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EMAIL REGARDING REGULATORY REVIEW AND COMMENTS ON INTERIM REMEDIAL
ACTION USING IN SITU RECIRCULATION WELL TREATMENT AT OPERABLE UNIT 4 (OU
4) NTC ORLANDO FL
9/25/1997
FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION

From: John Mitchell TAL 850/488-3935
To: Steve McCoy; WAYNE HANSEL; NANCY RODRIGUEZ; JOHN KAISER; Gary Whipple; BOB COHOSE; BARBARA NWOKIKE
Subject: **OU4 IRA**
Date: Thursday, September 25, 1997 2:16PM

Included in this message are Greg Brown's comments. Related to his comment No. 2, the UIC folks in the dept. do not believe it will be acceptable, even with EPAs approval. I will be speaking with their attorney next week for some form of confirmation. If the system were within the well below the natural ground surface it would not be an issue. I will try to adequately resolve this.

Gregs comments:

SUBJECT: Interim Remedial Action using in-situ Recirculation Well Treatment System, Revision 0, prepared by Bechtel Environmental, Inc., for Operable Unit 4, Naval Training Center Orlando, FL.

I reviewed the subject document dated September 1997 (received September 9, 1997). J. R. Manning, P.E., Florida Licensed Professional Engineer No. 0051803, is the engineer of record for this engineering document. I have the following minor comments:

1. What is the definition of in situ in regards to this technology? Primary treatment (i.e., stripping and aeration) appears to be ex situ, whereas enhancement of aerobic bioremediation seems to conform to the typical usage of in situ, as I understand it. Has the design team considered possible risks due to by-products of aerobic degradation that are of higher toxicity than the parent chemicals of concern?
2. This specific UVG configuration operates as a groundwater extraction system with aboveground treatment followed by reinjection of partially treated groundwater. Reinjection is prohibited under State and federal rule and code if the injected fluids exceed federal drinking water standards. There is an exception, however, under federal Part 144, Underground Injection Control Program, 144.13(c). Briefly stated, reinjection of treated groundwaters as part of a groundwater cleanup strategy approved by the U.S. EPA pursuant to CERCLA or RCRA is not prohibited (see the referenced subsection for detailed conditions). U.S. EPA Region IV Administrators approval of the subject work plan is therefore required prior to implementation.
3. Note for your information that the Bureau of Air Resources has revised their maximum VOC mass emissions to 13.2 pounds/day for petroleum sites (refer to Rule 62-770, F.A.C., September 1997).
4. Balancing the flows between the two pumps appears to be a critical factor for successful operations. Appendix C implies a feedback system between the two pumps without details. Is it possible to flood the above ground treatment canister and cause a spill if the extraction pump exceeds the capacity of the injection pump? Please provide additional information on the interlocks and alarm conditions of the proposed system.

5. In Appendix B, Remedial Design, Ms. Amy T. Twitty, Florida Professional Geologist, No. 0001703, of SBP Technologies, Inc., provided a certification page for the Remedial Design (my review copy was received unsealed). When this certification page is sealed by Ms. Twitty, what geology portion of the SBP's Remedial Design will it apply to? Does Mr. Manning, Florida Professional Engineer, No. 0051803, of Bechtel Environmental, Inc., certify the engineering portions of SBP's design as the engineer with responsible charge, or was it delegated to another engineer? Please distinguish the responsibilities of the geologist, as well as the engineer of record and any delegated engineers.

If you have any questions, call me at (904) 488-3935.