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MINUTES OF THE RESTORATION ADVISORY BOARD MEETING HELD ON 18 APRIL 2012  
AT RIDERWOOD VILLAGE NSWC WHITE OAK MD (PUBLIC DOCUMENT)  
04/18/2012  
DEPARTMENT OF THE NAVY



# NAVAL SURFACE WARFARE CENTER – WHITE OAK

## Restoration Advisory Board (RAB) Meeting Minutes

### Riderwood Village, Calverton, MD

#### April 18, 2012

#### **RAB Members Present at Meeting**

Armalia Berry-Washington – U.S. Navy, Naval Facilities Engineering Command (NAVFAC)  
Washington  
Andrew Dempster – RAB Community Co-Chair, FDA  
Dr. Richard Price – RAB Community Co-Chair  
Linda Gustafson – Maryland Department of the Environment (MDE)

#### **Others Present at the Meeting**

Scott Nesbit – Tetra Tech/White Oak BRAC Cleanup Team  
Mimi Secunda - FDA  
Betsy Bretz, community resident and Labquest Partnership  
Linda Price, community resident  
Sandy Brown – CH2MHill/White Oak BRAC Cleanup Team  
Stacy Davenport – CH2MHill  
Dr. Hall Crannell, community resident  
Dr. Rosemarie Neuner – NTEU @ FDA  
Bob Ridgeway, community resident  
Dalton Shaughnessy – NAVFAC Washington  
Amy McGivney – Tetra Tech

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**WHITE OAK RAB AND PROGRAM-RELATED DOCUMENTS ARE AVAILABLE AT  
NAVFAC WASHINGTON**

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### 1.0 Welcome/Introductions (Ms. Armalia Berry-Washington)

Ms. Berry-Washington opened the meeting at 7:30 P.M. and welcomed everyone. The attendees introduced themselves.

### 2.0 RAB Minutes Discussion/Approval

The RAB Community Co-Chair Mr. Dempster moved to approve the April 12, 2011 RAB meeting minutes and this was seconded by Richard Price.

### 3.0 Remedial Action Update (Sandy Brown, CH2MHill, and Scott Nesbit, Tetra Tech)

Ms. Sandy Brown (CH2MHill) presented a brief update of the status at the following sites:

#### Site 4 – Chemical Burial Area

- Enhanced *In-situ* bioremediation with soil vapor extraction (SVE)
- ROD signed in 2004
- Remedial Action Completed
  - Installed SVE and injection wells spring 2007
  - SVE system turned on July 2007; operation suspended
  - Emulsified Oil Substrate (EOS) injection in three phases (to treat three areas of the plume); Phase I well installation completed September 2007; Phase II injection wells completed in January 2009; Phase III wells constructed October 2009
- Phase I injection (100-series wells) September 2007; Phase II and Phase III (200- and 300-series wells) substrate injections completed in November 2009
- Post-injection quarterly monitoring is ongoing; completed 24-month post-injection monitoring in December 2011
- Significant (45%) reduction in chlorinated volatile organic compound (VOC) concentrations.

Dr. Crannell asked where the Site 4 monitoring wells are located and he asked how frequently they are sampled. Mr. Price asked if the most recent (December 2011) data has been sent to Dr. Crannell. Sandy said the data is still preliminary and needs to undergo internal review before it will be distributed. Ms. Bretz asked CH2MHILL to make sure they send the data files to Dr. Crannell.

#### Site 7 - Ordnance Burn Area

- All remedial actions completed and in long-term monitoring phase (annual monitoring)
  - Chlorinated VOC contaminants and explosive compound RDX
  - EOS injections in 2005 and 2006
  - Site contaminants have all been reduced below cleanup goals and semi-annual monitoring is ongoing
  - In the upcoming year, this site will likely undergo closeout, whereby the remedial monitoring will be discontinued because the goals have been met. A full set of

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groundwater samples will be collected at the site to comprehensively evaluate site conditions prior to closeout.

### **Site 9 - Building 318**

- All remedial actions completed and in long-term monitoring phase (annual monitoring)
  - Site origin was leaching wells in the 300-area of the property
  - Site contaminants are chlorinated VOCs
  - Primary source of VOCs was sump in Building 318
  - Enhanced in-situ bioremediation; initial injection of EOS in 2003; re-injection in 2006
  - All VOC concentrations have been below drinking water standards for multiple sampling rounds. Iron and RDX remain elevated at two locations.
  - VOC plume at Site 9 has been remediated; likely to perform site closeout within the next year.

### **Site 13 – Former Oil Sludge Disposal Area**

- Treatment of groundwater contamination with chemical reduction [zero-valent iron (ZVI)]; initial injection in 2005
- Remedial Action complete
- Contaminant concentrations were successfully decreased on the Navy property
- Offsite injections completed on Percontee property in June 2010; offsite injections successful in reducing trichloroethene (TCE) concentrations, but not as successful as the onsite injection
- Quarterly monitoring completed for one year after offsite injections, and currently scheduled for annual monitoring. One-year post injection sampling completed September 2011.
- Long-term monitoring is ongoing

Ms. Bretz said the owners have plans to develop the Percontee property very soon. Mr. Price asked what the medium is for injecting the ZVI. Sandy said it is injected in a water-based medium (emulsion). He asked what the time lag is from injection to oxidation to take place. Sandy said the reaction time is about 3 to 6 months. The RAB moved for an action item for all the Figures and data to be sent to Dr. Crannell as soon as they become available; not once per year. The BCT agreed. Ms. Bretz emphasized there are several recent monitoring reports that Dr. Crannell has not received. He would like to receive the database (Excel) files, rather than just an electronic (pdf) copy of the reports.

### **Site 49 – Groundwater Contamination 400 Area**

- Groundwater treatment completed – immediate reaction using in-situ chemical oxidation (ISCO)
  - Sodium permanganate injection completed September 10, 2007
  - Fractured bedrock – monitoring will likely last longer than other sites at White Oak

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- Annual monitoring is ongoing; they have seen some reduction in contaminant levels since injection (about half of the wells have reached goals)
- No future injections are planned at this time; Sandy said they have evaluated other remedial technologies, but because of the bedrock, they found ISCO to be the most appropriate technology.
- Site 49 will be sampled in spring 2012 and Sandy will send the data to Dr. Crannell.

Ms. Bretz asked that CH2MHILL keep Dan Marin in the loop on this site. He is the director of the wind tunnel. Mrs. Bretz indicated that the wind tunnel is now operated by the Air Force and they have a 3-year backlog of testing to do in this facility.

Mr. Scott Nesbit (Tetra Tech) presented a brief update of the status at the following sites:

### **SWMU 87 – Building 611 Storage Area**

- Enhanced *in-situ* bioremediation
- Remedial Action Completed
  - Injection of EOS and pneumatic fracturing completed in June 2007
  - Long-term monitoring ongoing; last sampling event in October 2011
  - Remedial action has worked very effectively; contaminants reduced below cleanup goals in remediation zone
  - Recently there was a single detection of TCE above the drinking water standard at the upgradient end of this site so they will continue to monitor this.

### **Site 11 – Industrial Wastewater Disposal 100 Area**

- Monitored natural attenuation except for VOC Plume 2 where EOS was injected
- Monitoring being coordinated with FDA construction; 13 of the 16 wells planned for the monitoring well network have been installed to date.
- Last sampling event was in January 2012
- Hexavalent chromium was not detected, and all perchlorate detections were below the cleanup goal (15 parts per billion). They detected TCE marginally above the MCL in only one sample (GW-204 in VOC Plume 1).

### **Operable Unit 2 – Site 1 and Site 2 Landfills**

- Monitoring of closed landfills
  - Includes groundwater, surface water sampling, and cover inspection
  - Sampling conducted every 15 months (last event in October 2011)
  - No issues identified with the condition of the cap during regular inspections
  - Minimal surface water and groundwater contamination still detected

## **4.0 Five-Year Review**

Scott indicated the current Five-Year Review is being prepared and would be finalized in May 2012. After it is signed by the Navy it will be available for public review.

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### 5.0 RAB/Public Discussion (All)

Ms. Bretz asked the Navy to keep the lines of communication going between the Navy and the current developers and the RAB. Scott invited suggestions from the RAB regarding the frequency of RAB meetings and whether they still found the annual RAB meetings to be beneficial. The RAB members unanimously agreed they would like to continue meeting on an annual basis, in person.

### 5.0 Closing and Wrap-Up

The meeting was adjourned at 8:30 p.m. The attendees joined the RAB in celebrating Richard Price's birthday.

**Next RAB Meeting:** As noted above, Scott asked if the current meeting frequency was acceptable to the RAB, and the members agreed that the annual frequency is preferred. Therefore, Scott said the next meeting will be planned for April 2013 likely at the same location (Riderwood Village).

### BRAC Clean-up Team Contacts are:

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