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LETTER AND COMMENTS ON BEHALF OF SEACOAST ANTI POLLUTION LEAGUE
REGARDING DRAFT TEST PITTING INVESTIGATION REPORT JAMAICA ISLAND LANDFILL
NSY PORTSMOUTH ME
9/21/2000
LEPAGE ENVIRONMENTAL SERVICES

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September 21, 2000

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

Subject: Review Comments, August 2000 *Draft Test Pitting Investigation Report, Jamaica Island Landfill, February/March 2000 Activity*

Dear Ms. Raymond:

We are transmitting the following comments on behalf of the Seacoast Anti-Pollution League (SAPL) concerning the August 2000 document, *Draft Test Pitting Investigation Report, Jamaica Island Landfill, February/March 2000 Activity*:

- 1. General Comment.** The test pitting investigation results add to the understanding of actual and potential contamination at Operable Unit 3 (OU3), and will help in selecting and designing effective and appropriate remedial measures.
- 2. General Comment.** The final Test Pitting Report must be signed and stamped by a Maine Certified Geologist.
- 3. Page ES-1, OBJECTIVE AND SCOPE.** The February 2000 *Work Plan for Mercury Burial Vault II and Drum Investigation at Portsmouth Naval Shipyard* prepared by Foster Wheeler Environmental Corp. describes the objective of the investigation as "... to perform additional investigation of the Jamaica Island Landfill to aid in further characterization in support of determining a final remedy of the site under CERCLA." This statement is not carried over to the Objectives and Scope section of the subject document. It is important to understand where the test pitting investigation fits overall in CERCLA-related activities at the Shipyard and at OU3. Therefore, the objective as stated in the Work Plan should be added to this report. This comment also applies to the parallel section on page 1-1.
- 4. Page ES-1, SITE BACKGROUND:** The text at the bottom of the page states "*Approximately 500,000 gallons of waste paints and solvents were reportedly buried in drums in the JILF. However, the Navy believes that the waste paints and solvents were likely brought to*

the tanks at Site 11 (which is adjacent to the JILF) for storage and offsite disposal. If these drums were indeed disposed of at the JILF, a large quantity (estimated to be as many as 9000 55-gallon drums equal to the total volume of 500,000 gallons of waste paints and solvents would be present in the subsurface." As currently written, disposal of waste paints and solvents appears to have been an all or nothing proposition - either all disposal took place at Site 11 or all wastes were disposed in drums in the landfill. The text should be revised to reflect that disposal took place at both locations. The first sentence in Conclusion Number 1 on pages ES-3 and 3-1 should also be revised appropriately.

5. Page ES-2, SUMMARY OF RESULTS, CONCLUSIONS AND

RECOMMENDATIONS: We feel that the statement here and elsewhere in the report that test pitting occurred "at the most probable areas where drums would be expected to have been buried at the JILF" is over-stating the Navy's case. The MTADS survey detected numerous anomalies, yet only 17 were selected for test pit investigation. Furthermore, the MTADS survey covered only a portion of the JILF. The report should be revised to reflect these limitations. This comment also applies to Conclusion Number 1 on pages ES-1 and 3-1.

6. Page ES-2, SUMMARY OF RESULTS, CONCLUSIONS AND

RECOMMENDATIONS: The contents of the 39 drums are described here and elsewhere in the text (see pages 2-3 and 3-1) as containing tar-like solids or viscous materials and not liquid oil/solvents. These statements are at odds with the information recorded in the Contents column of the Buried Drum/Container Removal Log in Appendix D. The data presented in the table indicates that all drums contained "oily material", and only two drums contained tar. The text must be reconciled with the information in Appendix D. This comment also applies to Conclusion Number 1 on pages ES-3 and 3-1, as well as the text on page 2-3.

7. Page ES-2, SUMMARY OF RESULTS, CONCLUSIONS AND

RECOMMENDATIONS: The results of the test pit soil sampling are compared here and elsewhere in the report (see page ES-3, for example) with concentrations of chemicals detected in samples collected previously at Sites 8, 9, and 11 and are described as having similar levels of most chemical constituents. The implication of this statement is that there is nothing to worry about with regard to analytical results for the recent samples. However, the reader has no way of knowing the basis for the Navy's conclusion and can not take comfort that levels were similar. Site 8 is a landfill that could reasonably be expected to harbor "hot spots" of contamination. Site 11, the tanks that received waste oils and solvents, had (and still has, as not all contaminated soil has been removed) soil contamination resulting from spilling or overfilling. Therefore, the comparison must be put into context. The reference(s) for the earlier sampling results must be provided. Actual results should also be reported so that the reader can see the comparison. Conclusion Number 2 on page ES-3 and page 3-2, as well as the text on page 2-8, should also be revised appropriately.

8. Pages ES-2 & ES-3, SUMMARY OF RESULTS, CONCLUSIONS AND

RECOMMENDATIONS: We are not sure what the following sentence means: "Higher levels of contaminant concentrations were not detected at locations with distinct waste materials that appeared to be sources of contamination such as a non-aqueous phase liquid or indications of hot spots." The sentence should be rewritten.

9. Page ES-3, SUMMARY OF RESULTS, CONCLUSIONS AND

RECOMMENDATIONS: Conclusion Number 3 should be revised to read "The contents of the JILF at the test pit locations are heterogeneous...", since the conclusion is based on only the 25 test pit locations. These 25 test pits provide useful information, but are not enough to fully characterize a 25-acre landfill. The fourth conclusion states there is less potential for buried drums above the water table than previously assumed. The documentation for the assumption must be provided - whose assumption, what exactly was the assumption, and where is it documented. What about the potential for drum burial below the water table? This comment also applies to Conclusions Numbers 3 and 4 on page 3-2.

10. Page 1-2, Section 1.3 PREVIOUS INVESTIGATIONS. The text should be supplemented by a map showing the location of the MTADS survey within the boundaries of the JILF, so that the landfill areas that were actually surveyed are clearly identified. The historical information depicting the extent of landfilling on a year-by-year basis is also helpful. A figure showing the MTADS anomalies with the test pit locations superimposed is also needed.

11. Figure 1-3. What is the significance of the grass area depicted on the figure? What are the MTP-01 and -02, and JTP-01, 02, and -03 shown on the plan? If pertinent to this report, information should be added to the text and figure legend. If not, the symbols should be removed.

12. Page 2-1, Section 2.0 TEST PITTING PROGRAM AND RESULTS. Deviations from the Work Plan are mentioned in the first paragraph. Other than the "minor changes in locations of test pits" in the last paragraph, were there any other deviations from the Work Plan? If so, these should be clearly identified in the text. The third footnote on Table 2-1 states that several test pits were relocated slightly to accommodate surface restrictions. How much did the final pit locations differ from the locations proposed in the Work Plan?

13. Page 2-1, Section 2.1 TEST PIT LOCATIONS. According to the first paragraph in the section, the Navy believes that if drums were buried in the landfill, it may have occurred between 1945 and 1965 in the area north of the capped portion of the landfill. The landfill reportedly received waste until 1978. What about the burial of drums between 1965 and 1978? Why is drum burial less likely during that period?

14. Pages 2-2 - 2-4, Section 2.2 DESCRIPTION OF SUBSURFACE FINDINGS. The descriptions of the material found in the test pits should also identify those locations where ash

was observed (TP-2, TP-8, TP-14, TP-15, TP-16, and TP-23). The staining, odors, and/or sheen on water in the excavation should be noted for TP-7, TP-9, and TP-24.

15. Page 2-6, Section 2.3.2 Analytical Results. We appreciate the summary of Frequency of Detection, Range of Positive Detections, and other analytical results. However, a review of Table 2-4 reveals that the Range of Nondetects exceeds or significantly overlaps the Range of Positive Detections for VOCs, SVOCs, and PCBs. This information and its effect on the Frequency of Detection should be covered in the text.

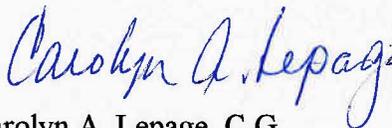
16. Page 2-6, Section 2.3.2 Analytical Results. The last paragraph on the page mentions total petroleum hydrocarbons (TPH). Discussions in the text should be in terms of diesel-range organics and gasoline-range organics (DRO and GRO), not TPH

17. Page 2-7, Section 2.3.2 Analytical Results. The meaning of the second sentence in the fifth bullet regarding the significance of higher levels of dioxins is not clear. Please revise.

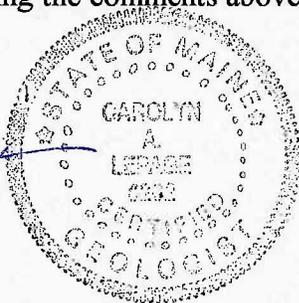
18. Page 2-8, Section 2.3.3 Comparison of Test Pitting Data to Existing Site Data. It is not clear what the significance is of concentrations of dioxins and furans in the test pit soils being similar to those in ashes resulting from common household trash burning. Nor is it clear how this information relates to potential risks and remedial measures for the landfill. It is not possible to determine the risk from dioxins and furans based on weight alone. It is necessary to determine the toxic equivalency factors for the mixture. It is necessary to show not just the same weight, but that the components of the mixture are similar to those in ash from household trash burning. Because the Teepee Incinerator at Site 29 is a potential source, and components of the ash at Site 29 are not similar to those in ash from household trash burning, the toxicity of the components in the test pit soil samples must be determined.

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: Johanna Lyons, Seacoast Anti-Pollution League
Iver McLeod, Maine Department of Environmental Protection
Meghan Cassidy, U.S. Environmental Protection Agency