mg/m3 1.0 ppm	Inhalation Ingestion Skin or Eye Contact Absorption	• Irritating to eyes, nose, throat • Giddy, headache • Nausea, fatigue • Dermatitis	Yes

(1) C: Data indicating potential carcinogenic effects.
(2) SEL: The lowest of the three safe exposure limits (SEL) established by OSHA-PELs, NIOSH-RELs, or ACGIH TLVs.
(3) CAS Number: Chemical Abstract Service Identification Number.
(4) mg/m3: milligrams of substance per cubic meter of air.
(5) ppm: volumes of substance per million volumes of air.

TABLE 4-2

SITE DESCRIPTIONS

Site Number	Site Description	Dates Used	Material Deposited
7	Tarawa Terrace Dump	1972	Construction debris, STP filters, sand, household trash
63	Verona Loop Dump	Unknown	Bivouac waste
54	Crash Crew Burn Pit	1950s-Present	Contaminated fuels, oil spills
82	Piney Green Road VOC	Unknown	DDT, PCBs
80	Paradise Point Golf	Unknown	Pesticides, fuels, oil spills
3	Old Creosote Plant	1951-1952	Trash, general debris
43	Agan Street Dump	Unknown	Boards, trash, WTP sludge, fiberglass
44	Jones Street Dump	1950s	Debris, cloth, boards, old paint cans
65	Engineer Area Dump	Pre-1958-1972	Construction debris, POL, waste battery acid

5.0 AIR MONITORING AND CONTROL OF HEALTH HAZARDS

5.1 AIR MONITORING REQUIREMENTS

The primary method for detecting organic vapors and gases will be a photoionization detector (PID) with a 10.2 eV probe. A combustible gas indicator and oxygen meter will be used to detect potentially flammable and/or oxygen deficient atmospheres during all ground disturbing activities. The meter that will be used for this purpose is the LEL/O_2 meter.

As a means of further controlling employee exposure warning properties and symptoms of over exposure will also be conveyed to all site workers as part of the site specific training. Any site worker conducting soil disturbing activity will be educated in methods of dust control (i.e., wetting down work areas) to prevent exposure to dust and particulates.

5.2 FREQUENCY OF MONITORING

Monitoring with the PID shall be conducted continuously during all drilling operations and periodically as work progresses and when there is potential for atmospheric change within the work area. Monitoring will be initiated at any potential source emissions, then moved to the worker's breathing zone if positive indications are observed at the source. Monitoring with the LEL/O_2 should be conducted within the headspace of samples and boreholes to detect potential flammable conditions.

5.3 AIR MONITORING ACTION LEVELS

All monitoring instrumentation used onsite will be calibrated and maintained in accordance with NUS Health and Safety SOPs. On a daily basis, before site work is to begin, background readings will be obtained for instruments that will be used for the field work. To obtain a background reading, the instrument is operated in a clean environment. The indication observed on the meter is labeled as the initial or background level. From this background level the appropriate action level as described below will be taken.

Level A protection will not be required for the task performed under this HASP. Any sustained readings in the workers breathing zone of 500 ppm or greater will require immediate notification of NUS' Pittsburgh health and safety staff so that the site can be further evaluated.

Atmosphere supplying respiratory protection, SCBA or Air-line, shall be utilized anytime the following actions are observed.

- Anytime positive HNU readings (above measured background levels) are observed in the worker's breathing zone.
- Anytime a worker wearing an APR perceives any odor, irritation, or other discomfort, which would indicate breakthrough of the chemical cartridge.

Full-face air purifying respirators (APR's) equipped with organic vapor/acid gas cartridges with HEPA filters (MSA's GMCH cartridge), shall be used in accordance with the following criteria:

- Anytime an acrid, irritating or pungent odor is perceived.
- Anytime a chloroform, ether, mint or aromatic-like order is perceived.

- Anytime irritation of the eyes, nose, throat or lungs is perceived by one or more of the team.

- Anytime work generates perceptible dust in the worker's breathing zone; unless dust can be controlled by other methods (e.g., wetting down areas of concern).

Action levels while monitoring with the LEL/O_2 meter are as follows:

- If percent oxygen is measured less than 19.5 percent, work must stop and personnel must evacuate the area until oxygen levels stabilize and the situation can be re-evaluated.

- At 10 percent LEL, work shall proceed with caution, monitoring shall become more frequent, and drillers must use spark proof tools.

- At 20 percent LEL in the headspace of a sample or borehole, efforts must be taken to reduce levels before drilling (or any other activity) may continue.

6.0 PERSONAL PROTECTIVE EQUIPMENT (PPE)

6.1 PPE REQUIREMENTS (GENERAL)

All personnel must wear, as a minimum, steel toe/hard sole work boots and side shielded safety glasses while on site. Hard hats must be worn if personnel are within 20 feet of the drill rig and drilling operations and/or if other conditions arise or exist where head protection may be necessary.

All drilling personnel, and all other personnel who could come in contact with waste material, are required to wear, in addition to PPE listed above, standard Tyvek protective coveralls, nitrile outer gloves, latex inner gloves, boot covers, and taped ankle and wrist seams.

Respiratory protection will be worn, if necessary, in accordance with action levels set forth in Section 5.0, Air Monitoring Action Levels.

6.2 PPE REQUIREMENTS FOR EACH SITE

6.2.1 Site 7 - Tarawa Terrace Dump

Suspected Contaminants: Construction debris, household trash

Since this site was a construction dump, the minimal PPE requirements as described in Section 6.1 should provide adequate protection to site personnel. Drillers and sampling personnel should where standard Tyvek protective coveralls while performing tasks where they could come in contact with waste material.

6.2.2 Site 63 - Verona Loop Dump

Suspected Contaminants: Bivouac wastes

Minimal PPE requirements as described in Section 6.1 should provide adequate protection to site personnel.

6.2.3 Site 54 - Crash Crew Burn Pit

Suspected Contaminants: JP fuels, leaded fuels, solvents

In addition to standard PPE requirements during drilling operations, full-face APR's with cartridges identified in Section 5.3 of this HASP shall be utilized if work generates any dust in the worker's breathing zone and if this dust cannot be controlled through other methods (e.g., wetting down areas of concern).

6.2.4 Site 82 - Piney Green Road

Suspected Contaminants: DDT, PCB's

Since the only way this site could have been contaminated is by migration of contaminants from Site 6, the extent of contamination is expected to be minimal if at all. Minimal PPE requirements as described in Section 6.1 along with action levels described in Section 5.0 should provide adequate protection for site personnel.

6.2.5 Site 80 - Paradise Point Golf

Suspected Contaminants: Fuels, pesticides, herbicides

Since this site was never used a a "dump" site, the only possible contaminants could come from spills or leaks from the machine shop which was used in the area or from spills/leaks of pesticides or herbicides which were stored in the area. The extent of contamination is expected to be minimal, therefore, the minimal PPE requirements described in Section 6.1 along with action levels described in Section 5.0 will provide adequate protection for site personnel.

6.2.6 Site 3 - Old Creosote Plant

Suspected Contaminants: Creosote

An earlier inspection of this site did not reveal any indication of creosote or other wastes, therefore, extent of contamination is expected to be minimal. Minimal PPE requirements as described in Section 6.1 should be adequate.

6.2.7 Site 43 - Agan Street Dump

Suspected Contaminants: Construction debris, trash, fiberglass

An earlier study revealed no evidence of hazardous materials; only inert materials were indicated.

Minimal PPE requirements described in Section 6.1 should be adequate.

6.2.8 Site 44 - Jones Street Dump

Suspected Contaminants: General debris, cloth, boards, paint cans

Extent of contamination is expected to be minimal.

Minimal PPE requirements as described in Section 6.1 should provide adequate protection for site personnel.

6.2.9 Site 65 - Engineer Dump Area

Suspected Contaminants: POL waste, battery acid waste, construction debris

Due to the nature of the waste suspected to be present on this site, PVC coveralls will be worn to initiate work by drillers and any other person who may come in contact with waste material. All other PPE requirements as described in Section 6.1 will remain the same. PVC coveralls must be changed immediately if they become saturated and appear to degrade. If any potentially contaminated soils or liquid is contacted during operations a PE coated Tyvek will be worn over top of the PVC coverall.

The HNU will be used to monitor workers breathing zone. The HNU will be the primary monitoring instrument to control employee exposure. As a further means of controlling employee exposure, site personnel should pay special attention to signs and symptoms of exposure for chemicals suspected to be present on this site, along with action levels for respiratory protection e.g., acrid, irritating or pungent odor; irritation of eyes, nose, throat, and other action levels described in Section 5.4 of this HASP. If at anytime workers experience these symptoms they are to immediately stop work and report to the SSO. If any of these symptoms occur outside of the work site personnel should also immediately contact the SSO.

6.3 PPE SELECTION CRITERIA

Safety glasses and work boots were selected as minimum requirements to protect personnel from the physical hazards which could exist on site. Hard hats were selected for use within a 20 foot radius around drilling operations for overhead and bump hazards. Standard Tyvek, boot covers, nitrile outer, latex inner gloves were selected as minimal PPE for most of the sites to protect from exposure by contact with contaminants on the site. PVC coveralls were selected for Site 65 as battery acid waste is suspected to be present. PVC coveralls are not entirely impermeable to the inorganic acids and could begin to degrade after extended contact. To combat this, coveralls will have to be changed immediately after contact with contamination.

7.0 DECONTAMINATION

7.1 PERSONNEL DECONTAMINATION REQUIREMENTS

The decontamination of personnel and their protective clothing shall be performed in three stages. Stage 1 includes removing contamination from reusable protective clothing with a detergent/water solution and soft bristle scrub brushes. Stage 2 shall include removal of protective clothing (disposable items shall be discarded into a container conspicuously marked "Potentially Contaminated Clothing"). Stage 3 shall consist of workers washing hands and face with potable water and soap each time they remove an item of PPE and/or leave the exclusion zone. See Figure 7-1.

All decontamination waste fluids and potentially contaminated PPE shall be contained and handled in accordance with the requirements stipulated by the Base contact.

7.2 DECONTAMINATION OF SAMPLING TOOLS

All sampling equipment that will be leaving the site will require a thorough decontamination. This can be accomplished either by steam cleaning or by a detergent wash and potable water rinse until tools are visibly clean. Decontamination of sampling tools to prevent cross contamination of samples shall be performed in accordance with regional protocol. Waste fluids generated through decontamination shall be handled as described in Section 7.1, above.

7.3 CORING/DRILLING EQUIPMENT DECONTAMINATION

Coring/drilling equipment will be thoroughly decontaminated as necessary to remove detectable contamination utilizing a method stipulated by the NUS subcontractor that will not damage the equipment. All decontamination fluids shall be contained and handled as in Section 7.1.

7.4 PPE REQUIREMENTS FOR DECON OPERATIONS

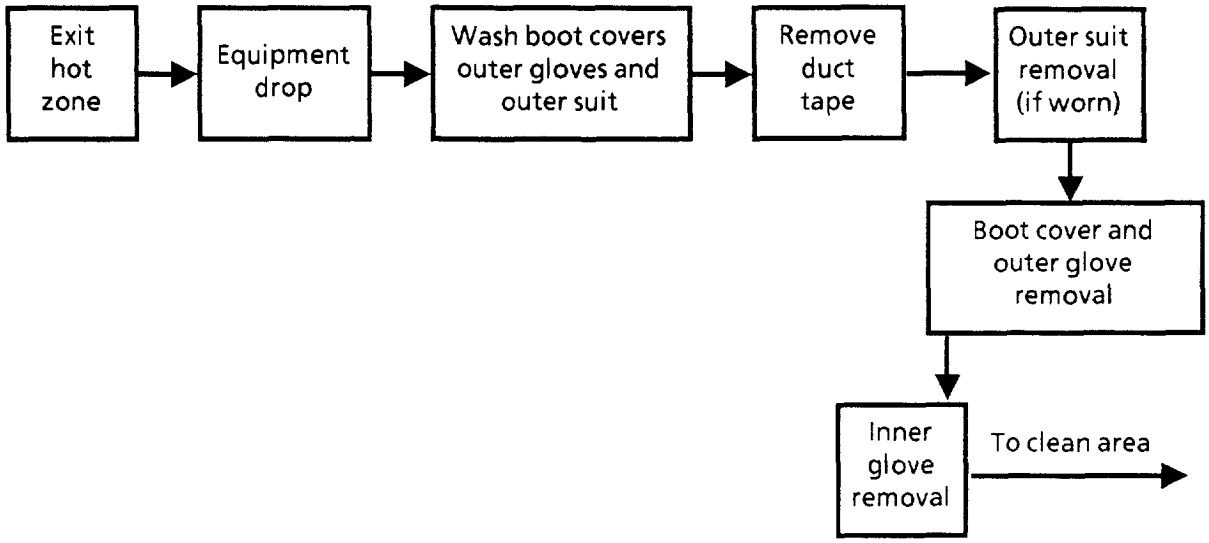
All personnel performing decontamination activities must wear, in addition to minimal requirements, PVC coveralls, nitrile outer gloves, latex inner gloves, boot covers, and taped ankle and wrist seams. When decontaminating heavy equipment (drill rigs) or anything else where a splash potential exists from high-pressure water, personnel must wear hard hats with a chemical splash shield attached to protect the eyes and face.

7.5 DELINEATION OF SITE ZONES

A three-zone approach will be used to control migration of contamination. The exclusion zone is the work area where contamination is known to be present. The contamination reduction zone is where all decontamination activities will take place. Appropriate PPE must be worn in these two areas. The third zone, support zone, is the designated clean area where no contamination is present and all support personnel will be stationed and materials stored. All personnel and/or materials that enter the exclusion zone must be properly decontaminated before returning to the support area. Zones will be set up for each individual site at the Camp Lejeune Military Reservation.

FIGURE 7-1

SKETCH OF DECONTAMINATION PROCEDURE



The sketch is for general decontamination procedures for operations at the Camp Lejeune Military Reservation. The level of protection, concentration of chemicals (visual inspection), and other factors will determine the extent of decontamination. Decontamination procedures may have to be modified after work begins if site conditions warrant change.

8.0 MEDICAL SURVEILLANCE

8.1 REQUIREMENTS FOR NUS PERSONNEL

All personnel participating in field activities associated with the investigations at Camp Lejeune will be required to have a current medical certificate. NUS employees are required to participate in the company medical monitoring program in order to perform field activities. This is in accordance with Health and Safety Standard Operating Procedure (H&S SOP) No. MD01, Medical Program Operating Procedure, and OSHA Standard 1910.120. The NUS medical consultants (University of Pittsburgh Occupational Medicine Program) will make the final review of all NUS medical records to determine if additional testing is required.

8.2 REQUIREMENTS FOR SUBCONTRACTORS

Subcontractors involved in field activities at Camp Lejeune are required to obtain a certificate of ability to perform their assigned task from a physician. An example of the Subcontractor Medical Approval Form can be found in Figure 8-1.

Also included in this section is an example of the OSHA Compliance Letter (Figure 8-2). All NUS subcontractors are to complete this form prior to initiation of work at this site.

FIGURE 8-1
SUBCONTRACTOR MEDICAL APPROVAL FORM

For employees of _____
Company Name

Participant Name: _____ Date of Exam: _____

Part A

The above-named individual has:

1. Undergone a physical examination in accordance with OSHA Standard 29 CFR 1910.120, paragraph (f) and found to be medically -

   ( ) qualified to perform work at the _____ work site
   ( ) not qualified to perform work at the _____ work site

   and,

2. Undergone a physical examination as per OSHA 29 CFR 1910.134 (b)(10) and found to be medically -

   ( ) qualified to work in respiratory protection
   ( ) not qualified to work in respiratory protection

My evaluation has been based on the following information, as provided to be by the employer.

( ) A copy of OSHA Standard 29 CFR 1910.120 and appendices.
( ) A description of the employee's duties as they relate to the employee's exposures.
( ) A list of known/suspected contaminants and their concentrations (if known).
( ) A description of any personal protective equipment used or to be used.
( ) Information from previous medical examinations of the employee which is not readily available to the examining physician.

Part B

I, _____, have examined _____
Physician's Name (print) Participant's Name (print)
and have determined the following information:

1. Results of the medical examination and tests (excluding findings or diagnoses unrelated to occupational exposure):

_____

_____

_____

FIGURE A.8-1
SUBCONTRACTOR MEDICAL APPROVAL FORM
PAGE TWO

2. Any detected medical conditions which would place the employee at increased risk of material impairment of the employee's health:

_____

_____

_____

3. Recommended limitations upon the employee's assigned work:

_____

_____

_____

_____

I have informed this participant of the results of this medical examination and any medical conditions which require further examination or treatment.

Based on the information provided to me, and in view of the activities and hazard potentials involved at the _____work site, this participant

( ) may
( ) may not

perform his/her assignment task.

Physician's Signature _____

Address _____

Phone Number _____

NOTE: Copies of test results are maintained and available at:

_____
Address

FIGURE 8-2

OSHA COMPLIANCE LETTER

The following statements must be typed on company letterhead and signed by an officer of the company:

LOGO
XYZ CORPORATION
555 E. 5th Street
Nowheresville, Kansas 55555

Month, day, year

Mr. Daryl Hutson
NUS Corporation
Park West Two, Cliff Mine Road
Pittsburgh, Pennsylvania 15275-1071

Subject: OSHA Compliance

Dear Mr. Hutson:

As an officer of XYZ Corporation, I hereby state that I am aware of the potential hazardous nature of the subject project. I also understand that it is our responsibility to comply with all applicable occupational safety and health regulations including those stipulated in Title 29 of the Code of Federal Regulations (CFR), Parts 1900 through 1910 and Part 1926.

I also understand that Title 29 CFR 1910.120 - Hazardous Waste Operations and Emergency Response: Final Rule - requires medical surveillance, for applicable employees, and appropriate level of training as required in paragraph (e) of 29 CFR 1910.120 for employees engaged in certain hazardous waste operations. In this regard, I hereby state that I have reviewed these requirements and that XYZ Corporation and all of its employees who will perform work at the Camp Lejeune Military Reservation are in full compliance.

Sincerely,

(Name of Company Officer)

9.0 TRAINING

NUS employees must complete a 40-hour introductory health and safety training class held at the Pittsburgh office. NUS subcontractors must provide evidence of having received 40 hours of introductory health and safety training as defined by OSHA Standard 29 CFR 1910 120. By completing Figure 8-2, the subcontractor is providing NUS with verification of this training.

Additionally, all NUS and subcontractor personnel must attend a site-specific training session before workers go on site. The training will consist of:

- Review of this HASP
- Basic chemistry and toxicology
- Work assignments and responsibilities
- Emergency provisions
- Communications setup
- Decontamination procedures
- Types of chemicals present on site and their effects
- Operational practices and protective requirements
- Respiratory protection
- FIT Testing

NUS personnel must also satisfy training requirements before going on site. In addition to the introductory training, other training may be required prior to initiation of activities. For example:

- Annual Health and Safety refresher training
- Supervisory Health and Safety training
- First Aid
- CPR
- Special Training - this refers to the use of special equipment or techniques that must be used during a task

10.0 STANDARD WORK PRACTICES

All site investigation activities will follow the appropriate Health and Safety Standard Operating Procedures.

The following safe working procedures are to be applied in addition to the Health and Safety Standard Operating Procedures:

- Eating, drinking, chewing gum or tobacco, taking medication, and smoking are prohibited in the exclusion or decontamination zones, or any location where their is a possibility for contact with site contaminants exists.

- Upon leaving the exclusion zone, hands and face must be thoroughly washed. Any protective outer clothing is to be decontaminated and removed as specified in this HASP, and left at a designated area prior to entering the clean area.

- Contact with potentially-contaminated substances must be avoided. Examples of this include contact with contaminated soils, puddles, or equipment. Monitoring equipment must not be placed on potentially contaminated surfaces. Workers will avoid walking through surface waters.

- No facial hair, which interferes with a satisfactory fit of the mask-to-face seal, is permitted on personnel required to wear respiratory protective equipment.

- All personnel must procure a site-specific Health and Safety Plan from the project Health and Safety Officer prior to commencing work on site. All site personnel must read and understand all components of this HASP. All site personnel are required to sign-off in the site HASP, acknowledging reading and comprehension of the HASP. Additionally, a Site Safety Follow-Up report must be filed with each trip report following completion of a task by the site safety officer.

- All personnel must satisfy medical monitoring procedures.

- No flames or open fires will be permitted on site.

- No drilling within 20 feet in any direction of overhead power lines will be permitted. The locations of all underground utilities must be identified and marked prior to initiating any subsurface activities.

- All personnel must be aware of and follow the action levels presented in this HASP for upgrading respiratory protection.

- Any new analytical data must be promptly conveyed via telephone to the project Health and Safety Officer by the lab technician or Field Team Leader.

- Personnel must develop hand signals with site workers, which will be included as part of site-specific training.

- A copy of the attached OSHA poster must be prominently posted at each site.

- All drill rigs and other machinery with exposed moving parts must be equipped with an operational emergency stop device. Drillers and geologists must be aware of the location of this device. This device must be tested prior to job initiation, and periodically thereafter.

The driller and helper shall not simultaneously handle moving augers or flights unless there is a standby person to activate the emergency stop.

- The driller must never leave the controls while the tools are rotating unless all personnel are clear of the rotating equipment.

- A long handled shovel or equivalent must be used to clear drill cuttings away from the hole and from rotating tools. Hands and/or feet are not to be used for this purpose.

- A remote sampling device must be used to sample drill cuttings if the tools are rotating. Samplers must not reach into or near the rotating equipment. If personnel must work near any tools which could rotate, the driller must shut down the rig prior to initiating such work.

- Drillers, helpers and samplers must secure all loose clothing within a 20 foot radius of drilling operations.

- Only equipment which has been approved by the manufacturer may be used in conjunction with site equipment and specifically to attach sections of drilling tools together. Pins that protrude from augers shall not be allowed.

- No person shall climb the drill mast while tools are rotating.

- No person shall climb the drill mast without the use of ANSI approved fall protection (i.e. approved belts, lanyards and a fall protection slide rail) or portable ladder which meets the requirements of OSHA standards.

- All compressed gas cylinders (empty or full) must be stored and used in an upright position, properly secured and protected from damage.

- The site safety officer will make daily entries into the Health and Safety logbook. Any information that pertains to site health and safety will be documented.

- A copy of the appropriate Health and Safety Standard Operating Procedures must be present on site.

- Training and medical monitoring records must be maintained on site for all site personnel including subcontractors, as required in 20 CFR 1910.120.

- All site personnel including subcontractors must complete a medical data sheet, to be maintained on site.

- Site personnel must immediately notify NUS Health Sciences (the OHSS or HSO) of all incidents for OSHA recordkeeping purposes.

- If personnel note any warning properties of chemicals (irritation, odors, symptoms, etc.) or even suspect the occurrence of exposure, they must immediately notify the HSO for further direction.

- Site personnel are not to undertake any activity which would be considered a confined-space entry without first being trained in the proper procedures by the HSO, and obtaining a Confined Space/Limited Egress Permit.

For Test Pitting Operations (if applicable)

- No one, under any circumstances, shall enter a test pit. Personnel must use remote samplers to collect samples from test pits or collect the samples from the backhoe bucket. the latter is recommended.
- No sampling of drums is to occur during test-pitting operations without prior approval and written procedures from the HSO.
- Before commencement of excavation where there is a potential for contact with buried drums, all test pit locations will require that clean (virgin) fill be located by the area in question. This soil can be used to cover any ruptured drums to reduce potential emissions.
- Personnel must not lean over test pits.
- Personnel must stand upwind from the test pits and away from the reach of the backhoe, tires, and outrigger.
- Personnel must stand a minimum of 2 feet from the edge of any test pit. Unstable pits must be sloped at the sides to prevent cave-in.
- No open pits will be left unattended, under any circumstances.
- The backhoe operator shall not undermine the excavation.
- The SSO shall frequently inspect the test pits for slide or cave-in potential.
- All work areas must be kept free of ground clutter following good housekeeping requirements as per OSHA 1910.
- Areas must be designated for chemical storage. Acids, bases and flammables shall all be stored separately. Storage areas must be labeled as to the contents within the storage area.

11.0 CONFINED SPACE ENTRY (CSE) PROCEDURES

There are no confined space entry operations anticipated for this project, therefore, this section is not applicable.

12.0 EMERGENCY RESPONSE PLAN (ERP)

12.1 ANTICIPATED SITE EMERGENCIES

Personal injury/illness is the only reasonably forseeable emergency anticipated during the investigation at Camp Lejeune Military Reservation.

12.2 PERSONNEL ROLES AND LINES OF AUTHORITY

The NUS Field Operations Leader (FOL) shall be responsible for the overall direction and implementation of this ERP, and for overall coordination of any emergency response actions.

The NUS site safety officer (SSO) shall serve as assistant and alternate to the FOL and shall provide health and safety input during emergencies.

The FOL or his alternate is responsible for notifying the appropriate outside emergency assistance, as needed, in accordance with Section 12.0.

12.3 EMERGENCY RECOGNITION AND PREVENTION

Compliance with this HASP can assist in the prevention of anticipated site emergencies. These emergency situations can easily be recognized by visual observations, or worker complaints. Personnel will be working in close proximity to one another therefore eliminating the need for alarms or horns.

12.4 SAFE DISTANCES, PLACES OF REFUGE AND EVACUATION ROUTES

To be determined by the FOL/SSO on an emergency specific basis. Considerations shall include wind direction and site topography.

12.5 SITE SECURITY AND CONTROL

Site control measures are typically employed during site activities to prevent or reduce the migration of potentially contaminated materials and to prevent the entry of unauthorized personnel into the work area.

If NUS personnel or equipment are exposed to contamination, the project team shall ensure that proper decontamination procedures are followed. All decontamination liquids shall be contained to prevent migration outside the decontamination area.

The NUS project team shall be contained to prevent migration outside the decontamination area.

12.6 RESPONSE PROCEDURES

The information provided in this subsection is presented as a guideline to assist the FOL and SSO in safe and effective response to anticipated site emergencies. This information is in no way designed to take the place of reasonable decisions based on incident-specific information.

First Priority

Prevent further injury or illness by:

- Protecting response personnel (Section 12.7)
- Isolating the scene to authorized personnel only
- Rescuing the injured parties
- Notifying Outside Emergency Assistance (Figure 12-1)

Second Priority

Provide first-aid to those persons with life threatening injuries or illnesses (Attachment A-3).

Third Priority

Alleviate the immediate hazards.

Fourth Priority

Provide first-aid to those persons with non-lifethreatening injuries or illnesses and further efforts to alleviate the hazard.

Last Priority

Complete an incident report (Attachment B), critique the response and prevent recurrence.

All persons with known or suspected chemically related injuries or illnesses shall be immediately examined by a licensed physician. The examining physician may choose to consult with the NUS medical consultant for additional expertise on occupational injury/illness. Attachment A-4 provides notification procedures to access this resource at any time of the day or night.

12.7 DECONTAMINATION AND FIRST-AID

Decontamination of injured or ill personnel shall consist of removing contaminated clothing. If worker's street clothes are grossly contaminated, remove them to prevent chemical exposures and wrap the injured party in a blanket.

First-aid shall be conducted by trained personnel. Attachment A-3 shall serve as a guide.

12.8 EMERGENCY PHONE NUMBERS AND ROUTE TO HOSPITAL

Numbers shall be posted at the nearest available telephone.

All site personnel including subcontractors shall complete a medical data sheet and field team review. This form shall accompany any injured party to the hospital.

See Figure 12-2 for emergency directions and written route to hospital.

See Figure 12-3 for medical data sheet.

See Figure 12-4 for Site Location Map.

FIGURE 12-1

EMERGENCY REFERENCE (POST ONSITE)
CAMP LEJEUNE MILITARY RESERVATION

Site: Camp Lejeune Military Reservation Project No.: _____

Emergency Information:

Local Resources:

Rescue Services:	Jacksonville	(919) 455-9119
Hospital:	Base Hospital Building No. NH100	(919) 451-4551
Police:	Base	(919) 451-4555
Fire Department:	Local	911
Nearest Phone:	TBA	TBA
Project Manager:	Daryl Hutson	(412) 788-1080
Site Health and Safety Officer:	Alan Margraf	(412) 788-1080
Alternate Site Health and Safety Officer:	TBA	TBA

Emergency Contacts (Medical and Health):

- Dr. Michael Hodgsen (NUS Consulting Physician - University of Pittsburgh)
  Office: (412) 648-3240
- Office Health and Safety Supervisor Matt Soltis, CSP
  Office: (412) 788-1080
- Program Manager of Health Sciences Richard Gerlach, Ph.D., CIH
  Office : (412) 788-1080
- Poison Information Center: Duke University 800-672-1697
- National Response Center (for Environmental Emergency Only): 800-424-8802

Directions to Hospital:

- Leave base through main entrance.
- Take Highway 24 West to Western Blvd. (turn right).
- Follow Western Blvd. to the 5th light.
- Hospital is on the left.

FIGURE 12-2

FIRST AID AND EMERGENCY NUMBERS
CAMP LEJEUNE MILITARY RESERVATION

Emergency Resources

Ambulance	Jacksonville	(919) 455-9119
Hospital	On Base (Bldg. #NH100)	(919) 451-4551
Fire		911
Police	On Base	(919) 451-4555
Poison Control Center	Duke University	(800) 672-1697
Back-up Hospital	Onslow Memorial	(919) 577-2240
Site Telephone		
Site Radio		
Site Other		

Emergency Contacts

OHSS - Matt Soltis, CSP	(Day)	(412) 788-1080
	(Other)	
Office Physician - Dr. Hodgeson	(Office)	(412) 648-3240
	(Beeper)	
PMHS - Richard Gerlach, Ph.D., CIH	(Day)	(412) 788-1080
	(Other)	
WMSG Physician - Dr. Hodgeson	(Office)	(412) 648-3240

Alternates: Dr. Betty Goodman - Kline

Back-up Hospital

Directions to Onslow Memorial

- Leave base through main entrance.
- Take Highway 24 West to Western Blvd. (turn right).
- Follow Western Blvd. to the 5th light.
- Hospital is on the left.

FIGURE 12-3

MEDICAL DATA SHEET
CAMP LEJEUNE MILITARY RESERVATION

This form must be completed by all onsite, personnel prior to the commencement of activities, and shall be kept in the site command post during site activities. This form must be delivered to any attending physician when medical assistance is needed.

Site _____

Name _____ Home Telephone (____) _____

Address _____

Age _____ Height _____ Weight _____

Name of next of kin _____ Telephone (____) _____

Drug allergies or other allergies _____

_____

Previous Illnesses or Exposures to Hazardous Substances:

_____

_____

Current Medication (prescription and non-prescription):

_____

_____

Medical Restrictions: _____

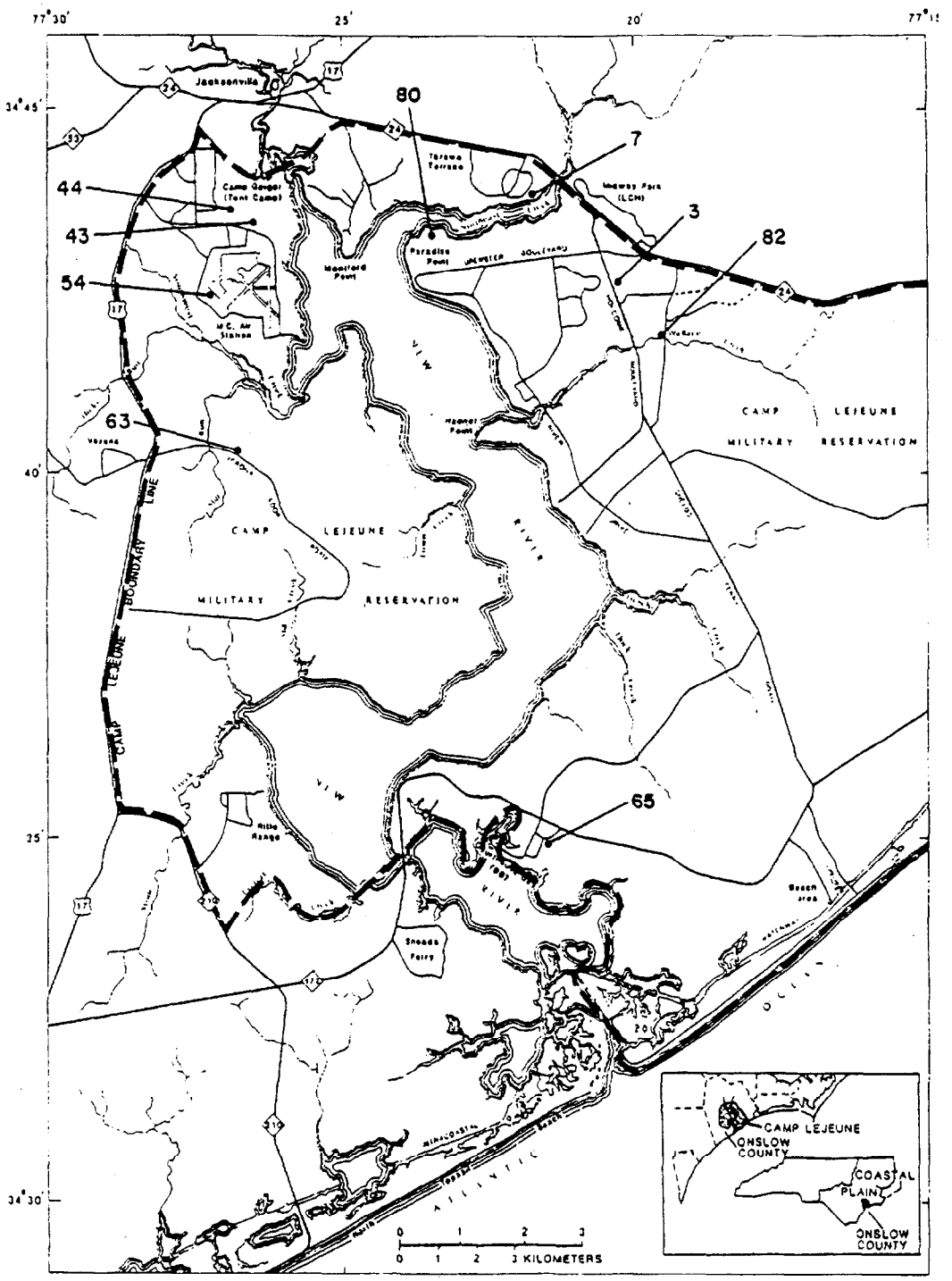
_____

Name, address and phone number of personal physician:

_____

_____

_____



Base taken from Defense Mapping Agency Hydrographic Center, Camp Lejeune Special Map, 1:12,000

FIGURE 12-4
LOCATION MAP
CAMP LEJEUNE MARINE CORPS BASE
(IAS SITE NUMBERS ARE SHOWN ABOVE AT APPROXIMATE LOCATIONS)

NUS CORPORATION
A Halliburton Company

13.0 SPILL CONTAINMENT PROCEDURES

Due to the nature of site work and the absence of containers, no spills are anticipated, therefore, this section is not applicable.

ATTACHMENT A

FIELD TEAM REVIEW AND SITE SAFETY FOLLOW-UP REPORT

FIELD TEAM REVIEW

Must be signed by each field team member prior to the first site visit. This form must be copied to the HSO for inclusion in the project records.

I have read and understand the contents of this HASP and will comply to its provisions, requirements, and restrictions.

Site _____

Name (PRINT)	Signature	Date

SITE SAFETY FOLLOW UP REPORT

This section must be filled out and returned to the Site Safety Officer after each site visit or task.

Person responsible for follow up report: _____
Actual date of work: _____

Actual Site Investigation Team:

NUS Personnel:	Responsibility:

Other:	Purpose:

PERSONAL PROTECTIVE EQUIPMENT

• Level of Respiratory Protection Used	Activity Performed

• Field Dress	Activity

MONITORING EQUIPMENT

HNU

- Background reading _____
  - Readings above background? _____
  - Location of high readings _____

_____

_____

Radiation

- Readings above background? _____ Yes _____ No
- If yes, specify where readings were found and what action was taken.

_____

_____

_____

GENERAL SAFETY

Were any safety problems encountered while on site?

Explain: _____

_____

_____

_____

_____

_____

_____

_____

ACCIDENT REPORT INFORMATION

Did any team member report:	Yes	No
• Chemical exposure	_____	_____
• Illness, discomfort, or unusual symptoms	_____	_____
• Environmental problems (heat, cold, etc.)	_____	_____

Explain: _____

_____

_____

_____

_____

_____

_____

_____

Was an Employee Exposure/Injury Incident Report Completed? ___ Yes ___ No

SITE SAFETY REVIEW - CHANGES AND OVERALL EVALUATION

(To be Completed for Each Field Change in Plan)

Was the Safety Plan Followed as presented? _____ yes _____ no

Describe, in detail, all changes to the Safety Plan:

_____

_____

_____

_____

_____

Reason for changes: _____

_____

_____

_____

_____

Follow-up, Review and Evaluation Prepared by: _____ Date _____

Discipline _____

Approved by: Site Manager _____ Date _____

Site Safety Officer _____ Date _____

Approved by: Office Health & Safety Supervisor _____ Date _____

Evaluation of Site Safety Plan

Was the Safety Plan adequate? _____ yes _____ no

What changes would you recommend?

_____

_____

_____

_____

HEAT STRESS MONITORING LOG

Date	Name	Work Shift		Total Time	Pulse Rate	Adjusted Air Temp.
		Start	Stop			

FIRST AID SUPPLY USAGE FORM

Project No.	Date	Item(s) Used	Kit No.

Please submit this form as soon as possible to to the NUS Equipment Manager for first aid supply replenishment.

SCBA LOG

Site: _____

Location: _____

Dates of Investigation: _____

User	Date of Use	SCBA #	Satisfactory Check-Out (Yes/No - Initials)	Date Cleaned

SCBA Performance Comments:

_____ Site Manager

_____ Date

Return to HSO at Completion of Activity

(ULTRA TWIN)
RESPIRATOR LOG

Site: _____

Location: _____

Dates of Investigation: _____

User	Date of Use	Cleaned and Inspected Prior To Use (Initials)	Cartridges Changed Prior to Use (Yes/No)	Total Hours On Cartridge

_____ Site Manager

_____ Date

Return to HSO at Completion of Activity

ATTACHMENT B

INCIDENT REPORT

INCIDENT REPORT

Report No. _____

Site: _____ Project No. _____

Location: _____

Date of Report: _____ Preparer's Name: _____

Name and Address of Injured: _____ SSN: _____ Age: _____

_____ Sex: _____

Years of Service: _____ Time of Present Job: _____ Title/Classification: _____

Division/Department: _____ Date of Incident: _____ Time: _____

Incident Category: _____ Motor Vehicle _____ Property Damage _____ Fire

_____ Chemical Exposure _____ Near Miss _____ Other

Severity of Injury or Illness: _____ Non-disabling _____ Disabling

_____ Medical Treatment _____ Fatality

Amount of Damage: $_____ Property Damage: _____

Estimated Number of Days Away from Job: _____

Nature of Injury or Illness: _____

Classification of Injury:

_____	Fractures	_____	Heat Burns	_____	Cold Exposure
_____	Dislocations	_____	Chemical Burns	_____	Frostbite
_____	Sprains	_____	Radiation Burns	_____	Heat Stroke
_____	Abrasions	_____	Bruises	_____	Heat Exhaustion
_____	Lacerations	_____	Blisters	_____	Concussion
_____	Punctures	_____	Toxic Respiratory Exposure	_____	Faint/Dizziness
_____	Bites	_____	Toxic Ingestion	_____	Toxic Respiratory
_____	Respiratory Allergy			_____	Dermal Allergy

Part of Body Affected: _____

Degree of Disability: _____

Date Medical Care was Received: _____

Where Medical Care was Received: _____

Address (if off site): _____

Incident Location

Causative agent most directly related to accident (object, substance, material, machinery, equipment, conditions): _____

_____

_____

_____

Was weather a factor? _____

Unsafe mechanical/physical/environmental condition at time of accident (Be specific):

_____

_____

_____

Unsafe act by injured and/or others contributing to the accident (Be specific, must be answered):

_____

_____

_____

Personal factors (improper attitude, lack of knowledge or skill, slow reaction, fatigue):

_____

_____

_____

Level of personal protection equipment required in Site Safety Plan:

_____

_____

_____

Modifications: _____

_____

_____

_____

Was injured using required equipment: _____

_____

_____

If not, how did actual equipment use differ from plan? _____

_____

_____

_____

What can be done to prevent a recurrence of this type of accident (modification of machine; mechanical guards; correct environment; training)?

_____

_____

_____

Detailed narrative description (how did accident occur, why; objects, equipment tools used, circumstances, assigned duties). Be specific:

_____

_____

_____

(Use back of sheet, as required)

Witnesses to accident: _____

_____

_____

Signature of Preparer _____

Signature of Site Manager _____

Department Appraisal and Recommendation

In your opinion, what actions or equipment contributed to this accident?

_____

_____

_____

Your recommendation:

_____

_____

_____

Date: _____ Signature of Department Manager _____

FOR HEALTH AND SAFETY USE ONLY

Temporary Total	_____	Permanent Partial	_____
Death or Permanent Total	_____		
Started losing time	_____	Part of Body	_____
Returned to work	_____	Percent loss or	
Time charge	_____	loss of use	_____
		Time charge	_____
Compensation	$_____	Medical	$_____
Other	$_____	total	$_____

Name and Address
of Hospital _____
_____

Name and Address
of Physician _____
_____

cc: OHSS
Administrative Manager
HSO
Medical Consultant

INCIDENT FOLLOW-UP

Date of Incident: _____

Name: _____ Employee No. _____

Site: _____

Brief description of incident: _____

_____

_____

_____

_____

_____

_____

Outcome of incident: _____

_____

_____

_____

_____

_____

_____

Physician's recommendations: _____

_____

_____

_____

_____

_____

_____

Date returned to work: _____

ATTACH ANY ADDITIONAL INFORMATION TO THIS FORM

cc: OHSS

Administrative Manager

HSO

Medical Consultant

ATTACHMENT C

OSHA POSTER

JOB SAFETY & HEALTH PROTECTION

The Occupational Safety and Health Act of 1970 provides job safety and health protection for workers by promoting safe and healthful working conditions throughout the Nation. Requirements of the Act include the following:

Employers

All employers must furnish to employees employment and a place of employment free from recognized hazards that are causing or are likely to cause death or serious harm to employees. Employers must comply with occupational safety and health standards issued under the Act.

Employees

Employees must comply with all occupational safety and health standards, rules, regulations and orders issued under the Act that apply to their own actions and conduct on the job.

The Occupational Safety and Health Administration (OSHA) of the U.S. Department of Labor has the primary responsibility for administering the Act. OSHA issues occupational safety and health standards, and its Compliance Safety and Health Officers conduct jobsite inspections to help ensure compliance with the Act.

Inspection

The Act requires that a representative of the employer and a representative authorized by the employees be given an opportunity to accompany the OSHA inspector for the purpose of aiding the inspection.

Where there is no authorized employee representative, the OSHA Compliance Officer must consult with a reasonable number of employees concerning safety and health conditions in the workplace.

Complaint

Employees or their representatives have the right to file a complaint with the nearest OSHA office requesting an inspection if they believe unsafe or unhealthful conditions exist in their workplace. OSHA will withhold, on request, names of employees complaining.

The Act provides that employees may not be discharged or discriminated against in any way for filing safety and health complaints or for otherwise exercising their rights under the Act.

Employees who believe they have been discriminated against may file a complaint with their nearest OSHA office within 30 days of the alleged discrimination.

Citation

If upon inspection OSHA believes an employer has violated the Act, a citation alleging such violations will be issued to the employer. Each citation will specify a time period within which the alleged violation must be corrected.

The OSHA citation must be prominently displayed at or near the place of alleged violation for three days, or until it is corrected, whichever is later, to warn employees of dangers that may exist there.

Proposed Penalty

The Act provides for mandatory penalties against employers of up to $1,000 for each serious violation and for optional penalties of up to $1,000 for each nonserious violation. Penalties of up to $1,000 per day may be proposed for failure to correct violations within the proposed time period. Also, any employer who willfully or repeatedly violates the Act may be assessed penalties of up to $10,000 for each such violation.

Criminal penalties are also provided for in the Act. Any willful violation resulting in death of an employee, upon conviction, is punishable by a fine of not more than $10,000, or by imprisonment for not more than six months, or by both. Conviction of an employer after a first conviction doubles these maximum penalties.

Voluntary Activity

While providing penalties for violations, the Act also encourages efforts by labor and management, before an OSHA inspection, to reduce workplace hazards voluntarily and to develop and improve safety and health programs in all workplaces and industries. OSHA's Voluntary Protection Programs recognize outstanding efforts of this nature.

Such voluntary action should initially focus on the identification and elimination of hazards that could cause death, injury, or illness to employees and supervisors. There are many public and private organizations that can provide information and assistance in this effort, if requested. Also, your local OSHA office can provide considerable help and advice on solving safety and health problems or can refer you to other sources for help such as training.

Consultation

Free consultative assistance, without citation or penalty, is available to employers, on request, through OSHA supported programs in most State departments of labor or health.

More Information

Additional information and copies of the Act, specific OSHA safety and health standards, and other applicable regulations may be obtained from your employer or from the nearest OSHA Regional Office in the following locations:

Atlanta, Georgia
Boston, Massachusetts
Chicago, Illinois
Dallas, Texas
Denver, Colorado
Kansas City, Missouri
New York, New York
Philadelphia, Pennsylvania
San Francisco, California
Seattle, Washington

Telephone numbers for these offices, and additional area office locations, are listed in the telephone directory under the United States Department of Labor in the United States Government listing.

Washington, D.C.
1988 (Revised)
OSHA 2203

Ann McLaughlin, Secretary of Labor

U.S. Department of Labor

Occupational Safety and Health Administration

Under provisions of Title 29, Code of Federal Regulations, Part 1903.2(a)(1) employers must post this notice (or a facsimile) in a conspicuous place where notices to employees are customarily posted.

GPO : 1988 O - 219-667

ATTACHMENT D

FIRST AID POSTER

Police:	(919) 466-3615
Fire Department:	(919) 466-3333
Doctor:	
Ambulance:	(919) 466-4419
Hospital:	(919) 247-1616
Poison Control Center:	800-672-1097

American Red Cross

First Aid

BITES Animal Bites - Thoroughly wash the wound with soap and water. Flush the area with running water and apply a sterile dressing. Immobilize affected part until the victim has been attended by a physician. See that the animal is kept alive and in quarantine. Obtain name and address of the owner of the animal.

Insect Bites - Remove "stinger" if present. Keep affected part down below the level of the heart. Apply ice bag. For minor bites and stings apply soothing lotions, such as calamine.

BURNS AND SCALDS Minor Burns - DO NOT APPLY VASELINE OR GREASE OF ANY KIND. Apply cold water applications until pain subsides. Cover with a dry, sterile gauze dressing. Do not break blisters or remove tissue. Seek medical attention.

Severe Burns - Do not remove adhered particles of clothing. Do not apply ice or immerse in cold water. Do not apply ointment, grease or vaseline. Cover burns with thick sterile dressings. Keep burned feet or legs elevated. Seek medical attention immediately.

Chemical Burns - Wash away the chemical soaked clothing with large amounts of water. Remove victim's chemical soaked clothing. If dry lime, brush away before flushing. Apply sterile dressing and seek medical attention.

CRAMPS Symptoms - Cramps in muscles of abdomen and extremities. Heat exhaustion may also be present.

Treatment - Same as for heat exhaustion.

CUTS Apply pressure with sterile gauze dressing, and elevate the area until bleeding stops. Apply a bandage and seek medical attention.

EYES Foreign Objects - Keep the victim from rubbing his his eye. Flush the eye with water. If flushing fails to remove the object, apply a dry, protective dressing and consult a physician.

Chemicals - Flood the eye thoroughly with water for 15 minutes. Cover the eye with a dry pad and seek medical attention.

FAINTING Keep the victim lying down. Loosen tight clothing. If victim vomits, roll him onto his side or turn his head to the side. If necessary wipe out his mouth. Maintain an open airway. Bathe his face gently with cool water. Unless recovery is prompt, seek medical attention.

FRACTURES Deformity of an injured part usually means a fracture. If fracture is suspected, splint the part, DO NOT ATTEMPT TO MOVE INJURED PERSON; seek medical attention immediately.

FROSTBITE Symptoms - Just before frostbite occurs skin may be flushed, then change to white or grayish-yellow. Pain may be felt early then subsides. Blisters may appear, affected part feels very cold and numb.

Treatment - Bring victim indoors, cover the frozen area, provide extra clothing and blankets. Rewarm frozen area quickly by immersion in warm water---NOT HOT WATER. DO NOT RUB THE PART. Seek medical attention immediately.

HEAT EXHAUSTION Caused by exposure to heat - either sun or indoors. Symptoms - Near normal body temperature. Skin is pale and clammy. Profuse sweating, tiredness, weakness, headache, perhaps cramps, nausea, dizziness, and possible fainting.

Treatment - Keep in lying position and raise victim's feet. Loosen clothing, apply cool wet cloths. If conscious, give sips of salt water (1 teaspoon of salt per glass) over a period of one hour If vomiting occurs, discontinue the salt water. Seek medical attention immediately.

SUNSTROKE Symptoms - Body temperature is high (106 degrees F or higher). Skin is hot, red, and dry. Pulse is rapid and strong. Victim may be unconscious.

Treatment - Keep victim in lying position with head elevated. Remove clothing and repeatedly sponge the bare skin with cool water or rubbing alcohol. Seek medical attention immediately.

POISONING Call the poison control center for instruction on immediate care. If victim becomes unconscious, keep the airway open. If breathing stops give artificial respiration, by mouth to mouth breathing. Call an emergency squad as soon as possible.

POISON IVY Remove contaminated clothing, wash all exposed areas thoroughly with soap and water followed by rubbing alcohol. If rash is mild, apply calamine or other soothing skin lotion. If a severe reaction occurs, seek medical attention.

PUNCTURE WOUNDS If puncture wound is deeper than skin surface, seek medical attention. Serious infection can arise unless proper treatment is received.

SPRAINS Elevate injured part and apply ice bag or cold packs. DO NOT SOAK IN HOT WATER. If pain and swelling persist, seek medical attention.

UNCONSCIOUSNESS Never attempt to give anything by mouth. Keep victim lying flat, maintain open airway. If victim is not breathing provide artificial respiration by mouth to mouth breathing and call an emergency squad as soon as possible.

ATTACHMENT E

EMERGENCY PHYSICIAN ACCESS PLAN

EMERGENCY PHYSICIAN ACCESS PLAN

CAMP LEJEUNE MILITARY RESERVATION

(1) MONDAY THROUGH FRIDAY, 8:00 A.M. - 4:00 P.M. (Central Standard Time)

Dial the (412) 648-3240 number. When answered state that:
- (a) you are calling from NUS Corporation;
- (b) this is an emergency call.

Program staff will be alerted how to contact the physician designated to provide emergency coverage on that day. Collect calls will be accepted.

(2) EVENINGS, WEEKENDS AND HOLIDAYS:

Dial the (412) 648-3240 number. An operator from the answering service will answer the telephone. Do the following.
- (a) Tell the operator that you are calling from NUS Corporation.
- (b) Tell the operator that this is an emergency call.
- (c) Give her your name.
- (d) Give her the telephone number where the physician is to call. Be certain that she has written the correct number (area code and seven digits).
- (e) If you do not receive a call back within 15 minutes, place a second call to (412) 648-3240.
  Collect calls will be accepted.

(3) SITUATIONS WHERE EMPLOYEE REQUIRES IMMEDIATE TRANSPORT TO A HOSPITAL:

If the situation is life-threatening, i.e., cardiac arrest or person not breathing, call the emergency medical services system and transport the person to the nearest hospital with advanced life support capabilities.

- Report the accident to the Site Safety Officer, and the Office Health and Safety Supervisor
- Develop safe operating procedures to prevent a recurrence
- File incident report with HSO Pittsburgh, Pennsylvania