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LETTER AND COMMENTS ON BEHALF OF SEACOAST ANTI POLLUTION LEAGUE
REGARDING INTERIM OFFSHORE MONITORING PLAN FOR OPERABLE UNIT 4 (OU 4)
NSY PORTSMOUTH ME
9/2/1999
LEPAGE ENVIRONMENTAL SERVICES

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September 2, 1999

Peter Vandermark
Seacoast Anti-Pollution League
P. O. Box 1136
Portsmouth, New Hampshire 03802

Subject: Comments on the July 1999 *Interim Offshore Monitoring Plan for Operable Unit 4*

Dear Mr. Vandermark:

As you requested, we are transmitting additional comments to the Seacoast Anti-Pollution League (SAPL) concerning the July 1999 *Interim Offshore Monitoring Plan for Operable Unit 4*. Our comments on Sections 3 and 5 of the report were transmitted in our letter to you dated August 25, 1999. This letter focuses on the remaining sections of the Plan. We had commented on the January 1999 version of the Plan in our letter to you dated April 4, 1999, and the Navy's responses to our comments are included in Appendix B of the current Plan. Many of the responses to our comments were acceptable. Note that we have retained the comment numbers and repeated the comments from our April 4th letter for the responses below that require clarification. We have also included several new comments at the end of this letter.

Comments on Responses to April 4, 1999, Comments

1. Page ES-1, Executive Summary. *"The monitoring program...was developed to provide data ...to determine whether the interim Remedial Action Objectives (RAOs) for OU4 are being met."* What action will the Navy take should the data determine that RAOs are not being met? This comment also applies to the second paragraph in Section 1.1.

Navy Response: Please refer to the response to MEDEP Comment 2 [which states "The monitoring plan is to fulfill the requirements of the Interim ROD for OU4. ... In addition, as part of the DQO process, the Navy is developing a decision process to determine what actions to take based on the data collected. ..."].

Additional Comment: The Navy's general anticipated course of action, should RAOs not be met, should be presented in the Executive Summary, as well as other appropriate places in the Plan.

7. Page 1-2, Section 1.2 Report Organization. Additional Standard Operating Procedures (SOPs) and a Health and Safety Plan (HASP) will be included in the final Monitoring Plan once a contractor is selected. We may have comments and questions once that information is presented.

Navy Response: Comment Noted.

Additional Comment: We submitted comments on SOPs in our letter to you dated August 21, 1999, and will comment on the HASP under separate cover.

9. Page 1-5, Section 1.3.2 OU4 Description and History. The use of the term "several" to describe the number of discharge points at Site 5 is misleading. It is our understanding there were about 85 pipes. If the actual or estimated number of discharge points at Site 5 is not included, then the number of discharge points should be described as "numerous" here and elsewhere in the text. Information must also be added about the contaminants (compounds, concentrations, etc.) detected in sediments in the Site 5 area prior to and after dredging (see comment 28, below), and the disposition of the spoils from the periodic maintenance dredging.

Navy Response: The text will be revised to reflect the text in the Interim ROD for OU4.

Additional Comment: The text on page 1-8 still states there were "several", rather than "numerous" discharge points for Site 5. This should be corrected. The information regarding the nature of contamination found in the dredge spoils should also be added.

12. Page 1-9, Section 1.3.2 OU4 Description and History. The paragraph regarding eelgrass habitats should mention that eelgrass beds appear to be "missing" from areas of Clark Cove where they would be expected to occur, and that this might be an adverse impact from contaminants.

Navy Response: This section describes OU4. Information on risks are provided in Section 1.4.

Additional Comment: The information requested should be added to Section 1.4.1.

13. Page 1-10, Section 1.3.3 Great Bay Estuary and Portsmouth Harbor Description. "*The water mass in the vicinity of PNS is predominantly marine...and is not used for human consumption.*" What does human consumption mean? The risks associated with human consumption of fish from the estuary, and measures taken to reduce those risks, have not been addressed. Reliance on fish consumption advisories to provide adequate protection to the public,

without taking active steps to determine the Navy's contribution to human health risks, is neither appropriate nor adequate. The interim offshore monitoring should, at a minimum, include contaminants identified in the human health risk assessment as posing risks, as well as appropriate receptors and media.

Navy Response: The sentence is discussing surface water and human consumption refers to ingestion of the surface water. The sentence is not discussing fish or seafood. The Navy believes the information collected as part of its interim offshore monitoring program can be used to address human health in the future, if required. Also please refer to response to SAPL comment 15.

Additional Comment: To avoid confusion, the text should be revised to clearly state that the surface water is not used as drinking water. To address comments concerning human health risks, the Plan should also include the third sentence of the Navy's response in appropriate sections, such as Section 1.4.2, Human Health Risk Assessment Report for Offshore Media.

16. Page 1-17, Table 1-4. The exponential notation is not consistent in the table and footnotes. As we suggested in our comments on the Draft ROD, our sense is that the use of superscripts is easier for readers to understand. It is also not clear which parameters are the most significant with regard to risk. This information should be added.

Navy Response: The text and the table will be revised to reflect the Interim ROD for OU4. As provided in the response to SAPL comment 20 on the draft Interim ROD for OU4, these changes include revision to include incremental cancer risk as superscript rather than exponents and also the inclusion of information on chemicals contributing to the risk.

Additional Comment: We appreciate the risks presented as superscript rather than exponents. However, the footnote identifying EPA's acceptable risk numbers has been removed from the current version of the table. This information should be put back as a footnote and the State of Maine acceptable risk numbers added. This will allow the reader to determine where the numbers in the body of table fit in terms of regulatory levels.

18. Page 2-1, Section 2.0 Aquatic PRGs Development Process and Data Needs. *"Note that pesticides have not been identified as COCs for the offshore at PNS..."* To reiterate our comments on the Draft and Draft Final RODs, DDT and related compounds exceeded State water quality criteria and screening levels for sediment at a number of seeps along the Shipyard shore. In addition, levels of DDT and its related congeners also exceeded NOAA's ERLs for every sediment sampling location for every round of sampling during the seep/sediment sampling

program. Therefore, it is appropriate that DDT and related compounds be included as COCs (contaminants of concern), regardless of whether an onshore source (or sources) has been identified or application of the pesticides was legal.

Navy Response: As per the Interim ROD, pesticides will be included in the offshore monitoring program. As per the resolution of comments on the Interim Record of Decision, the Navy will provide the MEDEP a proposal on how the navy plans to evaluate DDT in seeps and sediment to determine whether to include DDT as a COC for the offshore.

Additional Comment: We look forward to the opportunity to review the Navy's proposal.

21. Page 3-1, Section 3.1 Interim Offshore Monitoring Sampling and Analysis Program.

As stated in our comments on the Draft and Draft Final RODs, we take issue with the statement that environmental media will be monitored to determine whether contaminant concentrations **are** (emphasis added) at acceptable levels, particularly because Section 1.3 of the ROD states that acceptable human health and ecological risks were exceeded, meaning that contaminant concentrations **are not** at acceptable levels. The Navy responded to our February 1999 comment that "...monitoring will be conducted to determine whether current and future concentrations (over the course of the interim monitoring) are at acceptable levels." We suggest this portion of the Navy's response be added to the text of the Monitoring Plan. This comment also applies to the second paragraph on page 3-3.

Navy Response: The text will be revised to reflect revisions made to the Interim ROD for OU4 based on SAPL's similar comment on the draft final Interim ROD for OU4. As provided in the response to SAPL Comment 3 on the draft final Interim ROD for OU4, the text will be revised to indicate that environmental media will be monitored to determine whether over the course of interim monitoring current and future concentrations of chemicals of concern (metals, PCBs, and PAHs) in the offshore areas are at acceptable levels.

Additional Comment: The revision to the text in Section 3.1 was made. However, the passage we objected to is now included on page ES-1 in the Executive Summary. This must be corrected.

39. Page 7-5, Section 7.3 Field-Related QC Samples. This section should include a description of temperature blanks.

Navy Response: A description of the temperature blanks is provided in Section 5.3.4 - Sample Shipment Procedures, on page 5-7.

Additional Comment: We realize the temperature blank is described in a previous section. However, Section 7.3 states "Each type of field QC sample is discussed below." For the sake of completeness, the temperature blank should be described in this section along with the field duplicates, source water blanks, trip blanks, and equipment rinsate blanks.

42. Appendix D, Response to Comments on Proposed Sampling and Analysis Program.

Many of the responses to comments submitted in August 1998 are satisfactory. Additional comments are as follows:

42a. SAPL Comment 1. With regard to conducting the essential monitoring studies identified in the Estuarine Ecological Risk Assessment (EERA) as needed to reduce uncertainties, the Navy responded that it accepted the results of the risk assessment and would not conduct additional studies to reduce uncertainties. We concur with the Maine DEP (3/26/99 Comment 40) comment that, in accepting the uncertainties discussed in the EERA, the Navy must make the most conservative assumptions based on these uncertainties. This comment applies to other August 1998 comments (such as SAPL comments 9D and 9E) regarding uncertainties identified in the EERA.

Navy Response: As part of the FS, uncertainties are considered in developing remedial action alternatives and in the evaluation of the various alternatives developed. The 9 CERCLA criteria are evaluated for each alternative to determine how the alternative meets the criteria given the uncertainties. In determining which alternative to select as a final remedy, it is not a matter of making the most conservative assumptions, but rather a balancing of the 9 CERCLA criteria.

Additional Comment: We realize that the selection of the final remedy involves balancing the 9 CERCLA criteria. However, we also want to emphasize that, by accepting the results of the risk assessment and not conducting additional studies to reduce uncertainties, the Navy must make the most conservative assumptions in evaluating the criteria.

42e. SAPL Comment 8. What is the status of the Navy's evaluation of Dr. Henri Gaudette's research regarding sediment accumulation rates and vertical distribution of heavy metals in the Piscataqua River?

Navy Response: The Navy has had Dr. Richard Hurst evaluate Dr. Henri Gaudette's speciation procedure to determine how it may be used for characterization on PNS IR sites. The information will be distributed by July 31, 1999.

Additional Comment: We have not yet received the information on Dr. Hurst's evaluation. When does the Navy anticipate distributing it?

42f. NOAA Comment 2. We concur with NOAA's concern that the eelgrass pilot study should be done "sooner rather than later to learn if eel grass planting is a viable remediation project." What is the status of the Navy's evaluation of eelgrass restoration?

Navy Response: The Navy recognizes NOAA's preference for an eelgrass pilot study and placement of a small culvert in the Clark Cove Bridge to increase flushing in Clark Cove as a CERCLA remedy and its benefits for restoration of natural resources. The Navy suggests we have a discussion on these topics following finalization of the monitoring plan.

Additional Comment: We look forward to the discussion.

New Comments on the July 1999 Monitoring Plan

A. Page ES-1, Executive Summary. *"Interim Remediation Goals (IRGs) will be developed for OU4 and will be used to determine whether COC concentrations are at acceptable levels."*
Please see comment 21, above.

B. Page ES-3, Executive Summary. The second paragraph on page ES-3 should include that the less rigorous data reviews and assessments [see Section 7.4 on page 7-7] will be conducted as data is received after each monitoring event.

C. Pages 6-6 & 6-7, Table 6-4. The extraction and analysis methods for pesticides in sediment and lobster should be added to the table.

D. Page 6-8, Section 6.1 METHOD DETECTION AND QUANTITATION LIMIT. The explanation of laboratory and target method detection limits (MDLs) is not clear. After several readings, we think the target MDLs will remain constant, regardless of the laboratory selected to perform the analysis. The Laboratory MDLs reported in Tables 6-5a through 6-5o are specific to the Texas A & M Laboratory. The text should be clarified and a footnote added to the tables. Target MDLs should be included in Tables 6-5i through 6-5n, or an explanation provided in the text and as a footnote to the tables as to why there is no Target MDL. We find it troubling that [laboratory] MDLs for several compounds exceed the Target MDLs, particularly if the MDLs exceed water or sediment quality criteria. We encourage the Navy to pursue using analytical methods that would allow detections of contaminants at concentrations below quality criteria.

As we have noted in our May 2 and July 27, 1999, comments on the *Site Screening Report for Sites 30, 31, and 32*, there were numerous instances where the numerical detection limit was significantly higher than the MDL. This affected the frequency of detections reported. In addition, relatively high numerical detection limits also exceeded the screening criteria in several instances. As the Navy pointed out in their response to our comment, the combination of these two could lead to an underestimation of risk. What measures will the Navy employ to reduce the number of nondetects that exceed MDLs and media quality criteria in the offshore data?

E. Page 7-7, Section 7.4 DATA QUALITY ASSESSMENT. The bullet at the top of the page lists verification of project assumptions as one of the issues that will be addressed in the data quality assessment (DQA) process. We strongly suggest that the specific assumptions to be verified be listed now so they don't get "lost" when the DQA is performed 2, 5, 9+ years down the road. A number of assumptions were identified in the Data Quality Objectives (DQO) technical meeting held at the end of June 1999, and are identified in the meeting minutes in Appendix B. For example, the assumptions regarding decreasing inputs to the estuary resulting in natural decrease in concentrations in the offshore (see page 2 in Appendix B), variability of data (see page 5 in Appendix B), and AVS sampling versus depth (see page 7 in Appendix B) are to be tested. It would be preferable to have the assumptions listed now for everyone who was involved with the DQO meetings to review so the list will be complete.

F. Appendix A, Preliminary Remediation Goal (PRG) Proposal. In the last paragraph in Section 2 (page 3), several assumptions of the PRG process are identified. The second assumption states that there does not exist "novel" chemicals at high concentrations which have not yet been detected. We point out that dioxin, for example, has not been an analyte in previous offshore sampling. If significant concentrations of dioxin are detected, how will that affect PRG development?

G. Appendix B, Offshore Technical Meeting Minutes. We are concerned that a number of the decisions reached at the DQO meeting are not recorded in the text of the Plan. Who's going to go back through these minutes several years down the road to ensure that nothing is missed?

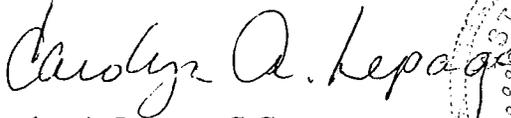
H. Appendix B, Offshore Technical Meeting Minutes, Page 2. The Navy stated their assumption that decreasing inputs to the estuary, based in part on improvements at the Shipyard (including capping soil at the DRMO) would result in natural decrease in concentrations in the offshore in the future. While a number of Shipyard actions (such as shutting off the numerous industrial outfall discharges at Site 5) should result in reduction of contaminant inputs, the recent discovery of highly contaminated soil eroding from the bank above the river at the DRMO (Defense Reutilization and Marketing Office) challenges the Navy's assumption, and shows that "new" inputs can occur. How will the Navy test their assumption? How will the discovery of other new inputs be addressed in the on-going monitoring?

Page 8 of 8, P. Vandermark
September 2, 1999
July 1999 Draft Final Offshore Monitoring Plan

I. Appendix B, Offshore Technical Meeting Minutes, Page 9. We recorded in our meeting notes that the TAG Advisor expressed concern with assuming impacts at reference locations were comparable to impacts at the PNS monitoring stations, and that the MEDEP recommended field checking reference locations for any outside or local influences. This information should be added to the minutes. In addition, how does the Navy plan to address the MEDEP's recommendation?

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



cc: Iver McLeod, Department of Environmental Protection
Meghan Cassidy, Environmental Protection Agency
✓ Marty Raymond, Portsmouth Naval Shipyard