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LETTER REGARDING STATUS OF REMEDIAL INVESTIGATION FIELD PROGRAM OPERABLE UNIT 3 (OU3) STUDY AREAS 8 AND 9 NTC ORLAND FL
5/12/1998
HARDING LAWSON ASSOCIATES

Harding Lawson Associates

May 12, 1998

Commanding Officer
SOUTHNAVFACENGCOM
ATTN: Mr. Wayne Hansel, P.E., Code 18B7
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Charleston, SC 24019-9010

**SUBJECT: Remedial Investigation Field Program,
Operable Unit 3 (Study Areas 8 and 9) (STATUS), NTC Orlando
CTO 107, Contract N62467-89-D-0317/CTO 107**

Dear Mr. Hansel:

Harding Lawson Associates (HLA; formerly ABB Environmental Services, Inc.) has prepared the following status report regarding subsurface soil sampling at Operable Unit (OU) 3 (Study Areas 8 and 9) at Naval Training Center (NTC), Orlando, Florida. This letter is intended to provide information to the Orlando Partnering Team (OPT) to aid in their decision-making and planning process.

As stated in our March 18, 1998 status letter report (attached), only one of the subsurface samples proposed in the Remedial Investigation/Feasibility Study (RI/FS) Workplan has been collected at the OU. This was due to an unusually high water table caused by extreme wet weather conditions throughout the winter in Central Florida. In the March 18 letter, we proposed delaying completion of the sampling program to enable collection of non-saturated samples from the shallow subsurface. This recommendation was made with the expectation that the water table would recede before the onset of the typical annual wet season in Orlando, which begins in the late spring.

The depth of the water table at the OU was most recently measured on April 27, 1998. At that time, the depth to water was still unusually high, ranging from approximately 1.5 to 2.5 feet below the land surface (bls) at Study Area (SA) 8 and from 2 to 3 feet bls in most areas at SA 9. Based on these observations, and because the regional weather in the summer months is typically characterized by an increase in precipitation, collection of unsaturated subsurface soil samples to depths up to 5 feet bls may not be possible until the fall or winter of 1998, which would delay completion of the Draft RI Report by approximately one year.

Since this schedule delay would be viewed as unacceptable, the RI could be completed using a different approach which would not require subsurface soil analytical data and would thereby meet the original schedule. A qualitative approach can be used to evaluate subsurface soil conditions in

terms of risks to human health and the environment and remedial requirements. A qualitative evaluation could be considered an appropriate approach based on the following points.

1) The expected sources of contamination at OU3 are releases to surface soil. Although, in general, contaminants can migrate vertically through the soil column, the primary contaminants of concern at OU3 have relatively low solubility and have a low vertical migration potential. Therefore, the highest contaminant concentrations are expected to be in surface soil, for which data is available, and contaminant concentrations are expected to decrease with depth.

2) Sufficient groundwater data exist to evaluate whether or not subsurface soil is a continuing source of groundwater contamination.

3) The expected future land use at OU3 is recreational, but the RI will be based on the assumption that future use will be unrestricted and could be residential. Under a future recreational use scenario, there would be no expected exposure to soils deeper than 2 feet. Under a future residential use scenario, exposure to soils deeper that 2 feet at OU3 would be limited to construction and/or utility workers. Health risks to these receptors from exposure to soil contaminants could be quantitatively evaluated using surface soil data.

4) As stated above, the highest contaminant concentrations are expected to be within the surface soil (i.e., the upper two feet of soil). If remediation of this contaminated soil is required, the final remediation depth will be determined by the remedial technique, and will include all appropriate soil based on established cleanup goals, which may include soil deeper than 2 feet, if appropriate.

In addition to these points, a cost-benefit analysis of the project does not support a lengthy delay of the RI Report to allow inclusion of subsurface soil data. Therefore, HLA proposes the following course of action.

- HLA will proceed with completion of the RI according to the previously established schedule using data collected to date.

- HLA will continue to monitor the water table at OU3. If conditions for collection of non-saturated subsurface soil samples to a reasonable depth become favorable prior to completion of the Draft RI Report, we will immediately notify the OPT.

- If subsurface soil sampling becomes possible after submission of the Draft but prior to report finalization, the feasibility of conducting subsurface sampling at that point, including any schedule and budget impacts, could be discussed.

HLA looks forward to a response from the OPT regarding this matter and appreciates your continued patience. If you have questions or comments, please do not hesitate to call me at (703) 769-8145.

Very Truly Yours,

HARDING LAWSON ASSOCIATES

Shannon B. Gleason, P.E.
Task Order Manager

Attachment

cc: John Kaiser, HLA
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