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RESTORATION ADVISORY BOARD (RAB) MEETING MINUTES 9 MAY 1996 WITH
TRANSMITTAL NSB KINGS BAY GA
8/28/1996
NSB KINGS BAY



DEPARTMENT OF THE NAVY

NAVAL SUBMARINE BASE
1063 USS TENNESSEE AVENUE
KINGS BAY, GEORGIA 31547-2608

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IN REPLY REFER TO:

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AUG 28 1996

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

Ann Johnson
ABB Environmental Services Inc
1400 Centerpoint Boulevard
Suite 158
Knoxville Tennessee 37932-1968

Dear Ms. Johnson:

Kings Bay Naval Submarine Base, (SUBASE) hosted the fifth Restoration Advisory Board (RAB) meeting on May 9, 1996. The next RAB meeting will be held on September 19, 1996 at 10:00 a.m. at the St. Mary's Library located at 100 Herb Bauer Drive (phone (912) 882-4800). As agreed upon during our last meeting, we will discuss Site 11 status update presented by ABB Environmental Services and the RCRA Cost Recovery Program presented by Southern Division Naval Facilities Engineering Command.

Attached is a copy of the meeting minutes from the May 9th meeting and an agenda for the next meeting. If you are unable to attend our September meeting, please try to send an alternate to represent you or call me at (912) 673-2001, extension 2728.

I look forward to working with you at our next meeting as our environmental cleanup continues at SUBASE.

Sincerely,

Kristin M Burbage

Kristin M. Burbage
Lieutenant Junior Grade, USN
By direction of the
Commanding Officer

Encls:

- (1) RAB Meeting Minutes of May 9, 1996
- (2) Agenda for September 19, 1996 meeting

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9 May 1996

MEMORANDUM

From: Restoration Advisory Board Co-Chairs

Subj: SUBASE KINGS BAY RESTORATION ADVISORY BOARD (RAB) MEETING
MINUTES

<u>NAME</u>	<u>POSITION</u>	<u>PHONE EXT</u>
Attendees:		
LTJG Kristin Burbage	SUBASE Co-Chair	673-2728
Richard King	Community Co-Chair	673-7285
John Garner	Technical Advisor	673-8845
Mr. Sandi Mukherjee	Technical Advisor	673-1217
Bill Blankenship	Community Member	882-4800
Anthony B. Robinson	SOUTHNAVFACENGCOM	803-820-7339
Carl Johnson	Community Member	673-8683
Laura Harris	ABB Environmental Services	423-531-1922
Bill Barker	GA Dept of Transportation	912-427-5703
Kevin Mosely	GA Dept of Transportation	264-7348
David Smith	KBAY 106 Radio	729-6106
William Terrell	Southeast Georgian	729-5231
Billy Hendricks	GADNR-EPD	404-657-8682
Fred Coley	BOSC	673-8536
Lannie Brant		729-4099

1. LTJG Kristin Burbage opened the meeting with a review of the minutes of the last RAB meeting and presented the agenda. No questions or issues were raised during this discussion.

2. SITE 11 UPDATE - Sandi Mukherjee, a SUBASE Environmental Engineer, provided a Site 11 update. He reviewed activities and deliverables since the last RAB meeting.

Enclosure (1)

a. The deliverables completed since the last RAB meeting include (1) the addendum to the IM Evaluations and Recommendations Report, (2) a plan for Phase II upgrades of the IM system, and (3) the Supplemental RFI Report. With the exception of the Supplemental RFI Report which is currently being reviewed by the U.S. Geological Survey (USGS), these deliverables are being reviewed by the Georgia Environmental Protection Division (GEPD). Kings Bay expects to submit the Supplemental RFI Report to GEPD in June.

b. Sandi provided a brief discussion of the Navy's Cleanup Review Team (CURT) review process and the meeting that was held in Atlanta in February 1996. The CURT team is comprised of members from academia, industry, and the Navy. The CURT team reviewed the cleanup approach being used at Site 11 and concurred with the SUBASE's plans to upgrade the IM system with an additional recovery well and prepare a plan to monitor the performance of the system.

c. During April, a comprehensive groundwater sampling event was conducted at Site 11, and in May, the IM System was overhauled. After the overhaul, the Navy will conduct a test to evaluate "pulsed pumping," a technique used for improving contaminant removal.

3. SUPPLEMENTAL RFI REPORT The Navy's environmental consultant, ABB-ES, summarized the findings reported in the Supplemental RCRA Facility Investigation (SRFI) Report for Site 11. The presentation included a brief summary of the RCRA Corrective Action Program as it relates to Site 11.

a. The RFI and Interim Measures have been implemented concurrently, based on the findings from several phases of investigation to characterize and delineate the plume of groundwater contaminated with organic compounds. The Navy is now moving away from the investigative and interim measure stages of the program and focusing on corrective measures. ABB will conduct ongoing investigations to monitor the progress of groundwater remediation.

b. The SRFI was designed to further evaluate potential effects that the contamination in the Site 11 landfill has had on the environment. ABB sampled waste, soil, liquids, and groundwater within the landfill and groundwater, surface water, sediment, soil, and air outside the landfill. ABB also analyzed sediment and surface water samples from Porcupine Lake and air samples downwind of the site. These samples indicated that the lake and the air around Site 11 have NOT been adversely effected by the landfill.

c. ABB excavated thirteen trenches in the landfill. The most significant finding from the trenching effort was the low number of organic chemicals. Only one volatile organic compound (VOC) and one semivolatile organic compound (SVOC) were detected in the soil samples collected from the trenches. Chlorinated solvents characteristic of the hot spot were not found in the media collected from the trenches. No source of chlorinated solvents was found in the landfill during the trenching program.

d. Subsurface soil samples were collected from borings in the landfill, on the western right-of-way of Spur 40, and in the Crooked River Plantation Subdivision. In the landfill, only one VOC was detected in a subsurface soil sample. To the west, of the landfill, VOCs found in the contaminated groundwater were detected in the soil. This soil is contaminated as a result of coming into contact with the contaminated groundwater. As the groundwater cleanup is effected, the soil should also cleanup.

e. Groundwater samples from monitoring wells located inside the limits of the landfill contained lower concentrations of organic compounds than those from locations within the hot spot. The hot spot on the western perimeter of the landfill is where the IM is focused because of the chlorinated solvents. Further west, in Crooked River Plantation Subdivision, nonchlorinated solvents belonging to a group of compounds referred to as "ketones" are characteristic of the plume. The ketones are less toxic than the chlorinated solvents. The ketones are typically very soluble in water and have little interaction with the soil comprising the aquifer. The result is that the ketones tend to flow at a rate equivalent to groundwater flow and are on the

leading edge of the plume. Other chemicals, such as the chlorinated solvents, interact with the soil so that they are slow relative to groundwater flow and relative to the rate of ketone migration.

f. The SRFI Report presentation closed with a summary of recommendations. The Navy has already initiated activities in response to the recommendations. The Navy will continue to operate the IM system and will upgrade it by adding a recovery well on the western margin of the landfill. A performance monitoring plan will be prepared and implemented to provide a framework for ongoing investigative tasks focusing on remedial efforts. The Navy, USGS, and ABB-ES will collaborate in development of the performance monitoring plan. The Navy will continue to investigate ways of improving the groundwater cleanup.

4. QUESTIONS AND COMMENTS

a. Question: Is the IM system suitable to perform the complete groundwater cleanup or would something else need to be done?

Answer: Cleanup standards, which have not been finalized by GEPD, could influence the method of cleanup and the extent to which cleanup is required. Therefore, no definite conclusions can be made regarding the possible need for other remedial technologies.

b. Question: How much did the equipment cost that was installed during the IM system overhaul?

Answer: The cost of the overhaul was approximately \$25,000, which includes parts and labor.

c. Question to GAEPD representative: Is the GEPD more or less stringent than the U.S. Environmental Protection Agency (USEPA)?

Answer: GEPD is more stringent in their policy than USEPA. GEPD has a draft risk assessment guidance that is in the public comment stage of promulgation. The state will be in a position to implement risk management of cleanup actions in the

near future, however there is no way of knowing how long it will take to finalizing the guidance. In the meantime, the standards used for contaminates are drinking water standards for chemicals that have a listed maximum contaminant level and background values for all other chemicals.

d. Question: Will the State provide money to complement Federal money being spent to cleanup the site?

Answer: The GEPD representative responded by stating that State money would not be used to fund the cleanup. A SUBASE representative added that there may be some contribution from the community because the landfill was a municipal landfill used by the community. The Navy is considering a cost contribution initiative.

e. Question: When will the pulsed pumping tests be conducted?

Answer: The tests are in the planning stage. The first part of the test will be used to evaluate the design of any further testing related to pulsed pumping. Thus, the exact time periods for pumping and non-pumping episodes are not presently known, but will be based on information collected during the initial stages of the test.

5. The RAB agreed to hold the next meeting on 19 September 1996, at the St. Marys Public Library.

6. There being no further business, the meeting was adjourned.



K. M. BURBAGE, LTJG, CEC, USN
Navy Co-Chair



RICHARD KING
Community Co-Chair