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NAS SOUTH WEYMOUTH  
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RESTORATION ADVISORY BOARD MEETING MINUTES 12 FEBRUARY 2015, UPDATE  
JANUARY 2015 , AND AGENDA 11 JUNE 2015 NAS SOUTH WEYMOUTH MA ( PUBLIC  
DOCUMENT)  
05/01/2015  
MASSACHUSETTS OFFICE OF PUBLIC COLLABORATION



# Naval Air Station South Weymouth, MA Restoration Advisory Board (RAB) Meeting Minutes February 12, 2015

## 1. INTRODUCTION

John Goodrich, RAB facilitator from the Office of Public Collaboration, opened the meeting at approximately 7:00 PM. He requested that all attendees sign-in. The sign-in sheet for the meeting is provided as Attachment A. Introductions and affiliations were skipped given the small group in attendance. There were no comments or questions regarding the October 9, 2014 RAB meeting minutes.

The February meeting presentation focused on the on-going work at the Sewage Treatment Plant (STP), presented by Dave Barney (Navy).

## 2. PRESENTATION

Mr. Barney began the presentation with the site background and history. Results from the Remedial Investigation (RI) and other preliminary investigations identified several areas of contaminated soil. These targeted regions were part of the first round of excavations conducted at the STP. Excavations were completed to the limits determined in the Record of Decision (ROD); however, chemical of concern (COC) concentrations in confirmatory soil and sediment samples exceeded Remedial Goals (RGs).

A Remedial Action Work Plan (RAWP) Addendum was finalized in 2014 to eliminate potential human and ecological receptor exposure to COCs present in site soil and sediment at concentrations above the selected RGs. The scope of this remedial action (RA) was to remove four drainage pipes and sediment within identified during a previous investigation as potential continuing sources of contamination to the drainage ditch. Additional removal areas included: a fifty foot length of the drainage ditch downgradient from the ditch headwall and several upland areas remaining from previous excavations. The Previous Remedial Action outlined four excavation depths (1 ft, 1.5 ft, 2-2.5ft, and crushed stone backfill up to 20 ft). Confirmatory samples were collected post-excavation to confirm the removal of impacted soil and sediment. Many locations were within RGs outlined in the ROD; however, continued polycyclic aromatic hydrocarbon (PAH) exceedances were detected. These exceedances led to additional investigations and this second phase of the RA which focused on the removal of Pipes 1-4 and related impacted soil and sediment. In addition, soil from Area A2-sample B4, Area A2- sample B5, and the historic filtration beds were to be excavated.

Erosion controls were set-up prior to the start of the second phase of the RA and vegetation was removed. Between the first and second phases of the RA, the wetland was re-delineated by the Master Developer and marked accordingly. The new mapped wetland now included several building footprints and the trickling beds associated with the STP. This changed the overall conceptual site model (CSM) of the site, but not the planned scope of work.

**Carol Keating (EPA): What was required by the ROD to be excavated and removed?**

**D. Barney: The ROD specified that impacted surface soil would be removed to unrestricted use. These areas included the two upland areas (Area A's) and two wetland areas (Area B's) covered in the first phase of excavations.**

D. Barney briefly explained the engineered purpose for each of the four pipes. Pipe 1 was believed to be the effluent discharge line for the original STP system and did not go through the headwall. Pipe 2 was the effluent discharge pipe from the expanded system and discharged through the headwall. Pipe 3 came from a storm water catch basin near the road and discharged through the headwall. Pipe 4 had an unknown usage, was located at a higher elevation than the other pipes and did not go through the headwall.

**RAB Member: Where did the sludge from the sanitary system go before the STP was built?**

**D. Barney: All sewage was gravity fed to Building 7 (previously known as Sewage Treatment building and located near the former fire station). It worked similarly to a private septic system where liquids were pumped off to a leach field and solids remained in place. The tank, vault, and baffles for Building 7 have all been cleaned out and closed.**

The second phase of the RA began with Pipe 1. Once uncovered, Pipe 1 appeared to be part concrete and part asbestos pipe. Once the suspected asbestos was uncovered, excavation operations ceased and the material was inspected and sampled. The results confirmed the presence of asbestos containing material (ACM). An asbestos notification form was submitted and an ACM abatement plan was drafted, approved, and implemented. No ACM was found in the other three pipes. Pipe 4 was made of corrugated metal and was used for storm water runoff.

An additional Scope of Work (SOW) was developed under the RA Addendum based on the results obtained from the second phase of excavations. The purpose was to investigate and remove potential upgradient continuing sources of contamination associated with the former STP. The SOW included:

- Perform test pitting and upgradient sampling
- Remove additional subsurface pipes and remove impacted soils
- Remove material from three subsurface chambers, break floor, and backfill
- Remove material from the two subsurface trickling filters (north and south), break floor, and backfill
- Remove material from former subsurface primary tanks (north and south), break floor, and backfill

Pipes 5 and 6 were successfully excavated, removed, tested, and backfilled. The trickling filters were approximately twenty-five feet in diameter and six feet deep. The filters were filled with small diameter filter material. This material and remaining soil within the trickling filters was removed in addition to any remaining infrastructure. Once this was done, holes were drilled in the bottom of the filters to prevent water from accumulating in the bottom. During the removal of fill from the north trickling filter, mercury droplets (used as a bearing lubricant) were observed at the base of the trickling bed spindle. Operations ceased and a mercury response plan was drafted and implemented. The mercury was containerized and a specialty hazmat contractor performed mercury decontamination of the potentially impacted material. When the spindle was demolished, a small amount of mercury was encountered in the soil. The soil and mercury were containerized in two separate drums. Soil samples were collected from beneath the spindle for mercury and did not indicate elevated mercury levels. The southern trickling filter spindle was demolished to assess the presence/absence of mercury. No mercury was detected.

Soil from the excavation of the trickling filters is still on-site and will be transported and disposed of once all excavation work is complete. Additional work remaining includes:

- Remove Pipes 7 and 8
- Remove material from two primary tanks and break bottom
- Remove material from two chambers
- Perform wetland restoration
- Remove sediment from the drainage ditch
- Perform final site restoration
- Mend and maintain erosion controls

**RAB Member: Will the drainage ditch be re-excavated before site restoration?**

**D. Barney:** The second excavation has not been done yet. In 2011, the ditch was cleaned-out nearly to the clear zone headwall. Additional sampling has been done at the ditch since the discovery of contamination in the pipes. A similar confirmatory sampling procedure will be implemented once the drainage ditch is excavated again. Further excavations will occur if exceedances are detected.

**EPA:** All this information will be made available in the Remedial Action Completion Report (RACR). All the findings from this RA and previous investigation will be reported in the ROD Amendment and go through a Public Hearing and comment period.

D. Barney explained that the excavations will remove surficial contaminants across the site. Some areas of pesticide impacted soil will remain on-site because they are located in a delineated wetland and/or are located at depth. As a result, a Land Use Control (LUC) will be put in place to restrict use in the future. Anne Malewicz (MassDEP) clarified how LUCs prevent land use at a site where contamination remains in the subsurface and does not pose a risk to human or ecological receptors. Once a LUC is in place, it will be the responsibility of the Navy to monitor and ensure that development is not occurring on the land.

**RAB Member:** It would be best for the community if the Navy and EPA agreed to remove the contamination from the STP rather than leaving it in place and instituting an LUC.

**EPA:** One of the conditions to having an LUC in place is the annual monitoring and Five Year Review Process which ensures that the LUC is still enforced and protective. Community involvement and oversight acts as an additional layer of protection. Options for Remedial Action will be evaluated in a Focused Feasibility Study (FFS). The FFS will evaluate in situ remediation, in addition to LUCs and excavation.

**D. Barney:** When it comes time to develop an FFS, the Navy will look at general response actions, including an in-situ option to remediate the pesticides in the deep subsurface.

**RAB Member:** There was a breach in the erosion control. Was this before or during the excavation? Was any contaminated sediment washed past the wattles?

**D. Barney:** Anything that would have washed past the erosion controls is already in the drainage ditch. Any contaminated sediments that migrated past the wattles will be removed during the excavation.

## **4. UPDATES**

### **Building 81**

The Navy is preparing the Remedial Design (RD)/ RAWP to implement the remedy outlined in the ROD. Boreholes/injection points, treatment infrastructure, and utilities from the previous pilot study remain at the site and could potentially impact the migration of contaminants and pose a health and safety risk for the ROD specified remedial action. An investigation will be done to locate these utilities; the RA Work Plan is currently being developed.

### **Building 82**

Several rounds of post-injection monitoring have been completed. The next round of sampling is scheduled for March (weather/conditions permitting). The Navy is looking to reach remedy complete status this summer.

## **Rubble Disposal Area**

More information will be available for the next meeting.

## **Sewage Treatment Plant**

No further discussion.

## **SRA**

The overburden injection wells have been installed and developed. Tree clearing was conducted to allow equipment and trucks access to the two injection grids. Overall, the vegetation clearing was limited. Bedrock injection wells are still in the process of being installed. Adjustments are being made due to the bedrock dipping more than originally expected.

## **West Gate Landfill**

A sampling event was conducted in December. The next event is scheduled for March (weather/conditions permitting). Sampling is still scheduled for the other landfills.

The next RAB Meeting is tentatively scheduled for June 11<sup>th</sup> 2015. Topics of discussion could include: LUCs across the site, Public Hearing for STP or Industrial Operations Area (IOA), B82 groundwater results, Solvent Release Area update, and Rubble Disposal Area methane concerns.

EPA asked to have the IOA and Hangar 1 Summary Status added to the table for the next meeting.

**RAB Member: Have the public benefit lands been conveyed by the National Park Service?**

**D. Barney: The Navy is not aware if any of those lands have been transferred from the Park Service.**



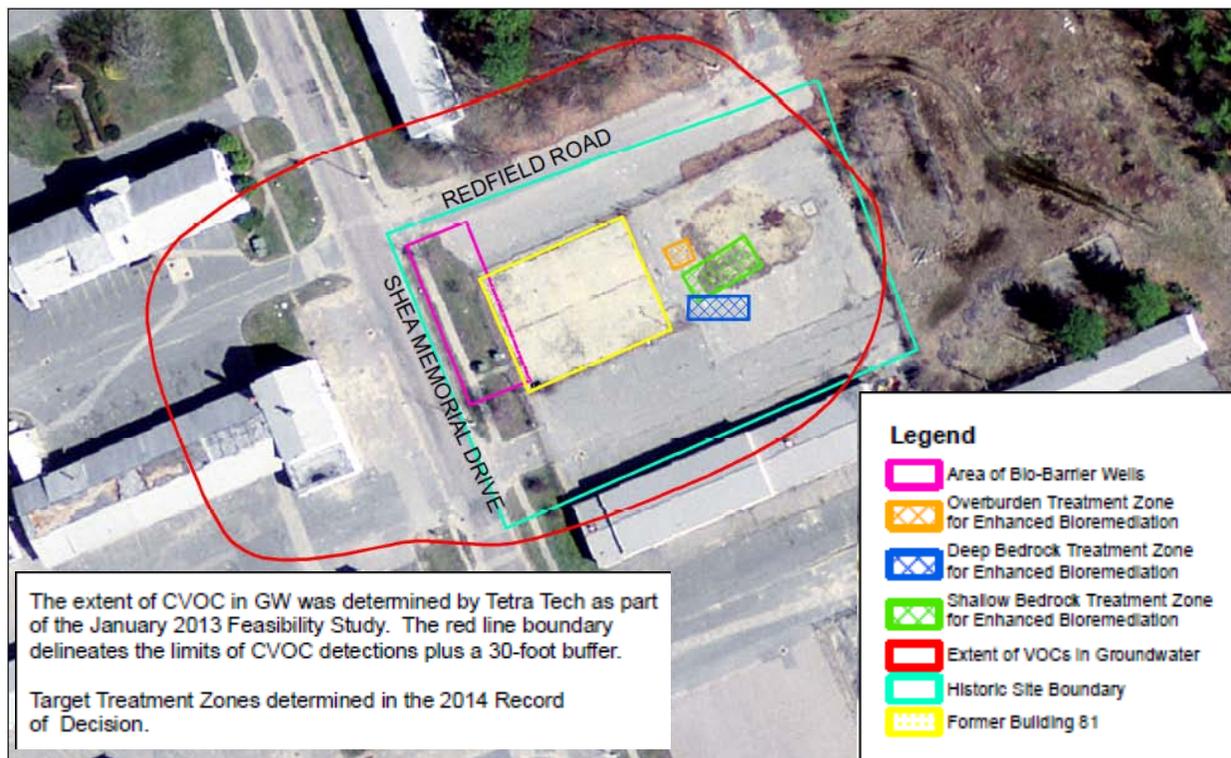
# Former Naval Air Station South Weymouth Restoration Advisory Board (RAB) Update January 2015

## Installation Restoration Program (IRP) Sites

Building 81 – The Record of Decision (ROD) was signed on September 30, 2014. The ROD selected remedy, shown in the figure below, includes the following components:

- In-situ (Overburden and Bedrock Source Area) Enhanced Bioremediation
- Bio-barriers
- Monitored Natural Attenuation (MNA)
- Land Use Controls (LUCs)
- Five-Year Reviews (as needed)

The Draft Remedial Design (RD)/Remedial Action Work Plan (RAWP) to implement the remedy was submitted to EPA in early April 2015.



Building 82 – In April 2014 the Navy completed in situ chemical oxidation (ISCO) injections (using potassium permanganate) in the pilot study area.

Results of the October post-injection groundwater sampling indicate that TCE concentrations have been reduced by the pilot test injection program. An additional post-injection groundwater sampling event was conducted in late March 2015. Additional groundwater profiling was conducted in early April 2015. Results of the March and April data indicate TCE concentrations in the immediate pilot study area increased to concentrations similar to those existing before the pilot study. The data did indicate that natural attenuation is occurring in areas outside of the pilot study. The Navy is currently considering modifying the selected remedy to include monitored natural attenuation.

Rubble Disposal Area (RDA) –The Navy completed installation of a landfill gas mitigation project to reduce concentrations of methane gas adjacent to the landfill footprint in Fall 2013. The landfill gas mitigation system was monitored monthly during 2014 to evaluate the performance. The mitigation system has been effective in reducing methane levels; however, there are still some areas with elevated methane levels. A Remedial Action Completion Report (RACR) will be prepared in 2015 to document the corrective action and next steps required.

Sewage Treatment Plant (STP)

Excavation activities at the STP have been completed with the exception of the drainage ditch. Excavation was temporarily suspended due to poor weather conditions. The drainage ditch will be excavated in Spring 2015. A ROD Amendment will be issued to add Land Use Controls (LUCs) and Long Term Monitoring (LTM) to the remedy. The LUCs will prevent residential use of the wetland area where there are minor exceedances of RGs and prevent disturbance of deep soil (>10') without proper management of the soil.

Snow clearing operations at the STP.



Small Landfill – The most recent sampling event was completed in March 2015 and the next event is scheduled for September 2015. The landfill was mowed in November 2014.

Solvent Release Area – Field implementation of the remedy began with tree clearing in November 2014 and the installation of the overburden monitoring and injection well network. The bedrock monitoring and injection well network installation was completed in April 2015. Due to weather delays, injections are now anticipated to begin in June 2015. A Draft RD for the Permeable Reactive Barrier (PRB) walls was submitted in September 2014. Additionally, a Land Use Control Implementation Plan (LUCIP) has been submitted and is under discussion.

Bedrock Core collected in March 2015.



West Gate Landfill – The most recent sampling event was completed in March 2015 and the next event is scheduled for June 2015. Tree saplings are scheduled to be treated in late May with an insecticide to prevent winter moth damage.

**SUMMARY STATUS  
CERCLA SITES AT FORMER NAS SOUTH WEYMOUTH**

<b>CERCLA Status</b>	<b>Remedial Investigation</b>	<b>Feasibility Study</b>	<b>Proposed Plan/Record of Decision (ROD)</b>	<b>Remedial Design/ Remedial Action</b>	<b>Post-ROD Long-Term Monitoring (LTM)</b>
West Gate Landfill					X
Rubble Disposal Area					X
Small Landfill					X
Sewage Treatment Plant				X	
Building 81				X	
Building 82				X	
Solvent Release Area				X	
Hangar 1	X				
Industrial Operations Area			X		

## **Massachusetts Contingency Plan (MCP) Sites**

There are currently no active MCP Sites at the Former NAS South Weymouth.

## **Environmental Baseline Survey (EBS) Sites**

- AOC 55C – Wetland evaluation and wetland species monitoring is continuing. Tree saplings are scheduled to be treated in late May with an insecticide to prevent winter moth damage. Manual removal of the invasive species Multiflora Rose is also scheduled for May 2015.
- RIA 11 (AFFF) –The third round of LTM sampling was conducted in March/April 2015 and the fourth round is planned for October 2015. A Remedial Investigation Work Plan to further evaluate the nature and extent of perfluorinated compounds (PFCs) at the Hangar 1 site (Aquifer Protection District Parcel) was submitted to EPA and MassDEP in November 2014.
- Industrial Operations Area (IOA) – Additional actions are required for soil. A Focused Feasibility Study was issued in April 2015 and the Navy is in the process of finalizing the Proposed Remedial Action Plan. The Navy's proposed remedy for the IOA is excavation and off-site disposal.
- RIA 111 (Old Hangar 2) – A work plan for additional investigations is the next action for this site.

## **Finding of Suitability to Transfer (FOST)**

FOST 6A –The Navy, MassDEP, EPA and SRA have reached agreement on the use of a Grant of Environmental Restriction and Easement (GERE) at the former NAS South Weymouth. The Navy has taken out the West Gate Landfill from FOST 6A and has re-issued for regulatory review FOST 6A1 that now only includes AOC 55C, Small Landfill, and the Main Gate Encroachment Area. The West Gate Landfill will be incorporated into FOST 6A2 at a later date.

FOST 4 & 5A Addendum –An Addendum to FOST 4 and 5A to update and address the parcels that were held back from transfer due to the previously unresolved considerations from the presence of perfluorinated compounds (PFCs) at the FFTA has been signed by the Navy and the parcels are now suitable for transfer. The “Hold Back” parcels at the FFTA area, approximately 8.8 acres, will be transferred to the Southfield Redevelopment Authority (SRA) shortly.

Please feel free to contact Dave Barney, BRAC Environmental Coordinator, at 617-753-4656 (or by email at [david.a.barney@navy.mil](mailto:david.a.barney@navy.mil)), or stop by the Caretaker Site Office if you have any questions or concerns related to this memo or any restoration activities.



# AGENDA

## Former Naval Air Station South Weymouth, MA Restoration Advisory Board (RAB) Meeting Agenda

**Date:** June 11, 2015

**Time:** 7:00 PM

**Location:** Southfield Redevelopment Authority Office  
223 Shea Memorial Dr., So Weymouth, MA

<i>Agenda Items</i>	<i>Item Lead</i>	<i>Projected Time</i>
1. Introduction, Review of Meeting Notes	Facilitator	7:00 – 7:15
2. Building 82 Results and SRA Update	Navy	7:15 – 8:15
3. Updates and Action Items	Navy	8:15 – 8:30
4. Questions, Agenda Items, Next Meeting	Facilitator	8:30 – 9:00

**Facilitator:** John Goodrich, Massachusetts Office of Public Collaboration

### Restoration Advisory Board (RAB) Members:

**Abington:** (Alternate: Steve Ivas)

**Hingham:** no current representation

**Rockland:** no current representation

**Weymouth:** James Cunningham (Community Co-Chair); Matthew Brennen (Weymouth BoH);  
Steve White

**Navy:** Dave Barney (Navy Co-Chair)

**EPA:** Carol Keating (Alternate: Lynne Jennings)

**MA DEP:** David Chaffin (Alternate: Anne Malewicz)

### BRAC Cleanup Team (BCT) Points of Contact:

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