



TETRA TECH NUS, INC.

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C-NAVY-12-01-1542W

December 21, 2001

Project Number N7397

James Shafer, Remedial Project Manager
U.S. Department of the Navy
Northern Division
Naval Facilities Engineering Command
10 Industrial Highway
Code 1823-Mail Stop 82
Lester, PA 19113-2090

RE: Response to RIDEM Comment Regarding Unlimited PRGs for Marine Sediment
Old Fire Fighting Training Area
Naval Station Newport, Newport, Rhode Island

Dear Mr. Shafer,

This correspondence has been prepared in response to the letter from the RIDEM Office of Waste Management dated December 18, 2000. The RIDEM letter was prepared to comment on the "Unlimited PRGs" provided by Tetra Tech NUS, Inc. on December 5, 2000 for the OFFTA manne sediments.

Comment:

The Rhode Island Department of Environmental Management, Office of Waste Management (RIDEM) has received the correspondences entitled Response to RIDEM Comment Regarding Limited PRGs for Marine Sediment Old Fire Fighter Training Area, dated 4 December 2001 and 6 December 2001. These correspondences were submitted to address a number of verbal and written comments submitted by the Office of Waste Management concerning the limiting steps in the PRG process. Specifically, the PRG process includes steps, such as collocation with other contaminants, biotoxicity screening, reference station screening, and SEM/AVS limiting metal bioavailability, which the Office of Waste Management had previously questioned. These concerns were reflected in the latest correspondence on this issue, included below, dated 30 October 2001.

Original Comment.

Previously, the Navy agreed to submit preliminary remediation sediment values for all of the contaminants found at the site. These values would be derived independent of any mechanism in the preliminary remediation goal process, which is designed to limit the number of analytes. That is, the proposed remediation goal process would eliminate certain contaminants based upon a number of factors, such as collocation with other contaminants, screening via biotoxicity, etc. Please, as agreed submit the requested material.

The submitted December correspondence is limited to the collocation concern. It is assumed that the Navy will be submitting packages, which address the screening via biotoxicity, complete metal availability, and reference stations. In order not to delay the review of the PRG values the Office of Waste Management recommends that the Navy submit the additional packages at the same time. In addition, the package should include a PRG value calculated based upon the omission of all of the limiting steps, collocation, biotoxicity, metals availability, and reference station.

In order to comply with the RIDEM request, the PRG development process would be stripped beyond the basic structure of the process. What would be left would simply be a conversion of the sediment data to porewater concentrations, and those concentrations compared against the WQSVs. Calculated pore water concentrations are presented on Table B-3.3 of the Draft Final PRG document, and WQSVs are presented on Table B-3.6 of that same document. Unfortunately, such a simplistic approach is not appropriate for determining cleanup criteria



Mr. James Shafer
December 21, 2001
Page 2 of 2

In accordance with EPA and Navy policy, if unacceptable risk to human health and/or the environment is identified, risk-based sediment cleanup goals shall be developed using site-specific information and the weights-of-evidence from the human health/ecological risk assessments. The cleanup goal must be risk-based and achievable. Ecological screening values must not be used as cleanup goals nor shall cleanup values below background chemical levels be used. Development of cleanup goals should include, but not limited to, land-use, toxicity measures, and bioavailability.

If an analyte is determined to not present an unacceptable risk by evaluating these weights-of evidence, then calculation of a cleanup goal is not necessary.

The Navy and EPA approach to ecological risk assessments is an iterative one. As we proceed through the steps in the process, each step or tier becomes more focused on actual analytes that drive risks. The PRG process is a way to use the results and data in the risk assessment to develop and focus cleanup goals in appropriate areas.

Should RIDEM wish to pursue the comparison of sediment concentrations against screening criteria, then we would be happy to provide all necessary information and data to support RIDEM's effort.

If you have any questions regarding this information, please do not hesitate to contact me.

Very truly yours,

A handwritten signature in black ink, appearing to read 'Stephen S. Parker'.

Stephen S. Parker
Project Manager

SSP:pmp

c: K. Keckler, EPA Region I
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