STATE OF MAINE
DEPARTMENT OF ENVIRONMENTAL PROTECTION

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October 5, 2000

Mr. Orlando J. Monaco
Code 1821 LM
Department of the Navy, Northern Division
Naval Facilities Engineering Command
10 Industrial Highway, Mail Stop 82
Lester, PA 19113-2090

Re: Site 9, Monitoring Event 16, April 2000
Naval Air Station, Brunswick, Maine"

Dear Mr. Monaco:

The Maine Department of Environmental Protection (MEDEP or Department) has reviewed the report entitled Monitoring Event 16-April 2000, Site 9, prepared by EA Engineering, Science and Technology. Based on that review the Department has the following comments and issues.

Each of our comments is followed with a code that indicates whether a response is required (RR), no response is required (NR), editorial correction needed (ED); or meeting discussion requested (MTG). No response is required for editorial corrections unless the Navy disagrees with the correction.

General Comments:

1. The report is clean of any serious problems, however, there are some changes that should be corrected or clarified in the annual report. (NR)

2. The Department plotted the new concentration data for MW-NASB-069 on the graph in the 1999 Annual Report for Site 9. Vinyl chloride rose to a new high value of 55 µg/L, while 1,2-dichloroethene (total) dropped slightly. For the first time, vinyl chloride concentration exceeds the corresponding 1,2-dichloroetherne concentration. The Department's concern about the rising trend of vinyl chloride continues, particularly if degradation is slowing. (MTG)

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Specific comments:

3. Gauging Activities, Section 1.2.1, p. 1:

   It was noted in the Eastern Plume Monitoring Event 16 report that 2 inches of precipitation was received during the week before and during the water level gauging period. As the time frame appears to be nearly identical for both Site 9 and the Eastern Plume, the same precipitation statement should appear in the Site 9 report. (ED)

4. Sampling Activities, Section 1.3.1, p. 2, 2nd para:

   "Reduced dissolved oxygen concentrations (<2.0 mg/L) were noted in samples from 9 monitoring wells, some as low as 0.00 mg/L."

   a.) In Table 4, only 8 wells have dissolved oxygen values of less than 2 mg/L. Also, no well has a value of 0.00 mg/L, the lowest being 0.08 mg/L. Please correct the text. (ED)

   b.) The Department suggests that in the future, monitoring event reports should show DO values rounded to the nearest 0.1 mg/L. The hundredths have no meaning and likely are not repeatable for sampled water with low readings. Likewise, water temperatures and pH values might best be rounded to the nearest 0.1 units, so as not to overstate our ability to determine actual representative values. (MTG-TEG)

5. Analytical Data Quality Review, Section 1.8, p.4, 1st para:

   This paragraph states that the remedial action is monitored natural attenuation at Site 9. While this is somewhat true, the Site 9 ROD remedy was termed "*natural attenuation with monitoring and institutional controls*" as required by MEDEP and EPA. It is important that this language remain consistent throughout the Site 9 reports, as the completeness of monitoring does not meet the EPA's definition of monitored natural attenuation. The difference appears subtle, but in actuality, is not. Please correct the text. (ED)

6. Analytical Data Quality Review, Section 1.8, p.5, last para:

   It seems strange that non-detect results should be considered estimated. Please explain what this means. A large number of compounds are involved. The table of data to which this applies (Table A-5, SED-10 data) does not list or mention the possibility that other compounds may be present in the sample. Table A-5 gives detected values for 1,2-dichloroethene (total) and trichloroethene. The qualification listing in Section 1.8 includes 1,2-dichloroethene, but not trichloroethene. Why?

Please provide explanation for the above questions and include in the Annual Report. (RR)

7. Summary of Water Quality Indicator Parameters, Table 4:

a.) Groundwater temperature measurements can be quite useful in analyzing the groundwater flow regime. The range in measured temperatures in this table is 8.56 to 18.83 °C. For the April timeframe, the Department questions the representativeness of in situ of temperatures over 13 °C. MEDEP is aware that an elevated temperature can be produced by the pump at low flow rates. However, inspection of information in Appendix B.2 shows no consistency between the high temperatures compared with flow rate, duration of pumping, well drawdown or well (screen) depth. What other field sampling conditions might be affecting which wells deliver groundwater at elevated temperatures? (RR)

b.) The Navy will need to consider how it will obtain these parameters if diffusion sampling replaces low-flow sampling. Can some of the parameters, say temperature, be obtained by lowering a YSI sensor head into wells? This topic might best be addressed at a technical meeting. (MTG)

Thank you for the opportunity to review this report. If you have any questions or comments please call me at (207) 287-7713.

Respectfully,

Claudia Sait

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