



**OHM Remediation
Services Corp.**

A Subsidiary of OHM Corporation

03.01-10/26/95-01594

October 26, 1995

Mr. Lance Laughmiller
Atlantic Division Code 18232
Naval Facilities Engineering Command
1510 Gilbert St.
Norfolk, VA 23511-2699

Re: Site Health & Safety Plan
Site 69; Delivery Order 0087
Contract N62470-93-D-3032
MCB Camp Lejeune, NC

Dear Mr. Laughmiller:

Enclosed herewith please find four copies of the subject plan for your review.

Very truly yours,

OHM Remediation Services Corp.

James A. Dunn, Jr., P.E.
Senior Project Manager

Enclosure

pc: Gena Townsend - EPA Region IV
Patrick Watters - NCDEHNR
Neal Paul - IRD/EMD
Vann Marshbern - ROICC



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OHM SITE SAFETY PLAN

PROJECT NAME: MCB Camp Lejeune

PROJECT NUMBER: 17849

LOCATION: Camp Lejeune, NC

DATE: October 18, 1995

I. SCOPE OF WORK

The work will consist of improving the access road, and power supply. The entire access road will be graded and reshaped with a center crown in the roadway. A culvert will be placed beneath the TLZ Owl Road. The drainage ditches and/or slopes along the roadway will be cleaned and reshaped to enhance surface water flows. ABC stone will be used to provide a firm roadway base where conditions dictate. The right-of-way for the power lines will be cleared and grubbed. The following task will be completed:

- Task 1 Mobilization and site preparation
- Task 2 Grade and reshape road, drainage ditches
- Task 3 Place culvert
- Task 4 Place erosion/sediment control
- Task 5 Reseed area
- Task 6 Clear and grub right-of-way
- Task 7 Clean equipment
- Task 8 Demobilization

II. ORGANIZATION AND AUTHORITIES

The Project Supervisor is responsible for the safe implementation of field activities and is ultimately responsible for site safety. The Regional Health and Safety Manager is responsible for providing guidance to the Site Safety Officer (SSO) and Project Supervisor on the implementation of the site safety plan. The SSO is responsible for implementing the site safety plan on-site and enforces the plan by performing routine site inspections. The SSO has the authority to immediately shut down site operations where unsafe conditions or practices are observed and takes the lead during site emergencies. Site personnel are responsible for following the requirements of this plan and the directions of the SSO. OHM subcontractors may either develop and implement their own site safety plan or comply with the OHM site safety plan. The following personnel are designated to perform these job functions.

Project Manager: James Dunn

Site Supervisor Randy Smith

Site Safety Officer: Steve Grant

Health and Safety Manager: Mark Wilson (404) 734-8086

Related Personnel: Steve Diller, Hank Noultski, Jim Letson, Arron Gran

Subcontractors:

III. HAZARD EVALUATION

CHEMICAL HAZARDS

The site will not present any hazardous chemical hazard since we will be working on clean fill.

PHYSICAL HAZARDS (Heat/Cold Stress, Noise, Fire, and Explosion)

Heat stress; Manual lifting/back strain, Noise, Heavy equipment, Vehicle traffic

TASK SPECIFIC HAZARDS

Task 1: Mobilization/Site Preparation

Hazards: Material handling, manual lifting; Slips, trips, falls;

Control Measures: Practice safe material handling, manual lifting techniques; Ensure personnel are constantly aware of terrain and footing;

Task 2: Grade and reshape road, drainage ditches

Hazards: Material handling, manual lifting; vehicle traffic, heavy equipment operations

Control Measures: Practice safe material handling, manual lifting techniques; Ensure personnel are constantly aware of terrain and footing; vehicles must be operated in a safe and legal manner, safety belts must be worn, do not exceed the safe driving limits posted or for the driving conditions, Heavy equipment shall have fully functioning safety devices, Maintain 15-foot buffer between heavy equipment and overhead electrical utilities, Do not carry personnel or lift anyone with equipment, Personnel approaching heavy equipment will make eye contact and signal the operator to cease activity Institute traffic control measures and ground personnel wear high visibility vests when working around moving equipment and vehicles.

Task 3: Place culvert

Hazards: Material handling, manual lifting; vehicle traffic, heavy equipment operations

Control Measures: Practice safe material handling, manual lifting techniques; Ensure personnel are constantly aware of terrain and

safety belts must be worn, do not exceed the safe driving limits posted or for the driving conditions, Heavy equipment shall have fully functioning safety devices, Maintain 15-foot buffer between heavy equipment and overhead electrical utilities, Do not carry personnel or lift anyone with equipment, Personnel approaching heavy equipment will make eye contact and signal the operator to cease activity Institute traffic control measures and ground personnel wear high visibility vests when working around moving equipment and vehicles.

Task 4: Place erosion/sediment control

Hazards: Material handling, manual lifting; vehicle traffic, heavy equipment operations

Control Measures: Practice safe material handling, manual lifting techniques; Ensure personnel are constantly aware of terrain and footing; vehicles must be operated in a safe and legal manner, safety belts must be worn, do not exceed the safe driving limits posted or for the driving conditions, Heavy equipment shall have fully functioning safety devices, Maintain 15-foot buffer between heavy equipment and overhead electrical utilities, Do not carry personnel or lift anyone with equipment, Personnel approaching heavy equipment will make eye contact and signal the operator to cease activity Institute traffic control measures and ground personnel wear high visibility vests when working around moving equipment and vehicles.

Task 5: Reseed area

Hazards: Material Handling; Slip, trip, fall; Heavy equipment operation;

Control Measures: Practice safe material handling, manual lifting techniques; Ensure personnel are constantly aware of terrain and footing; vehicles must be operated in a safe and legal manner, safety belts must be worn, do not exceed the safe driving limits posted or for the driving conditions, Heavy equipment shall have fully functioning safety devices, Maintain 15-foot buffer between heavy equipment and overhead electrical utilities, Do not carry personnel or lift anyone with equipment, Personnel approaching heavy equipment will make eye contact and signal the operator to cease activity Institute traffic control measures and ground personnel wear high visibility vests when loading trucks

Task 6: Clear and Grub right-of-way

Hazards: Material handling, manual lifting; vehicle traffic, heavy equipment operations, chain saws

Control Measures: Practice safe material handling, manual lifting techniques; Ensure personnel are constantly aware of terrain and footing; vehicles must be operated in a safe and legal manner, safety belts must be worn, do not exceed the safe driving limits

posted or for the driving conditions, Heavy equipment shall have fully functioning safety devices, Maintain 15-foot buffer between heavy equipment and overhead electrical utilities, Do not carry personnel or lift anyone with equipment, Personnel approaching heavy equipment will make eye contact and signal the operator to cease activity Institute traffic control measures and ground personnel wear high visibility vests when working around moving equipment and vehicles. Chainsaw operators must wear chainsaw chaps and full face shield, Follow the manufacturer's operating and safety procedures, Have chainsaw operator training, Keep personnel away from falling trees, Follow OHM SOP for Solvents and Flammable Liquids No. 39,

Task 7: Clean equipment

Hazards: Operation of high pressure washer; Splash; Slip, trip, fall; Material handling, manual lifting

Control Measures: Follow OHM SOP for operation of high pressure washer; Wear specified level of protection with splash shield; Ensure employees aware of footing; Practice safe material handling and manual lifting procedures

Task 8: Demobilization

Hazards: Material handling; Slips, trips, and falls; Manual lifting hazards; Inhalation and dermal hazards when decontaminating equipment; and hazards associated with operation of high pressure washer

Control Measures: Institute safe lifting and material handling practices; Ensuring personnel awareness of footing; Heavy equipment operation awareness

IV. SITE CONTROL

WORK ZONES

Site operations will be segregated in two work zones: a Construction Zone (CZ); and a Support Zone (SZ) where site support facilities are located. The boundary of the CZ/SZ will be marked with warning signs or barrier tape and access control points will be designated to restrict access to authorized personnel. A site map depicting these work zones will be developed during site mobilization and posted. The Buddy System will be implemented on-site for those tasks performed in the CZ.

SITE COMMUNICATIONS

On-site communications will be established between site work zones and will consist of verbal communications, line of sight observations, or two-way radios. Off-site communications will be established in the support zone to summon off-site emergency

services and will consist of either on-site cellular telephones or identifying the location of the nearest telephone to the site.

SAFE OPERATING PROCEDURES

OHM Health and Safety procedures apply to OHM's hazardous waste and emergency response operations. These procedures are contained in OHM's Health and Safety Procedures Manual that is reviewed with and provided to site supervisors during OSHA Supervisors Training. Questions on the applications of these procedures to site operations should be directed to the Regional Health and Safety Manager. Project-specific procedures are attached to this plan.

V. PERSONAL PROTECTIVE EQUIPMENT

The following Levels of Protection are designated for each task performed in site work zones, based on the hazards posed by each task. Modifications of these Levels of Protection are provided for those tasks with specific personal protective equipment requirements. An upgrade/downgrade in the designated Level of Protection may only be instituted for those tasks' where more than one level of protection is specified (i.e., Mod D/C) and only after air monitoring results justify the upgrade/downgrade, based on the action levels listed in this plan. For those tasks where more than one level of protection are specified (i.e., Mod D/C) the first level of protection (Mod D) is the initial level of protection required for the task, with the second level (Level C) being either the downgrade or upgrade level of protection.

NO CHANGES TO THE DESIGNATED LEVEL OF PROTECTION BELOW SHALL BE MADE FOR THOSE TASKS WHERE ONLY ONE LEVEL OF PROTECTION IS SPECIFIED WITHOUT AN AMENDMENT TO THIS PLAN AND THE APPROVAL OF THE REGIONAL HEALTH AND SAFETY MANAGER/DIRECTOR.

All tasks will be performed in Level D. Cleaning the equipment with a pressure washer will require a face shield.

Personal protective equipment requirements for the above designated Levels of Protection is as follows:

LEVEL D

Boots: Steel Toe/Shank Boots

Head/Face Protection: Hard Hat

Eye Protection: Safety Glasses with side shields

VI. DECONTAMINATION PROCEDURES

Decontamination procedures are not necessary on this site.

VII. AIR MONITORING

Instrument: Miniram Particulate Monitor

Task 2,3,4,5,6

Monitored/Frequency: Perform at start up and periodic during all tasks

Action Levels/Required Actions: >1 mg/m³ apply dust suppression agent; > 5 mg/m³ stop operations and allow dust to settle

VIII. EMERGENCY RESPONSE PLAN

PRE-EMERGENCY PLANNING

Before starting site operations, the SSO will implement emergency procedures that include: identifying the location and route to emergency medical services; establishing site communications; designating emergency warning signal and evacuation routes; inventorying emergency equipment; and communicating emergency procedures to personnel.

PERSONNEL ROLES, LINES OF AUTHORITY AND COMMUNICATION

The SSO takes the lead during site emergencies until off-site emergency responders arrive on-site. In cases of major emergencies, OHM personnel will evacuate the site, contact local emergency responders, and rely on them to handle the emergency. Minor emergencies that are controllable on-site with emergency equipment located at the site will be addressed by OHM personnel with the approval of the SSO.

EMERGENCY RECOGNITION AND PREVENTION

The SSO will conduct an initial site safety briefing to review the requirements of the site safety plan with site personnel. This briefing will include discussions on the recognition, prevention and control of emergencies anticipated on-site. Daily safety meetings will be held to emphasize emergency prevention and control measures.

SAFE DISTANCE AND PLACES OF REFUGE

The on-site assembly point will be located in the SZ where site personnel are accounted for and emergency services are contacted. The SSO will evaluate the emergency situation based on the hazards posed to site personnel remaining at the on-site assembly point, then determine the need and location of further off-site evacuation and assembly points.

SITE SECURITY AND CONTROL

Access to the site will be controlled by the SSO until local emergency responders arrive. The SSO will then relinquish site security/control to the authorized emergency response organization.

EVACUATION ROUTES AND PROCEDURES

The emergency evacuation signal will be one long blast with an air horn. Evacuation routes will be designated that direct evacuation from the EZ in an upwind direction. In cases of uncontrollable emergencies such as fire, explosion, or toxic vapor release, a site evacuation shall be implemented as follows:

- ❖ Sound the emergency warning signal.
- ❖ Stop work activities and evacuate the EZ in an upwind direction.
- ❖ Assemble in the SZ and account for personnel. Dispatch a response team equipped with appropriate PPE (minimum Level B protection) and rescue unaccounted personnel.
- ❖ Contact off-site emergency response services.

EMERGENCY DECONTAMINATION PROCEDURES

Personnel will be decontaminated to the extent feasible (gross decon or deluge shower) but life saving and first aid procedures take priority over personnel decontamination efforts. Standard personnel decontamination procedures apply for those injuries deemed non-life threatening by the SSO.

EMERGENCY MEDICAL TREATMENT AND FIRST AID

In the absence of reasonably accessible medical services, an SSO trained in first aid by the American Red Cross or the equivalent will be available on-site to render first aid. An industrial first aid kit available on-site, with its contents approved by OHM's consulting physician. The contents of the first aid kit will be checked by the SSO weekly, with expendable items replaced when used.

EMERGENCY ACTIONS

If actual or suspected serious injury occurs on-site implement the following emergency actions:

- ❖ Remove the exposed/injured person(s) from immediate danger.
- ❖ Render first aid if necessary. Decontaminate injured after critical first-aid has been administered.

- ❖ Obtain paramedic services or ambulance transport to local hospital. This procedure shall be followed even if there is no visible injury.
- ❖ Other personnel in the work area shall be evacuated and assembled at the SZ until the SSO determines that it is safe to resume work.

RESPONSE FOLLOW-UP

The SSO must complete an incident investigation form for site emergencies within 24 hours of the incident and submit/fax it to their Division Manager. Incidents involving potential Lost Time Accident (LTA) injuries, overexposure incidents, or emergencies causing site evacuations must be reported within 24 hours after incident occurrence to:

Angelo Liberatore
 Regional Health and Safety Manager
 Phone: 404/729-3900 (work)
 404/476-0112 (home)
 Fax: 404/729-3905

The SSO will identify the cause(s) of the incident and take action to prevent reoccurrence. The SSO will also evaluate the effectiveness of the site's emergency response procedures and institute corrective actions when warranted.

EMERGENCY EQUIPMENT ON-SITE

The following emergency equipment are located on-site:

- o Fire Extinguishers @ OHM Vehicle
- o Industrial First Aid Kit @ OHM Vehicle
- o Portable Eye wash/Shower @ OHM Vehicle

EMERGENCY CONTACTS

The following emergency contacts will be identified during project mobilization and conspicuously posted in the SZ.

	<u>Name</u>	<u>Phone Number</u>
Hospital:	_____	_____
Fire Dept.:	_____	_____

Police Dept.: _____

Location and Route to Hospital: _____

IX. SITE SAFETY PLAN CERTIFICATIONS

This Site Safety Plan has been approved by Mendel Stanich on 10/23/98

The following site personnel acknowledge reading and understanding the contents of this Site Safety Plan:

	<u>Name</u>	<u>Signature</u>
Project Supervisor:	<u>Randy Smith</u>	_____
Site Safety Officer:	<u>Steve Grant</u>	_____
Site Personnel:	_____	_____
	_____	_____
	_____	_____

ATTACHMENTS: OHM Hazard Communication Program
Material Safety Data Sheets (MSDS)
Incident Investigation Form
Project-Specific Health and Safety Procedures