

**MEETING SUMMARY, FORMER NANSEMOND ORDNANCE DEPOT (FNOD)  
RESTORATION ADVISORY BOARD (RAB)**

To: RAB Members, Interested Parties  
 From: Adriane James, U.S. Army Corps Government Co-Chair  
 Sandra Chaloux, CEC, Inc., RAB Facilitator  
 Re: September 7, 2006 RAB Meeting Summary

<p><b>RAB Members Present:</b>          Rex Watson for Kevin Hegg          Adriane James          Bruce Johnson          Stephen Mihalko          Lynn Bartlett for Tom O’Grady          Marian “Bea” Rogers          David Saunders          Rob Thomson          Bob Williams          Cherie Walton</p> <p><b>RAB Facilitator Present:</b>          Sandra Chaloux</p> <p><b>RAB Members Absent:</b>          John Bucklin          Tim Fink          Mike Isper          Kemp Littlefield          Kevin Mattonen          Carl Serrette</p>	<p><b>Affiliation:</b>          Ashley Capital          USACE, Govt. Co-Chair          Respass Beach          VDEQ          City of Suffolk          Community Co-Chair          Bennett’s Creek          EPA          Dominion          Reactives Management Corporation</p> <p>CEC, Inc.</p> <p>GE          TCC          VDOT          Lockheed Martin          Cedar Crest Hall          Burbage Grant</p>
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**Introduction and Welcome/Call to Order (6:20 p.m)**

*(Sandra Chaloux – CEC, Inc.)*

The meeting was called to order and the meeting attendees introduced themselves.

Adriane introduced Col. Dionysios Anninos, the new Colonel for the Army Corps Norfolk District to the RAB. Col. Anninos offered some introductory remarks. He stated that safety is absolutely critical in our line of business. He also stressed the importance of open communication and working together on the scene, proper documentation, unity of effort, and collaboration. He commended the RAB for their efforts.

Bryan Hodge noted one correction to the June RAB meeting summary under the Recent Munitions Findings section, his crew had to go to 8-feet deep at Grid E4 not D4.

**RAB Business**

***Government Co Chair Comments (Adriane James)***

Adriane gave a quick review of the new RAB Rule that was published on May 12, 2006 in the Federal Register. Adriane said that the FNOD RAB was already doing almost everything listed in the new RAB Rule. Adriane did not see anything in the final RAB Rule that would affect this RAB. Adriane said she would send the new RAB Rule out to the RAB members by email and will post it on the FNOD project website.

***Community Co Chair Comments (Bea Rogers)***

Bea reported that she served on the selection board for the new RAB that formed for Fort Monroe August 15. There were five people on the selection panel who sorted through 40 applications. Bea welcomed the Colonel to the meeting.

### Meeting Location

The RAB agreed to continue the RAB meetings at Bon Secours. The RAB discussed trying TCC, Northern Shores Elementary School, or the new elementary school on Shoulder Hill Road for public meetings. Bea said that she would go look at the new elementary school to see if it would have a suitable space for a public meeting.

### Landowner Updates

Dominion – Bob Williams told the RAB that he had been in contact with George Mears and was aware that there was a Dominion Lands crew (electric service technicians) coming on the site without properly checking in with the Corps. Bob said that he would follow-up with this crew to make sure that they know to check in with the Corps when they go to the site again.

George pointed out that everyone going out onto the site must check in at the Zapata trailer to get a safety briefing. This is especially important when Zapata is conducting munitions work (Monday through Thursday), because the munitions response field crew has to maintain safety distances. The Zapata Crew does not work on Fridays –on those days, people should coordinate with George for site access.

Ashley Capital – We have been working on the inside and outside of our building, getting it spruced up, and ready to paint. He said he was hoping that the upgraded image would be complete by the first of the year.

City – Mr. Bartlett said that the 55-plus acre triangle parcel is actually owned now by the Industrial Development Authority (IDA). The City of Suffolk transferred the property directly to the IDA. So access agreements need to be worked out with the IDA. Tom O’Grady is the executive director of the IDA, and should be the Corps’ main point of contact. George said that the Corps will host a public meeting early next year regarding the former Pesticide Drum Area work that was completed in the Triangle Area. George said that the Corps will probably be totally done with the site by mid next year. Mr. Bartlett said that he was not anticipating any site work to be conducted by the IDA out at the site this year. He said that the next step is putting together the master plan for the property, and that will go out for bid. The master plan will probably take at least eight months to develop. Mr. Bartlett promised to keep the Corps in the loop. Harry Wheeler recommended that the IDA fence off the area as soon as possible to prevent people from dumping out there.

### Army Corps Update

George Mears provided 2 handouts to the RAB: an updated FNOD Site Summary Spreadsheet, and a Figure showing areas for Interim and/or Permanent Land Use Controls (LUCs). George showed a site map that illustrated where land use control restrictions will be required, may be required, or are currently restricted, but may not be after the Corps’ work is completed.

### Community Interview Findings (Adriane James –U.S. Army Corps)

Adriane reported that a few weeks prior, the Corps, EPA, and CEC went out to the surrounding community and completed 30 community interviews. The last time a round of community interviews was completed for this project was six years ago. She said that people were more aware of the ordnance work being conducted on the site but not as aware of the environmental work being conducted at FNOD. Adriane asked Bill Hudson from EPA to comment on his observations from the interviews. Bill said that the interviews indicated that overall we’re doing a pretty good job letting people know what’s going on with the site. He went on to say that “residents were probably more aware here than they are at quite a few other sites that I have been working.” Approximately 80% of the people interviewed were aware of the Corps’ work at FNOD.

Bill said that the interview team picked people who lived in close proximity to the site and that “40% or 12 of the people we talked to said they come to the site on a regular basis. It’s a very public site, we found.” They play soccer, fish, boat, bike, run, walk, fly kites, crab, walk their dogs and just drive to the river. There is a Rotary barbecue here once a year and a JC Shrimp Fest. And 25% of those interviewed say they come to the site once a week. RAB members were provided a complete summary of the interview responses.

### **Environmental Studies Update (Jeff Zoekler, USACE)**

#### **Pesticide Drum Area**

This site is located within the Triangle area, which is now owned by the Industrial Development Authority (IDA) run by the City of Suffolk. The reason this site was first investigated was because two drums were discovered. They were unsealed, abandoned 55-gallon drums located in a wooded area west of I-664. One of the drums was empty and one contained an unknown liquid. In 1998/1999, EPA had a contractor come out and collect surface soil samples and samples from the drum. In 2000, the Corps conducted a site visit to evaluate if contaminants may have been released in the Pesticide Drum area. In 2000/2001, the Corps removed the drums and collected some surface soil samples.

Pesticides were detected in the drum samples and in the surface soil samples (but were different than those detected in the drum). Semi-volatile organic compounds (SVOCs) were detected in surface soil samples (also not related to the drums). Low levels of dioxins/furans were detected in the surface soil samples. No explosives or VOCs were detected. The Corps then conducted a Remedial Investigation to determine the nature and extent of the contamination and to evaluate the risk. The Corps conducted additional soil sampling in 2002 and 2004 for dioxins/furans, and dieldrin. Jeff showed a map illustrating all the soil sampling locations. All the data collected from 1998, 2002, and 2004 was incorporated into a Human Health Risk Assessment (HHRA). The Chemicals of Potential Concern were: Dioxins and Furans, Arsenic, Chromium, Dieldrin, Iron, and Vanadium. The exposure scenarios evaluated included: current and future adolescent and adult visitors, current and future industrial workers, future construction workers, future residents (adult and child). No unacceptable risks were identified in the HHRA. The Corps also conducted a Screening Level Ecological Risk Assessment at the site. Results indicate that chemicals present at the site do not pose a significant risk to animals or plants at the site.

Jeff said that the results of both risk assessments demonstrate that the existing conditions are protective of human health and the environment. The next step is a No Further Action Proposed Plan and Decision Document for site soils, to be reviewed by the Virginia Department of Environmental Quality. Jeff pointed out that typically on a Superfund site EPA is the lead authority, but for this particular site the Virginia Department of Environmental Quality is the lead regulator that the Corps will be working with to develop a Decision Document for the site. Jeff said a public meeting for this site is expected in February 2007. Then there will be a 30-day public comment period. Groundwater will be handled separately and will be restricted until it can be cleared. Once the decision document is signed requiring no further action, then the site is available for unrestricted use. David Saunders asked about the size of the site. Jeff said that the site including the surrounding sampling locations is about 40 feet around.

#### **TNT Area**

Jeff showed the location of the TNT Area and pointed out that this was the first site that got the FNOD project started back in 1987. Crystalline TNT was discovered in this area. Jeff reviewed for the RAB all the previous removal actions and soil and groundwater investigations that have been conducted at the site since 1987. The latest removal action was completed in 2001 and 2002. Shortly after that, the Corps installed a permeable soil cap over some affected soils.

The Corps has just completed the draft Remedial Investigation report for the TNT area and is about to send it to EPA and DEQ for review. Jeff said that the next step for this site is a Feasibility Study because the Corps knows that they have to do something to address this site. During the Feasibility Study phase, the Corps evaluates specific alternatives for addressing the contaminants at the site. One of the potential remedies that the Corps is evaluating is Monitored Natural Attenuation (MNA). Jeff explained that MNA is letting natural processes clean up the contaminants at the site, but monitoring it to make sure it's progressing as you planned. If it's not, then something is done to enhance the progress. The factors at play are: dispersion (the physical spreading of the contaminants at the sites), sorption/desorption (if contaminants attach to soil), biodegradation (microorganisms eating the contaminants), and abiotic degradation (subsurface chemical reactions that can degrade the contaminants). The Corps is monitoring the groundwater and soils at the site looking for the presence of the breakdown products of TNT to determine how fast the TNT is degrading. Jeff pointed out that DNT (a breakdown product of TNT) is actually more toxic than the TNT.

The Corps is trying to measure and predict whether MNA could be successful at the TNT area. Jeff told the RAB that the groundwater flows to the north-northeast in the TNT area and showed the RAB a site map indicating the monitoring well locations. The highest concentrations of TNT and DNT have historically been detected in two monitoring wells (MW 07 and MW 13). Both TNT and DNT are decreasing over time in these two wells. The highest detection was in MW-07 at 173 ppb in 1995, and then in 2006, it was 88 ppb. Ironically, monitoring well 01-A which is located nearest the worst-case soil impact had very low concentrations of TNT and DNT in the groundwater. Recent data shows a slight increase in TNT and DNT in the down-gradient well (MW-16). The concentrations are decreasing in the hot spots of the plume, but it's spreading out and getting more expansive in some areas. The Corps hasn't seen detections in TNT or DNT in the furthest down-gradient well (MW-17). There are still some data gaps the Corps needs to fill for the Feasibility Study. Jeff said that the Corps will compare MNA to at least four other alternatives. He said typically they evaluate five alternatives in a Feasibility Study. The purpose of the Feasibility Study is to determine the best alternative to address the contaminants at the site. In addition to the TNT, the Corps will also be evaluating metals and other compounds. Bruce Johnson asked what the target goal is for TNT and DNT. The Maximum Contaminant Level (MCL) for TNT is 21 ppb and for DNT is 7.8 ppb. Bea Rogers pointed out that no one is currently using this groundwater for drinking water. TCC and the surrounding community are provided water by the City.

#### **Munitions Response Update (Bryan Hodge –Zapata)**

##### **Nansemond River Beachfront (NRB)**

This site is right behind the GE building. The Corps investigated three trenches that were dug 5 feet wide and 4 feet deep just behind the seawall and up to 100 feet inland. Each trench was started at locations where previous munitions had been found. The purpose of the investigation was to gather data to determine the scope and technical parameters for the full munitions investigation of the NRB that will be conducted in 2007. The munitions response team first started out with a surface sweep. Bryan showed the RAB photos from that whole effort. During that surface sweep, the crew found 200 lbs of adapter boosters. He showed the RAB some of the items that they found on the beach surface. Earlier that day, Bryan said they found more items –French World War I era fuzes. Each pit was 5 feet in diameter and the crew went to a depth of two feet unless they found something in the bottom of a pit. Sixty-three (63) boosters were found in Pit 2 burned out. One still had explosive residue in it. In Trench 3, the crew found 27 lbs of bulk TNT. Bryan said that the planned detonation of the seven five-pound shots of TNT that were found was the largest detonation that he had done at the site.

### **Items found at NRB**

- Surface Sweep – 200 lbs of expended fuze boosters, 2 WWI Era French M3 nose fuzes, 3 WWI Era French M5 nose fuzes.
- Pit 1 – 3 expended fuze boosters
- Pit 2 – 63 expended fuze boosters, 1 fuze booster with residue
- Pit 3 – None

### **Items found at NRB Trenches**

- **Trench 1** – 99 expended fuze adapter/boosters, 1 WWI era French M5 nose fuze, 1 civil war grapeshot cannonball, 1 WWI British No. 101 II Nose fuze
- **Trench 2** – 25 expended fuze adapter/boosters, 10 combination artillery primers, 1 civil war era grapeshot cannonball, 1 WW I era French M5 nose fuze
- **Trench 3** – 27 lbs bulk explosives (TNT), 2 TNT fuze boosters, 20 French M3 Nose Fuzes, 27 French M5 Nose fuzes, 75 British No. 146 stokes fuzes, 25 U.S. MK IV stokes fuzes, 53 3-inch fuze adapters, 71.5 lbs of British .303 caliber blanks, 2 friction primer igniters, 30 combination artillery primers, 12 British No. 101 nose fuzes, 18 U.S. Livens projectile fuzes.

A total of 522.5 lbs of munitions debris and 2,149 lbs of scrap were removed from the NRB.

Tim Thompson, U.S. Army Corps Archeologist did a brief presentation on the history of the NRB area during the civil war period. He showed the RAB a photo of what the Grape Shot used during that time looked like.

### **Safety Warning**

Bryan told the RAB a story about a civil war artifact collector in Dalton Georgia who was seriously injured while trying to defuse an unexploded Civil War era shell. The 64-year old man was attempting to remove the black powder filler from the shell. The explosion also injured the man's grandson who unfortunately was standing nearby. Bryan told the RAB that under no circumstances should anyone other than authorized EOD personnel attempt to tamper with ordnance. The black powder in Civil War era ordnance can be just as (if not more) dangerous today than it was the day it was fired. "If you see it, it's best to leave it alone."

George said that now that TNT was found at NRB, the Corps will also need to do an environmental study of the site (a Remedial Investigation). George said that the Corps is putting some fencing around the NRB to secure this area.

### **Main Burning Ground**

Since the June RAB, the crew completed 6 grids (G-11, G-10, G-9, G-8, F-8, Pit in G-2). Bryan said the crew was working in GE G-006 (Area O) and that there were 11 grids remaining.

### **Public Comments**

None.

### **Next FNOD RAB Meeting**

- December 7, Bon Secours, 6:15 p.m.

**Agenda items** for the next RAB meeting:

- Main Burning Ground Update
- James River Beachfront RI
- NRB Update

**Meeting Adjourned around 8:00 p.m.**

<b>Others Present:</b> Col. Dionsios Anninos George Mears Jeff Zoeckler Terry McCann Brian Hodge Bill Hudson Harry Wheeler Art Collins Franco Godoy Lynn Bartlett Bernard Nawyn	<b>Affiliation:</b> USACE, Colonel USACE, Project Manager USACE, Project Engineer USACE, Public Affairs Zapata Engineering EPA Community Involvement Tech Law HRPDC ERM City of Suffolk Harbour View
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