

NAS KEY WEST RESTORATION ADVISORY BOARD

14 JULY 2010 MEETING SUMMARY

LOCATION: Mangrove Room, Doubletree Grand Key Resort, Key West, FL

Restoration Advisory Board Members

Ron Demes	NAS Key West	
Robert Courtright	NAVFAC –NAS Key West PWD Environmental	
Tracie Bolaños	FDEP	
Chuck Bryan	Tetra Tech NUS, Inc.	
Amy Twitty	CH2M HILL	
Mimi Stafford	RAB community member	
Dana Hayworth	NAVFAC SE	
Mark Davidson	BRAC PMO South East	

Other Participants

Tim Flood	Management Edge	
Ed Barham	NAVFAC – NAS Key West PWD Environmental	
Sid Allison	CH2M HILL	
Melissa Forrest	Navy and Marine Public Health Center	
Debbie Pyron	Tetra Tech NUS, Inc.	
Ralph Basinski	Tetra Tech NUS, Inc.	
Michele Coffman	Tetra Tech NUS, Inc.	
Shauna Stotler-Hardy	Tetra Tech NUS, Inc.	
Edward Russell, Jr.	FDEP	
Jim Scholl	City of Key West	
Michael Buchman	NOAA	
Shawn Smith	City of Key West	
Annalise Mannix	City of Key West	
Doug Bradshaw	City of Key West	
	Citizen	

Welcome and Introductions

Ron Demes brought the meeting to order at 7:00 PM. Ron introduced the Restoration Advisory Board (RAB) members and went over meeting logistics, requesting that any questions be held until after a presentation has concluded.

Review of Last Meeting

Ron briefly reviewed the 2009 RAB meeting summary, requesting that the term “annotated” be changed to “administrative” in the Florida Administrative code. He also requested that his phone number and Tracie Bolaños’ telephone number be corrected in the minutes.

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Restoration Advisory Board Membership Drive

Melissa Forrest introduced herself as part of the Navy and Marine Public Health Center which supports both the Navy and Marine Corps. She is assisting the Key West RAB with a membership drive. Melissa explained the purpose of the RAB as a public forum for discussion and exchange of information between the Department of Defense, state and federal regulatory agencies, and the community. The purpose of the membership drive is to engage the community. The RAB focuses only on environmental cleanup activities.

The RAB comprises local citizens and Navy, EPA, state, and local government representatives. A critical element for the success of the Board is local community participation. RAB members from the community provide advice to the Navy and regulatory agencies by reviewing and commenting on various technical documents. They attend the RAB meetings, and serving as liaisons between the greater community and the Navy's environmental restoration programs. A RAB is chaired by two people, a Navy representative and a community representative. The Navy representative is selected by the Installation's Commanding Officer. The community representative is selected by the community members.

Most of the Key West Installation projects have proceeded through their environmental cleanup phases. A new Munitions Response Program (MRP) is starting which presents an opportunity for interested community members to join the RAB. The RAB would like five community members to join the Board.

Melissa informed everyone that a Survey Form had been handed out. She requested the survey form be completed even if a person is not interested in becoming a RAB member. More information on the RAB to go to the following website.

www.denix.osd.mil/denix/public/library/cleanup/cleanupofc/subject_arch/rab.html

Ron then introduced the presenters and requested that detailed questions be held until the end of the meeting. He noted that several technical experts were present at this meeting to answer questions any detailed questions.

Trumbo Point Tank Farm

Amy Twitty (CCI) assists with remediation efforts at the Base. She presented an updated on Trumbo Point Tank Farm (TPTF) activities over the past 12 months. The TPTF has been used as a fuel storage and distribution point by the Navy since 1942. The site consists of three areas now referred as TPTF-Navy North, TPTF-Navy South, and TPTF-Coast Guard Area. Free product was detected in all three areas, in the TPTF-Coast Guard Area. Most above-grade storage systems at the TPTF-Navy South were demolished by the mid 1990s and the large concrete "cut and cover" tanks were backfilled and graded and abandoned in-place. Soil and groundwater contamination identified during preliminary investigations led to the development of a Remedial Action Plan for free product recovery as an interim remedial action.

Remedial actions taken to date have been

- . the 2001 removal of 3,130 tons of non-hazardous arsenic-contaminated soil and debris to an offsite licensed disposal facility
- . the 2003 - 2008 active removal of approximately 22,615 gallons of free product and groundwater using disposable bailers and "aggressive fluid vapor recovery" systems.

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- the passive free product recovery attempted in 2007 with the installation of petroleum skimmer trap systems that was discontinued after removing only 11.4 gallons of free product.
- the April 2009 recovery of 1,730 gallons of free product-contaminated groundwater and 858 tons of petroleum-impacted soil and debris with soil excavation.

Amy reported on the existence of data gaps regarding the extent of free product in some areas, the current nature and extend of dissolved constituents in groundwater, and the current geochemical conditions in the groundwater. Field work began July 12, 2010 to delineate free product using specialized optical sensors (Laser Induced Fluorescence technology). The long-term monitoring plan should consider periodic physical removal of product from the wells and may also include installation of hydrophobic socks for product collection between monitoring events. Amy reported the Navy will continue to build data sets that facilitate the evaluation of long term natural attenuation.

BRAC Sites Update

Mark Davidson (BRAC PMO South East) provided an update on four BRAC Sites which have been transferred to the city and are currently undergoing cleanup:

- > Parcel K, Truman Annex
- > UST, Truman Annex
- > Poinciana Housing
- > Coast Guard Station, Trumbo Point

City-Owned Portion of Parcel K

A portion of Parcel K was transferred to the City of Key West in 2002 with a land use restriction of “industrial use” for Port Operations. The land use restriction was based on limited sampling performed in November 1997. The City is considering developing the parcel as a park, which requires the City to determine if the soil meets FDEP recreational-use criteria. The City collected soil samples in April 2009; PCBs, lead, and PAHs were detected at concentrations higher than those for FDEP industrial-use criteria. Under CERCLA the Navy is required to ensure the parcel meets FDEP industrial criteria. The City contacted the Navy on June 18, 2009. The Navy re-sampled the site in July 2009, November 2009, and July 2010. The Navy is currently evaluating the data and working with FDEP to determine which areas require removal of soil to meet industrial-use criteria. The Navy will also consider what is needed to clean the site to recreational-use criteria. If the Navy determines to clean the site to meet industrial-use criteria only, the Navy will provide the City information on any additional cleanup necessary for the site to meet recreational-use under state criteria. The current schedule is to excavate the contaminated soils in Fall 2010.

Questions

Mimi Stanford: Will additional cleanup be needed to get recreational standards?

Mark Davidson: Level of excavation to get to residential with no LUCs or recreation with no LUCs will be determined by the level of contamination. We will need to evaluate the data.

Mimi Stanford: How is cleanup driven?

Mark Davidson: Clean up is driven by what we expect to be the individual person’s exposure. Anytime a clean up is to less than residential use criteria LUCs need to be included in the deed transfer. The

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property's deed restricts the City to only industrial use, but this does not prevent the City from cleaning the site to residential standards.

Tracie Bolaños: Calculations are done on the different types of average persons that would be using the site (adult, child). The calculations include an estimated number of days/hours they would use the site (length of exposure). This is what drives our calculations.

Mimi Stanford: Understand, but am asking how we determine where we clean too. Tracie Bolaños: We remove the hot spots.

Ron Deems: There is no intention to go to residential-use on this site so there will be LUCs on this site and the City will need to enforce this restriction.

Lucy Gage: Where do you take the excavated dirt?

Mark Davidson: The material goes to an approved landfill with a liner. When the landfill is closed a heavy piece of plastic is placed on top and covered with a thick layer of clay material.

Ron Deems: Navy owns the landfill forever and it must meet regulatory limits.

Jim Scholl: Mark, when will the samples from the site return and when will we have data to determine the delta's of sampling?

Mark Davidson: About three weeks to a month.

Jim Scholl: Tracie, will the recreational standards be used in the calculations?

Tracy Bolaños: Yes, recreational and industrial standards will be used.

Ron Deems: We will look at data and if it makes sense to cleanup to residential as we did across the street, than we will do so. Otherwise, we will provide the information necessary for the City to clean up to residential, if they choose.

Truman Annex UST

Truman Annex UST is on property that was transferred to the City of Key West in 2002 with no use restrictions. During installation of a fence surrounding Navy property on Truman Annex, an UST was discovered. The tank was closed in place in 2003, and limited soil and groundwater investigative work related to the tank was performed. The Navy completed additional soil and groundwater sampling in fall 2009 and discovered a second tank. Both tanks were removed in 2009.

Currently, the Navy is sampling soil and monitoring groundwater to ensure there is no residual contamination from the tanks.

Questions

Mimi Stanford: Does Navy know what was stored in the tanks?

Robert Courtright: It was an old Army UST used for kerosene with crude oil mixed in

it. Poinciana Housing Site

The Poinciana Housing site is 1 on the corner of Duck Avenue and 19th Street. The property was transferred to City of Key West in 1999. The site was originally investigated because of arsenic in soil and groundwater. An excavation was performed in 2005 and groundwater monitoring was performed in 2006 and 2007 and results were below Groundwater Cleanup Target Levels (GCTLs). The Navy

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submitted an NFA request to FDEP in April 2009. FDEP disapproved the report in August 2009, because new regulatory standards required soil concentrations of arsenic to be below 10µg/l. The sampling results were at 11µg/l. The Navy will continue to monitor the site until groundwater monitoring indicates that concentrations are below 10µg/l.

Questions

Ron Deems: The LUCs in place for this site include groundwater use restrictions. We will not be able to change these restrictions until we have two consecutive samples below 10µg/l. Currently, we sample every six months; it will be awhile before we can review the LUCs.

Public: Has this property been given to the Fish and Wildlife Service?

Ron Deems: This is the property that has been set aside for the homeless. The site has a groundwater restriction only and is safe for other uses. The City needs to review the deed to ensure they keep any construction on this site outside the LUC.

Lucy Gage: The street behind the site has a canal. Is there runoff from the Poinciana site into that canal?

Robert Courtright: Yes, the Navy checked the drainage ditch for soil and groundwater flow from the site. There is no connection between the site runoff and the canal. The answer to the Navy's concern was that the groundwater from Poinciana site could not get into the ditch.

Lucy Gage: Noticed children near the water on 17th Street and wondered if that area could also become contaminated.

Robert Courtright: There is a small pocket of contamination that is contained and not spreading. Navy checked the groundwater flow and there is no connectivity.

Ron Deems: The actual LUCs control defines the area of concern at this site. The Navy is very concerned that a well not be drilled in this area.

Coast Guard Piers

Piers D1 and D3 were transferred to the Coast Guard in January 2001. In May, 2009 the Coast Guard discovered oily wastewater in an old navy vault on Pier D1 and contacted the Navy to inform them that the vault was still full of oil. Navy ships would pump oily bilge water to vault. From there the water was treated via an oil/water separator. Navy disposed of the oily wastewater, filled the vault with concrete, and secured the access points. Site now has new parking spots.

Questions

There were no questions.

Sigsbee Water Towers

Amy Twitty (CCI) presented an update on Sigsbee Water Towers. The project includes the locations of two former water tower, North SAWT and South SAWT. The source of the lead contamination recently detected in surface soils at the SAWT is lead-based paint from the tower.

The North SAWT is adjacent to a car wash and approximately 150 yards north of an elementary school in a residential area. The South SAWT is directly behind an elementary school. Tetra Tech conducted preliminary surface soil sampling (0 to 6 inches below land surface) at the North SAWT and South SAWT prior to water tower demolition, using conventional means.

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CCI conducted soil sampling from 0 to 0.5 feet below land surface, and 2 to 5 feet below land surface in July 2009 to delineate the lead contamination in soil both vertically and horizontally. Cleanup level for lead is 400 mg/kg based on FDEP residential Soil Cleanup Target Levels (SCTL). Lead concentrations at the North SAWT ranged from non-detect to 4,750 mg/kg and at the South SAWT from non-detect to 3,680 mg/kg. Only the upper 6 inches of soil exceeded the soil cleanup level.

An engineering evaluation/cost analysis was completed in May 2010 to identify the objectives of the removal action, and to analyze the effectiveness, implementation, and cost of various alternatives that may satisfy the remedial objectives. Three alternatives were reviewed.

- . No action.
- . Engineering and institutional controls (leave the fence in place and add deed restrictions).
- . Excavation of contaminated soil and backfill with imported topsoil to return to residential-use criteria.

The Navy will excavate and backfill. An Action Memorandum was prepared outlining the soil removal alternative. CCI mobilized this week and activities should take approximately two weeks, to be completed by August 5, 2010.

Defense Reutilization Marketing Office (DRMO) Slivers

Amy Twitty gave a presentation on the DRMO Slivers, two very small parcels of Navy-owned land adjacent to the City-owned portion of the former Defense Reutilization and Marketing Office (DRMO) Waste Storage Area. The southern sliver is approximately 600 feet long by 25 feet wide; the northwestern sliver is approximately 200 feet long by 30 feet. Both the City-owned and the Navy-owned land were once used to store military equipment. Over time, contaminants were released to site soils from DRMO activities and from a water tower painted with lead-based paint.

These slivers had concentrations of contaminants higher than the FDEP's Residential and Industrial SCTLs. The City-owned portion of the DRMO property was remediated to the FDEP Residential SCTLs and portions of the DRMO slivers were also remediated. The Navy plans to remediate the two slivers to the same regulatory standards as the rest of the DRMO property.

The work will be conducted under the CERCLA regulatory framework and consists of:

- > Preparation of a Uniform Federal Policy Sampling and Analysis Plan (UFP-SAP) and work plans
- > Performance of a site investigation
- > Preparation of Engineering Evaluation and Cost Analysis (EE/CA) and an Action Memorandum
- > Performance of non-time critical removal action (NTCRA) for contaminants in shallow soil at the land slivers, as necessary

Munitions Response Program (MRP)

Dana Hayworth introduced himself as the Remedial Project Manager and discussed the new Munitions Response Program (MRP) at the base. The DOD Military MRP addresses past military munitions-related activities. At this point the Navy is doing a Site Identification, followed by a Site Assessment, which will include.

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> Preliminary Assessment

- Site Description, Operational History
- Documentation of Environmental Hazards
- Identification of Active and Inactive Ranges
- Assessment of potential Munitions and Explosives of Concern (MEC) risks/hazards

The Site Assessment helps to develop munitions hazard screening protocols which begin with response actions in accordance with CERCLA Process.

The Navy has completed the initial site identification and is currently doing the preliminary assessment and getting ready to begin the site investigations. Crews will be in the field within the next couple of weeks to begin the site investigations. A data quality objective is being developed that identifies

- (1) what to investigate;
- (2) how to investigate;
- (3) what samples will be taken.

This process was mandated by Congress to be completed by September 30, 2010.

During the preliminary identification two potential UXO sites were identified (Fleming Key Dredge Spoil area and Trumbo Point Temporary Staging Area). Also 12 near shore underwater sites were identified as potential areas of concerns and were noted as having very little historic information. Returning ships apparently dumped shells in Fleming Key Cut and by the piers.

A contract has been awarded to begin a limited site investigation at applicable sites listed below within the next two weeks.

Areas of Concern:

- | | |
|---|--|
| <ul style="list-style-type: none">> Boca Chica:<ul style="list-style-type: none">• Skeet Range 820• Rocket Loading Area• Shooting-in-Butt• Trap Range• Pistol Range 821• Skeet Range, NE of RLA• Bore Sighting Range> Sigsbee Annex<ul style="list-style-type: none">• Marine Rifle Range> Truman Annex<ul style="list-style-type: none">• Rifle Range | <ul style="list-style-type: none">> Trumbo Point:<ul style="list-style-type: none">• Temp Staging Area (UXO site)• Fleming Key<ul style="list-style-type: none">○ Dredge Spoil Area (UXO site)○ Pistol Range• Military Housing Area<ul style="list-style-type: none">○ Rifle Range○ Pistol Sheet Range> Underwater Sites<ul style="list-style-type: none">• Near shore areas associated Pistol Skeet Range with base property |
|---|--|

Part of the MRP process is to notify stakeholders, including EPA, FDEP, and the public, of the MRP and progress using forums such as RAB meetings and Public Notices. The Navy's responsibility is to evaluate each site and set relative remediation priorities based on the potential risk to human health and the environment. Once the Navy has completed the priority ranking, stakeholders will be given the opportunity to review and comment.

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A fact sheet is available with additional information..

The following link provides the fact sheet on the MRP process.

□ Web link: www.astswmo.org/publications

[federalfacilities.htm](#) *Questions*

Mimi Stanford: Are you mainly concerned about unexploded ordnances: what will you be looking for at the rifle sites?

Dana Hayworth: The rifle sites may have bullets or shell casings. When we find bullets we will look at sampling the soil for lead contamination. Dana introduced Ralph Basinski (Tetra Tech) to respond more fully to the question.

Ralph Basinski: At the rifle range we are concerned about lead. At the skeet range we will be concerned about lead shot and clay pigeons that were used. Unexploded ordnances are not a concern at the rifle or skeet ranges.

Mimi Stanford: Are the sites active?

Ron Deems: No the sites are not being used. The Navy wanted to get this information out to everyone. Some of these sites where used in the 1930s, 1940s, and 1950s. In some of these areas, facilities have been built on top of the ranges.

Mimi Stanford: Is the Navy aware other munitions sites that have been found at Fort Zachary Taylor?.

Ron Deems: Yes, every so often someone comes across an item in the landfill which appears to be an old cannonball. We have handled these over time with the Sheriff's office.

Tracie Bolaños: We also work with the Army Corps of Engineers and the state archeologist.

Lucy Gage: I was president of Fort Taylor in the beginning of the 1990s for about 6 years. Ft Taylor was out at sea. In order to bring it into shore the Navy was dumping stuff under the current road. During the time I was president they found 23 hotspots on Fort Taylor property. When I checked about a year ago they had found 63 hotspots on or around that area. Fort Taylor had been filled with sand and the doors cemented. When they went in and open them they found all sorts of ammunition.

Ron Deems: That is true, and in the City of Key West they have occasionally found items. It seems that people would sometimes take these things home and bury them.

Tracie Bolaños: When these items are found they are taken away. The Navy and the State are very concerned for your safety.

Meeting Adjournment

Ron Deems thanked everyone for coming to the meeting. He noted that the RAB meetings are held once a year. He reminded everyone about the membership drive and how important it is for public participation in this process, and asked everyone to complete the survey form. Ron stated that the NAS Key West Public Affairs Officer Robert Courtright could be contacted to answer any questions the public may have.

Robert Courtright reported that records are available at the Monroe County Library which date back to the earlier 1880s and are current up to a year and a half ago. The Navy is currently considering updating those records.

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Ron noted potential topics for next year's RAB meeting: petroleum sites, new RAB members, and a MRP update. Ron then asked the Board and public if they had any suggested potential topics. None were suggested.

Ron adjourned the meeting at approximately 9:00 PM.