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NSB KINGS BAY
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LETTER AND GEORGIA DEPARTMENT OF NATURAL RESOURCES COMMENTS ON
WORK PLAN FOR GROUNDWATER REMEDIATION AT SITE 11 NSB KINGS BAY GA
8/10/2001
GEORGIA DEPARTMENT OF NATURAL RESOURCES

01/01

Georgia Department of Natural Resources

205 Butler Street, S. E., Suite 1162, Atlanta, Georgia 30334

Lonice C. Barrett, Commissioner
Environmental Protection Division
Harold F. Reheis, Director
404-656-2833

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CERTIFIED MAIL: RETURN RECEIPT REQUESTED

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Commanding Officer
Naval Submarine Base
1063 USS Tennessee Avenue
Kings Bay, GA 31547-2606

Re: Work Plan No. 02: Groundwater Remediation at Site 11
5090 Ser FE4/1578

Dear Sir:

We have reviewed the above-referenced Work Plan submitted July 10, 2001. In an effort to aid the current work effort to mitigate historical contamination at the Old Camden County Landfill, we are providing comments based on an expedited, brief review. Our comments follow.

1. **Section 1, Figure 1-3:** This Figure is misleading and possibly erroneous in several aspects, including the following:
 - a. The "zero" concentration isopleth has nonzero data outside its bounds.
 - b. The isopleth indicated as "32,000" and the unmarked 18,000 isopleth near SP-35 have no data points within to support the conclusion that these are closed contours.
 - c. The 10,000, 12,000, and 14,000 isopleths between SP-03 and SP-37 intercept.

This Figure should be reviewed and corrected. Hand-drawn contours of these concentration data would be acceptable.

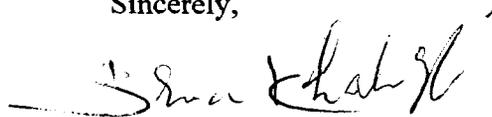
2. **Section 2.1.2, Appendix A:** The Work Plan proposes locations for the vegetable-oil injectors, but not the chemical oxidation injectors. Section 2.1.2 states, "The chemical oxidation injector parameters (actual number, placement, and construction details)...are vendor-specific and will be determined by the selected chemical oxidation injection vendor at a later date." However, the CPM Project Schedule (Appendix A) does not provide for EPD review of the proposed injector parameters and placement once the vendor determines what they are. We understand that adding an extra review step could delay corrective action activities by several weeks or months, possibly detracting from ultimate system performance. NSB may proceed in the most expedient manner, but EPD will closely monitor system performance with respect to the designated criteria.
3. **Section 2.1.3:** The last paragraph of Section 2.1.3 states, "Vegetable oil injection will address the anticipated slight contaminant rebound following chemical oxidation injections and will preclude the further necessity of in-depth investigations at the site", but the Work Plan does not identify the performance criterion to use in evaluating this claim. In other

words, does NSB expect the vegetable oil injection to completely eliminate the cVOC rebound or are cVOC concentrations expected to rebound, but below a certain threshold level? If the performance criterion is the baseline criterion in the CAP for monitored natural attenuation (maximum source-area cVOC concentration of 100 ppb), then the Work Plan should state that.

4. **Section 3.4.1, Analytical Methods:** Jeff Wilmoth's title and role in this project are unclear. Please include this information in this or other sections of the Work Plan.
5. **Appendix D, Health and Safety Plan:** NSB should address the following deficiencies in the Health and Safety Plan (HASP):
 - a. Section 3.3 and 3.4 of the HASP list the following biological hazards: snakes, poison ivy/oak/sumac, blood borne pathogens from waste, bees and other stinging insects and ticks. Section 3.4 is devoted specifically to tick bites and the danger of Rocky Mountain spotted fever and Lyme disease. However, the HASP does not mention the hazard posed by mosquitoes. Diseases including several types of encephalitis, such as that caused by the West Nile virus, are transmittable through mosquitoes and have been reported recently in Georgia. The HASP should therefore address the mosquito hazard.
 - b. Section 3.7 of the HASP lists the contaminants of concern as 1,2-DCE, PCE, and TCE. However, vinyl chloride was present in some of the source-area characterization samples (See Table 1-3 of Work Plan). The aggressive nature of the Fenton's reaction is such that volatilization will be likely of any vinyl chloride present, with consequent possible exposure by the site workers. The HASP should therefore address vinyl chloride.

Please provide, at your earliest convenience, change pages to address these comments. If you have questions or comments, please contact Billy Hendricks or Larry Papetti at 404-656-2833.

Sincerely,



Bruce Khaleghi, Unit Coordinator
Hazardous Waste Management Branch

cc: John Garner, Subbase FE
Sam Ross, J. A. Jones
Anthony Robinson, SOUTHDIV