

N00102.AR.002106
NSY PORTSMOUTH
5090.3a

LETTER AND COMMENTS ON BEHALF OF SEACOAST ANTI POLLUTION LEAGUE
REGARDING TECHNICAL MEMORANDUM FOR HUMAN HEALTH RISK ASSESSMENT
PROTOCOL FOR OPERABLE UNIT 2 (OU 2) NSY PORTSMOUTH ME
11/19/1999
LEPAGE ENVIRONMENTAL SERVICES

Lepage Environmental Services, Inc.

P. O. Box 1195 • Auburn, Maine 04211-1195 • 207-777-1049 • Fax: 207-777-1370

November 19, 1999

Johanna Lyons
Seacoast Anti-Pollution League
P. O. Box 1136
Portsmouth, New Hampshire 03802

Subject: Review of October 1999 *Technical Memorandum for Human Health Risk Assessment Protocol for Operational Unit 2 (OU2) (Site 6, Site 29, DRMO Impact Area Including Quarters S, N, and 68)*

Dear Ms. Lyons:

We are transmitting comments to the Seacoast Anti-Pollution League (SAPL) on the October 1999 *Technical Memorandum for Human Health Risk Assessment Protocol for Operational Unit 2 (OU2) (Site 6, Site 29, DRMO Impact Area Including Quarters S, N, and 68)*. The following incorporate Dr. David Brown's comments as well:

1. Page 1, Section 1.0. The first paragraph under the bullets lists a couple of reports (the *Revised OU3 Risk Assessment* and the 1994 *Human Health Risk Assessment*) that were considered in the preparation of this *Technical Memorandum*. The paragraph also states that federal and state comments on the *Revised OU3 Risk Assessment* were also considered. We note that we have submitted comments on both these documents on behalf of SAPL. Were SAPL's concerns and comments (see our letter dated August 7, 1999, regarding the Navy's responses to our comments on the *Revised OU3 Risk Assessment*, for example) also considered in the preparation of the *Technical Memorandum*?

2. Page 2, Section 2.0. The basis for using data from the references listed at the beginning of the section should be provided. For example, why is soil data, but not groundwater data, from the 1992 reference used? Why is groundwater data from 1996/1997 selected?

3. Page 2, Section 2.0. The first paragraph after the Toxicity Screen heading states that "A carcinogenic chemical detected at maximum concentration equal to or less than the relevant Region IX PRG level will not be selected as a COPC." The additive effects of carcinogenic chemicals, not just concentrations of individual chemicals, must also be considered in determining which parameters should be chemicals of potential concern (COPCs).

- 4. Page 2, Section 2.0.** The first paragraph after the Toxicity Screen heading also states that concentrations in soils will also be compared to federal soil screening levels (SSLs) for migration from soil to air. How will the Navy evaluate migration from soil to air for compounds lacking an SSL? This comment also applies to other passages in the document where SSLs are mentioned.
- 5. Page 3, Section 2.0.** As we have noted in our comments on previous documents (the *Interim Offshore Monitoring Plan* and the *Site Screening Report for Sites 30, 31, and 32*, for example), the frequency of detection for a compound may be underestimated if numerical detection limits are elevated. We think this issue should be evaluated during data analysis to avoid underestimating the number of times action levels or other criteria are exceeded and to avoid underestimating risk.
- 6. Page 3, Section 2.0.** The Navy is proposing to evaluate surface soils using samples collected from 0 to 2 feet below the ground surface. Will some COPCs be excluded because of the sample depth interval chosen? On page 12, the Navy states that the 0 to 2 foot interval was selected to assure an adequate surface soil sample dataset. How many surface soil samples were collected at OU2 from the 0 to 1 foot interval, and how many from the 0 to 2 foot interval? What is considered an “adequate” dataset?
- 7. Page 4, Section 2.0.** The Navy is proposing eliminating inorganic compounds on the basis of background levels, even though the most recent EPA guidance states that background levels should not be used to eliminate any COPC from the evaluation process. As we have noted in our comments on the *Draft Facility Background Development* and other documents, the issue of what constitutes representative background conditions for the Shipyard as a whole and for individual sites is still unresolved. Furthermore, we do not believe that the Navy should deviate from EPA guidance in this area.
- 8. Page 5, Section 2.0.** The last paragraph in the section is confusing. It states that maximum chemical concentrations will be compared with SSLs and ARARs (federal or state applicable or relevant and appropriate requirements), but COPCs will not be selected on the basis of ARARs or groundwater protection SSLs. Why is the comparison being made if it will not have an effect on COPC selection? More importantly, if chemical concentrations exceed either or both the SSLs and ARARs, what is the basis for not selecting them as COPCs? This section requires clarification.
- 9. Page 11, Section 5.2.** The equations at the end of the section are confusing and require additional explanation in the text.
- 10. Tables 4.1C and 4.1J.** The adult and child residential default values for exposure frequency need to be justified. Why is 150 days per year considered adequate for residential exposure, but a construction worker’s exposure is 250 days per year (see Table 4.1A)?

Page 3 of 3, J. Lyons
November 19, 1999
Draft OU2 Risk Assessment Protocol

If you have any questions regarding the comments above, please give me a call at 207-777-1049.

Sincerely,



Carolyn A. Lepage, C.G.
President



Enc.

cc: Iver McLeod, Department of Environmental Protection
Meghan Cassidy, Environmental Protection Agency
David Brown, Sc.D.
Marty Raymond, Portsmouth Naval Shipyard