



**DEPARTMENT OF THE NAVY**  
BASE REALIGNMENT AND CLOSURE  
PROGRAM MANAGEMENT OFFICE, NORTHEAST  
4911 SOUTH BROAD STREET  
PHILADELPHIA, PA 19112-1303

5090  
BPMO NE/TB  
Ser 09-108  
March 13, 2009

Mr. Michael J. Daly  
Remedial Project Manager  
Federal Facilities Superfund Section  
U.S. Environmental Protection Agency (EPA)  
1 Congress Street, Suite 1100 (HBT)  
Boston, MA 02114-2023

Ms. Claudia Sait  
Remedial Project Manager  
Maine Department of Environmental Protection (MEDEP)  
Bureau of Remediation and Waste Management  
17 State House Station  
Augusta, ME 04333-0017

Dear Mr. Daly and Ms. Sait:

Enclosed you will find the Final February 2009 Restoration Advisory Board (RAB) Meeting Notes, Naval Air Station (NAS) Brunswick, Maine. These notes are provided for your use/reference.

If you have any questions or comments, please contact the Navy's Remedial Project Manager, Todd Bober at (215) 897-4911.

Sincerely,

A handwritten signature in black ink that reads "Paul F. Burgio".

Paul F. Burgio  
BRAC Environmental Coordinator  
By direction of BRAC PMO

Enclosure:  
Final February 2009 RAB Meeting Notes, NAS Brunswick, Maine

Copy to:

MEDEP (C. Evans)

Gannet-Fleming (D. McTigue)

NASB (L. Joy, M. Fagan, J. James)

Lepage Environmental (C. Lepage)

NAVFAC MIDLANT (T. Bober)

NAVFAC ATLANTIC (J. Wright, B. Capito)

TtNUS (L. Klink, C. Race, J. Orient)

ECC (A. Easterday, G. Calderone, C. Guido, R. Phinney)

Curtis Memorial Library (J. Fullerton)

Copy to: (w/o encl)

BRAC PMO NE (P. Burgio)

NAVFAC ATLANTIC (D. Barclift)

BACSE (E. Benedikt, C. Warren)

CO NASB (CAPT Fitzgerald)

RAB Brunswick Representative (S. Johnson)

RAB Harpswell Representative (D. Chipman)

RAB Topsham Representative (S. Libby)

MRRA (V. Boundy)

**RESTORATION ADVISORY BOARD MEETING  
NAVAL AIR STATION BRUNSWICK, MAINE  
PARKWOOD INN  
4 FEBRUARY 2009  
MEETING NOTES**

**MEETING ATTENDEES**

Todd Bober, Remedial Project Manager	U.S. Navy, MIDLANT
Paul Burgio, BRAC Environ. Coordinator	U.S. Navy, BRAC PMO Northeast
Marty McMahan, BRAC	Naval Air Station Brunswick
John James, Public Affairs Officer	Naval Air Station Brunswick
Lisa Joy, Environmental Director	Naval Air Station Brunswick
Michael Fagan, IR Coordinator	Naval Air Station Brunswick
Claudia Sait, Remedial Project Manager	Maine Department of Environmental Protection
Ted Wolfe, Program Manager	Maine Department of Environmental Protection
Mike Daly, Remedial Project Manager	U.S. Environmental Protection Agency
Stacy Greendlinger, Community Relations	U.S. Environmental Protection Agency
Al Easterday, Sr. Project Manager	ECC (Navy Contractor)
Gina Calderone, Project Manager	ECC (Navy Contractor)
Doug Heely	Environmental Strategies & Management
Carol Warren	Brunswick Area Citizens for a Safe Environment
Victoria Boundy, Planner	Midcoast Regional Redevelopment Authority
David Chipman, RAB Representative	Town of Harpswell
Scott Libby, RAB Representative	Town of Topsham
Chuck Race, Project Manager/Geologist	TtNUS (Navy Contractor)
Leighton Cooney	Governor's Office
Carolyn Lepage, BACSE Tech. Advisor	Lepage Environmental Services
Suzanne Johnson, RAB Co-Chair	BACSE and RAB co-chair

**1. INTRODUCTIONS**

Lisa Joy, Environmental Coordinator at Naval Air Station Brunswick (NASB), opened the meeting at 7:00 p.m. She said that Captain Fitzgerald was not feeling well and he sent his regrets for not being able to attend. Lisa reiterated that a lot of field work was completed last fall and this winter, and that the purpose of tonight's meeting was to review some of those results. Lisa introduced Suzanne Johnson, who is one of the Restoration Advisory Board (RAB) Co-Chairs. Suzanne originally came to the RAB as one of the town of Brunswick representatives. She requested latitude from the RAB in asking questions since more citizens are asking questions of BACSE (Brunswick Area Citizens for a Safe Environment) members. Suzanne thanked everyone for coming tonight.

Lisa reiterated that this is an open forum and encouraged everyone to speak up and ask questions.

Todd Bober reviewed the agenda. He said it was slightly different than the one that was sent out earlier. One of the items to discuss was the dates for the upcoming RAB meetings. Todd also said he received some comments on Tetra Tech's (TtNUS) FTP site. Todd said that TtNUS is working on repairing the FTP site. Todd acknowledged that the Administrative Record at the Curtis Memorial Library needed organization and that Tetra Tech has been contracted to reorganize it.

## 2. OLD/NEW BUSINESS

### o Schedule for 2009 RAB Meetings

Todd proposed having the next RAB meeting on the second Wednesday of May (13 May 2009). Todd explained that the meetings for 2009 were moved to help accommodate his schedule. For August 2009, the group decided on the second Wednesday (12 August 2009). The November RAB meeting will be held on 4 November 2009.

Todd showed the proposed field schedule for 2009. He is still working on a more precise schedule, but for now Todd is still waiting to hear on final budgets for this year. He said that most of the work was already funded.

Suzanne Johnson asked about a recent article in the paper regarding the development of one of the hangars, and she asked if work related to that came out of Todd's budget. Todd said that before the hangar can be transferred, the environment impact statement (EIS) must be completed. Before the hangar can be transferred, it must also undergo a Resource Conservation and Recovery Act (RCRA) closure process, where an independent professional engineer (PE) will certify that all hazardous waste and residues have been removed. The hangar could be *leased* prior to EIS completion.

Suzanne asked how the EIS process fits in with the institutional controls and the other environmental activities on the base. Todd said that most of the environmental cleanup issues at the base are handled under Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), but the overall environmental program also includes current compliance and historical issues. The EIS evaluates the impacts associated with the re-use plan. Claudia Sait explained the CERCLA process from Maine Department of Environmental Protection's (DEP) perspective, which is mostly related to historical releases and would primarily be focused on areas outside of buildings. The EIS process has its own community involvement requirements with comment periods.

Mike Daly of the U.S. Environmental Protection Agency (EPA) talked about record searches (i.e., due diligence) that may indicate a release to the environment. Suzanne asked where this information gets recorded. Claudia said that new environmental information would be dealt with under the RCRA program, the CERCLA program or under the Base Realignment and Closure (BRAC) program.

Scott Libby asked about Oxford (the company seeking use of the hangar and subject of Suzanne's original question) and how they would approach issues like asbestos. The Environmental Condition of Property (ECP) is a public document that is updated, by parcel, before transfer. The Department of Defense (DOD) uses decision-making documents to show when and how a parcel is suitable for transfer. This process is available and open to the public.

Paul Burgio talked about the overall process that governs land transfers from the government. He said that for NASB, the initial request will come from Midcoast Regional Redevelopment Authority (MRRA) to his office. The BRAC PMO (Program Management Office) will then forward the request through the operational Navy organization. The operational side will determine whether or not the request to lease/transfer property will impact the base mission. If the decision is that there is no mission impact, the request will be sent back to the BRAC PMO, who will proceed with the action. At the next meeting, Paul offered to outline the entire process and how all of the various programs such as EIS, National Environmental Protection Act (NEPA), and CERCLA are intertwined.

- Field Program for 2009

Todd reviewed the 2009 field program that is planned for the base. There are many projects scheduled for this year, including background sampling in Spring 2009 (including new "off-base" properties), long-term monitoring (LTM) events scheduled for April and September 2009, sampling at the Old Navy Fuel Farm (ONFF), and soil sampling in the skeet and bore sight range areas. Todd mentioned that at this time, the Navy is not exactly sure where the bermed area for the bore sight range is, since the area has been leveled.

The schedule for this year also includes installation of new 1,4-dioxane monitoring wells, sampling in the two new Areas of Concern (AOC); East Brunswick, and former buildings 7 and 10, as well as munitions clearance activities at Site 12 and munitions bunker. Todd stated that Site 12 is a very high priority because it has the highest potential for discovering munitions.

Finally, the 2009 field schedule will include bench/pilot testing at the Groundwater Extraction and Treatment System (GWETS) and Eastern Plume to determine treatment for 1,4-dioxane, the cleanup of the Naval Exchange Service Station (NEX) site, lead paint removal at the Sabino Hill site, and additional work at Site 7 that was originally scheduled for last year but was not completed due to early snowfall.

- List of documents for 2009

Todd reviewed the list of reports and other documents that are expected to be released this year. Carolyn Lepage asked about the due date for the next Five-Year Review. The next Five-Year Review is scheduled for September 2010.

### **3. PROJECT UPDATES/OVERVIEWS**

- Site 2 Area North – Investigation Results

Chuck Race of TtNUS gave a summary of the work completed at Site 2. All of the field work has been completed, which included a geophysical survey to find the extent of the landfill to the north, completion of test pits, and the installation of soil borings and monitoring wells. Chuck showed a site map with the outline of the study area and the locations of the exploration points. This area is north of the former landfill and adjacent to Mere Brook. The purpose of the investigation was to find the source of metals in leachate seeps along the brook. Chuck provided a review of the laboratory results, which indicated no exceedances of the screening criteria for dioxin, but minor exceedances of screening criteria for semi-volatile organic compounds (SVOCs), pesticides and some metals. The screening criteria are relative to residential use, and are based on current toxicological data.

Carolyn Lepage asked if dioxins were detected. Chuck said yes, however, he did not have details on what percent of the samples had detections.

For groundwater, the laboratory results were compared to Maine Maximum Exposure Guidelines (MEG). The results for manganese and sodium in groundwater were above the MEGs.

Chuck said that a report detailing the study and their conclusions is due out in March 2009.

A member of the audience asked where the metals in the leachate are coming from. Chuck said that they are still evaluating the data to determine this. All of the data needs to be tied together to understand the site and the source of the metals.

- Site 17 Remedial Investigation Results

Chuck Race gave an update of Site 17, and said that this area is a former pesticide mixing, application and disposal area. This site is very small, less than one acre. The field work that was done last fall included completion of 45 borings and installation of four monitoring wells. All field work is complete, and the data is presently being evaluated. Chuck presented a map of the area, which showed the study area as well as the area to the south where the excavated material was placed many years ago.

The initial findings indicate that pesticide concentrations exceeded the screening criteria at three borings. In addition, arsenic exceeded the EPA guideline of 0.39 parts per million (ppm) in most samples but only exceeded the DEP guideline of 10 ppm in two samples.

- 1,4-Dioxane Investigation Results

Chuck Race reviewed the initial pore water investigation results, where samples were collected along Merriconeag Stream and analyzed with EPA's mobile lab for volatile organic compounds (VOCs). Samples were also sent to EPA's fixed laboratory for analysis of 1,4-dioxane. A sampling and analysis plan for additional testing was done in October 2008, and electrical conductivity profiling was completed in November and December of 2008.

Chuck showed a map of the VOC and 1,4-dioxane sampling results. Iso-concentration contours were presented showing high concentrations of 1,4-dioxane near extraction well 5B and from monitoring wells near the brook. The elevated concentrations were in the range of 200-300 micrograms per liter (ug/l). Up to 25 new permanent wells will be installed in Spring 2009 to confirm the iso-concentration contours. The contours on this map were based on the most recent data from the transect wells and existing monitoring wells.

Claudia Sait said the DEP was concerned that no data was collected in some areas. She does not want the map to suggest that areas with no data are clean. Chuck said that the new wells will help to fill in these data gaps.

Chuck showed a picture of the direct-push electrical conductivity rig. He said that most of the field work (geophysics, surveying, test pits and direct-push) was conducted by local firms.

- Bedrock Investigation Results

An additional bedrock investigation was conducted in the area near extraction well 5B. Groundwater from an existing monitoring well (MW-308) in this area had concentrations of 1,4-dioxane and VOCs similar to concentrations found in the overburden. The group initially had questions about the construction of MW-308 as a possible explanation. Also, the clay formation that is prevalent throughout the Eastern Plume area just above bedrock is not present near MW-308.

The bedrock drilling for a new monitoring well cluster is done, and hydraulic conductivity testing and survey is also complete. The well cluster consists of one overburden and two bedrock wells within the upper 50 feet of bedrock. The next steps are to collect groundwater samples and piezometric data, which will be completed during the April 2009 LTM event. A report on this new well cluster is due next summer.

- Extraction Well Pump Sampling Results

Todd Bober reviewed the pump test that was completed in Fall 2008 on extraction well 5B. This test was completed to determine the optimum rate of water withdrawal and to evaluate chemical concentrations. The test determined that 12 gallons per minute (gpm) was the optimum pumping rate. Concentrations of 1,4-dioxane were sustained at around 120 ug/l, which is about four times the state MEG. Other VOCs were also detected in the pump test water.

Suzanne Johnson asked about the health risks of the other VOCs that were detected. Todd said that the MEGs are used for comparison, and these standards are based on the assumption that the water is being consumed. Mike Daly said that the EPA may have fact sheets available on their web site for these other chemicals. The concentrations of 1,4-dioxane and VOCs in this well are similar to concentrations at other wells. The treatment system currently is not designed to treat 1,4-dioxane, but it does work well for the other VOCs. The Navy has assembled a group of experts called the "tiger team" to look at the treatment system and whether there are "in-situ" remedial techniques for the Eastern Plume.

David Chipman asked whether this well is currently on line, and if 1,4-dioxane is being pumped by the other extraction wells. Al Easterday said that well 5B is not on line yet, and that the influent levels to the GWETS are below the state MEG. Since the GWETS is not designed to remove 1,4-dioxane, the system's removal rate is very low for this compound but very good for the other VOCs. Al said that the concentrations of 1,4-dioxane are highest at well 5B.

- Site 9 Area North Investigation Results

Al Easterday discussed the direct-push investigation results for the area north of Site 9. In December 2008, ECC completed 38 borings to the north of the Site 9 excavation. They collected 21 soil samples for laboratory analysis of VOCs, SVOCs, and metals. Ash was visible in 80% of the samples, ranging in thickness from 1 to 10 inches. Polyaromatic hydrocarbons (PAH) were detected above screening criteria in some of the samples. PAH compounds are related to the incomplete combustion of organic compounds, and are associated with the ash from Site 9. Al showed a map of the area, and explained that the areas of thickest ash were found along a northwest/southeast trend coincident with the former stream. To the east of the former stream, the ash was perhaps 1 to 2 inches thick, and was intermixed with fill (i.e., was more spread out).

During the installation of these borings, ECC also replaced the LTM wells that were destroyed during the Site 9 excavation. Al said that a summary report will be out in March 2009.

Claudia Sait asked about the direct-push points that were completed to the south of the excavation. Al said that two points were completed south of the excavation, and two other points were completed south of Neptune Drive. The extent of the ash was found in the points south of Neptune Drive.

Al said that the direct-push work was more extensive than originally intended in the north area, and that the extent of ash was not found. About 80% of borings in the area north of the Site 9 excavation extended to the clay.

Carolyn Lepage said that the ash turned out to be more extensive within Site 9 when the excavation was started, and she asked what the plan was for further remediation. She also asked whether the direct-push data can be trusted. Al said that some additional drilling may be warranted to the north to fill in data gaps, and test pits may also be warranted. He said that the ash thickness in this north area was much less than within the Site 9 excavation. The ash was noted starting at about four feet, and was as deep as 10 to 12 feet in some areas. These depths were shallower than within the excavation area. Todd Bober said they will collect chemical data and conduct a risk assessment consistent with CERCLA to decide how much more remediation needs to be done.

A member of the audience asked how much money was spent on Site 9. Paul Burgio said he was not sure, but around 30,000 cubic yards of ash and soil were removed.

- Munitions Response Program

Todd reviewed the work related to the Munitions Response Program (MRP). The field work was split to separate the Munitions and Explosives of Concern (MEC) sites from the non-MEC sites. Field work for the three non-MEC sites will commence Spring 2009. These sites include the NASB Skeet Range, the Topsham Annex Skeet Range and the Machine Gun Bore Sight Range. (Todd stated that the investigation for the Topsham Annex Skeet Range will include the shot fall zone on adjacent private property.) The field work will include monitoring well installation and chemical testing. The three MEC sites need additional work to be safe before chemical testing is done.

- Small Point Update

Paul Burgio discussed the Small Point rake station. This site is not part of the CERCLA process that governs the rest of NASB. The Navy leased this property from a private owner in 1960, and it will revert back to the owner as soon as possible. The only environmental issue identified was lead paint from the original observation tower. Recently, 41 soil samples were collected and analyzed in the field for metals using x-ray fluorescence (XRF), with 22% of the samples submitted to a fixed laboratory. This additional testing was performed to correlate the field XRF results to actual laboratory data. The DEP provided a field technician and the XRF analyzer to complete this field program. The samples were collected in 20' by 20' grids, which were reduced to 10' by 10' grids around the tower. The next step will be to complete the data evaluation and prepare a technical memorandum.

Paul Burgio said that this is one of five areas outside of the base that will be transferred, and is not part of the CERCLA process.

Claudia Sait asked about the bombing range off the coast (within sight of the tower) and whether the Navy plans on conducting any investigations. Paul said the Navy does not consider that part of the BRAC 2005 package, and does not have plans to investigate this issue.

- Picnic Pond Sampling Update

Paul said that the issues related to Picnic Pond are also not under the CERCLA program at this time. The pond is part of the base's storm water system. The Navy had some preliminary data from years ago suggesting there may be an issue with the sediment. Surface water and sediment samples were collected in November 2008, and the preliminary results suggest that several constituents in surface water were slightly above the ecological screening levels. The sampling results were consistent throughout the pond. The sediment sample results showed elevated PAHs and some metals. These results were consistent with sediment in other detention basins, and demonstrate that the storm water system is capturing contaminants that flow off of streets and parking areas.

Lisa Joy said that the base's storm water testing frequency is above the State requirements, to make sure there are no compliance issues.

Todd said the Navy is currently evaluating the data to determine the path forward. A draft report is expected in March or April of 2009.

- Upper Impoundment Pond

Al Easterday discussed the upper impoundment pond, which is near the galley building at Site 9 (south of Neptune Drive). This pond acts as the main detention basin for about 80% of the developed portion of the base. ECC collected pore water samples along the northern bank of the pond, and analyzed samples for diesel range organics (DRO) and VOCs. Lisa Joy asked about the direct-push data that was collected for this area. Al said the direct-push data was included with the pore water data. Al stated that the DRO concentrations in pore water ranged from 78 to 220 parts per billion (ppb).

Al said that this pond was constructed to detain common contaminants found in storm water. The discharge from this pond flows to Picnic Pond. Lisa Joy said that sorbent booms and an over flow weir are part of the impoundment pond to contain any spills.

Claudia Sait said that she thought solvents were detected in the surface water last year. Al did not think this was the case, but did say that the LTM program includes water sample collection in the tributary coming from Site 9 to the lower impoundment pond. (Note: It was determined later that there was a detection of 1,2-DCE (0.23 ug/L) at SW-010 in Monitoring Event 32).

Carolyn Lepage asked Al if he thinks the DRO in the pore water samples is from Site 9. Al said he did not think so. He further said that the new monitoring wells in Site 9 are all installed and surveyed. These new wells will be sampled in April 2009 during the next LTM event.

Carolyn also said there is another aspect of Site 9 that is not defined. She said that VOCs have been detected in one of the sentinel wells, and no one is sure what the source of these VOCs is.

#### **4. QUESTIONS AND FUTURE RAB AGENDA TOPICS**

Carolyn Lepage mentioned that Captain Fitzgerald had said in the last RAB meeting that priorities should be discussed during this meeting. She said that there are many activities moving ahead on parallel tracks, and she asked what the number one priority is. Paul said that everything discussed is a priority, but that it is hard to say what the highest priority is because things change quickly and frequently. For example, Paul said that hangars 5 and 6 were not a priority until recently, and could be a bigger priority if environmental issues are discovered. There are many issues being addressed at the same time in an effort to further define what the highest priorities are.

Suzanne Johnson asked about the budget for 2009. Todd said that they already have more funding that they asked for, and it is coming from different funding sources. Carol Warren said they were initially told that the environmental work would cost about \$16 MM. Paul said he has enough money to do what is needed for now, and in fact would have difficulty taking on more work. He feels that the group (regulators, Navy personnel and contractors) is already stretched thin. This is the only BRAC Navy base that is being transferred to the public..

At the next meeting, Paul will present his overview of the environmental processes that work within the BRAC program. Also, there will likely be a technical meeting before the next RAB meeting, likely in April 2009. The Navy will continue to work with TtNUS to fix the FTP site.

**Meeting adjourned at 9:15**

