DEPARTMENT OF THE NAVY
ENGINEERING FIELD ACTIVITY, NORTHEAST
NAVAL FACILITIES ENGINEERING COMMAND
10 INDUSTRIAL HIGHWAY
MAIL STOP, #82
LESTER, PA 19113-2090

IN REPLY REFER TO
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21 JULY 2003

MEMORANDUM

FOR THE MEMBERS OF THE RESTORATION ADVISORY BOARD (RAB) FOR THE INSTALLATION RESTORATION PROGRAM AT NAVAL WEAPONS INDUSTRIAL RESERVE PLANT (NWIRP) CALVERTON, NEW YORK

The Navy would like to announce that a Restoration Advisory Board (RAB) meeting has been scheduled for **Thursday, August 7, 2003.** This meeting is open to the general public and will be held at the Riverhead Masonic Lodge located at 1246 Roanoke Avenue in Riverhead, NY. The meeting will begin at 7:00 p.m.

Also enclosed are the minutes from Restoration Advisory Board meetings held on May 15, 2003. The RAB minutes were paraphrased from the meeting's official transcripts. A copy of both the meeting minutes and the official transcripts will be available for review at the Navy's Information Repository located at the Riverhead Free Library. In addition, the RAB's community co-chair will also be provided with a copy of the transcripts for both meetings.

Items that will be discussed during this meeting will include:

- The status of the Navy's restoration efforts associated with Installation Restoration Site 1 - Northeast Pond Disposal Area;
- The status of the Navy's restoration efforts associated with Installation Restoration Site Site 7 - Fuel Depot Area;
- An update regarding the Navy's overall IR Program for Calverton;
- Follow-up discussions regarding the southern boundary groundwater issues; and
- The potential for a new Technical Assistance for Public Participation (TAPP) project.

If you need additional information, please call either Judy Lamey of Tetra Tech NUS, Inc. at (412) 921-8817 or myself at (610) 595-0567, ext 163.

Sincerely,

JAMES L. COLTER
Remedial Project Manager
By direction of the
Commanding Officer

Enclosures: (1) Minutes from 05-15-03 RAB Meeting
(2) Agenda for the 08-07-03 RAB Meeting

Distribution:
NAVAIR, Joe Kaminski
NYSDEC (Albany), Larry Rosenmann
NYSDEC (Stony Brook), Stan Farkas
NYSDOH, Wendy Kuehner
SCDHS, Sy Robbins
USEPA Region II, Carol Stein
USEPA Region II, Carla Struble
Town of Riverhead, Andrea Lohneiss
J.A. Jones, Al Taormina
Community RAB Member, Sidney Bail
Community RAB Member, Lorraine Collins
Community RAB Member, Louis Cork
Community RAB Member, Bill Gunther
Community RAB Member, Jean Mannhaupt
Community RAB Member, Randolph Manning
Community RAB Member, Ann Miloski
Community RAB Member, John Pedneault
Community RAB Member, Vincent Racaniello
Community RAB Member, Warren Voegelin

Agenda

Restoration Advisory Board
Naval Weapons Industrial Reserve Plant Calverton

August 7, 2003
Riverhead Masonic Lodge, Riverhead, NY
7:00 p.m.

Welcome and Agenda Review
Joe Kaminski
Naval Air Systems Command

Review and Approval of Minutes
All Members

Update on Remedial Activities
Site 1 – Northeast Pond Disposal Area
Site 7 – Fuel Depot Area
Robert Olewinski
Tetra Tech FW

Southern Area Supplemental Groundwater Investigation
Jim Colter
Engineering Field Activity, Northeast

Schedule of Documents to be Submitted by the Navy
Jim Colter
Engineering Field Activity, Northeast

TAPP Grant Application
RAB

Closing Remarks
Joe Kaminski
Naval Air Systems Command

Presenters will be available after the program for questions.

RESTORATION ADVISORY BOARD (RAB) MEETING
NAVAL WEAPONS INDUSTRIAL RESERVE PLANT CALVERTON
RIVERHEAD MASONIC LODGE
RIVERHEAD, NEW YORK
May 15, 2003

The twelfth meeting of the RAB began at 7:00 pm. RAB members attending were: Joe Kaminski, Jim Colter, and Bob Ingram representing the Navy; Henry Wilkie representing the New York State Department of Environmental Conservation (NYSDEC); Stan Farkas representing the New York State Department of Environmental Conservation (NYSDEC); Sy Robbins representing Suffolk County Department of Health Services (SCDHS); Al Taormina representing J.A. Jones, Inc.; Andrea Lohneiss representing the Town of Riverhead; Community members: Community Co-chair Bill Gunther, Warren Voegelin, Louis Cork, Sid Bail, Ann Miloski, Harry Histand, and Jean Mannhaupt. Members absent included: Representatives from the New York State Department of Health (NYSDOH), Representatives from the Region II U.S. Environmental Protection Agency, Randolph Manning, John Pedneault, Vincent Racianello, and Lorraine Collins.

There were also several attendees from the general public.

WELCOME AND AGENDA REVIEW

Mr. Kaminski welcomed everyone to the twelfth meeting of the RAB. The minutes from the January 9, 2003 were approved. Mr. Kaminski stated that as the new Navy co-chair, he would like to establish regular meetings for the RAB. It was decided that the first and third Thursdays of the month were most suitable due to the availability of the Riverhead Masonic Lodge and April, August, and November would be the suitable for his and the RAB's schedule. With that administrative issue decided, Mr. Kaminski turned the meeting over to Mr. Jim Colter.

Mr. Colter welcomed everyone and stated that during the previous months, the Navy had been concentrating on two remedial actions: excavation of the Site 1 landfill and installation of the air sparge/soil vapor extraction system at Site 7.

SITE 1 – NORTHEAST POND DISPOSAL AREA

Mr. Colter stated that because the cold weather was affecting site work, the excavation activities at the Site 1 landfill were temporarily postponed. Additionally, based on the work that Foster Wheeler had already done, the Navy realized that their initial volume calculations were off and funding for the project would probably not support the remainder of the excavation, so it was advantageous to shut down over the winter months.

During this time, Mr. Colter explained that funding was allotted to complete the rest of the work at Site 1. In addition, a small business contractor was hired to transport and dispose of the excavated materials from the Site 1 landfill. Foster Wheeler was previously tasked with this duty, however, Congress enacted a new Navy policy that requires 40% of the Navy's environmental contracts to be awarded to a small business. Because this was a mid year policy that had to be met by the end of the fiscal year, the Navy had six months rather than a year to fulfill this requirement. Due to the extent of work remaining at Site 1, the Navy decided to subcontract the transportation and disposal of excavated materials to a smaller business and keep Foster Wheeler for the excavation and overall site management.

The activities at Site 1 restarted early May and are expected to continue for approximately four months.

Mr. Colter stated that Foster Wheeler Corporation had been purchased by Tetra Tech in the previous months and is now known as Tetra Tech FW. Mr. Colter introduced Mr. Olewinski from Tetra Tech FW and stated that he would be taking over for Marlene Lindhardt.

Mr. Olewinski stated that mobilization at the site began in April. As excavation activities proceeded, it became evident that initial volume calculations were underestimated. Prior to the start, it was estimated that excavation would occur to an average depth of eight feet. What they are finding now, is the need to excavate down to an average depth of 14 feet. This accounts for the discrepancies in the initial volume estimates. However, the same type of materials, non-hazardous soil and construction debris, is still being encountered.

Mr. Olewinski stated that they are currently in the process of developing a restoration plan for the area around the pond and the areas excavated within the landfill. Additionally, Mr. Olewinski stated that prior to mobilization during this second season, a second tiger salamander survey was conducted during March and April because these months are the primary breeding season for the endangered species. No evidence of the tiger salamander was found.

Mr. Olewinski stated that currently, 37,500 tons of excavated material has been taken off the site. This volume includes 37,200 tons of soil and sediment, 100 tons of concrete which will be recycled, and 200 tons of scrap metal which will also be recycled. Additional work is also being done on some areas of the pond. Though some debris and sediment has been removed, waste material has been found in the saturated zone of the pond which was not previously anticipated. This explains, in part, why the initial volume calculations were underestimated.

Mr. Olewinski stated that they are hoping to be completed with the excavation by the end of June, but this is dependent on the quantity of material that is found at the site. Wetland planning is scheduled to occur in early September because July and August are not suitable months to successfully revegetate. The close out report for the site is tentatively scheduled to be completely around January 2004.

SITE 7 – FUEL DEPOT AREA

Mr. Colter stated that the chosen remedial action for Site 7 – Fuel Depot Area is an Air Sparge/Soil Vapor Extraction System to clean up the groundwater containing fuel components and the soil interface contaminated with petroleum components.

Mr. Olewinski provided an update on the status of activities. In late April, Tetra Tech FW conducted a pre-design investigation to gather data from soil borings and monitoring wells that could be used in the design of the system. Tetra Tech FW will then submit a work plan to the Navy for the pilot-scale tests. The tests will last approximately three months and will be used to evaluate the system for effectiveness.

Tentatively, Tetra Tech FW will submit a work plan to the Navy towards the end of May. A building to house equipment and construction for the pilot test will occur in the July-August time frame. Ideally, the pilot system will be installed by early October and run for the three month test period.

Mr. Colter stated that one of the primary reasons to run the pilot scale is to test the effectiveness of the system. If the pilot scale system is working as anticipated then a full scale system is put in place. If the pilot scale system runs as expected by the end of this year, then the January through March 2004 time frame will be used to develop the full scale work plan with construction tentatively planned for the April-May time period.

TAPP REVIEW OF NAVY'S RI REPORT ON SITES 6A, 10B, AND THE SOUTHERN AREA

Mr. Colter introduced Mr. Frank Anastasi from SCA Associates, the TAPP contractor who has been reviewing the Navy's RI Report on Sites 6A, 10B, and the Southern Area.

Mr. Anastasi stated that he has completed his review of the Phase II RI Report of Sites 6A, 10B, and the Southern Area as well as the Site Data Report previous to the RI Report.

Mr. Anastasi stated that there are two on-site areas that were investigated in the RI Report. The Fuel Calibration Test Area which is actually two sites where jet engines were tested and fueled and fuel systems were calibrated. This area had a shed and fuel pipeline which are no longer present and activities had occurred along the concrete apron. The Engine Test House is southeast of the Fuel Calibration Test Area and jet engines were tested here. This area had an underground tank, surface tanks, and fuel pipelines.

The primary contaminants and their sources for these sites are petroleum hydrocarbons which are volatile organic compounds (VOCs) from spilled fuel from possible leaks from the pipelines and/or tanks and chlorinated hydrocarbons from solvents which may have been used to clean up fuel spills and leaks from the planes. Solvents are typically a part of any industrial activity that involves the fabrication and/or testing of engines and

machine parts. Mr. Anastasi stated that since the report didn't reference a solvent storage area or satellite accumulation for solvents, that the occurrence of solvents is most likely from incidental use.

The petroleum hydrocarbons are comprised of the BTEX compounds: benzene, toluene, ethylene, and xylene. The chlorinated hydrocarbon compounds are trichloroethane and dichloroethane and tend to break down chemically over time to degradation products such as vinyl chloride.

The Navy investigated areas further south and southeast off-site known as the Southern Area which includes both on-site and off-site areas. The area investigated extends from the Peconic River Sportsmen's Club down to the Peconic River. The RI investigated groundwater conditions both north and south of the Peconic River. The RI indicates that contaminated areas found at the Southern Area weren't necessary releases that occurred at the test area that migrated with the groundwater southeast towards the river under these off-site properties.

For a period of time in the mid 80s and early 90s, petroleum was being pumped from the groundwater and placed in an oil/water separator at Site 6A, the Fuel Calibration Area. The oil or fuel was being collected and treated off-site. The water was discharged into the drainage ditch which flows and discharges into the ponds at the southeast portion of the site. As the water drained, the dissolved contaminants in the water may have seeped into the soil, and once the water reached the ponds, the contaminants may have seeped into the ponds also. This could explain why the contaminants are not found at the areas between the on-site and off-site areas.

In addition, there is a possibility that there may have been not just a single release but multiple sporadic releases over time which produced discrete areas of contaminated groundwater that migrated which might explain why the contamination is found further downgradient. However, there is sufficient evidence with the over land transport and the deposits found in the pond that explains how the contamination may have migrated further.

The RI activities occurred in two phases. The work performed in 1997 occurred primarily on-site. Soil borings were taken at depths down to 135 below the ground surface and groundwater samples were collected at various depths. Two permanent monitoring wells were installed on-site at Site 6A. A supplemental groundwater investigation occurred in 2000. During this same time period, the Suffolk county had performed some sampling that indicted chlorinated solvents in the groundwater southeast of Navy property. This was the impetus for the Navy to expand their study area. Two surface water samples were taken from the Peconic river. Volatile organic compounds were not detected.

Sampling was also conducted to collect monitored natural attenuation (MNA) data. The MNA process works well for petroleum hydrocarbon compounds. Microbes or bacteria in the ground naturally degrade the compounds. This prevents the petroleum hydrocarbon plumes from expanding.

The RI concluded that the chlorinated VOCs will eventually discharge into the Peconic River. Calculations, modeling, and shallow groundwater sampling data downgradient near the river predicts this. However, the modeling predicts that the level and impact of the contaminants entering the river will be below acceptable levels or nonexistent because of dilution.

However, there is some uncertainty in the deep zone on-site at Site 6A, the Fuel Calibration Area. Sampling in a boring drilled down to 200 feet has indicated significant contamination down to 165, 180, and 200 feet at the site. Further downgradient, and other areas off-site, 90 feet is the deepest boring and chlorinated solvents were detected a mile downgradient at 90 feet. Because this downgradient contamination is in the shallow groundwater, it can be predicted that the path of flow is with the direction of groundwater which is to the southeast to the Peconic River. However, with the deep groundwater, there is some uncertainty in that the underlying material of the area is very complicated ranging from sporadic encounters of sand to silt to clay and it is difficult to predict how the deep contamination may react from one area to another. It is very dependent upon the underlying geology.

Mr. Anastasi stated that based on his research, his recommendation to the Navy would be to drill additional borings down to depths of 200-250 feet downgradient of the source areas. This would provide data to understand the underlying geology, the deep groundwater flow, and the chemical concentrations found at this depth.

FUTURE STRATEGIES FOR ADDRESSING REMAINING IR SITES

Mr. Colter stated that due to fiscal year budget constraints within the Department of Defense, priority of actions at individual sites needs to be determined. Remedial actions at sites where contamination has been delineated can proceed, however if the RAB decides that the unknowns or data gaps should be addressed, prioritization would have to be decided upon to determine which actions at which sites would occur during a specific fiscal year.

Mr. Bill Gunther, the newly appointed Community Co-Chair thanked all those in attendance. The meeting was adjourned at approximately 9:24 pm.

POSTSCRIPT NOTE

Stenographer's transcripts are prepared for RAB meetings to assist the Navy in preparation of meeting minutes. The transcripts are available in the NWIRP Calverton Information Repository at the Riverhead Free Library. To assist the stenographer, RAB members and other attendees at the meeting are requested to speak one at a time for the stenographer to accurately transcribe the meeting discussions. Any participant at the RAB meeting who would like to have their comment formerly documented for the record is requested to state their name prior to speaking.

ACTION ITEMS

Action Item	*Person(s) Responsible*	*Tentative Due Date*	*Status*
Decide on dates for future RAB meetings. Calverton will get either the first or third Thursday in August.	J. Kaminski	July 7, 2003	
Chronology of documents to be submitted by the Navy	J. Colter	Next RAB meeting	
TAPP Grant Application	RAB	Next RAB meeting	