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LETTER REGARDING WORK PLAN FOR UVB WELL UPGRADE AT OPERABLE UNIT 4 (OU 4) NTC ORLANDO FL
10/6/2000
FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION

FLORIDA

Department of Environmental Protec

Jeb Bush
Governor

Twin Towers Building
2600 Blair Stone Road
Tallahassee, Florida 32399-2400

David B. Struhs
Secretary

09.01.04.0020
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October 9, 2000

Mr. Wayne Hansel
Code 18B7
Southern Division
Naval Facilities Engineering Command
P.O. Box 190010
North Charleston, South Carolina 29419-0068

RE: Work Plan for UVB Well Upgrade at Operable Unit 4, Area C, Naval Training Center, Orlando, Florida

Dear Mr. Hansel:

Mr. Jorge Caspary, P.G. and I have completed the technical review of the Work Plan for UVB Well Upgrade at Operable Unit 4, Orlando Naval Training Center, dated September 2000 (received September 21, 2000), submitted by CH2M Hill. Attached, is a Memorandum from Mr. Caspary with some comments to be considered in implementing this technology at this site. The Work Plan is adequate for its intent and should be implemented.

If I can be of any further assistance with this matter, please contact me at (850)488-3693.

Sincerely,

David P. Grabka
Remedial Project Manager

Attachment (1)

cc: Barbara Nwokike, Navy SouthDiv
Nancy Rodriguez, USEPA Region 4
Richard Allen, HLA, Jacksonville
Steve McCoy, TetraTech NUS, Oak Ridge
Steve Tsangaris, CH2M Hill, Tampa
Bill Bostwick, FDEP Central District

TJB _____ JJC _____ ESN _____

TO: David Grabka, RPM
Orlando Naval Training center

TRHOUGH: Greg M. Brown, P.E. GB
Technical Review Section

FROM: Jorge R. Caspary JRC
Technical Review Section

DATE: October 6, 2000

SUBJECT: Workplan for UVB Well Upgrade at OU-4, ONTC

I have reviewed the subject document dated September 2000 (received September 21, 2000). The document is signed and sealed by Mr. Steve Tsangaris, P.E. of CH2M Hill.

From the text, I infer that the ONTC Team has concurred on groundwater extraction and treatment to capture the VOC plume to avoid its discharge to Lake Druid. The workplan's description of the technology is fairly standard calling for installing two extraction pumps in the existing UVB wells, extracting groundwater and treating it via a low-profile air stripper before discharging it to the City of Orlando sanitary sewer system.

Pump-and-treat technology has been around a long time and is discouraged as a long-term remedial alternative when compared with more advanced techniques such as air sparge, chemical oxidation, and enhanced bioremediation. However, pump-and-treat is still a valuable tool to achieve hydrodynamic control of contaminant plumes when surface waters must be protected. Usually, the benefit of capturing and treating the plume is secondary to the above objective, in my opinion. In this context, the workplan, and the technology discussed therein, are adequate. However, I have some comments for the record.

The document provides the model and its interpretation of the steady-state capture zone; however, it fails to provide an estimated time frame of the plume achieving effluent discharge criteria at the projected 10 gpm extraction rate. Only a 12-month operation schedule is presented without supportive calculations showing contaminant mass reduction. My recommendation is that particular attention is devoted to this subject as some pump-and-treat systems are in

operation for years without achieving stated remedial objectives or hydrodynamic control. Calculations and field-check adjustments and/or verification should be performed, and I recommend such time frame be submitted as part of the start-up report.

Please call me at (850) 921-9986 if you have any questions.