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UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION IV

345 COURTLAND STREET, N.E.
ATLANTA, GEORGIA 30365

4WD-FFB

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

Ms. Linda Berry
Department of the Navy - Atlantic Division
Naval Facilities Engineering Command
Code 1823
Norfolk, Virginia 23511-6287

RE: Marine Corps Base Camp Lejeune NPL Site
Operable Unit 7, Sites 1, 28 and 30
Jacksonville, North Carolina

Dear Ms. Berry:

Attached are the risk review comments from the Environmental Protection Agency for the document titled "Draft Remedial Investigation/Feasibility Study Work Plan for Operable Unit No. 7, (Sites 1, 28 and 30)" dated June 1993.

If you have any questions or comments, please call me at (404) 347-3016.

Sincerely,

Gena D. Townsend
Senior Project Manager

Attachment

cc: Patrick Watters, NCDEHNR
Neal Paul, MCB Camp Lejeune

Post-It™ brand fax transmittal memo 7671		# of pages ▶ 4
To	Ray Watters	From
Co.	Baker	Co.
Dept.		Phone #
Fax #	412 269 2002	Fax #
		804 322 4805

Comments on the Draft Work Plan
Sites 1, 28 & 30

1. Page 5-35 (Section 5.4.3.2), last paragraph on page - Regarding the sampling of the top six inches of soil, EPA Region IV generally considers the top twelve inches as surface soil for the purposes of deriving a concentration term for direct human contact in the baseline risk assessment. Therefore, contaminant data should be obtained from soil areas within the top twelve inches that has the highest anticipated contaminant concentrations for surface soil characterization.
2. Page 5-47 (Section 5.7.1.5) - Current EPA toxicology databases should be used in the risk assessment (IRIS, 1993; HEAST, 1993)
3. Section 5.7 - The risk assessment should include health-based remedial goal options (RGOs) for chemicals which significantly contribute to unacceptable risks. Chemical-specific remedial goals should be presented which correspond to carcinogenic risk of 10^{-6} , 10^{-5} , 10^{-4} , and to hazard quotient values of 0.1, 1, and 10 for noncarcinogens as well as any ARAR values (state and federal). (see attached)

Development of Preliminary Remediation Goals, REmediation Goal Options, and Remediation Levels

GIETechS Article by Julie W. Keller
Office of Health Assessment
Waste Management Division

The Office of Health Assessment (OHA) issued a supplemental guidance to "Risk Assessment Guidance for Superfund: Volume I - Human Health Evaluation Manual (Part A)" titled "Supplemental Region IV Risk Assessment Guidance" in March 1991. Additional guidance has been added to this supplement from time to time. The evolution of risk assessment is continually ongoing and the OHA sees the need for a more extensive updated guidance. It is anticipated that this new guidance will be developed in the next few months. One clarification to appear in the new risk assessment guidance is the development of Preliminary Remediation Goals (PRGs), Remedial Goal Options (RGOs) and Remediation Levels (RLs).

Preliminary Remediation Goals (PRGs) are established at scoping for toxic substances known to be present at the site in order to provide a basis for the feasibility study consideration of all appropriate remedial alternatives that may achieve the target levels. PRGs serve as the basis of the development of the sampling and analysis plan to ensure that the proposed methods will achieve adequate quantitation limits. PRGs are based on ARARs or risk-based calculations to set concentration limits. The use of PRGs will limit the number of alternatives included in the feasibility study and streamline the process. Calculation of PRGs should be done in accordance with "Risk Assessment Guidance for Superfund: Volume I - Human Health Evaluation Manual, Part B, Development of Risk-based Preliminary Remediation Goals." PRGs are intended as initial guidelines and do not establish that cleanup to these goals is warranted.

The baseline risk assessment should include a section which outlines the remedial goal options (RGOs) for the contaminants and media of concern. This section should include both ARARs and health based cleanup goals. This section should contain a table with media cleanup levels for each chemical that contributes to a pathway that exceeds a 10^{-4} risk (or what ever risk level is chosen as the remediation "trigger" by the risk manager) or HI of 1 or greater for each scenario evaluated in the baseline risk assessment. Chemicals contributing risk to these pathways need not be included if their individual carcinogenic risk contribution is less than 10^{-6} or their noncarcinogenic HQ is less than 0.1. The table should include the 10^{-4} , 10^{-5} , and 10^{-6} risk levels for each chemical, media and scenario (land use) and the HQ 0.1, 1 and 10 levels as well as any ARAR values (state and federal). The values should be developed by rearranging the site-specific average-dose equation used in the baseline risk assessment to solve for the concentration term; RAGS Part B is not appropriate at this stage in the risk assessment process. The purpose is to provide the RPM

with the maximum risk-related media level options on which to develop remediation aspects of the Feasibility Study and Proposed Plan.

Remediation Levels (RLs) are chosen by the risk manager for the chemicals of concern and are included in the Proposed Plan and the Record of Decision. These numbers derived from the RGOs are no longer goals and should be considered required levels for the remedial actions to achieve.