



STATE OF MAINE

# DEPARTMENT OF ENVIRONMENTAL PROTECTION

JOHN R. McKERNAN, JR.  
GOVERNOR

DEAN C. MARRIOTT  
COMMISSIONER

DEBRAH RICHARD  
DEPUTY COMMISSIONER

August 6, 1993

Mr. James Shafer  
Project Manager, Code 1821  
Department of the Navy, Northern Division  
Naval Facilities Engineering Command  
10 Industrial Highway, Mailstop 82  
Lester, Penn. 19112-2090

Dear Jim:

The Maine Department of Environmental Protection has received and reviewed the "Draft Technical Memorandum Site 9 Neptune Drive Disposal Site", dated June 1993, Naval Air Station Brunswick, Brunswick, Maine. The Department's comments are provided below.

At this time the Department does not support the Navy's recommendation for no remedial action and continued groundwater monitoring, both north and south of Neptune Drive, at Site 9. Perhaps after the Navy responds to our comments, the Department will be able to support the no action recommendation.

## General Comments

### 1. Background Locations

Background location maps and data results should be included in the Technical Memorandum Report. It was very time consuming to track down background numbers and locations. The Technical Memorandum references E.C. Jordan Co., 1990a, Volume 3, Appendix K, for the inorganic background numbers and locations. Appendix K contains all of the laboratory results for that investigation. It does not provide locations for the samples. It does not indicate which background samples were used to establish background concentrations. The background samples used to establish the background concentrations were found in the unreferenced Draft Swampy Road and Merriconeag Extension SI. The locations of the background samples were found in another unreferenced report.

It appears that two soil samples from MW-903 were used to establish background concentrations. Please explain why these two soil samples were chosen. MW-903's location, adjacent to LT-901, doesn't seem like an appropriate background sampling location.

Please explain why MW-916 was chosen as a background location. MW-916 is located approximately 20 feet from T-21 which has observed ash material below the water table. The hydraulic gradient in this area is very small, approximately 0.0022 ft/ft. It is possible that groundwater samples collected from MW-916 have been impacted from the landfill materials and is not representative of background concentrations.

2. The Department does not believe that groundwater flow directions can be determined from the few groundwater elevation measurements taken to date. Groundwater elevations were measured during periods of high water. Why weren't water level measurements taken for MW-901, MW-902, and MW-903? The possible influences of the drain on the shallow groundwater flow has not been discussed. Please submit a revised groundwater flow map.

3. Only three soil samples were analyzed from within the landfill. There are no TCLP results for the landfill material. A TCLP test should be performed for the landfill material.

4. No groundwater has been analyzed from within the landfill.

5. It has not been determined if the pesticides and VOCs found in LT-901 are from past disposal practices at the ash landfill.

6. It has not been determined if the VOCs found south of Neptune Drive have a source north of Neptune Drive.

#### Specific Comments

8. Page 2-9, first paragraph  
Several of the results reported in the E.C. Jordan 1990 Report are above the AWQC. When determining compliance with AWQC, the Department uses the most stringent concentration listed for any given chemical. It is not clear if ABB-ES is using the same method for determining compliance with AWQC.

9. Page 2-9, second paragraph  
No hydrogeologic data has been presented in this Technical Memorandum or in the E.C. Jordan Report to demonstrate that SW-915 is upstream of the contaminant plume associated with Site 9. Figure 11-3 of the E.C. Jordan Report suggests that contaminants flowing from Site 9 could discharge to the southern unnamed stream in the vicinity of SW-915.

The AWQC appear to be improperly applied to the surface water results in the Picnic Area Pond. Surface water associated with the Picnic Area Pond exceeds the AWQC for

iron and manganese. The Picnic Area Pond is located approximately 2500 feet from the seep location. The Department does not consider down stream concentrations when determining impacts from the seep. It is not clear why the Technical Memorandum includes the Picnic Area Pond in the inorganics discussion. The Picnic Area Pond is referenced in the text, but its location is not shown on a site plan.

10. page 2-10, first paragraph

What is the upstream sample taken at the culvert outfall? Is it SW-915? When referencing specific information from past reports, references must provide page numbers, figure numbers, and other important reference notes.

11. Page 2-10, second paragraph

Strike the statement that states that no site-related inorganic contamination was present in MW-901, MW-902, and MW-903. Considering that these wells are located downgradient from an ash disposal landfill, all metals found downgradient should be considered site related, especially those found above background concentrations.

12. Page 2-11

The MEG for vinyl chloride is below the detection limit, however, this level is applicable.

13. Section 2.2.1.2 Ash Disposal Area

The ash disposal area is classified under Maine's Solid Waste Management Regulations as an unlicensed special waste landfill. Please change all references from an ash disposal area to an ash landfill.

14. Samples should be collected from the ash and analyzed for TCLP. Additionally, groundwater samples from within the ash should be collected to determine the effectiveness of the existing monitoring well network.

15. Page 2-17, second paragraph

Please clarify how many samples were collected from each boring and how many samples were analyzed.

16. Page 2-21, Table 2-4

PAH results for SD-901/DUP are reversed. SD-901 is 10848J and DUP is 8345J.

The text on page 2-5 states that 0.5 mg/kg is the site background concentration for pesticides in soil. The text should expand on the pesticide results from SD-901.

17. Page 2-24, Table 2-6

Table 2-4 reports Total PAHs for soil, Table 2-6 reports individual PAHs for groundwater. Either both should show

total PAHs or both should show individual PAHs. It appears that LT-901 PAH concentrations should be corrected.

Please provide TerraProbe investigation logs indicating intervals sampled and recovery quality. From on-site observation samples were collected at intervals 8-9' and 12-13'. The text indicates that continuous samples were collected.

18. Page 2-32

How was the black organic material found in the cesspool borings different from the organic material found in MW-914 and MW-915?

19. Section 3.0 Summary of Contamination Assessment

Page 3-1, first paragraph

It has not been determined whether the ash extends beneath Building 219.

The source of the VOCs found east of building 201 is not known. What is the meaning of a continuing source, as written in "Sporadic low levels (below CRQL) of 1,1,-DCA and vinyl chloride are not indicative of a continuing source of VOCs." What are sporadic low levels indicative of?

20. Section 4.0 Summary of Site Risks

Page 4-2, 4-3

Maximum values must be used to assess risk. Please include the State of Maine's Incremental Lifetime Cancer Risk Guideline of  $1 \times 10^{-5}$  in the carcinogenic risk discussion.

21. Page 4-5, first paragraph

The text should include a discussion about the elevated manganese levels.

22. page 5-2, first paragraph

The ash dump has not been fully characterized. It has not been determined if the ash extends beneath building 219. No TCLP analysis has been conducted from within the ash. No groundwater samples have been collected from within the ash. It is possible that the landfill may have been a dumping ground for cleaning solvents used at the incinerator.

One TerraProbe location, T-29, was sampled west of Building 218? Are you confident that one TerraProbe sample is enough to verify the ash does not extend to the west of Building 218?

23. The Department recommends that groundwater be sampled from within the more permeable soils in the location of the former drain.

24. Page 5-2, last sentence  
Iron, aluminum, and zinc are naturally occurring elements,  
however, the concentrations detected do not represent  
background concentrations.

Please call me if you have any questions or comments.

Sincerely,

*Nancy Beardsley*

Nancy Beardsley  
Project Manager, Federal Facilities Unit  
Office of the Commissioner

cc: Meghan Cassidy, USEPA  
Jim Caruthers, NAS Brunswick  
Carolyn Lepage, R.G. Gerber Inc.  
Bob McGirr, ABB ES  
Rene Bernier, Topsham  
Sam Butcher, Harpswell  
Susan Weddle, Brunswick  
Brunswick Topsham Water District  
Mark Hyland, DEP  
Marianne Hubert, DEP  
Troy Smith, DEP