

**Draft  
Environmental Protection Plan  
Soil and Groundwater Remediation  
Operable Unit 2, Site 6 and 82  
MCB Camp LeJeune, North Carolina  
Contract No. N62470-93-D-3032**

Prepared for:

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## 1.0 ENVIRONMENTAL PROTECTION PLAN

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This Environmental Protection Plan (EPP) has been prepared in accordance with standard OHM policies and procedures. The Environmental Protection Plan provides specific information relating to the scope of work under Delivery Order No. 0015, Soil and Groundwater Remediation, OU No. 2, Sites 6 and 82. The EPP for Sites 6 & 82 will consider air, water and land impacts, as well as noise and solid waste management. The plan will provide site-specific information for:

- Land resources management
- Water resources management
- Air and noise pollution control
- Non-compliance/corrective action
- Post-excavation cleanup
- Permits

The land resources within the property of MCB Camp LeJeune, excluding the limits of existing or newly constructed features, will be preserved in their condition or restored to a condition after completion of construction that does not detract from the appearance of the area. As much as is practical, construction activities will be limited to areas defined by the plans and specifications including land required for access to the AOCs.

## 2.0 HISTORICAL AND ARCHEOLOGICAL FINDS

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OHM does not anticipate locating or uncovering historical artifacts. If an historical artifact is encountered during field operations, OHM will stop work and notify the NTR. The Navy Technical Representative (NTR) will be responsible for contacting the federal, state, and local authorities to determine if the site may contain other important historical artifacts, and whether this site qualifies for possible placement on the National Registrar of Historical Places. Field operations will not resume until the NTR issues a written authorization to proceed.

### 3.0 TEMPORARY CONSTRUCTION ROADS

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The construction of all temporary construction roads in and around the job site will be performed in a manner which will minimize the impact to the natural environment. Water will be used for dust control, as necessary. It is not expected that a significant number of construction roads will be necessary during the removal action. Access roads currently exist near much of the planned construction locations including the proposed groundwater treatment building and groundwater extraction wells.

All access to the site will most likely be from Holcomb Boulevard at the intersection of Holcomb Blvd. and Brewster Blvd. (Lot 203).

## 4.0 PROTECTION OF TREES AND SHRUBS

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Prudent steps will be taken to protect trees and shrubs outside of the AOC excavation zones as necessary. Those trees and shrubs within the excavation zones will be removed by OHM for pickup by the Forestry Division. All trees and shrubs removed as a result of the construction activities will be cut into manageable pieces and moved from the project site so as not to interfere with operations. Precautions that will be taken to minimize the construction activities impact on existing vegetation will include, but not be limited to:

- Utilization of existing or temporary construction roads only;
- Closely supervised equipment operators with an emphasis placed on preservation of vegetation in non-work areas;
- Proper use of heavy equipment and training for truck operators to minimize damage to adjacent vegetation not directly affected by construction activities; and
- Utilization of equipment appropriately designed and sized for precise excavation

### 4.1 RESTORATION OF LANDSCAPE DAMAGE

Upon completion of the field construction activities, disturbed areas will be seeded. Prior to seeding and fertilization, lime will be applied as a soil amendment for pH adjustment at a rate of approximately 40 pounds per acre.

Any trees or other landscape features damaged by equipment will be restored if practical by trimming of damaged limbs and application of tree dressing. Damaged trees which cannot be restored will be felled, limbed and left on-site. Soil will be placed and compacted around any root systems exposed during excavation activities.

## 5.0 WATER RESOURCES PROTECTION

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New River, Bear Head Creek and Wallace Creek are located near or within OU No. 2, and could be negatively impacted by construction activities if proper sediment and erosion protection measures are not taken. To protect against damage, storm water surface run-off leaving the site will be controlled by temporary erosion/sediment control techniques such as berms, placement of rip raps, silt fencing and grading. Open excavations or stockpiled soil vulnerable to creating erosion problems during construction activities will be held to a minimum.

### 5.1 EROSION SEDIMENT CONTROL

Prior to disturbance of native vegetation and soils, temporary erosion/sediment control will be established on the down gradient side of each excavation. Control techniques to be utilized will involve silt fencing.

Silt fencing will be installed with the fabric a minimum 6 inches below grade and extending 36 inches above grade and fastened to posts no more than 6 feet apart. The posts will be installed with a minimum of 24 inches below grade and extend a minimum of 36 inches above grade. Fabric will be attached to the up slope side of the posts using 1 inch staples or tie wires. Silt fences will be inspected after every rain and daily during extended rain fall. Accumulated sediment will be removed before the depth reaches 12 inches.

### 5.2 SPILL CONTROL

Measures will be taken to prevent chemicals, fuels, oils, greases, bituminous materials and contaminated materials from entering streams, rivers or lakes. Adsorbents will be available to collect any free product outside containment and any soil contaminated with fuel spills will be immediately removed and placed into appropriate containers and sampled to determine proper disposition.

## 6.0 DUST AND AIR POLLUTION CONTROL

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### 6.1 AIR AND NOISE MONITORING

Personnel and ambient air monitoring will be conducted as necessary in order to determine airborne dust and contaminant levels. Ambient air monitoring for total particulates will be conducted at working locations and on occasion at the perimeter of the project site. This insures that respiratory protection is adequate to protect personnel against the contaminants that are encountered as well as assuring that harmful levels of airborne contaminants are not leaving the site. Particulate monitoring will be performed using a mini-ram monitor as discussed in the site specific Health and Safety Plan.

OHM will only perform operations of heavy equipment during daylight hours to minimize the impact of noise pollution on off-site personnel. Noise exposure to off-site residents or personnel is expected to be minimal. Hearing protection will be implemented in high decibel areas if necessary as specified in the SHSP.

### 6.2 PARTICULATE EMISSIONS CONTROL

Specific measures will be taken to minimize particle emissions for major activities during site construction if total particulates exceed action levels specified in the SHSP Actions included the following:

#### *Soil Excavation, Handling, Site Grading and Transportation*

- Apply water to work and traffic areas as necessary to minimize fugitive emissions.
- Cover stockpiles with sheeting to minimize wind and/or storm water erosion.
- Move and load soil for transport within the site that limits freefall of material and is least likely to generate fugitive emissions.



- Halt dust-generating work when on-site wind conditions exceed 35 miles per hour.

#### *Movement of Equipment*

- Water traffic areas as required to minimize fugitive emissions.
- Designate equipment traffic patterns to minimize travel distance and vehicular fugitive emissions.
- Limit vehicle speed to minimize fugitive emissions.

### **6.3 BURNING**

No burning will be performed on site. In the event of a fire on site, work will stop immediately and the MCB Camp LeJeune fire department will be notified.

## 7.0 POST EXCAVATION CLEANUP

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All equipment will be decontaminated on the equipment decon station prior to demobilizing from the site. Decontamination will consist of scraping and pressure washing to remove visible soil and debris from tires and undercarriage of vehicles and heavy equipment. Decontamination water will be transferred to a holding tank for process through the groundwater treatment system or off-site disposal. The site will then be turned over to the Navy following their acceptance of site conditions.

Liquids generated from decontamination processes will be transferred to portable storage containers. Decontamination liquids will be sampled, analyzed for hazardous constituents and disposed of at an approved off site, permitted disposal facility or through the base water treatment plant. The Site Health and Safety Plan contains additional information on personnel and equipment decontamination procedures.

## 8.0 PERMITS

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In accordance with the EPA National Oil and Hazardous Substances Pollution Contingency Plan (NCP) under the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA), specifically 40 CFR 300, Subpart E (Hazardous Substance Response), Section 300.400 (General), Subsection (e) - Permit Requirements, paragraph (1): "No federal, state, or local permits are required for on-site response actions conducted pursuant to CERCLA sections 104, 106, 120, 121, or 122. The term *on-site* means the areal extent of contamination and all suitable areas in very close proximity to the contamination necessary for implementation of the response action". Therefore, though no formal permits will be obtained for these remedial actions. The spirit and intent of these permits will be met including discharge monitoring for air and surface water discharges.