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LETTER REGARDING SEACOAST ANTI-POLLUTION LEAGUE REVIEW COMMENTS ON  
THE APRIL 2001 DRAFT RECORD OF DECISION FOR OPERABLE UNIT 3 (OU 3) NSY  
PORTSMOUTH ME  
5/16/2001  
LEPAGE ENVIRONMENTAL SERVICES

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May 16, 2001

Portsmouth Naval Shipyard  
Code 106.3R, Bldg. 44  
Attn: Ms. Marty Raymond  
Portsmouth, New Hampshire 03804-5000

Subject: April 2001 Draft *Record of Decision for Operable Unit 3*

Dear Ms. Raymond:

We are transmitting the following comments on behalf of the Seacoast Anti-Pollution League (SAPL) on the April 2001 Draft *Record of Decision for Operable Unit 3* (ROD):

**General Comment.** We found the document to be difficult to follow and understand. Significant editing and revisions are needed so that the reader can readily understand the remedial action the Navy has chosen to implement and the basis for the remedy selection.

**1. Page 1-1, Section 1.2 STATEMENT OF BASIS AND PURPOSE.** The opening sentence states that the document presents the selected remedial action for soil and groundwater within the boundary of the Jamaica Island Landfill (JILF). Similar passages can be found elsewhere in the ROD. The remedy also calls for hazardous waste to be left in place in the landfill. However, waste is typically not listed along with soil and groundwater in the text, even though two of the Remedial Action Objectives listed on page 2-19 specifically mention waste. The first Objective covers preventing human exposure to waste and the third addresses preventing erosion of waste on the edge of the landfill to the Piscataqua River or Back Channel. The text should be revised in Sections 1.1 and 1.2 and elsewhere in the ROD (see page 1-5, for example) to reflect that the waste left in place is also covered by the remedy.

**2. Page 1-1, Section 1.2 STATEMENT OF BASIS AND PURPOSE.** The Administrative Record Index is to be included in Appendix A.2. We are not able to comment on the Index as it was not included in the Draft ROD. Therefore, we may have comments on it in the future.

**3. Page 1-1, Section 1.3 ASSESSMENT OF OU3.** The use of the term "threatened" implies something like terrorist activity may occur. Perhaps "potential" would be a better term. This comment applies to other passages in the ROD (see page 2-11, for example) where "threatened" is used to describe releases, contamination, or risk.

**4. Page 1-1, Section 1.3 ASSESSMENT OF OU3.** The next-to-last sentence on the page states that "... the selected remedy for OU3 will minimize future exposure to soil or groundwater within the JILF boundary." Our comment number 1, above, applies to this passage.

**5. Page 1-2, Section 1.3 ASSESSMENT OF OU3.** The first sentence on the page should be revised so that it doesn't run on.

**6. Page 1-2, Section 1.4 DESCRIPTION OF THE SELECTED REMEDY.** The opening sentence should state that the selected remedy for OU3 "includes", not "is". The second sentence should state that the following components are necessary to address soil and groundwater contamination within the JILF boundary along with the waste left in place. The first bullet should also be revised to state that the cover would prevent receptors from coming in contact with contaminated soil and waste. The fourth bullet should mention contaminated soil in addition to waste. The first sentence in the last paragraph doesn't make sense and should be revised.

**7. Page 1-3, Section 1.4 DESCRIPTION OF THE SELECTED REMEDY.** The second bullet states that the work plan for the additional investigation for OU6 will be completed by the time the JILF cap construction is complete. The proposed *Operable Unit 3 Remedial Design and Remedial Action Schedule*, which is dated April 16, 2001, indicates that remedial construction will not be complete until October 2005. It should not take over four years to develop an investigation work plan; the work plan should be completed well in advance of the cap completion. Furthermore, it is important to gather the information on seep concentrations and potential impacts in the near future, not almost five years down the road. Data should be gathered before the cap is constructed so that it can be evaluated and appropriate measures can be implemented, if necessary. The data should also be compared with concentrations after the cap is installed to test the assumption that the cap will decrease the effects of the seeps.

**8. Page 1-3, Section 1.4 DESCRIPTION OF THE SELECTED REMEDY.** The fourth bullet identifies two areas to be reevaluated for consolidation of landfill materials. When, how, and where (what document) were these areas first evaluated for consolidation? Why wasn't the potential for consolidation pursued at that time? Should other areas also be considered and, therefore, listed in this bullet?

**9. Page 1-3, Section 1.4 DESCRIPTION OF THE SELECTED REMEDY.** What do the terms "nonprincipal threat waste" and "principal threat waste" mean? Language that is understandable to the general public should be used. The last sentence in the section should state that direct contact with site soil and waste will be prevented.

**10. Page 1-3, Section 1.5 STATUTORY DETERMINATIONS.** The opening sentence states that the remedy utilizes permanent solutions. The word "permanent" is perplexing, given the concerns about sea level rise and related impacts, the need for on-going inspection and

maintenance activities once the remedy is implemented, and the inclusion of institutional controls to prevent exposure to contaminants in the future. How is "permanent" defined? What are considered to be "permanent solutions"?

**11. Page 1-4, Section 1.5 STATUTORY DETERMINATIONS.** The sentence at the top of the page states that a review will be conducted within five years after initiation of remedial action to ensure the remedy remains effective. What about subsequent five-year reviews? They should be mentioned as well. What is considered the initiation of remedial action? This trigger should be clearly identified in this and similar passages throughout the ROD

**12. Page 2-1, Section 2.1 SITE NAME, LOCATION, AND DESCRIPTION.** The first sentence in the third paragraph leads the reader to believe that OU3 consists only of soil and groundwater. The text must be revised to prevent confusion. Furthermore, the waste remaining on-site should also be listed along with soil and groundwater.

**13. Page 2-2, Section 2.2 SITE HISTORY AND ENFORCEMENT ACTIVITIES.** The third sentence in the second full paragraph appears to state that the State of Maine is afforded a participatory role in the CERCLA process by virtue of CERCLA. What does this actually mean? The text must be revised to clarify the role CERCLA allows the State of Maine.

**14. Page 2-3, Section 2.2 SITE HISTORY AND ENFORCEMENT ACTIVITIES.** The last paragraph on the page opens with the statement that Site 8 is mainly the JILF. What else is included in Site 8 besides the landfill? This information should be added or the text revised. The text should also refer to an appropriate figure. In addition, the relationship of the former Child Development Center to OU3 should also be clarified. The industrial wastes that were reportedly disposed at Site 8 should be listed so that the Contaminants of Concern described later in the ROD can be put in some kind of context. For instance, given the concerns about dioxin detections on site and offshore, it is important to know that incinerator ash was disposed at Site 8. Other wastes reportedly disposed included plating sludges containing chromium, lead, and cadmium; asbestos; volatile organic compounds; empty acetylene and chlorine gas cylinders; contaminated dredge spoils containing chromium, lead, PCB oils, mercury and possibly phenols; waste paints and solvents; and sandblasting grit. The reference(s) for information concerning the permitting and implementation of dredge spoil disposal must also be included.

**15. Page 2-4, Section 2.2 SITE HISTORY AND ENFORCEMENT ACTIVITIES.** The description of the removal of the tanks and associated contaminated soil at Site 11 should be amended to clearly state that contaminated soil remains on-site.

**16. Page 2-4, Section 2.2 SITE HISTORY AND ENFORCEMENT ACTIVITIES.** The text should be revised to clearly state that the test pitting conducted in 2000 and the prior geophysical survey covered only part of the landfill. The percentage of the JILF landfill that was not covered

by the survey or included in the test pitting investigation, as well as a statement that the potential for as-yet undiscovered drums and for those drums to leak at some time in the future remains, should be added. Results of the subsurface soil sampling should also be summarized. Appropriate references must be cited as well.

**17. Page 2-5, Section 2.3 HIGHLIGHTS OF COMMUNITY PARTICIPATION.** Are the minutes of the Restoration Advisory Board (RAB) and technical meetings included in the Administrative Record and the Information Repository? If not, how can the general public know what happened, particularly what decisions were made, at meetings they were unable or were not invited to attend?

**18. Page 2-6, Section 2.3 HIGHLIGHTS OF COMMUNITY PARTICIPATION.** The second bullet must be revised to clarify that oral public comments were not recorded at the Informational Open House. Any questions, comments, or concerns raised at the Open House were explicitly not regarded as public comments by the Navy. The fourth bullet should be revised to state that the Navy also accepted written comments at the Public Hearing.

**19. Page 2-7, Section 2.4 SCOPE AND ROLE OF OPERABLE UNIT 3.** The site numbers and names included in OU1, OU2, OU3, and OU5 should be listed in the appropriate bullets. The former Child Development Center should also be mentioned. The waste left in place should be added wherever soil and groundwater within the JILF boundary are mentioned (the second bullet, three locations in the paragraph following the bullets). The second sentence in the paragraph following the bullets should be revised so its meaning is clear.

**20. Page 2-8, Section 2.4 SCOPE AND ROLE OF OPERABLE UNIT 3.** The statement that actions relating to OU6 will be initiated after the remedy for OU3 is initiated requires clarification. What constitutes initiation of the OU3 remedy? The last sentence in the first paragraph is awkward and confusing and should be rewritten. In addition, it appears to be at odds with statements elsewhere in the ROD that the impacts of the seeps have yet to be determined. The concerns regarding OU6 are not specifically addressed in the OU4 monitoring.

**21. Page 2-8, Section 2.4 SCOPE AND ROLE OF OPERABLE UNIT 3.** The table at the bottom of page 2-8 lists principal and low-level threats. These two terms must be defined in the text and the basis for their determination, including references, must also be provided. It should also be made clear how the wastes left in place at Site 8 fit.

**22. Page 2-9, Section 2.5 SITE CHARACTERISTICS.** The reader should be referred to figures, as appropriate, in this section. The paragraph at the bottom of page 2-9 makes the case that the variety of contaminants detected at Sites 8, 9, and 11 are indicative of a heterogenous mixture of wastes in the landfill. As we pointed out in our comment number 14, above, information regarding the nature of the wastes disposed must be included in the ROD.

**23. Page 2-10, Section 2.5 SITE CHARACTERISTICS.** The first paragraph on page 2-10 is confusing, particularly the use of the term "COC specific cleanup goals". Does the Navy mean that the boundary of OU3 contamination, for the purposes of the ROD, is based on the horizontal extent of landfilled material, rather than analytical results showing contamination? The JILF was described earlier in the ROD as resulting from the filling of tidal mudflats. However, the boundary of the JILF shown on Figure 2-3 does not coincide exactly with the historical shoreline contour, especially in near Stephenson Road and Buildings 206 and 337. How was the landfill boundary determined in these areas?

**24. Page 2-10, Section 2.5 SITE CHARACTERISTICS.** The description of contamination related to Site 11 operations should not be limited to petroleum alone. The site description earlier in the ROD indicates that materials other than waste oil alone were likely disposed in the tanks at Site 11. Furthermore, the waste oil disposed at Site 11 was likely contaminated with metals. The text should be revised.

**25. Page 2-10, Section 2.6 CURRENT AND POTENTIAL FUTURE LAND AND RESOURCE USES.** The opening sentence states that OU3 is covered with grass, pavement, or gravel. Figure 2-3 and several subsequent figures show what appear to be three buildings (349, 354, and 360) within the mapped boundary of the JILF. Are they buildings? If so, what are they used for? If they are buildings, the description of OU3 here and elsewhere in the ROD must be modified appropriately.

**26. Page 2-10, Section 2.6 CURRENT AND POTENTIAL FUTURE LAND AND RESOURCE USES.** The shoreline area along the JILF is described as having limited access. The implication of the description and the access statement is that people are not likely to be found on the shore. However, as we noted in our comments on the *OU3 Feasibility Study* (FS) and the draft *Proposed Remedial Action Plan for OU3* (PRAP), children were observed along the shore in the vicinity of seep 1011 during the August 29, 2000, seep observation site visit. These children could very easily have walked further along the shore and accessed seep 1004.5, where pesticide concentrations in particular are high. Our concern was that, as long as access to the shore area is not strictly controlled, consideration of risks associated with seeps should include these additional exposures and that risks calculated for children should account for more frequent, not limited, exposure to seeps. The ROD should be revised to more accurately reflect that access to the shore does occur and is not controlled.

**27. Pages 2-11 +, Section 2.7 SUMMARY OF SITE RISKS.** This section is very difficult to follow and understand, so it should be revised. In addition, the risks from the wastes that remain on-site, especially from drums that might leak in the future, should be discussed along with the risks due to exposure to soil and groundwater.

**28. Page 2-11, Section 2.7.1 Human Health Risk.** The first paragraph should be revised to clarify that the revised human health risk assessment for OU3 considered data collected prior to 1998. It did not include the results of the limited soil sampling conducted during the drum investigation test pitting in 2000, where dioxin was detected in several samples. Nor did the sampling conducted prior to 2000 include dioxin analysis.

**29. Page 2-12, Section 2.7.1 Human Health Risk.** The JILF Impact Area and its relationship to OU3 should be described earlier in the ROD.

**30. Page 2-13, Section 2.7.1 Human Health Risk Sites 8/9.** The facility background data should be explained and a reference provided. As we have noted in comments in other documents, the Navy has not demonstrated that site-related contaminants can be differentiated from non site-related chemicals. This increases the uncertainties associated with the interpretation and application of background data, and may lead to underestimating site-related risks. Therefore, background data should not be used to eliminate site-specific data from consideration for risk. This comment applies to other passages in the ROD where background data is invoked (see page 2-14, for example).

**31. Pages 2-13 & 2-14, Section 2.7.1 Human Health Risk Sites 8/9.** The last paragraph does not reflect the unacceptable risks that were reported in the first two paragraphs on page 2-13. The text should be revised to be consistent. The risks attributed to lead exposure are described as "marginal", in part because of the "hot spot" nature of the contamination. That conclusion is likely to be correct only if the locations, size, and concentrations of the "hot spots" are known. This comment also applies to a similar statement at the bottom of page 2-14 regarding Site 11.

**32. Pages 2-15 & 2-16, Section 2.7.3 Chemicals of Concern.** Why is the construction worker scenario the basis for risk of exposure to brackish/saline groundwater? Is it the most conservative? What is the basis for the reasonable maximum exposure (RME)? How is RME determined? The text mentions the CERCLA risk range on page 2-16. Would application of the State of Maine Risk Guidelines be more conservative?

**33. Page 2-16 +, Section 2.7.3 Chemicals of Concern.** Our comment number 30, above, applies to this section.

**34. Page 2-19, Section 2.8 REMEDIAL ACTION OBJECTIVES.** The sentence above the bullets should be revised so that exposure to the wastes left on site is addressed in addition to exposure to soil and groundwater. For the second RAO, was dermal contact with groundwater considered? The fourth Remedial Action Objective listed addresses current and future land uses while providing sufficient protection for human health and the environment. However, the performance of the remedial measures (capping, etc.) must not be jeopardized by future land uses. The priority is remediation, not future use as a parking lot. The paragraph after the fourth RAO

begins with the statement that unacceptable levels identified in RAO 1 and 2 are based on the revised human health risk assessment. What level of exposure to waste is considered unacceptable? Section 2.7 reported that risks were not acceptable for all scenarios. Why then does Section 2.8 on page 2-19 report that risks are acceptable, yet note on the following page that risks for all receptors exceed the State of Maine acceptable risk guidelines? The text must be revised so the reader is not confused. In addition, how will risks associated with construction of the cover and erosion controls be addressed?

**35. Page 2-20, Section 2.8 REMEDIAL ACTION OBJECTIVES.** The statement is made that active remediation of OU3 groundwater is not necessary to meet RAO 2. The text should also note that the need to remediate OU3 groundwater to prevent adverse impacts to biota associated with seeps has not been determined. The sentence regarding RAO 3 should be revised to consider not just tidal action but storm events and sea level rise. The final paragraph in the section states that OU3 is currently used for industrial and recreational uses. "Industrial" implies something more involved than the parking and equipment storage described earlier in the ROD. A more accurate description is needed here.

**36. Page 2-21, Section 2.9 DEVELOPMENT AND SCREENING OF ALTERNATIVES.** The four alternatives covered in Section 2.10 are described in the last sentence in Section 2.9 as source control alternatives. This is very misleading as Alternative 1 (No Action) does absolutely nothing source control. Alternative 2 does nothing to inhibit production or migration of contamination from the source area and is likely illegal as it doesn't meet the State of Maine requirements for hazardous waste land fill closure. Alternatives 3 and 4 are just variations of the same alternative - to cap the landfill. The only real alternative for source control is a decision on how to design the cap.

**37. Page 2-22, Section 2.10 DESCRIPTION OF ALTERNATIVES Alternative 2: Institutional Controls, Erosion Controls, and Monitoring.** The first bullet provides information about institutional controls. The land uses are listed as recreation, vehicle parking, and equipment storage. As we noted on our comment number 25, above, Figure 2-3 shows what appears to be several buildings within the boundaries of the JILF. If they are buildings, the institutional controls also must address future use and modification, including demolition, of the structures. In addition to preventing exposure to contamination, the institutional controls must also prevent or control excavation, construction, and any other activity that might adversely affect the cover, the erosion control measures, monitoring, or any other remedial measure. The text in the bullet must be revised accordingly. The second bullet should also state that monitoring trends in groundwater contamination conditions should also provide indication of releases from drums or other buried sources.

**38. Page 2-23, Section 2.10 DESCRIPTION OF ALTERNATIVES Alternative 3: Cover with Composite Liner and Enhanced Drainage Layer, Institutional Controls, Erosion Controls, and Monitoring.** The second bullet should state that the cover will prevent receptors on the surface from coming in contact with waste and groundwater, in addition to soil. This comment also applies to the second bullet on page 2-24. It is not clear to the reader how much of a difference there is in the permeabilities of the barrier layer in Alternatives 3 and 4. The fourth bullet should include a minimum or target permeability for the Barrier Layer. A similar value should be added to the fourth bullet on page 2-24.

**39. Page 2-26, Section 2.11 COMPARATIVE ANALYSIS OF ALTERNATIVES Modifying Criteria.** A brief explanation of how modifying criteria are applied (similar to those for threshold and balancing criteria) should be added under the heading.

**40. Page 2-27, Section 2.11 COMPARATIVE ANALYSIS OF ALTERNATIVES Overall Protection of Human Health and the Environment.** We disagree with the statement that Alternative 2 is as protective of the environment as Alternatives 3 and 4. The installation of the cover is anticipated to prevent infiltration of precipitation, which would in turn reduce leaching of contaminants from wastes. This would presumably decrease concentrations in leachate exiting the seeps along the shore. The text should be revised.

**41. Page 2-27, Section 2.11 COMPARATIVE ANALYSIS OF ALTERNATIVES Compliance with ARARs** We do not agree that Alternative 2 complies with ARARs. The reality is that OU3 is a landfill that the State of Maine requires be capped. Any alternative that does not include a cap that complies with Maine's regulations is not viable and is likely not legal.

**42. Page 2-27, Section 2.11 COMPARATIVE ANALYSIS OF ALTERNATIVES Long-term Effectiveness.** The statement that Alternatives 2, 3, and 4 offer a moderate level of long-term effectiveness implies they offer a similar degree of protection, which is not the case. The text should be revised.

**43. Page 2-28, Section 2.11 COMPARATIVE ANALYSIS OF ALTERNATIVES Community Acceptance.** The second sentence in the paragraph implies that community support for capping the landfill is unconditional. This is misleading. The comments received during the public comment period for the OU3 PRAP reveal a great deal of frustration regarding adequacy of the Navy's proposed alternative. In fact, the majority of comments state, in effect, that the cap alone is inadequate. The cap without a barrier to contaminant migration does not address the major concern of the community, which is the health of the estuary and the organisms it supports. It would be more accurate to say that the what support there is in the community for covering the JILF with a hazardous waste cover as proposed in Alternatives 3 or 4, is contingent upon addressing management of migration adequately, appropriately, and in a timely fashion. This means immediate testing of the seeps and biota, and retention of the barrier as an option.

**44. Page 2-30, Section 2.12 SELECTED REMEDY.** Why are the buildings and other structures mentioned in the last sentence of the first paragraph not discussed in sections relating to current and future land uses earlier in the ROD? How will the institutional controls address these structures (see comment 37, above)?

**45. Page 2-30, Section 2.12 SELECTED REMEDY.** The installation of a relatively impermeable cap over the landfill will likely allow pressure beneath the cap to fluctuate as result of tidally-influenced water level changes. Will the gas management system handle these fluctuations or will another method be utilized?

**46. Page 2-30, Section 2.12 SELECTED REMEDY.** Where is the existing fill material likely to be excavated in order to meet slope requirements? How much fill is required?

**47. Page 2-30, Section 2.12 SELECTED REMEDY.** Parker Avenue is assumed to be built on soil that does not contain waste material. How will this assumption be tested?

**48. Page 2-31, Section 2.12 SELECTED REMEDY.** The paragraph regarding shoreline erosion control appears to be biased in favor of rip-rap, when wetlands construction has been implemented successfully elsewhere in the country. In addition, there is no mention of eelgrass restoration as an option. The options should be more open than this passage implies.

**49. Page 2-31, Section 2.12 SELECTED REMEDY.** The environmental monitoring conducted during any invasive activity at the Shipyard must include radioactive hazard monitoring. This should be mentioned in the ROD text.

**50. Page 2-32, Section 2.12 SELECTED REMEDY.** The statement is made that on-site soil is assumed to be adequate to meet the permeability of the barrier soil. What does this mean? That some of the landfill will be excavated and "reinstalled" as a barrier? Where will the soil come from? What is the permeability of the material?

**51. Page 2-33, Section 2.12 SELECTED REMEDY.** Comment 7, above, regarding timely preparation of the OU6 work plan and the need to sample seeps before the cap is installed also applies to the second bullet on page 2-32. Comment 8 applies to the re-evaluation of consolidating portions of the landfill, as described in the last paragraph on page 2-33.

**52. Table 2-3.** The comparative analysis ratings for Alternative 2 are confusing and appear to be inaccurate. The long-term effectiveness and protection of human health and the environment of Alternative 2 should not be rated the same as for Alternatives 3 and 4. How can the installation of a cap not afford some additional level of protection and performance and overall protection of human health and the environment? In addition, Alternative 2 can not comply with ARARs. The site is a landfill which the State of Maine requires be closed properly and in accordance with state

regulations. Any alternative that does not fulfill these requirements can't meet ARARs and likely isn't legal.

**53. Figure 2-3.** Parker Avenue should be labeled on Figures 2-3, 2-4, and 2-6. Are the seeps shown on Figure 2-3 the only known seeps or the only seeps sampled? The legend should be amended to clarify this point.

**54. Pages 3-3 & 3-4, Summary of Comments Received During the Public Comment Period and Navy Responses. Comment 1:** *A cut-off barrier in addition to the cap (proposed in Alternative 3) is needed at this site to address tidal impacts to the sites, including impacts from migration of groundwater/seeps offshore, from sea level rise, and storm events.* There are several areas of the Navy's response to Comment 1 that require additional comment. The Navy's discussion of sea level focuses on some current estimates of how much sea level will rise, and concludes that sea level rise will not be a significant consideration for the design of the cap. The Navy also feels that the groundwater fate and transport modeling indirectly accounted for the potential of rising sea level by presenting a worst case estimate of groundwater. In addition, the Navy states that erosion control measures will protect the shoreline from the increased number of storms, which are expected to come with the rise of sea level.

The portions of the Navy's response that address sea level rise appear to miss the mark with regard to the public's concerns. The comments received during the public comment period indicate that the public is concerned not so much with the absolute value selected for sea level rise, but with the effects of increased storm events and higher storm surges superimposed on sea level rise. In addition, there are concerns regarding the likely increase in groundwater and seep contaminant levels as previously unsaturated wastes within the landfill (including drums and other containers) become saturated as sea level rises. The Navy's response that sea level rise will not be a significant consideration in the design of the cap appears to dismiss the public's concerns and certainly does not generate confidence in the Navy's design. The reliance on erosion controls alone to address the combination of increased storm effects and higher sea level does not appear to be a sound long-term solution to the problem. Furthermore, the groundwater modeling was not intended to estimate the effects of sea level rise on contaminant generation within the landfill. Therefore, to invoke the model does not instill confidence in the Navy's approach to potential sea level rise effects.

The Navy's response to Summary Comment 1 also states that, based on available information, the migration of groundwater offshore from the JILF does not represent a current or potential future risk that requires a cut-off barrier. The consistent theme in comments from the public is that the cap does not inhibit groundwater or tidal migration, and the public does not want contaminants leaking into the estuary. Since we do not know the risks posed by groundwater migrating from the JILF, testing should be conducted immediately. Furthermore, the lack of testing for dioxin means that risks have likely been underestimated in the past. There is a great deal of frustration in

the community that the Navy will not conduct appropriate testing to answer these questions of risk, and instead relies on old incomplete information to make its decision.

**55. Pages 3-5 & 3-6, Summary of Comments Received During the Public Comment Period and Navy Responses.** **Comment 4:** *Alternative 5, included in the draft PRAP, should not have been deleted from the final PRAP. Deleting important information at the 11<sup>th</sup> hour is not the way to gain public trust.* The Navy's response also must acknowledge that the *Feasibility Study for OU3 (FS)*, which was issued in November 2000 and which the public had access to, retained Alternative 5 as a viable alternative.

**56. Page 3-7, Summary of Comments Received During the Public Comment Period and Navy Responses.** **Comment 8:** *The remedial alternatives evaluated by the Navy are incomplete and there are a lack of adequate options. Alternative 5 was removed from consideration and there is no consideration of complete or partial removal.* The Navy's response states that partial removal of landfill material was developed in the FS, but dropped during the screening of alternatives. The Navy should clarify if the re-evaluation of consolidation of portions of the landfill mentioned elsewhere in the ROD (see page 1-3, for example) is the same as the partial removal alternative. If not, how do the two alternatives differ?

**57. Page 3-8, Summary of Comments Received During the Public Comment Period and Navy Responses.** **Comment 9:** *Alternatives 1 and 2 are do nothing choices and the State of Maine would not agree to such choices so they do not represent genuine options. Alternatives 3 and 4 are merely variations on the same theme and those technical variations could have been left to the design phase.* The Navy's response should clarify that Alternative 2 does not meet ARARs, and so is not a viable option. The response should also clearly state that the only alternative considered was capping the landfill, and that way the public won't be led to believe there were choices.

**58. Page 3-8, Summary of Comments Received During the Public Comment Period and Navy Responses.** **Comment 10:** *The USEPA has so far gone along with the Navy's proposals for the JILF. They now stand alone as the only signatory on this decision in a position to call for a real remedial action plan. There is still time for the USEPA to come forth to protect human health and the environment by demanding the Navy place a barrier as well as a cap at the JILF.* No response was provided for review, although the Navy has requested a response from USEPA. We may have comments when a response is provided at some time in the future.

**59. Page 3-8, Summary of Comments Received During the Public Comment Period and Navy Responses.** **Comment 11:** *Will the shoreline erosion controls (rip-rap and/or wetlands) be as effective as a barrier to stop any kind of leakage?* The Navy's response should be amended to also state that wetlands can be utilized for water quality control.

**60. Pages 3-8 & 3-9, Summary of Comments Received During the Public Comment Period and Navy Responses. Comment 12:** *Why was a last-minute decision made to separate OU3 and OU6?* The Navy's response should also acknowledge that the funding schedule played a role in the decision to move forward with the cap at this time.

**61. Pages 3-9 & 3-10, Summary of Comments Received During the Public Comment Period and Navy Responses. Comment 13:** *The Navy should not separate "source control" from "management of migration" for the JILF when the impacts of the offshore and nearshore environment via seeps from the JILF are not clearly understood. The remedies for OU3 and OU6 should occur concurrently and should include monitoring of seeps and thorough evaluation of containment methods to control groundwater migration from the JILF.* The comments regarding compartmentalizing the operable units was not limited to OU3 and OU6 - OU4 was included as well. These operable units should not be treated independently or approached in isolation. The entire system must be evaluated. The comment and response should be revised to reflect this. In addition, the part of the response that focuses on why the cap was pursued should acknowledge that the funding schedule played a large role in proceeding with the capping alternative. The second bullet on page 3-10 says that the OU6 investigation work plan will be completed by the time the JILF cap construction is complete. As we pointed out in comment 7, above, the proposed *Operable Unit 3 Remedial Design and Remedial Action Schedule*, which is dated April 16, 2001, indicates that remedial construction will not be complete until October 2005. It should not take over four years to develop an investigation work plan; the work plan should be completed well in advance of the cap completion. Furthermore, it is important to gather the information on seep concentrations and potential impacts in the near future, not almost five years down the road. Data should be gathered before the cap is constructed so that it can be evaluated and appropriate measures can be implemented, if necessary. The data should also be compared with concentrations after the cap is installed to test the assumption that the cap will decrease the effects of the seeps.

**62. Page 3-11, Summary of Comments Received During the Public Comment Period and Navy Responses. Comment 14:** *What is the timeline for study and remediation of OU6 and what funding will be available to deal with OU6?* As we noted in comments 7 and 61, above, the Navy's proposed timeline for preparing an investigation work plan and for starting the OU6 sampling is not acceptable. The public has been adamant about the need to sample immediately. We also note that the Navy's response to Summary Comment 14 states that the work plan will be finalized before the cap construction is complete. This timeframe is not consistent with language elsewhere in the ROD.

**63. Page 3-11, Summary of Comments Received During the Public Comment Period and Navy Responses. Comment 15:** *How does the new OU6 relate to OU3 and OU4. How will the OU3 remedy currently proposed by the Navy affect OU6?* The Navy's response states that if the OU6 seeps are still present after cap construction, then investigations of the OU6 seeps will begin.

This delayed approach does not address concerns regarding what the seep impacts are. The potential impacts of the seeps needs to be evaluated now, not five years down the road. Furthermore, baseline data is needed to compare with concentrations after the cap is constructed to test the assumption that the cap will decrease the effects of the seeps.

**64. Page 3-12, Summary of Comments Received During the Public Comment Period and Navy Responses. Comment 16:** *Without containment of the JILF, daily tidal action and the current groundwater seepage will continue to flush contaminants from the JILF and introduce them into the intertidal nearshore and offshore environments. These represent continued risk to human health and the environment. As several people pointed out during the public meeting, the earlier risk assessments did not evaluated dioxin, because dioxin data had not been collected. The first dioxin results for the JILF were reported in 2000 after the limited soil sampling conducted as part of the drum investigation. This soil sampling does not adequately characterize dioxin contamination in soils or groundwater at the JILF. So any discussion of risk associated with JILF contamination likely underestimates total risk.*

**65. Page 3-12, Summary of Comments Received During the Public Comment Period and Navy Responses. Comment 17:** *Will the delay for addressing management of migration (OU6) result in risks to human health and the environment? What are the risks to humans from the seeps?* The Navy should also state in their response that they will not know what the potential risk from OU6 migration is until the data is finally collected and evaluated.

**66. Page 3-13, Summary of Comments Received During the Public Comment Period and Navy Responses. Comment 18:** *The Navy needs to implement a testing protocol for the seeps from the landfill as well as intertidal monitoring to insure that at a minimum the public can be notified if there is any danger of contamination through eating fish or shellfish from the waters around JILF. The Navy's response mentions that three rounds of monitoring data have been collected so far for OU4. How do the data compare with the December 2000 Fish Tissue Action Levels for Screening Evaluations issued by the Maine Bureau of Public Health's Environmental Toxicology Program? With fish advisories issued by the State of New Hampshire? Every new round of OU4 data should be compared with fish advisory concentrations and appropriate agencies notified if there is an exceedance or concentrations approaching action levels.*

**67. Page 3-13, Summary of Comments Received During the Public Comment Period and Navy Responses. Comment 19:** *What impact will dioxin concentrations detected in the soil at the JILF and in the sediment, mussel, and juvenile lobster near the JILF have on the results of the risk assessments? Dioxin testing of the seeps wasn't conducted; therefore there is not sufficient information to determine whether dioxins are leaching out of the landfill. Finding dioxin in the seeps could alter the risk level of the site significantly. Also evaluation of the available dioxin data may change the risk assessment conclusions significantly. The Navy acknowledges in their response that performing a new risk assessment with dioxin data would not*

change the selection of the source control remedy. However, it is important to note that dioxin data collected in 2000 came from a very limited number of locations at the JILF. Dioxin was not an analytical parameter during the initial JILF site characterization, nor in the subsequent groundwater, seep, and sediment monitoring at JILF. None of the offshore risk assessments utilized dioxin data. In addition, one of the comments submitted at the Public Hearing focused on a recent USEPA report that indicated risk factors for dioxin may be 10 to 100 times greater than previously thought, and that significant uncertainties remain regarding the effects of dioxin and related compounds.

**68. Page 3-14, Summary of Comments Received During the Public Comment Period and Navy Responses. Comment 20:** *A strong potential exists for future releases from undiscovered steel drums in the JILF. Investigations to date were limited and did not prove that additional drums are not present elsewhere in the JILF.* A person commenting on this issue also made the point that the limited investigation provided ample evidence that previously unknown materials are deposited in the JILF in containers made of corrodable material. In addition, the impact of rising sea level on these buried wastes has not been evaluated. These points should be added to the comment and addressed in the response.

**69. Page 3-14, Summary of Comments Received During the Public Comment Period and Navy Responses. Comment 21:** *Most of the quantitative analysis has focused solely on the human health risk at the immediate landfill site. However, there has been little data generated related to the overall health of the ecosystem or whether it will ever be safe to swim in the Piscataqua River.* The Navy's response cites the risk assessments it conducted as indicating the offshore area of PHS is safe for human exposure. This part of the response should be amended to clarify the dioxin was not evaluated as part of the risk assessments cited.

**70. Page 3-15, Summary of Comments Received During the Public Comment Period and Navy Responses. Comment 22:** *The sediment in the offshore area of the Shipyard is heavily contaminated with lead and other toxins and there should be no additional contamination from the seeps added to what is already there.* The response cites the ecological risk assessment as indicating low risks. As stated in comment 69, above, the response should be amended to state that dioxin was not evaluated as part of the risk assessment.

**71. Page 3-15, Summary of Comments Received During the Public Comment Period and Navy Responses. Comment 23:** *How will the public's concerns related to the remedy for OU3 be addressed under the CERCLA process.* The response states that concerns related to the timeframe for addressing OU6 are being addressed by incorporating several requirements into the ROD for OU3. However, as we have noted in several comments above, the Navy's proposed timeframe for completing the OU6 work plan and initiating the OU6 investigation almost five years down the road is not acceptable and does not address the public's concerns. The response should be revised.

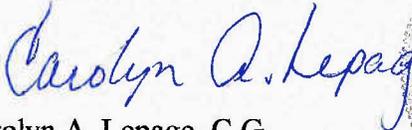
**72. Page 3-16, Summary of Comments Received During the Public Comment Period and Navy Responses. Comment 25:** *The cleanup process is too slow and needs to be accelerated. Why has it taken the Navy so long to come up with the solution for capping and how many years will it take to determine the need for a barrier?* Another expression of the public's frustration with the time it has taken to reach this decision are comments to the effect that the Navy has been studying this site for over ten years, and is only now coming up with the obvious action of capping the landfill. The Navy's response does not address the part of the comment regarding how long it will take to determine the need for a barrier. The response must be revised.

**73. Pages 3-17 & 3-18, Summary of Comments Received During the Public Comment Period and Navy Responses. Comment 30:** *Are funding and cost driving selection of the remedy? How do budget cycles affect remedy selection?* The Navy should acknowledge in its response that the funding schedule did play a role in pursuing the capping alternative while holding off on addressing the management of migration issue.

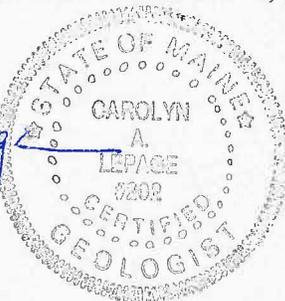
**74. General Comment for Section 3.** There were several important comments made during the Public Hearing and/or submitted in writing that were not presented in the 32 Summary Comments in Section 3. A RAB member (Appendix B.2, page 10) raised the issue of fresh air being drawn into the landfill and changing physical and chemical conditions beneath the cap. SAPL (Appendix B.2, page 24) and Clean Air Action (B.2, page 7) both advised a more precautionary approach. SAPL's provisions for supporting installation of the cap are also important, as they are a good indicator of community support for the Navy's remedy. Two people (Appendix B.1, Pages 76 and 77, and Appendix B.2, page 1) also commented on the perception of a double standard regarding how government agencies and the military conduct cleanups versus cleanups in the private sector. These additional comments should be added to Section 3 and responses provided.

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: James Horrigan, SAPL  
Iver McLeod, Department of Environmental Protection  
Meghan Cassidy, Environmental Protection Agency