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June 7, 1991

Commanding Officer
Atlantic Division
Naval Facilities Engineering Command
Norfolk, Virginia 23511-6287

Attn: Ms. Laurie Boucher, P.E.
Code 1822

Re: Contract N62470-89-D-4814
Evaluation of Hadnot Point Groundwater Analyses and
Comments on the Camp Lejeune Electronics Proposed Building Location

Dear Ms. Boucher:

This letter has been written in response to your May 25, 1991 requests for the following technical support: a comparison of the referenced groundwater analyses with existing Maximum Contaminant Levels (MCLs); and comments on whether or not building on the proposed Electronics Building would be problematic in light of the adjacent Installation Restoration (IR) site.

Evaluation of Hadnot Point Groundwater Analyses

The objective of this request was to determine if inorganic constituents detected in wells HPGW21, 22GW1, and 22GW2 are below their respective MCL's. Baker has reviewed the analyses and developed the attached matrix (Table 1).

As the matrix shows, MCLs are exceeded only in Well 22GW1, where arsenic is at the MCL and chromium and lead are each approximately an order of magnitude greater than the MCL. Note that in Well HPGW2, the MCL for lead is also equaled. In addition, the secondary drinking water standard for iron was exceeded in all three of the wells in question.

Evaluation of Proposed Building Site

Baker was also asked to comment on whether building on property near an IR site would be a problem, since the proposed location is downgradient of a monitoring well that exhibited elevated levels of lead and chromium.

Baker's initial question is whether or not soil samples have been collected at the proposed building site or the adjacent IR site. Soil and groundwater samples would be required to characterize the site from a contamination perspective in order to verify the absence of contaminants, and permit the construction of the electronics building with minimal risk of encountering environmental-related problems. For example, if contaminated soil would be encountered during excavation of the building foundation,

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proper disposal of the soil would result in increased costs and schedule delays. Additionally, proper disposal of contaminated soil in a landfill would at least require testing for TCLP metals and/or TCLP organics.

If groundwater contamination is confirmed in the immediate building site, construction would not necessarily be precluded. If there are no plans to excavate into the water table or to use groundwater at the site, and if there is sufficient adjacent area to facilitate concurrent or future installation of groundwater recovery and/or treatment equipment (if ultimately determined to be warranted and feasible), then construction at the site should still be feasible from a groundwater perspective.

To ensure that the soil or groundwater at the proposed building site is not contaminated by either inorganics or organics, a property site assessment would need to be conducted. I have attached an article dealing with various approaches to conducting property site assessments.

If you have any questions, or require a more detailed review of the contamination at the site, please do not hesitate to call me at (412) 269-2016.

Sincerely,

BAKER ENVIRONMENTAL, INC.

Raymond P. Wattras

Raymond P. Wattras
Project Manager

RPW/rw
Enclosure

I don't think Ray understood that we've essentially already completed a site assessment here (the IAS and limited sampling). Ray & I did discuss this & decided we should have a few soil borings taken in the vicinity of the proposed building location.

Laurie