

N00102.AR.001950
NSY PORTSMOUTH
5090.3a

LETTER AND COMMENTS FROM U S EPA REGION I REGARDING PROCEDURE FOR
ELEVATION OF POTENTIAL BACKGROUND SOIL AND GROUNDWATER DATA SETS AND
RECOMMENDED HUMAN HEALTH RISK ASSESSMENT PROTOCOL NSY PORTSMOUTH
ME
6/30/1998
U S EPA REGION I



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 1

JOHN F. KENNEDY FEDERAL BUILDING
BOSTON, MASSACHUSETTS 02203-0001

June 30, 1998

Mr. Fred Evans
Department of the Navy
Northern Division
Naval Facilities Engineering Command
10 Industrial Hwy., Mail Stop #82
Lester, PA 19113-2090

Re: Technical Memoranda
1) Procedure for the Elevation of Potential Background Soil and Groundwater Data Sets
2) Recommended Human Health Risk Assessment Protocol
Portsmouth Naval Shipyard
Kittery, Maine

Dear Fred:

The United States Environmental Protection Agency (EPA) has reviewed the two Technical Memoranda listed above. These documents pertain to work to be performed at the Portsmouth Naval Shipyard in Kittery, Maine and are dated May 26, 1998.

EPA's comments on the above-mentioned documents are provided in Attachment I to this letter.

If you have any questions regarding these comments, please contact me at (617)573-5785.

Sincerely,

A handwritten signature in cursive script that reads "Meghan F. Cassidy".

Meghan F. Cassidy
Remedial Project Manager

Enclosure

cc: Marty Raymond/PNS
Iver McLeod/ME DEP
Carolyn Lepage/Lepage Environmental
Cynthia Hanna/EPA
RAB Members

ATTACHMENT I

The following are EPA's comments on the Technical Memoranda entitled 1) Procedure for the Elevation of Potential Background Soil and Groundwater Data Sets and 2) Recommended Human Health Risk Assessment Protocol for the Portsmouth Naval Shipyard in Kittery, Maine. These documents are dated May 26, 1998.

Specific Comments on Technical Memorandum, Recommended Human Health Risk Assessment Protocol

- (1) **Page 2, Background Comparison**, Please cite this reference in the reference list and note that it is an attachment to the document
- (2) **Page 3, 5th paragraph, item "b)"**, The maximum concentration across all wells should be used for the RME. This Region I guidance is stated in the August 1995 number 3 edition of Risk Updates/New England.
- (3) **Page 3, 5th paragraph, item "c)"**, The word "mean" appears to be missing after "arithmetic".
- (4) **Page 4, 1st Bullet, last sentence**, This sentence appears to lead into some further information regarding State of Maine Guidance. Please complete or clarify the bullet.
- (5) **Page 5, 2nd paragraph, 4th line**, Please add: "(two values are recommended depending on the organic content of the soil). In addition, in order to assess this contaminant, the organic content of the soil will have to be determined.
- (6) **Page 5, 2nd paragraph, 6th line**, Please add: "Generic absorption factor defaults (i.e., 0.1 for semi-volatile organic contaminants and 0.01 for inorganic contaminants) will be used for screening.
- (7) **Page 5, 3rd paragraph, last line**, Please add: "Dermal contact with groundwater will use guidance specified in "Risk Assessment Guidance for Superfund, Volume I: Human Health Evaluation Manual, Supplemental Guidance, Dermal Risk Assessment, Interim Guidance". NCEA-W-0364."
- (8) **Page 7, 3rd Line**, Please add: "a combination of" after "follow", and add: "and state of Maine" after "I".

- (9) **References** Please update the following references:

US EPA, 1998. "Risk Assessment Guidance for Superfund, Volume I: Human Health Evaluation Manual, Supplemental Guidance, Dermal Risk Assessment, Interim Guidance". NCEA-W-0364.

US EPA, Region III, April 1998. Risk-Based Concentration Table

Specific Comments on Technical Memorandum, Procedure for the Evaluation of Potential Background Soil and Groundwater Data Sets

- (1) Discussion is needed regarding how to handle any non-site related contaminants that appear greater than risk-based concentrations (RBC). Generally, inorganic constituents at concentrations greater than the RBCs can be eliminated if they are naturally occurring to a particular area. However, other elements and especially organic compounds are quantitatively evaluated in the human health risk assessment. If some of these non-site related constituents are found to be risk drivers or have risks above EPA's acceptable risk range, the determination of whether/who/how to mitigate the risks should be evaluated during the risk management phase of work.