N00102.AR.002610
NSY PORTSMOUTH
5090.3a

LETTER AND COMMENTS FROM SEACOAST ANTI POLLUTION LEAGUE REGARDING PROPOSED PLAN FOR OPERABLE UNIT 2 (OU 2) NSY PORTSMOUTH ME
09/19/2011
LEPAGE ENVIRONMENTAL SERVICES

Lepage Environmental Services, Inc.

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

September 19, 2011

Ms. Danna Eddy
Public Affairs Office (Code 100PAO)
Portsmouth Naval Shipyard
Portsmouth, NH 03804-5000

Subject: July 2011 *Proposed Plan for Operable Unit 2*

Dear Ms. Eddy:

This letter is submitted as requested by and on behalf of the Seacoast Anti-Pollution League (SAPL) regarding the July 2011 *Proposed Plan for Operable Unit 2, Portsmouth Naval Shipyard, Kittery, Maine* (the Proposed Plan). Most of the comments below reflect the oral comments presented on behalf of, and with input from, SAPL members at the August 10, 2011, Public Hearing held at the Kittery Town Hall.

1. Conditional Support for the Preferred Remedy. SAPL looks forward to the remediation of Operable Unit 2 as described in the July 2011 *Proposed Plan for Operable Unit 2*. For too many years, the materials and soils at Sites 6 and 29 have been sources of contamination migrating into the Piscataqua River. However, while SAPL supports the removal of contaminated soil from the two sites and subsequent follow up land-use protections and monitoring, SAPL also believes there are weaknesses in the Navy's preferred alternative as follows:

2. Shoreline Structures. A review of the "History of Site Investigations and Interim Actions" box on page 2 of the Proposed Plan reveals a history of deterioration and failure of shoreline stabilization structures. Yet these structures are integral to the remedy in order to prevent erosion and migration of soil and contamination from the site into the adjacent river.

Has the Navy performed an assessment of these structures to ensure that they are performing as needed at the present time? While monitoring sediment accumulation areas is necessary in the future, SAPL believes that frequent inspection and evaluation will also be needed to ensure that any structural deterioration is fixed <u>before</u> failure occurs. What are the Navy's plans for inspections and repairs? How will rising sea level be factored into the plans? Should repairs or replacement become necessary, how will the Navy prevent erosion and migration of site soils and contamination during construction?

3. Sea Level Rise. SAPL again expresses its concern with the effect of rising sea level on the contamination located at various sites around the Shipyard, as well as on the remedial measures taken to clean up the sites. Rising sea level will alter the current groundwater/surface water system and affect the stability of shoreline structures. The remedy for OU2 relies heavily on the integrity of shoreline structures to maintain stability along the shoreline slopes and to prevent erosion and further migration of the waste and contaminated soil that will remain at Sites 6 and 29.

How was rising sea level considered in the development of potential remedies for OU2, and in the selection of the Navy's preferred alternative? What range of sea-level change was considered? What are the potential future impacts to the Navy's preferred alternative as sea level rises? How has the Navy planned to deal with the potential future impacts?

4. Hot Spot Removal. The Navy is proposing to remove contaminated soil that would pose a risk to construction workers at the site. However, the target cleanup level is based on averaging soil contaminant concentrations, which may result in discrete areas of significant soil contamination that, for statistical reasons, fall outside the area proposed for excavation and removal. SAPL advocates removal of any 'hot spots' of contaminated soil, which would eliminate significant contamination from the site for relatively little additional cost and effort.

5. Future Disturbance at Sites 6 and 29. The risk management decisions and remedy design for OU2 assume that the Shipyard will remain active and the Navy will always be available to oversee and enforce land use restrictions at OU2. But what will happen if the Shipyard closes and the Navy is no longer on the property to keep an eye on OU2? Recent experience at another Navy facility in Maine that recently closed has shown that security measures for even the most dangerous sites will no longer be maintained at a high level once a base closes.

6. Contingency for Building 310 and Other Structures. The Navy's preferred alternative for OU2 relies on land use controls to prevent any unauthorized disturbance of the site, including Building 310, the soil cover, and protective shoreline structures. The building and soil cover are part of the barrier the Navy is relying on to prevent human exposure to waste and contamination that will be left on site after cleanup. However, experience at other Naval facilities has shown that it may become necessary to remove or repair the building, or conduct some other construction activities, such as repairing or replacing protective structures along the shore, that will disturb or destroy this barrier function. The Record of Decision for OU2 should specify what will happen should Building 310 be removed or if other barrier components are disturbed or removed. At a minimum, the soil beneath Building 310 should be considered for a removal action.

As an example, a similar situation was addressed in the Record of Decision for Site 9 at the former Brunswick Naval Air Station in Brunswick, Maine. Several barracks buildings that had served as barriers to the contaminated soil beneath them were torn down. The Navy ultimately performed a soil removal action at the site to eliminate the human health risk posed by the contaminated soil.

7. Preference for Alternative WDA-4. SAPL prefers Alternative WDA-4 because it will remove a lot more of the contamination from an area that is vulnerable to erosion and sea level rise. As noted in a comment submitted earlier this year, of the 44 soil samples in the WDA with concentrations of lead in excess of 2,000 mg/kg, only three were in the top two feet of the site, and 22 were located at depths of three to six feet below ground surface. The additional removal would substantially reduce the risk of human exposure and the potential for contamination to migrate to the river, especially if the existing seawall and/or riprap were ever to fail or be compromised in a future climate regime.

8. Confusion Regarding Cleanup Level and Extent of Excavation. Table 1 in the Proposed Plan lists the cleanup levels for several contaminants of concern (COCs) for four different receptors. The driver for the Navy's preferred alternatives is the cleanup level for lead for the construction worker receptor, given as 2,000 mg/kg in Table 1. However, page 4-29 of the April 2011 "*Feasibility Study Report for Operable Unit 2*" states the following in describing Alternative DRMO-4, the Navy's preferred alternative for the DRMO portion of OU2:

"Based on the distribution of COCs, soil containing concentrations of lead greater than 4,000 milligrams per kilogram (mg/kg) ... represent the limits of the excavation area".

This is followed in the next paragraph by statements about confirmation sampling:

"Confirmation samples would be collected from the floor and sidewalls of the excavation areas to confirm that soil with concentrations greater than construction worker PRGs have been removed. The actual limits and depths of excavation would be determined by the results of the confirmation samples."

The Preliminary Remediation Goal (PRG) for construction workers is listed on page 2-12 of the Feasibility Study as 2,000 mg/kg.

Although the Feasibility Study mentions 4,000 mg/kg as limiting excavation, the message the public has taken away from the Proposed Plan and the role of confirmation sampling as quoted above is that the Navy will excavate until it reaches soil with lead concentrations below 2,000 mg/kg. The Navy must be very clear in the Record of Decision exactly what the cleanup standard is. Based on the information in the Proposed Plan, the public understands that it is 2,000 mg/kg of lead.

9. Investigation at West Corner of Site 6. The Navy recently completed a pre-design investigation of the area to the west of Site 6. Because the data package was only received two days before, SAPL recommended at the August 10th public meeting that the public comment period be extended until such time as the data evaluation would be available to all stakeholders for review and comment. The Navy extended the public comment period for an additional month to allow review and consideration of the new data.

While the results of the pre-design investigation likely will not change the Navy's choice of remedy for OU2, the data indicates that there is significant contamination of soil right up to the boundary of the investigation area. Based on the cleanup levels presented in Table 1 in the

Proposed Plan (2,000 mg/kg for lead for the construction worker), it appears that several locations within the investigation area must be excavated. Excavating the areas around soil boring locations OU2-SB-400 and OU2-SB-407, in particular, will likely reach the northern and western bounds of the investigation area.

If the confirmation samples collected after the excavation reveal an exceedance of a cleanup level specified in Table 1 of the Proposed Plan, will the Navy continue excavating beyond the pre-design investigation study boundary (see Figure 3 in the July 2011 "Pre-Design Investigation Data Package for Operable Unit 2") until cleanup levels are no longer exceeded? If so, how far beyond the pre-design investigation study boundary will the Navy go if subsequent confirmation samples continue to demonstrate that cleanup levels are exceeded? If not, how will the risks associated with the remaining contamination be assessed? Would the area be considered a "new" site, that is, a site other than OU2, that requires additional evaluation? If contamination above the cleanup level is found on the existing boundary, SAPL recommends that the excavation be extended as part of the current remedy to remove this additional contamination, especially adjacent to the existing shoreline.

Please do not hesitate to contact me if you have any questions.

Sincerely,

Carolyn A. Lepage

Carolyn A. Lepage, C.G. & P.G.
President
State of Maine Certified Geologist No. GE202

cc: Doug Bogen, SAPL
Linda Cole, NAVFAC MIDLANT
Iver McLeod, MEDEP
Matthew Audet, EPA
Deborah Cohen, TetraTech

105OU2PRAP Comments19.SP1