



**Naval Air Station
South Weymouth, MA
Restoration Advisory Board
Summary of RAB Meeting – October 11, 2007**



NAS South Weymouth Website: <http://nas-southweymouth.navy-env.com>

1. INTRODUCTIONS/ APPROVAL OF PRIOR MEETING MINUTES

Mary Skelton Roberts opened the meeting at approximately 7:10 PM. She requested that all attendees, including RAB members, regulators, and audience members, introduce themselves. She noted that the meeting agenda, handouts and the sign-in sheet were available on the back table. The sign-in sheet for the meeting is provided as Attachment A to this meeting summary. M. Skelton Roberts asked if everyone had time to read the minutes from the August 2007 RAB meeting and the September RAB update and asked for comments. There were no comments offered. J. Cunningham stated he appreciated the details in the minutes. During introductions of all present at the meeting, B. Olson announced that EPA's NAS Weymouth project manager had changed from Patty Whittemore to Kymberlee Keckler.

M. Skelton Roberts then reviewed the ground rules for the meeting and reminded the meeting attendees that the focus of the meeting is cleanup issues; redevelopment issues will be placed on the 'parking lot.' She reviewed the guidelines for the meeting and reminded the participants when asking questions to wait to speak until they are acknowledged, to state their names and affiliations, and to speak into the microphone when they have questions.

M. Skelton Roberts then reviewed the agenda and presentation scheduled for the meeting. The Agenda for the meeting and the Action Item Tracking List are provided as Attachment B to this meeting summary. In accordance with the agenda, the presentation would be followed by the Updates and Action Items portion of the meeting.

2. PRESENTATIONS

M. Skelton Roberts introduced Diane Baxter, TtNUS, to discuss the pre-design investigation (PDI) for the Sewage Treatment Plant (STP). The following paragraphs summarize the presentation and include references to selected presentation slides in Attachment C. The complete presentation is available on the NAS South Weymouth web site: <http://nas-southweymouth.navy-env.com>.

D. Baxter stated that the former STP Site and the upcoming PDI work would be discussed. The PDI is the first step in determining how the Site will be cleaned up. The objective of the presentation is to update the RAB on the progress of the STP Site, present objectives and components of the PDI, and

review Navy's timeline for remedial activities at the Site. The STP Site was a former sewage treatment plant, and the wastewater treatment facilities for the Base were located there. The Site is located in Weymouth, as shown on Slide 2.

Clean-up activities for NAS South Weymouth, a Superfund Site, follow the CERCLA process. Slide 3 reviews the steps that are part of the CERCLA process for the STP Site. The first step is the RI/FS process. The evaluation of what contamination is present at the Site (RI) and how to clean it up (FS) was completed in April 2007. A Proposed Plan describing the Navy's preferred remedy for the Site was presented to the public on September 13, 2007. The public comment period for the Proposed Plan ended on September 28, 2007. The Record of Decision, which will formalize the selection of the remedy for the Site, is expected to be signed in February 2008. The next phase, the PDI process, is underway; the PDI will generate the information necessary to design and implement the remedy.

Slide 4 presents the conclusions (media of concern) of the Feasibility Study (FS). The main conclusions were that surface soil and sediment were a concern because they posed a potential threat to human health and the environment. The FS concluded that surface water does not require cleanup. PCBs were detected in one surface water sample, but the result was suspected to not be a representative result. The FS also concluded that groundwater does not require cleanup. A single arsenic detection in groundwater was also considered to not be representative of the Site. An additional groundwater sample was collected from that well and the arsenic result could not be reproduced. Two pesticides were also detected in one groundwater sample, but their concentrations were within EPA's acceptable risk range. Additional sampling is planned for the PDI to confirm that surface water and groundwater do not require clean-up and to determine the extent of soil and sediment contamination.

The preferred alternative for the STP Site is excavation of the contaminated media (surface soil and sediment) and off-site disposal. The first step is to conduct a PDI to determine how to go about cleaning up the Site. The second step would be excavating the soil and sediment, loading the material onto trucks, and transporting it to a permitted disposal or recycling facility. The recycling facility would be an asphalt batching facility, where the soil is combined with an asphalt emulsion to form an asphalt material that can be used on roads. The excavated areas would be backfilled with certified clean fill. A sediment and groundwater monitoring program will be implemented to verify that cleanup is complete. The soil excavation area based on the FS is approximately 0.5 acres to a depth of 1 ft bgs and is shown in yellow on Slide 5. The sediment excavation area based on the FS is approximately 0.15 acres to a depth of 1 ft bgs and is shown in red on Slide 5.

The objectives of the PDI are to better delineate areas must be excavated to achieve the cleanup goals. The presence of methyl mercury in sediment will be evaluated. Methyl mercury is an organic form of

mercury which is more toxic to organisms than the elemental (and more common) form of mercury. Site samples were never analyzed for methyl mercury during the RI; however, the RI identified methyl mercury as potential contaminant of concern due to possible ecological risk in sediment to birds and mammals. The site samples were analyzed for total mercury, and an assumption was made during the RI that a certain percentage of total mercury was in the organic form, as methyl mercury. Based on this assumption, it was determined that if the methyl mercury were present, it would be a contaminant of concern. During the PDI, sediment samples will be analyzed specifically for methyl mercury to confirm whether or not it is present at the Site.

The presence of PCBs in surface water will be evaluated during the PDI to confirm whether surface water is a media of concern. The surface water in the drainage ditch, the location of the former sample with PCB detections, and associated sediment and nearby soil will be sampled.

A comprehensive water level round will be completed to evaluate groundwater flow. This is the first step needed to determine whether groundwater is a media of concern. Additional groundwater evaluation will be performed following the soil/sediment excavation and removal.

Slide 6 shows the locations of the previous samples collected at the Site and the proposed PDI investigation area. The Site is very wooded and clearing will be required to get to the PDI sample locations.

The PDI activities will include mobilization, utility clearance, clearing, and staking locations with input from EPA and MassDEP. The field program will consist of:

- Collection of soil, surface water, and sediment samples;
- Installation of piezometers;
- Groundwater level measurements; and
- Survey of all locations and features.

The data will be validated and evaluated for use in the PDI report. Slide 7 presents the analyses that are planned for the samples to be collected. All samples for this investigation will be collected by hand; no subcontractors will be needed. Shovels, trowels, and hand augers will be used to collect soil, sediment, and stockpiled soil samples. Surface water will be collected using a glass jar directly dipped into the water column. Proposed sample locations are shown on Slide 8, and will be finalized after further discussion with EPA and MassDEP. The proposed PDI sample locations for soil and sediment were based on 50-foot grid.

The timeline for upcoming activities at STP is as follows:

- Issue Final PDI WP in December
- Conduct PDI field work in winter 2008 (~2 weeks)
- Prepare PDI Report
- Finalize/sign ROD in February 2008
- Complete Remedial Design
- Implement remedy in summer 2008

M. Byram asked why methyl mercury is not believed to be a COC. D. Baxter stated that the RI made a conservative assumption since there were no analytical data for methyl mercury and that methyl mercury is not necessarily a concern. The Ecological Risk Assessment was conservative in assuming that 5 percent of the total mercury detected in Site samples was in the form of methyl mercury, but it is not known whether that is an accurate assumption.

M. Parsons asked if methyl mercury was naturally occurring or man-made. D. Baxter stated that mercury itself is naturally occurring and under certain geochemical conditions it can be converted to the organic form of mercury.

D. Galluzzo asked for an estimate on the distance of STP to French Stream. D. Baxter stated that the STP Site is approximately 2500 feet from French Stream. It is known that cleanup needs to occur from the ditch headwall (near FSD-2) to FSD-5 (Slide 5) because pesticides and arsenic were detected at concentrations exceeding cleanup criteria in samples from this area. The next sample downstream from FSD-5 (at FSD-3) only exceeds cleanup criteria for methyl mercury; therefore, it is not known whether cleanup is needed in the area between FSD-5 and FSD-3. The PDI includes additional sampling in this area to determine if methyl mercury is present in the sediment and to determine whether any of the contaminants of concern are present beyond FSD-5 at concentrations exceeding cleanup criteria.

D. Galluzzo asked about the proximity of the new sewage treatment plant to French Stream. D. Baxter stated that she did not know the location or the details of the new sewage treatment plant. M. Skelton Roberts stated that there is a response to this question in the SSTTDC parking lot issue response letter and will be discussed later.

M. Parsons stated that she thinks the STP discharged into French Stream. D. Barney said that it did not discharge directly into French Stream, but went through a series of culverts and pipes in the wetland area between the Site and French Stream. M. Parsons stated that she recalled some dye tests that had been conducted which indicated a connection between French Stream and Reeds Pond.

M. Bromberg asked if the series of pipes from the Site to French Stream were tested and cleaned. D. Barney responded that they had not been. D. Baxter stated that the PDI would check the extent of contamination at the Site. If no contamination is found at the limits of the STP Site, there is no need to continue looking for contamination in the pipes beyond the STP Site. There is approximately 1000 feet of open ditch before the piping. The assumption is that if contamination is not at the outer limits of the open ditch, then there is no contamination in the pipes.

M. Bromberg asked if the discharge pipe into French Stream was going to be tested. D. Barney said that he could check the information previously gathered for French Stream to determine if that discharge pipe was sampled. M. Bromberg wanted to know if this piping would be part of the new storm water system. D. Barney stated he did not know how the piping would fit in to the new storm water system. R. Kleiman stated that all storm water piping will be new.

As an Action Item, D. Barney will review the routing of the piping between the STP Site and French Stream.

M. Parsons asked if there was leak detection testing performed on the piping and if effluent could have gone beyond the ditch. D. Baxter responded that the only piping on the Site was underground from the treatment building to the headwall of the outfall where it discharged into the open ditch. D. Barney noted that there is piping that leads to French Stream at the edge of the clear zone at the north end of the runway. That piping was installed primarily to drain the wetlands north of the runway. D. Barney stated there was no leak detection performed and the assumption is that the releases to the environment would have occurred in the open ditch, before the clear zone piping.

J. Rakers asked about the ditch along the Tile Bed Area. D. Barney stated that the tiles in this area were designed for water and effluent to percolate into the ground. D. Chaffin stated that the groundwater in that area was thoroughly tested during the RI and there were not any issues related to that area. This area is being looked into further solely based on the methyl mercury assumptions, no other contaminants of concern were found in the area. D. Chaffin noted that the objective of the PDI is to define the extent of contamination in the sediment, not in surface water. The surface water is not a focus because it is not representative of present conditions. This was a permitted facility; Navy performed quarterly surface water monitoring to comply with their National Pollutant Discharge Elimination permit. There was also extensive sediment testing in French Stream, including the vicinity of the where the pipe discharges into French Stream. D. Barney stated that if anomalous data is found during the PDI, there will be further investigation.

T. Pries asked about the monitoring well with arsenic detection and if it will be re-sampled. D. Baxter stated that groundwater will not be sampled as part of the PDI. After the remedial action is completed, new monitoring wells will be installed; then a complete groundwater sampling round will occur. Only one groundwater sample collected during the 1998 RI had an arsenic detection; the duplicate sample was non-detect for arsenic. The well was re-sampled in 2006 to verify whether arsenic was present; arsenic was not detected in the 2006 groundwater duplicate pair samples. She also noted that the 1998 detection of arsenic was below drinking water standards. D. Chaffin stated that the reason for concern is that arsenic is one of the contaminants of concern in the ditch, so they want to be conservative and be certain that the PDI addresses all concerns.

M. Byram asked if MW-57D2 (well with arsenic detection) was re-sampled at the same time of year in 1998 and 2006. D. Baxter stated she was not certain but the geochemistry is not likely to be influenced by the season.

D. Galluzzo asked the number of people that lived on the Base at its peak and if the former STP had any backup plan if there was a power outage. D. Barney stated that at the maximum, approximately 2500 to 4000 people were on the Base. If there was a power outage there were backup generators on the Base. There are large holding tanks in case there was an outage. He indicated that Navy has no knowledge of any direct discharge into a stream.

3. UPDATES AND ACTION ITEMS

M. Skelton Roberts reviewed the action item listed on the Action Item Tracking List (see Attachment B) for this RAB meeting:

Provide location of Basewide Assessment floc samples: D. Barney showed a figure from an earlier ENSR RAB presentation with the locations of the floc samples. M. Bromberg asked if the floc is likely caused by peat and contamination (petroleum), and if the peat stored at the lower end of the runway could cause floc in the east branch of French Stream. R. Kleiman stated that there is peat and rock found all over the Base, so the peat stored on the runway is not unusual and should not have a significant impact. M. Bromberg stated his concern that moving the peat could impact the east branch of French Stream.

D. Galluzzo asked what is the source of iron that causes the floc. B. Olsen stated that floc is formed when iron is geochemically converted due to the presence of organic material in the groundwater, which could be from peat or from organic contamination from sites. The iron and manganese, which are naturally occurring in the rock used to fill the wetlands on the Base, interacts with peat/organics to create iron oxides. Moving peat around at the ground surface should not be a problem, because this conversion occurs below the water table.

M. Parsons asked if the high manganese and iron levels at RDA were due to the RDA. B. Olson stated that there do appear to be conditions that are unique at RDA. EPA is still in the process of determining whether the floc poses a human health or ecological risk.

Provide copies of parking lot response letter: J. Cunningham stated that copies of the parking lot response letter are available. The SSTTDC letter refers mainly to the DEIR, which was also brought to the meeting and is available in Dave Barney's office.

Provide groundwater data from transferred land: D. Barney stated that he provided J. Rakers an example of the level of detail and information that is available with regard to groundwater data, and if more detailed information is desired then it is available.

M. Skelton Roberts asked each of the Leads to provide updates to the list of Update Items.

RAB Administrative Actions: D. Barney stated there was no update.

MassDEP Update: D. Chaffin stated there was no update.

Coast Guard Update: D. Barney received no update.

IR Program Site Update: D. Barney stated that the September RAB update mailing includes updates for the IR sites.

Since the September update, the WGL Record of Decision has been signed by the Navy and EPA. DEP has offered a letter of concurrence. The signed ROD has been distributed. Responses to questions asked during the comment period have been addressed in the Responsiveness Summary portion of the ROD. Copies of the ROD and Responsiveness Summary have been distributed to those who provided comments. Navy will now develop a PDI and then submit a design for the cap, the preferred remedy for the West Gate Landfill.

The third quarter of long-term monitoring was completed at the RDA last month. The second quarter report should be available in a few weeks.

With regard to the Basewide Program, four technical memoranda have been submitted to the agencies. Navy is expecting comments on the HHRA report.

The RI reports for Building 81 and Building 82 are nearing completion.

The SRA data are being reevaluated and a meeting is planned to discuss the need for more information for the RI.

The STP PDI has been discussed. The draft ROD will be submitted in late October/early November.

MCP Update: A removal action at the FFTA was performed under a Release Abatement Measure last fall and confirmatory samples were collected. Problems were identified with some of the data points, and samples were re-collected in the summer of 2007. The new data will be used in the report. Navy hopes to finish up and close out the FFTA in the next month or so.

EBS Update: The Navy delivered four draft RODs for the four EBS sites presented at a public hearing back in July (Areas of Concern (AOC) 4A, 8, 53 and 55D). AOC 8 (PCB removal action in Rockland) and AOC 53 (removal effort at the Main Gate) were recommended for NFA. No action was proposed for AOC 4A and AOC 55D based on streamlined risk assessments that were performed.

Additional subsurface soil information has been collected in the East and West Mat areas at locations identified during the storm sewer cleaning project, based on cracks in the pipes. Samples were collected adjacent to and down gradient of these fractures to determine if there were any releases.

Additional sediment samples were collected from the perimeter of the East Mat Ditch and a hot spot removal action is planned within the next month.

The Small Landfill remedial design is in internal review and after that is completed it will be submitted to the DEP.

FOST Update: FOST 3 has been completed. FOST 4 is being revised and should be finished within the next couple of weeks. There is no current discussion of a Covenant Deferral Request, Early Transfer, or Finding of Suitability to Lease.

SSTTDC Update: No update.

Other questions/comments:

D. Galluzzo asked when the MDPH study would be out. B. Olson said that S. Condon, MDPH, indicated the study would be out sometime in the late fall/before the end of the year. M. Parsons clarified that MDPH study was a data collection effort only.

M. Bromberg asked if R. Sugatt had performed a health risk assessment concerning the floc and the use of groundwater for irrigation. K. Keckler stated the R. Sugatt was working on it. A draft has been reviewed by EPA: the risk assessment it will be provided to M. Bromberg and copies will be available at the next RAB.

R. Kleiman stated that groundwater used to irrigate the golf course would be aerated first to get the iron to precipitate out and would then be run through the irrigation system. The distribution of the irrigation well water is only planned for the golf course, not anywhere else on the site.

M. Bromberg asked about the independent observer that was requested during development. B. Olson clarified that the EPA would have provided full-time oversight when it was thought that the developer would be performing clean-up, but the Navy has continued with the clean-up. The EPA would not provide oversight during development because property is being cleaned first. D. Chaffin recalled that the Certificate on the Final Environmental Impact Report mentions an Independent Observer related to wetlands impacts only and that this is tied to a condition of the wetland permit.

Topics for future RAB Meetings

The following action items and topics were suggested for future meetings:

- SRA information/Building 82 update
- MDPH Study

Conclusion/Next Meeting

The meeting concluded at approximately 8:50 pm. The next RAB meeting will be on November 8, 2007. D. Barney suggested a return to alternating month RAB meetings, so the following meeting will be January 10, 2008.



**Naval Air Station South Weymouth
Weymouth, MA
Restoration Advisory Board
RAB Meeting Agenda**



October 11, 2007

Conference Center on Shea Memorial Drive

7:00 PM

<i>Agenda Items</i>	<i>Item Lead</i>	<i>Projected Time</i>
1. Introduction, Review of Meeting Notes	Facilitator	7:00 - 7:15
2. Sewage Treatment Plant Site – Pre-Design Investigation	Navy	7:15 - 7:45
3. Updates and Action Items	Navy	7:45 - 8:15
4. Questions, Agenda Items, Next Meeting	Facilitator	8:15 - 8:30

Facilitator: Massachusetts Office of Dispute Resolution: Mary Skelton-Roberts

Restoration Advisory Board (RAB) Members:

Abington: James Lavin, (Alternate: Steve Ivas); Phil Sortin (Alternate: Beth Sortin)

Hingham: no current representation

Rockland: no current representation

Weymouth: James Cunningham (Community Co-Chair); Ken Hayes; Dan McCormack; Steve White

Navy: Dave Barney (Navy Co-Chair)

EPA: Kymberlee Keckler (Alternate: Mark DeSouza)

MA DEP: David Chaffin (Alternate: Ann Malewicz)

BRAC Cleanup Team (BCT) Points of Contact:

Navy: Dave Barney, BRAC Environmental Coordinator, Base Realignment and Closure Office, Program Management Office, Northeast (617) 753-4656

Brian Helland, Remedial Project Manager, Base Realignment and Closure Office, Program Management Office, Northeast (215) 897-4912
Email: brian.helland@navy.mil

MA DEP: David Chaffin, Environmental Engineer, Federal Facilities (617) 348-4005
Email: david.chaffin@state.ma.us

EPA: Kymberlee Keckler, Remedial Project Manager, Federal Facilities Section (617) 918-1385 Email: keckler.kymberlee@epamail.epa.gov



Naval Air Station South Weymouth Restoration Advisory Board Action Item Tracking List



October 11, 2007 – Next RAB Meeting

<i>Action Item</i>	<i>Item Lead</i>	<i>Deadline</i>
ACTION ITEMS		
Provide location of Basewide Assessment floc samples	D. Barney	Next RAB
Provide copies of parking lot response letter	J. Cunningham	Next RAB
Provide groundwater data for transferred land	D. Barney	Next RAB
UPDATES		
RAB Administrative Actions	D. Barney	Each RAB
MA DEP Update	D. Chaffin	Each RAB
Coast Guard Buoy Facility Update	R. Marino	Each RAB
IR Program Sites Update	D. Barney	Each RAB
MCP Release Areas Update	D. Barney	Each RAB
EBS Review Item Areas/ Various Removal Action Update	D. Barney	Each RAB
FOST/FOSL/CDR Update	D. Barney	Each RAB
SSTTDC Update	J. Lavin/ S. Ivas	Each RAB
COMPLETED ITEMS		
MDPH MS Study update (8/07)		
List of AULs; what and where they are (4/07)		
Provide vernal pools map to J. Cunningham (4/07)		
Copies of figures from Old Swamp River Study by Beta Group, Inc (03/07)		
Provide Hydrogeologic Investigation Tech Memo to D. Galluzzo (03/07)		
Distribute monthly Navy program status/administrative items update (03/07)		
Provide blueprint of old STP to H. Welch (01/07)		
Distribute monthly Navy program status/administrative items update (01/07)		
Check status of NAS South Weymouth website (01/07)		
P. Scannell to provide the reference for the 1995 EPA study to D. Barney (11/06)		
Distribute monthly Navy program status/administrative items update (11/06)		
Were runways in the transferred land tested for fuel oil and PCBs? (11/06)		
1997 DEP letter re: non-potable drinking water source areas on the Base (11/06)		
Map showing sampling locations on the Base (11/06)		
Old Swamp River additional sample collection; data available? (11/06)		
Status of release of MDPH ALS/MS study (11/06)		
Contact Dr. Knorr regarding access to NAS South Weymouth EGIS (7/06)		
Distribute monthly Navy program status/administrative items update (7/06)		
Check availability of MDPH to give a presentation on MS/ALS data (5/06)		
Distribute monthly Navy program status/administrative items update (3/06; 4/06)		
Provide copies of SSTTDC and Mayor Madden letters re: Small Landfill CAAA to M. Parsons (2/06)		
Provide information on vernal pools to M. Byram (2/06)		
Distribute monthly Navy program status/administrative items update (2/06)		
Small Landfill CAAA Update (12/05)		
Distribute monthly Navy program status/administrative items update (12/05)		
Provide details of RDA contractor's upcoming work (10/05)		
Provide details about SSTTDC's unescorted access policy (10/05)		