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MCB CAMP LEJEUNE
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U S MARINE CORPS RESPONSE TO NORTH CAROLINA DEPARTMENT OF
ENVIRONMENT AND NATURAL RESOURCES AND U S EPA REGION I COMMENTS TO
DRAFT EXPANDED SOIL BACKGROUND STUDY REPORT MCB CAMP LEJEUNE NC

08/02/2011
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Response to Comments

Draft Expanded Soil Background Study Report

Marine Corps Base Camp Lejeune, North Carolina

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Introduction

The purpose of this document is to address comments on the Draft Expanded Soil Background Study Report for Marine Corps Base Camp Lejeune. The North Carolina Department of Environment and Natural Resources (NCDENR) Superfund Section provided the comments listed below. Responses to comments are provided in bold.

NCDENR Comments (dated May 2, 2011)

1. Section 6.1 on page 6-1, Section 6.2 on page 6-1, and Section 6.3 on page 6-2 states that no further consideration will be given to metals that do not exceed the Background Threshold Value (BTV), even though the BTV may exceed the health risk concentration. This information should be provided to the Base for future notification to construction projects on base that are planned in areas of potentially toxic naturally occurring inorganics in the soil. As stated in the report no action is required by the Base IR program but the base should take the health risk issue into consideration during future construction projects. It is typical to see a phase I environmental investigation before construction at many projects.

This report will be available to anyone at the Base (if needed).

2. As you know, PAH's and Pesticides as listed in Tables 6-1 through 6-12 are not naturally occurring elements and therefore cannot be used exclusively to justify No Further Action (NFA) at any on-Base Sites. Proof that PAHs or Pesticides are from an off-Base source would be required. Construction projects in areas that have PAH or pesticide concentrations that exceed human health concentrations should take these facts into consideration. Exposure to these PAHs or pesticides could be toxic to future occupants.

Agreed, multiple lines of evidence will be evaluated in establishing PAHs and pesticides cleanup levels. As mentioned in the response to comment 1, this report will be available to anyone at the Base (if needed).

3. Please clarify in the text of the report, why the BTV for Chromium III, Barium, and other inorganics in Tables 6-1 through 6-12 are calculated or otherwise determined to be acceptable background concentrations at levels greater than the maximum detected naturally occurring value.

The text of the report will be revised to explain that based upon the sample size, variability, and distributional choice, UTLs sometimes exceed the maximum detected concentration. One reason for this is that the UTL is an estimate of a target of the 95th percentile (with 95 percent confidence) of the background population, and a small percentage of background results from the overall background population are expected to exceed the calculated UTL. Whether such occurrences are captured in the background data is something that fluctuates from case to case (and is related to the number of background sample results).

USEPA Comments (dated July 21, 2011)

EPA has completed its review of the Draft Expanded Soil Background Study Report, dated May 2011 and has no additional comments. The document can be finalized.