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Baker

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February 26, 1992

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

Attn: Ms. Laurie A. Boucher, P.E.
Engineer-in-Charge
Code 1822

Re: Contract N62470-89-D-4814
CTO-0017, HPIA Shallow Aquifer Interim Remedial Action
Draft Hadnot Point STP Evaluation

Dear Ms. Boucher:

Enclosed please find three (3) copies of the above-referenced report for your review. Copies of this report have been forwarded via Express mail to Mr. George Radford (EMD, Camp Lejeune). Upon receipt of your comments on or before March 16, Baker will finalize this report by March 23, 1992.

Overall, the evaluation of using the Hadnot Point STP appears promising. No State water standards should be exceeded by discharging the treated effluent to the New River. Additionally, the capacity of the existing sewer lines and the capacity of the STP should not be problematic.

There are two issues that will need further assessment by Baker. The first issue involves potential impacts to air quality as a result of volatilization of organics from the aeration lagoon. At present, we are able to determine that OSHA worker safety standards will be met for the contaminants of concern; however, we need to perform air modeling in order to evaluate whether North Carolina air toxic pollutant standards would be exceeded and what additional measures would be required if the standards are exceeded. Several "simple" models such as EPA's SCREEN, ISCST, or CHEMDAT 7 can be used and are available to Baker. Baker is proposing to use the SCREEN model, which represents a worst case scenario. If the worst case scenario indicates a potential air quality problem, one of the other two models mentioned above will be utilized to better evaluate site conditions. The results of this study can be incorporated into the Final Report.

The second issue involves volatilization from the clarifier. As we discussed on February 26 (conference call between LANTDIV, Baker, and CJEJ EMD), Baker has assumed no volatilization from the clarifier. The only contaminant reduction was assumed to be the result of VOCs adsorbing onto the sludge, which was determined to be only a 2 percent reduction. In reality, some volatilization would occur as a result of this operation due to the mixing action created by the clarifier. To determine the amount of organics removed at the clarifier due to volatilization, additional calculations can be performed if deemed necessary by LANTDIV. At present, no State

or Federal surface water standards are exceeded under the present assumptions in the STP study (i.e., no volatilization from the clarifier); however, this additional calculation can be performed and included in the Final Report.

If you have any questions, please do not hesitate to contact me at (412) 269-2016.

Sincerely,

BAKER ENVIRONMENTAL, INC.

Raymond P. Wattras

Raymond P. Wattras
Project Manager

RPW/rw
Enclosures (3)

cc: Mr. Keith Simmons (w/o enclosure)
Mr. Marc Lambert, P.E. (w/o enclosure)
Mr. George Radford (with enclosures)