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LETTER WITH U S NAVY RESPONSES TO GEORGIA DEPARTMENT OF NATURAL
RESOURCES COMMENTS ON FINAL DRAFT RCRA INTERIM REPORT AND WORK PLAN
FOR SITE 11 NSB KINGS BAY GA
11/17/1993
NSB KINGS BAY

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Georgia Department of Natural Resources
Environmental Protection Division
Hazardous Waste Management Branch
Attn: Bruce Khaleghi, Unit Coordinator
Floyd Tower East, Suite 1154
205 Butler Street, SE
Atlanta, Georgia 30334

Dear Mr. Khaleghi,

In response to your October 29, 1993 letter, regarding our Final Draft RFI Interim Report and Interim Measure Work Plan for Site 11 - Old County Landfill, and in follow-up to our November 12, 1993 letter, a Response to Comments Table, enclosure (1), is submitted for your review. We believe this Table adequately addresses your concerns on the Interim Measure Work Plan. A Final Interim Measure Work Plan will be completed within 30 days of your approval/acceptance of these comments.

As required under the terms of SUBASE Kings Bay's Hazardous Waste Facility Permit (HW-014)(S)(2), Section I.C.8, and according to the requirements in paragraph 270.11 of 40 CFR, I certify under the penalty of law that this document and all attachments were prepared under my direct supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Thank you for your timely review of these submittals. If you have further questions regarding our response or about our program in general please contact Mr. John Garner at 912-673-8845. Please address all correspondence to "Commanding Officer,

Naval Submarine Base, 1063 USS Tennessee Avenue, Kings Bay,
Georgia 31547-2606."

Sincerely,

L.P. Scullion P.E.
Captain, CEC, USN
Public Works Officer
By direction of the
Commanding Officer

Encl:

(1) Response to Comments Table

Blind Copy to:

→ SOUTHNAVFACENGCOM (Code1868)
ABB-ES (Frank Cater)

Response to Comments by Georgia Environmental Protection Division (EPD) on
 Final Draft Interim Measure Work Plan for
 Site 11 - Old Camden County Landfill
 NSB Kings Bay, Georgia

Comment No./ Section/Para.	Comment	Response
<p>Comment 1 Section 2.2</p>	<p>This section should state why other treatment options, such as reverse osmosis and ozonation, were not considered. It should contain a brief description of the rationale for choosing the relative sizes of the waste streams being treated during the pilot-scale test by air-stripping versus biological treatment.</p>	<p>The constituents detected in the groundwater can be treated effectively by air stripping and biological technologies during the Interim Measure (IM). Either of these two are considerably less costly to implement than other technologies. This section will be revised to clarify the IM treatment technology selection.</p> <p>The one (1) gallon per minute stream to be used in the biological process is sufficient to collect data needed to evaluate biological treatment of the groundwater. Higher flows of extracted groundwater are more easily handled by the air-stripping technology apparatus; therefore, the bulk of the waste stream will be routed through the air stripping treatment system. The rationale for the split in the flow stream will be clarified further in the final Work Plan.</p>
<p>Comment 2 Section 2.3 and associated Table 2-1</p>	<p>The State of Georgia requires cleanup to Maximum Contaminant Levels (MCL) where these have been established, and to site-specific background concentrations for compounds with no established MCLs. Therefore, Table 2-1 should list "Site-specific background" as the performance criteria for 1,1-Dichloroethane. It should be noted that because 1,1-Dichloroethane is not a naturally occurring compound, "background" for this compound will effectively be zero.</p>	<p>Table 2-1 lists treatment system performance goals for treated discharge and does not reflect cleanup goals for the aquifer. Cleanup standards for the groundwater have not been addressed in the Interim Measure. Cleanup goals for the final remedial action effort(s) will be addressed in the Corrective Measure Study and the Corrective Action Plan.</p>

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<p style="text-align: center;">Comment 3 Section 3.0</p>	<p>This section should contain a map showing the proposed monitoring well locations. Also, Figures 9.1 and 9.2, which show recovery well locations and treatment pad design, should be included in this section, rather than in the Health and Safety section of the Plan.</p>	<p>A figure that shows locations of proposed recovery wells, observation wells/piezometers, the treatment pad and the RFI monitoring wells will be included in Section 3 of the Final IM Work Plan.</p>
<p style="text-align: center;">Comment 4 Section 3.1</p>	<p>U.S. Environmental Protection Agency guidance for monitoring well construction calls for the use of stainless steel casing. Use of alternate materials (PVC) for monitoring well construction is not recommended. EPD will not prohibit the use of PVC, however, any contaminants detected in groundwater from these wells will be attributed to contamination emanating from the landfill, and will never be considered to have resulted from degradation of the PVC well casing material. The Work Plan should include a statement to this effect.</p>	<p>The observation wells/piezometers, constructed of PVC, will be used for water level measurements to monitor drawdown caused by the recovery well discharge. No water quality samples will be collected from these ten observation wells/piezometers. Monitoring wells to be installed as part of the RFI will be constructed with stainless steel casing.</p>
<p style="text-align: center;">Comment 5 Section 3.1</p>	<p>This section should discuss the methods for providing security for all monitoring and recovery wells, not just those wells which life off base.</p>	<p>All observation wells/piezometers will be equipped with lockable, expandable-seal caps. Off-site observation wells will also be installed with flush-mounted vaults that have latchable covers. All recovery wells will be installed and secured with lockable covers.</p>

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Comment 6 Section 3.3	This section also states that the decision to use either an air stripper or an air sparger will be made during the initial pumping tests. This section should state that an addendum to the Work Plan, describing selection criteria and providing the system design, will be prepared at that time.	An initial pumping test has been performed and a recovery well discharge sample has been collected for analyses of engineering treatability parameters. Results have been obtained and the air sparger has been selected. An addendum to the Work Plan will be issued providing the selection process and the final system design. This section will be revised to address the addendum to be issued.

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<p>Comment 7 Section 3.3.3</p>	<p>This section must identify a target range or other performance standards for organic vapor air emissions. Vinyl Chloride is a known human carcinogen and has been identified as a hazardous air pollutant; vapor emissions testing should therefore include analyses specifically for Vinyl Chloride as the monomer. Attainment of the Lowest Achievable Emission Rate (LAER) is required.</p>	<p>Pre-operational estimates of vapor emissions for the vapor treatment system will be provided in a letter to Georgia EPD by mid-December 1993. These pre-operational estimates of vapor emissions will be generated by modeling highest concentrations of specific constituents in the waste stream and using equipment performance parameters of the selected air sparger and carbon treatment units. These performance standards will be calculated using guidance from Georgia's "Guideline for Ambient Impact Assessment of Toxic Air Pollutant Emissions" on the calculation of Acceptable Ambient Pollutant Concentration. The Threshold Limit Value (TLV) for each constituent will be adjusted for full-time operation and for the safety factors recommended for toxic/lethal effects.</p> <p>Vapor emissions testing will be performed by the on-site laboratory for the constituents of concern, including vinyl chloride. The Lowest Achievable Emission Rate will be maintained through the use of granular activated carbon.</p> <p>Preliminary estimates of the granular activated carbon indicates a removal efficiency of approximately 99% of the vinyl chloride.</p>

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<p>Comment 8 Section 4.2.2</p>	<p>This section states that the treated effluent will be analyzed hourly for performance criteria until steady state is reached. The performance criteria identified in Section 2.3, are MCLs (or site-specific background) for the constituents of concern. It is not clear from the document whether these analyses will be conducted using the on-site lab described in Section 5.3.4.4. This should be clarified.</p>	<p>These analyses will be conducted using the on-site laboratory. Representative samples will be collected on a weekly basis (at a minimum) and shipped to an off-site laboratory for analyses of TCL volatiles and semi-volatiles, TAL metals and Engineering Treatability Parameters. This will be clarified in the Final IM Work Plan.</p>
<p>Comment 9 Section 4.2.4</p>	<p>Permission should be obtained from the permitting agency prior to any discharge of effluent to the base land application system.</p>	<p>We concur. Permission will be obtained from the permitting agency prior to any discharge of effluent to the base land application system, or to the City of St. Marys POTW.</p>
<p>Comment 10 Section 4.4</p>	<p>This section should specify disposal methods as follows for residuals (including spent carbon). If the analytical results for the residuals are less than NSB background values, the residuals may be handled as non-hazardous. If the analytical results for the residuals are above NSB background values but less than the TCLP threshold values, the residuals may be handled as solid waste and disposed of in a permitted, Subtitle D landfill. If the analytical results for the residuals are greater than the TCLP threshold values, the residuals must be labelled and disposed of as hazardous waste.</p>	<p>This section will specify disposal methods as requested.</p>

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<p>Comment 11 Section 6.3</p>	<p>The first paragraph of this section states that the possibility of discharging the influent without treatment will be considered. In the event of a discharge to the city of St. Marys' POTW, proof of the ability of St. Marys to treat and dispose of the wastewater under its NPDES permit will be required.</p>	<p>Extracted groundwater will be treated before discharge to either of the treatment works during Phase I of the IM activities at Site 11. Extracted groundwater may be discharged, without prior treatment, to the selected treatment works (on-base or City of St. Marys POTW) after Phase I of the IM activities if the POTW has the capability to treat and dispose the wastewater under its discharge permit. Appropriate documentation will be supplied to Georgia EPD and the City of St. Marys. No change will be made to the treatment operations affecting the discharge to the POTW without the approval of Georgia EPD or the City of St. Marys.</p>