



FINAL

**NAVAL SURFACE WARFARE CENTER – WHITE OAK  
Restoration Advisory Board (RAB) Meeting Minutes  
White Oak Library, White Oak, MD  
April 8, 2014**

**RAB Members Present at Meeting**

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

**Others Present at the Meeting**

Paula Gilbertson - NAVFAC  
Scott Nesbit – Tetra Tech  
Sandy Brown – CH2M Hill  
Stacy Bogdanski – CH2M Hill  
Bob Ridgway - Community resident  
Jay Collert – FDA ESEM  
Matt Amann – FDA ESEM  
Anne Laurie Wong – GSA  
Rosemarie Neuner – FDA, NTEU  
Mimi Secunda – FDA  
Andrew Mosholder – FDA, NTEU  
Kenneth Clare – Prince George’s County Health Department  
Michael Theodorakis – FDA  
Kevin St. Clair - GSA

---

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

## FINAL

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

Ms. Berry-Washington opened the meeting at 6:10 P.M. and welcomed everyone followed by attendee introductions.

### 2.0 RAB Minutes Discussion/Approval

The Team discussed finalizing the 2012 RAB Meeting Minutes. There were not enough RAB members present at the 2013 meeting to approve the 2012 RAB meeting minutes. A motion was made to approve the April 2012 minutes and the 2012 minutes were approved. Ms. Berry-Washington also solicited comments on the 2013 meeting minutes. No comments were presented. A motion was made to approve the April 2013 minutes and the 2013 minutes were approved.

### 3.0 Remedial Action Update (Sandy Brown, CH2M HILL)

Ms. Sandy Brown (CH2M HILL) presented a brief update of the status at the following sites:

#### **Site 4 – Chemical Burial Area**

- The contaminants of concern at this site are volatile organic compounds (VOCs).
- The remedy for this site was enhanced in-situ bioremediation
- A soil vapor extraction (SVE) system was also installed
  - Installed SVE and injection wells in 2007.
  - SVE system turned on July 2007 and operation was later suspended.
- A soil removal action was completed.
- Two injections were completed
  - Emulsified Oil Substrate (EOS) injection wells were installed in three phases (to treat three areas of the plume); Phase I well installation completed September 2007; Phase II injection wells completed in November 2008; Phase III wells constructed October 2009.
  - Phase I injection (100-series wells) was completed in September 2007; Phase II and Phase III (200- and 300-series wells) substrate injections were completed in November 2009.
- The Site is in the long-term monitoring phase (annual monitoring). There have been significant reductions in contamination through reductive dechlorination since baseline sampling in 2007. Long-term monitoring is ongoing annually, the most recent sampling conducted in December 2013. Our next sampling event is scheduled for October 2014.

#### **Site 7 - Ordnance Burn Area**

- The contaminants of concern at this site are VOCs and explosives.
- The remedy for this site was enhanced in-situ bioremediation
- Two injections were completed
  - The initial injection was completed in 2005 and a second injection was completed in December 2006.

## FINAL

- The Site is in the long-term monitoring phase (annual monitoring). The most recent sampling event was in January 2014. The next sampling event is scheduled for October 2014.
- The main contaminants of concern (VOCs) have achieved cleanup goals. RDX is the only contaminant of concern at Site 7. RDX concentrations are slightly above the cleanup goal at only one location.

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

- The contaminants of concern at the site are VOCs and explosives. The source of contamination was a sump in Building 318.
- The remedy for this site was enhanced in-situ bioremediation
- Two injections were completed
  - The initial injection of EOS was completed in 2003 and a second injection was completed in 2006.
- A soil removal action was completed in 2005.
- The Site is in the long-term monitoring phase (annual monitoring). The most recent sampling event was in January 2014. Next round of sampling is scheduled for October 2014.
- Results have been very positive in that all VOC concentrations have achieved cleanup goals. RDX remains elevated at one location and iron is also elevated at two locations.

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

- The contaminants of concern are VOCs and explosives.
- The remedy for the site was chemical reduction through zero-valent iron (ZVI) injection.
- Two injections were completed.
  - An initial injection was completed in February 2005 (on GSA property).
  - Offsite injections completed on Percontee property in June 2010.
- The Site is in the long-term monitoring phase (annual monitoring). The most recent sampling event was in October 2013. Next round of sampling is scheduled for October 2014.
- Significant contamination reduction has been observed since the initiation of the remedial action, however concentrations of VOCs, RDX, and iron still remain above cleanup goals at some locations.

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

- The contaminants of concern are VOCs.
- The remedy for the site was chemical in-situ chemical oxidation (ISCO) through sodium permanganate
- One injection was completed in September 2007.
- The Site is in the long-term monitoring phase (annual monitoring). The most recent sampling event was in September 2013. Next round of sampling is scheduled for October 2014.

## FINAL

- The contamination is in fractured bedrock, which is very difficult to treat. VOC and iron concentrations continue to remain elevated.

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

- The contaminants of concern are VOCs.
- The remedy for the site was enhanced in-situ bioremediation.
- One injection of EOS and pneumatic fracturing completed in June 2007.
- The Site is in the long-term monitoring phase (monitoring every 15-months). The most recent sampling event was in January 2013. Next round of sampling is scheduled for May 2014.
- VOC concentrations continue to decrease, only two locations have concentrations slightly above the cleanup goal.

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

- The contaminants of concern are VOCs and explosives. This site is located near the FDA campus.
- The remedy for the site was hot spot in-situ bioremediation along with monitored natural attenuation.
- One injection of EOS was completed in 2004.
- The monitoring well network is currently incomplete, delays were caused by FDA construction. 13 of the 17 wells planned for the monitoring well network have been installed. The last four wells are currently being installed.
- The Site is in the long-term monitoring phase (annual monitoring). The most recent sampling event was in March 2013. Next round of sampling is scheduled for May 2014 and it will include the newly installed wells.
- Concentrations are very low at this site, only one well has concentrations that exceed the Primary Remediation Goals (PRGs).

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

- The contaminants of concern are VOCs and explosives.
- The ongoing actions for this site include groundwater and surface water monitoring, and a cover inspection.
- The Site is in the long-term monitoring phase (monitoring every 15-months). The most recent sampling event was in January 2013. Next round of sampling is scheduled for May 2014.
- Minimal groundwater contamination at this site. No issues were identified with the condition of the cap during regular inspections

#### **4.0 RAB/Public Discussion (All)**

Mr. Amann asked about the process for site closure. Ms. Brown stated that the site will continue to be monitored until the Navy and MDE agree that the site is ready for closure. When site is ready for closure, an expansive set of monitoring wells at the site will be sampled for a broad set of

## FINAL

analyses, which are specified in the long term monitoring (LTM) plan. Each LTM plan has an exit strategy specific to each site and the exit strategy will be followed.

FDA employees discussed the perception that there was an increased rate of cancer at the FDA campus due to White Oak contamination. To address these concerns, the Employee Safety and Environmental Management Office of the FDA conducted a health survey. The survey asked employees questions regarding their health information. The results were then analyzed by FDA experts. The survey concluded that FDA campus employees experienced cancer risks that were normal for the general population. Additionally, the survey data, analysis, and environmental data were sent to NIOSH to conduct a health hazard evaluation. NIOSH came to the same conclusion, that the cancer data was not indicative of environmental exposure. The suggestion is made that after the next 5 year review, the RAB meeting should be held at the FDA campus to address employee concerns.

Ms. Neuner asked if vapor intrusion is an issue at the FDA buildings. The FDA employees discussed the shallow groundwater leaking into the basement and underground tunnel system and inquired if the groundwater leaking is contaminated and is a concern. Mr. Nesbit stated that vapor intrusion was assessed in the initial risk assessment of the Site 11 and all the risks were acceptable. The Navy stated that they will provide depth to groundwater data in this area, to help determine if the building basements could be impacted by the groundwater contamination. Ms. Gustafson indicated that Site 11 groundwater concentrations are low and that only one monitoring well had concentrations that exceeded the PRGs. The FDA employees inquired about former leaching wells at the Building 22 area that were destroyed during construction and whether groundwater contamination resulted. Mr. Nesbit stated that no contamination was detected in the area of Building 22. The only contamination was east of Building 22 and the concentrations were very low and have decreased through the years. There are no signs that contamination is still present due to the leaching wells. All leaching wells were removed and cleaned. At Site 11 all soil remedies are in place.

Ms. Gustafson stated that the Five-Year Review Report contains all data collected at sites that underwent remedial action and the report is available for the public to review. Public Administrative Records contain information on closed sites or abandoned wells. The administrative record CD may be available at this library (White Oak Library). The Navy will check if this is still correct. Also, FDA employees should have some of the administrative record files available on their SharePoint site.

### **5.0 Closing and Wrap-Up**

The meeting was adjourned at 7:10 p.m.

**Next RAB Meeting:** The next meeting will be planned for April 2015 likely at the same location (White Oak Library).

### **BRAC Clean-up Team Contacts are:**

Armalia Berry-Washington, NAVFAC Washington: (202) 685-3273;

**FINAL**

[armalia.berry-washin@navy.mil](mailto:armalia.berry-washin@navy.mil)

Linda Gustafson, MDE: (410) 537-4238; [lgustafson@mde.state.md.us](mailto:lgustafson@mde.state.md.us)

Bruce Beach, EPA: (215) 814-3364; [beach.bruce@epa.gov](mailto:beach.bruce@epa.gov)