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LETTER AND COMMENTS ON BEHALF OF SEACOAST ANTI POLLUTION LEAGUE
REGARDING FINAL INTERIM OFFSHORE MONITORING PLAN FOR OPERABLE UNIT 4
(OU 4) NSY PORTSMOUTH ME
10/27/1999
LEPAGE ENVIRONMENTAL SERVICES

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October 27, 1999

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

Subject: Comments the October 1999 Final *Interim Offshore Monitoring Plan for Operable Unit 4*

Dear Ms. Lyons:

We recently received the Final *Interim Offshore Monitoring Plan for Operable Unit 4*, which contains the Navy's responses to our August 25, 1999, and September 2, 1999, comments on the July 1999 draft monitoring plan. While many of the Navy's responses were satisfactory, there are a number of responses relating to reference locations and other concerns that we feel require additional comment. Rather than go through each of the individual comments, we have grouped them according to outstanding issues. There are several comments (for example, comments numbered 15, 16, 17 in our August 25th letter and 4, 5, 6, 8, and 10 of our September 2nd letter) where we either disagree with the Navy's response or feel the Navy's response does not address our concerns. However, the following comments focus on what we feel are the most important issues that must be revisited in the future as the offshore monitoring continues and decisions regarding the need for remediation are being formulated.

1. Interpretation of Data from Reference Locations. We had several comments regarding the selection of sampling sites as reference locations and with the interpretation of data collected at reference locations (see comments 5, 9, 10, and 12 in our August 25th letter and comment I (Navy response is numbed 21) in our September 2nd letter). One of our particular concerns is with the lack of understanding of local inputs of contaminants at these reference locations and with how data from the reference sites would be compared with data collected in the immediate vicinity of the Shipyard. One of the assumptions in selecting reference locations is that samples collected at these sites represent general conditions in the river that would also affect concentrations of contaminants at the Shipyard. However, without more fully understanding depositional environments and contaminant inputs at reference locations, it is not clear to us how concentrations and data trends for reference locations can be compared with those of Shipyard monitoring locations with much confidence.

We had questions about interpreting the significance of higher concentrations should they be detected at reference locations, and about demonstrating that trends observed in reference location data are applicable to Shipyard monitoring locations (8/25/99 letter, comment 9). In response, the Navy stated that it is not within the scope of the interim monitoring program to determine the reasons for the trends observed at the reference station. We pointed out in comment 10 (8/25/99 letter) that the trend of data at the reference locations may have nothing to do with the data trend at Shipyard monitoring locations. As we mentioned in comment 21 of our September 2nd letter, we raised these concerns at the June 1999 Offshore Monitoring technical meeting, yet this information is not included in the meeting minutes. The issues we identified at the technical meeting are the same as or similar to those raised by several Restoration Advisory Board (RAB) representatives when the Navy presented the offshore monitoring program at a RAB meeting held earlier this year.

Given the likely level of understanding regarding the significance of contaminant concentrations detected at the reference locations, caution must be exercised when interpreting and comparing data from reference and Shipyard monitoring locations.

2. Verification of Assumptions. Several comments in our September 2nd letter (see comments E, F, G, and H) focused on assumptions underlying the offshore monitoring and decisions made at the June 1999 technical meeting on data quality objectives. As noted in comment E, verification of project assumptions is to be addressed as part of the data quality assessment (DQA) process. Our primary concern is that project assumptions should be clearly identified in the body of the *Offshore Monitoring Plan* so that nothing is missed whenever the DQA is performed in the future. The Navy responded that assumptions are identified in Section 3.0.

While we agree that a number of project assumptions are stated in Section 3.0, not all relevant assumptions are documented in the text. Furthermore, for those assumptions identified, it is not always clear how the assumption will be verified. An example is the assumption that decreasing inputs to the estuary resulting in natural decrease in concentrations in the offshore (see page 2 in Appendix B). This assumption is of particular interest given the recent discovery of highly-contaminated soil eroding into the river from the DRMO shoreline. Another example is the assumption that there are no "novel" chemicals at high concentrations which have not yet been detected in the offshore environment. As we pointed out in comment F, dioxin, for example, has not been an analyte in previous offshore sampling. Assumptions regarding reference locations (see comment 1, above) are also not addressed.

Therefore, we believe that when it comes time to perform the data quality assessment, it will be necessary to revisit the June 1999 technical meeting proceedings, the Preliminary Remediation Goal Proposal, and other supporting documents to ensure that all appropriate assumptions are identified and verified. Relying on Section 3.0 alone is insufficient.

3. Method Detection Limits, Numerical Detection Limits, Quantitation Limits. In comment 11 in our August 25th letter, we expressed our concern that numerical detection limits may be significantly higher than the Method Detection Limit (MDL) when the offshore monitoring samples are analyzed. We based this comment on our review of data and interpretations presented in the *Site Screening Report for Sites 30, 31, and 32* (see Tables 4-5 and 4-6) where there were numerous instances of the numerical detection limits exceeding MDLs and/or screening criteria, sometimes by more than an order of magnitude. This is a concern because it can lead to underestimating the number of times action levels or other criteria are exceeded and to underestimating risk, a fact that the Navy acknowledged in their response when we raised this issue regarding the *Site Screening Report* (see comment 63 in our letter dated July 29, 1999).

We feel the Navy's response to our August 25th letter deserves additional comment. Their opening sentence states that "numerical detection limit" is not a term the Navy is familiar with. We used "numerical detection limit" because it was used in the *Site Screening Report for Sites 30, 31, and 32* (see page 2-7) in the discussion of data validation qualifiers. We acknowledge that terms can be confusing (see comment D in our September 2nd letter). The Navy's response also discusses the need for data comparability with past studies, that there are no guarantees that MDLs can be met, and mentions logistical difficulties with collecting additional sample volume. The Navy plans to use one-half the value of the detection limit for "non-detects" as a reasonable alternative to using zero values for non-detects in data analysis, a practice commonly used in the statistical analysis of environmental data.

The Navy's response does not mention considering elevated detection levels as part of data assessment or risk evaluation. We think it is necessary to revisit this issue during data analysis in order to avoid underestimating the number of times action levels or other criteria are exceeded and to avoid underestimating risk.

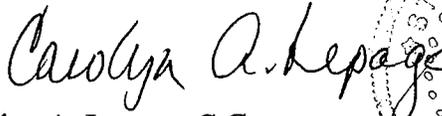
4. Backwash of Contaminants at Seeps. Comment 2 in our August 25th letter and MEDEP comments (comment 12 in March 29, 1999 letter and the last comment in letter dated August 20, 1999), question the Navy's idea that "backwashing" of non-Shipyards contamination is a possible source of contaminants found in seeps and sediment. The Navy responded that the subject would be evaluated as part of the seep/sediment data evaluation and would be discussed in the *Seep/Sediment Summary Report*.

This is an important issue which needs to be resolved. The results of the seep/sediment data evaluation must be incorporated into the offshore monitoring data assessment so this point can be addressed.

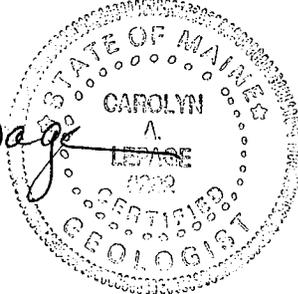
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Final Offshore Monitoring Plan

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
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