



STATE OF MAINE
DEPARTMENT OF ENVIRONMENTAL PROTECTION

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NSY PORTSMOUTH
5090.3a

ANGUS S. KING, JR.

GOVERNOR

February 4, 2002

MARTHA KIRKPATRICK
COMMISSIONER

Mr. Fred Evans
Department of the Navy
Northern Division
Naval Facilities Engineering Command
10 Industrial Highway, Mailstop 82
Lester, PA 19113-2090

re: Responses to Comments from MEDEP Dated November 19, 2001, Draft Building 184
(Site 30) Test Pitting Investigation Report

Dear Fred:

The Maine Department of Environmental Protection has reviewed the document referenced above. The Department's comments follow.

1. Response to General Comment 1

We understand the Navy's intent with the phrase "housekeeping workers". However, the text of the report should be changed to clarify this for any reader.

2. Response to General Comment 2

"...the Navy does not believe the photographs improve the understanding of the results of the investigation or the recommendations for the site."

The MEDEP disagrees. Photographs always help to understand a site, at least from a general perspective. In this instance they indicate what the crystals look like. The MEDEP doesn't understand the Navy's reluctance to doing something as simple as providing color photographs (or color photocopies) in a report. These photos should be available to all readers, not just the regulators and public who request them. The easiest way to make them available is to include them in the text.

3. Response to General Comment 3

The Navy's new language states that 13 gallons of water seeped into the excavated pit over a period of 6 hours. The question that MEDEP asked was how much water was pumped from the pit during the sampling process. This volume could have been significantly greater than 13 gallons, depending on the degree of water-level recovery after 6 hours. An estimate of this volume should be added as part of the new text.

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Also, please reverse the order of the cited temperature and pH values presented in the new text to match the proper parameter.

If the pit water did not recover to the pre-sampling/purging level documented within the pit, this condition might be corroborating evidence (with differences in water level just outside the building) that the pit water is not in direct hydraulic connection with the water table in the Building 184 area. However, such an inference would require that the water-level rebound in the pit had ceased, and a new equilibrium at lower elevation was established. The supporting data, if it exists, is not presented in this report.

4. Response to Specific Comment 7

We accept the Navy's rebuttal regarding the insignificance of tidal effects in site monitoring wells and concur that the data can be used to map the water table without tide adjustments being applied. However, we do not necessarily agree that the potentiometric contours as drawn in Figures 3-5 and 3-6 of the Site Screening Report are correct and can be reliably used to determine groundwater flow paths from the acid proof pit. The primary concern is that the Navy has only one well downgradient of the pit (MW-04), and only that well is screened entirely in bedrock. Examination of the geologic cross sections (Figures 3-3 and 3-4) indicates that MW-04 is located on a bedrock topographic high. MEDEP would not expect very shallow groundwater to move away from the pit into this bedrock high when it could migrate around the bedrock high through unconsolidated materials. Therefore, it would be even less likely for MW-04 to become contaminated than it would to reflect the true potentiometric head in the material overlying bedrock.

Agreed, contaminant migration in three dimensions will normally occur over short distances if impediments do not exist. In the case of the acid proof pit, it seems reasonable to MEDEP that if the only significant leak from the pit occurred along its western edge, roughly 40 feet from MW-02, the dispersion pattern probably would not engulf MW-02.

Unless the Navy can provide conclusive data indicating that the acid proof pit has never leaked its contents, the Department will stand fast on requiring additional monitoring wells to test the breadth of the area considered downgradient.

5. Response to Specific Comment 8

Please indicate the frequency of the "periodic inspections" of the herculite.

6. Response to Specific Comment 21

The Navy admits in their response that the available information does not prove that the pit water is not groundwater. The MEDEP agrees with this statement. However, the following statement in the second bullet on page 3-1 was not revised per the Navy's response, but should be revised or deleted.

"A comparison to EPA Region 9 PRGs for tap water was not conducted since the pit water was not groundwater."

7. Response to Specific Comment 23

The majority of silver hits were well below the maximum concentration. Therefore, from a risk perspective we do not believe the maximum concentration (6.1 mg/kg) is significant.

However, we are still opposed to the use of a DAF of 20 for the following reasons.

The Navy responded, "The USEPA...supports the use of a DAF of 20 for a small source size (i.e., up to 0.5 acres) which receive rainfall infiltration through the source and possibly for larger source sizes based on site specific conditions. The size of the source (pit) Building 184 is approximately 48 feet by 32.5 feet (approx. 0.036)."

As the Navy indicated in its response the SSLs are used to get an initial understanding of the potential for chemical migration from soils in the source area to groundwater at the receptor well. Since there is no receptor well at Building 184 there is no distance involved to gauge how much silver leaching from the fill material would attenuate as it migrates via groundwater. However, we can assume a distance of 48 feet (the length of the pit) to a hypothetical receptor well at the opposite end of the pit. Given such a relatively short distance the MEDEP is still highly skeptical that a DAF much greater than 1 is appropriate. A DAF of 3, as the Navy indicated in their response, seems appropriate.

We also note that the pit does not receive rainfall infiltration so there is no leaching of contaminants from an unsaturated zone to the saturated zone. This doesn't specifically apply to this situation however since the sample with the maximum concentration of silver is in the saturated zone.

8. Response to Specific Comment 28

MEDEP yet objects strongly with the choice of wording in the following text statement, which precipitated the State's comment:

"A direct pathway of chemical migration from the pit fill material to the crystals cannot be established."

While this may be true using the present site data, further investigation/sampling may very well establish a direct pathway between the crystals and the pit fill material. The word "cannot" implies that it is impossible under any circumstances, unless duly qualified. Please change the wording as suggested by MEDEP in its November 19, 2001 comment letter.

9. Response to Specific Comment 32

"The report was provided for information and included in a Draft report by the Navy for review and comment."

We recognize that. However, as our comment stated, we hadn't had a chance to review it prior to receipt of the Draft Building 184 (Site 30) Test Pitting Investigation Report. Therefore, it should not have been labeled "Final" in the Draft Investigation Report.

"No comments have been received on the Field Investigation Assistance Report, therefore the Navy considers it "Final."

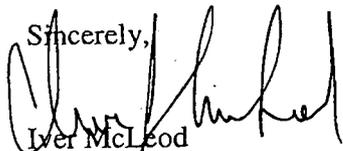
We agree that since no comments have been received from the MEDEP, USEPA, or SAPL following review of the Draft Building 184 (Site 30) Test Pitting Investigation Report it may *now* be considered "Final". However, our point was that prior to review of a document, the Navy must consider it a "Draft" and must label it as such.

10. Revised Section 2.2.2.1, Table "Pit fill Material, Minimum and Maximum Nondetects vs. target Limits"

Please explain why many of the "Minimum Nondetect" values (presumably reporting limits since they all have the "U" qualifier) differ from the corresponding "Maximum Nondetect" value:

Please feel free to contact me at (207) 287-8010 if you have any questions.

Sincerely,



Iver McLeod

Project Manager

Bureau of Remediation and Waste Management

pc:

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