#### Location

# Mangrove Room, Doubletree Grand Key Resort, Key West, Florida

# **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	
Emily McRee	Tetra Tech NUS, Inc.	
Tom Spriggs	NAVFAC LANT	
Edward Russell, Jr.	FDEP	
Captain Steve Holmes	NAS Key West	
LCDR Ana Franco	NAVFAC PWD	
Anne Morkill	U.S. Fish and	
	Wildlife Service	
Jim Scholl	City of Key West	
E. Carie Noda	Area Health Education	
	Centers	
Michael Buchman	NOAA	
Shawn Smith	City of Key West	
Laird Ueberroth	ECS	
Mark Rauch	Key West Pipeline Co.	
	Citizen	
Annalise Mannix	City of Key West	
Doug Bradshaw	City of Key West	

# Welcome and Introductions

Ron brought the meeting to order at 7:00 PM. Ron introduced the RAB members and went over meeting logistics, requesting that any questions be held until after that portion of the presentation has concluded.

#### **Review of Last Meeting**

Ron briefly reviewed the 2008 RAB meeting summary, requesting that the term "twin system" be stricken from the minutes in reference to the pipeline that transports fuel from the Trumbo Point Tank Farm to Boca Chica. There are currently two single.wall pipes supplying fuel to the Trumbo Point Tank Farm.

#### **Trumbo Point Tank Farm**

Amy Twitty from CH2M HILL 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 3 areas now referred as TPTF.Navy North, TFTF.Navy South, and the TPTF.Coast Guard areas. Free product has been detected in all three areas, but no longer exists in the TPTF.Coast Guard area. Three aboveground storage tanks (ASTs) and associated piping are located at the TPTF.Navy North site while the TPTF.Navy South area is an open grassy area. Most above grade storage systems at the TPTF.Navy South were demolished by the mid 1990s and the large "cut and cover" tanks were demolished aboveground and sub.grade structures 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. Removal of product was performed actively by using disposable bailers, vacuum trucks, and excavating soil and passively using petroleum oil traps inside impacted wells.

The Navy's fuel contractor has completed an investigation and cleanup at TPTF.Navy North related to a 2007 release of jet fuel (JP.5) and issued a final report to FDEP. The Navy's monitoring activities are ongoing at TPTF.Navy North.

Product has been recovered from temporary wells at TPTF.Navy South since 2002. The source of the product is believed to be a partially demolished underground storage tank known as Tank D.4. An excavation was performed at TPTF.Navy South in April 2009 to remove free product source areas.

Future plans include abandoning approximately remaining 50 temporary wells at TPTF.Navy North and 66 temporary wells at TPTF.Navy South. A post.active remediation plan to monitor groundwater conditions will be prepared and implemented.

A question was posed from Lucy Gage (citizen) about whether leaving excavations open will cause mosquitoes to breed in the standing water. Amy Twitty from CH2M HILL responded that the excavations were only open for a short time and have been permanently closed so this will not be an issue. Mimi Stafford, a citizen member of the RAB, asked whether the Navy will continue to remove product from the site. The Navy will continue to monitor and remediate both the South and North areas of TPTF. Ray Blazevic (citizen) asked whether it was an option just to leave the product in the ground. Robert Courtright from NAS Key West responded that the Navy is required by the State of Florida to remove the free product. Amy Twitty from CH2M HILL added that the Navy is compelled to follow Florida Administrative Code (F.A.C.) 62.770 and remove the free product. Mr. Blazevic added that the contamination won't migrate offsite because the seawalls extend to caprock. Ron Demes from NAS Key West emphasized that the Navy is compelled to actively clean up the site; the contamination cannot be left in place. Michael Buchman from NOAA asked what chemicals the groundwater is being analyzed for an full suite of contaminants appropriate for a fuel site. Ron responded to the second

portion of the question, explaining that groundwater does not flow in Key West like it does in other areas of the country; there is no single flow direction because of the flat topography and tidal influence.

# **BRAC Updates**

Mark Davidson provided an update on the BRAC Sites including:

- Former Building 1276, Truman Annex
- Former DRMO Area, Truman Annex
- Parcel K, Truman Annex
- UST 5, Truman Annex
- Poinciana Housing
- Coast Guard Station, Trumbo Point

### Former Building 1276

Building 1276 was a NEX gas station/car repair facility located near the intersection of Fort and Petronia Streets. The site was transferred to the City of Key West in 2002 with no land use restrictions. The City had since identified stained soil around the hydraulic rams and the Navy investigated the site in 2005. Both hydraulic rams were removed, along with the contaminated soil. A buried concrete vault containing hydraulic oil was discovered. The hydraulic oil was removed and the vault was cleaned. Groundwater was sampled to determine if there had been any impact from site activities; all fuel constituents in groundwater were below FDEP groundwater contaminant target levels (GCTLs). The Navy submitted a Site Rehabilitation Completion Report (SRCR) to FDEP in December 2008; FDEP approved the report and issued a Site Rehabilitation Completion Order (SRCO) in February 2009, meaning that the site has been cleaned to FDEP requirements and there are no restrictions on soil and groundwater. The site's groundwater monitoring well has been abandoned since it is no longer needed.

### Former DRMO Site

The former Defense Reutilization and Marketing Office (DRMO) Waste Storage Area is approximately 6.25 acres and was used to store old and new military equipment. A water tower was located on the site, but has been removed. Most of the property was transferred to the City of Key West in 2002 with a land use restriction; the site use was limited to industrial use and included restrictions on digging. Past soil removals at the site include:

- 1) 12,173 cubic yards in 1999,
- 2) 1,930 cubic yards in 2004, and
- 3) 3,075 cubic yards in 2007.

The excavations were performed primarily because of lead and PCB contamination. Following the 2007 cleanup, a single PCB detection at a high level precluded unrestricted use of the site (residential/recreational use). Therefore, the Navy decided to perform an additional excavation so that the City of Key West could use the former DRMO Waste Storage Area as a park, as planned. In June 2009, the Navy excavated 5 cubic yards of soil where the PCB had been detected above residential soil cleanup target levels (SCTLs). A SRCR is currently being prepared for submittal to FDEP recommending no further action with no restrictions on use. If

FDEP's SRCO concludes that unrestricted use is appropriate, the Navy will prepare a release to remove the current land use restriction (industrial) from the parcel.

#### City.Owned Portion of Parcel K

This portion of Parcel K was transferred to the City of Key West in 2002 with a land use restriction of industrial use. The land use restriction was based on limited sampling performed in November 1997. The City has decided to develop the parcel as a park, which requires the City to determine if the soil meets residential SCTLs. The City collected soil samples in April 2009; PCBs, lead, and PAHs were detected above FDEP industrial SCTLs. The City contacted the Navy on June 18, 2009 and an article appeared in the Key West Citizen on June 22, 2009. The Navy has evaluated the deed and is currently evaluating the soil data collected by the City to determine if the parcel still meets industrial criteria. If the parcel does not meet industrial criteria, the Navy will determine the path forward to include additional sampling and excavation of contaminated areas. FDEP is involved in this decision.making process and any future actions will be based on future data results and Partnering Team discussions and decisions. The Navy is required to ensure the parcel meets industrial criteria. The City will be required to perform any additional cleanup necessary for the site to meet recreational/residential criteria (if any additional cleanup is needed).

#### Truman Annex UST 5

Truman Annex UST 5 is located 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, a UST was discovered. The tank was closed in place in 2003, and limited soil and groundwater investigative work was performed. Benzene was detected in groundwater above FDEP GCTLs. The Navy plans to conduct additional soil and groundwater sampling in fall 2009.

# Poinciana Housing Plaza Site

Poinciana Housing is located on the corner of Duck Avenue and 19<sup>th</sup> 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, removing 108 cubic yards of soil. Groundwater monitoring was performed in 2006 and 2007 and results were below GCTLs. The Navy submitted a SRCR to FDEP in April 2009 requesting no further action for the site with no use restrictions.

### **Coast Guard Piers**

Piers D1 and D3 were transferred to the Coast Guard in January 2001 (a federal to federal transfer). The Navy completed investigation of the parcel in 2008. A SRCR was submitted in FDEP in November 2008 recommending no further action with a restriction on groundwater use.

#### Questions From The Public

Michael Buchman from NOAA asked what the background of the UST 5 site was. Ron responded that the site history is unknown and the Navy is unsure what the purpose of the UST was. However, Parcel K (where the UST is located) dates back to the submarine base. Support buildings for submarine maintenance were located in this area. Mr. Buchman asked where the assisted living facility at Bahama Village is being located and if this area has been investigated? Ron responded that the area meets residential standards.

Mimi Stafford asked whether the Navy is responsible for additional contamination at the site, if found. Mark responded that the Navy will be responsible for any Navy contamination found in the future.

# **Performance Monitoring Program Sites**

Tom Spriggs from NAVFAC LANT reported on the annual performance monitoring. Tom reviewed useful terms and acronyms. Performance Monitoring sites include:

- IR 1 Truman Annex Refuse Disposal Area
- IR 7 Fleming Key North Landfill
- IR 8 Fleming Key South Landfill
- SWMU 1 Boca Chica Open Disposal Area
- SWMU 2 Boca Chica Pesticide (DDT) Mixing Area
- SWMU 5 Boca Chica Sand Blasting Bldg. A.990
- SWMU 7 Boca Chica Former Hazardous Waste Storage Area building

A.824 Public access is restricted to all sites, thereby minimizing public exposure to chemicals of concern (CoCs).

# IR 1 . Truman Annex Refuse Disposal Area

Metals (primarily antimony) were detected slightly above Groundwater Cleanup Target Levels (GCTLs) in groundwater. Metals, polynuclear aromatic hydrocarbons (PAHs), PCBs, and a pesticide (DDE) were detected in sediment. Site conditions are stable; most CoCs are slightly above action levels.

# IR 7 . Fleming Key North Landfill

Arsenic was detected slightly above the GCTL in groundwater. Metals and a pesticide (DDE) were detected in sediment. There were single detections of iron and lead in surface water. Most CoCs are slightly above action levels.

# IR 8 . Fleming Key South Landfill

IR 8 is located northwest of the City's Wastewater Treatment Plant. There are two remaining groundwater sampling locations. Two metals (arsenic and thallium) were detected slightly above GCTLs.

# SWMU 1 - Boca Chica Open Disposal Area

Arsenic was detected above action levels in two monitoring wells. Detections in sediment include metals and pesticides (DDE, DDD, and DDT). Three metals were detected in the single surface water sample collected.

# SWMU 2 – Boca Chica DDT Mixing Area

Metals and pesticides (DDE, DDD, and DDT) were detected in sediment. Manganese, a metal, was detected in one surface water location, but was also detected in a laboratory blank, which could be indicative of laboratory contamination, rather than an actual detection from SWMU 2.

# SWMU 5 - Boca Chica AIMD Sand Blasting Building A.990

Arsenic and cadmium were detected in sediment; CoCs in sediment were slightly above action levels. Nickel and thallium were detected in a single surface water sample.

# SWMU 7 - Boca Chica Former Hazardous Waste Storage Area Building A.824

Metals and pesticides (dieldrin and DDE) were detected in sediment. Two metals (iron and lead) were detected slightly above action levels.

Most CoCs detected were slightly above action levels, but remain at levels that warrant annual monitoring. The next annual monitoring event is scheduled for January 2010. The Navy will implement a base wide optimization plan to streamline sampling events, assess the bioavailability of each CoC, determine the CoC structure by matrix in the environment, and examine pathways for exposure including evaluating potential receptors of CoCs.

#### Questions

In regards to the thallium hit at SWMU 5, a citizen asked what exactly thallium is. Tom Spriggs stated that he would get an answer for her. The representative from NOAA asked what sediment action levels are being used and what the ratio of DDD/DDE/DDT is at SWMU 2. Tom will look into this.

### **General Environmental Awareness Brief**

Ed Barham from NAS Key West presented information on the Environmental Management System (EMS) for NAS Key West. NAS Key West's EMS provides a framework for consistently addressing and resolving environmental issues before they become problems and establishing measureable environmental objectives and targets that lead to continually improving environmental performance at NAS Key West. The environmental objectives and targets include the following:

Objective	Target
Meet State Wastewater Standard	Meet the wastewater treatment standards by July 2010
Solid Waste Reduction	Reduce solid waste 10% and increase recycling 10% by end of FY 2010
Reduce Chemical Usage	100% identification of and 5% reduction in chemical usage of toxic and hazardous chemicals by end of FY 2010
Reduce Energy Consumption	Improve energy efficiency and reduce energy consumption 3% annually through FY 2015

NAS Key West published its intentions and principles for its overall environmental performance through its Environmental Policy. Highlights of the Environmental Policy include:

- Our commitment to continual improvement
- Our commitment to comply with environmental regulations
- Our commitment to ensure objectives and targets are met
- Our commitment to preserving our natural and cultural resources
- Our commitment to communicate to the public that we care about the environment

NAS Key West is working toward continual environmental improvement and currently recognized as leaders in Natural Resource Stewardship. More information about NAS Key West's Environmental Management System can be found at:

# www.cnrse.ems.org/env.keywest

# **Meeting Adjournment**

Ron thanked everyone for coming to the meeting. These Restoration Advisory Board meetings are held once a year. Ron asked for potential topics for next year's RAB meeting; none were suggested.

Ron reported that records are available at the Monroe County Library. The NAS Key West Public Affairs Officer may be contacted at 305.293.2425 to answer any questions the public may have.

Ron adjourned the meeting at approximately 9:00 PM.