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RESTORATION ADVISORY BOARD MEETING MINUTES 7 MARCH 2016 NCBC GULFPORT MS

3/7/2016

RESTORATION ADVISORY BOARD

Restoration Advisory Board Meeting

March 7, 2016

Isiah Fredericks Community Center
3312 Martin Luther King Blvd
Gulfport, MS 39501

Meeting Outreach and Attendance

In addition to announcing the meeting on the NCBC Gulfport Environmental Restoration Program public website (http://go.usa.gov/ZVGV) a meeting announcement (shown to the right) was placed in the Sun Herald newspaper.

NCBC Gulfport Restoration Advisory Board (RAB) Meeting

Update on Environmental Restoration Activities at NCBC Gulfport

When? Monday, March 7, 2016
6 :30 - 8:00 PM

Where? Isiah Fredericks Community Center
3312 Martin Luther King Jr. Blvd
Gulfport, MS 39501

Information will be presented in a poster session format. Please feel free to arrive any time during the meeting for discussions with the NCBC Gulfport Environmental Restoration Program project team.

For more information please contact Gordon Crane:
Phone: 228-229-0446
E-mail: gordon.crane@navy.mil
Website: http://go.usa.gov/ZVGV

RAB
Gulfport, Mississippi

A meeting flyer was also mailed to everyone on the Restoration Advisory Board mailing list.

Meeting Format and Content

The February 2015 RAB meeting was presented in a poster session format to provide an opportunity for community members to engage in an informal dialogue with the project team.

Fifteen presentation boards were on display at the RAB Meeting. In addition, fact sheets and handouts were available for further information. The three topics presented included:

- Environmental Restoration Activities at the Disaster Recovery Disposal Area (Site 1) & the World War II Landfill (Site 2)
- Previously presented background information on Sites 1 & 2
- The Chronology of Herbicide Orange at NCBC Gulfport

Meeting Attendees

RAB Members:
David Marshall (Alternate Community Co-Chair)
Gordon Crane (NCBC Gulfport Representative)
Skip McDaniel (Community Co-Chair)
Joyce Shaw
Philip Shaw
Bob Fisher (Naval Facilities Engineering Command)

Community Members:
Ruth Story

NCBC Gulfport Representatives:
Lisa Noble (Environmental Manager)

Technical Support:
William Olson (Tetra Tech Lead Geologist)
Greg Roof (Tetra Tech Project Manager)
Nancy Rouse (Tetra Tech Community Relations Specialist)

Updated Posters Presented at RAB Meeting

Herbicide Orange and Dioxins at NCBC Gulfport

1968 – 1977 During the Vietnam war, the United States Air Force used a 30-acre area located in the central portion of NCBC Gulfport for the storage and handling of Herbicide Orange in 55-gallon drums. Some of the drums leaked over time.

1970 In April 1970, the United States Environmental Protection Agency banned the use of Herbicide Orange. The Air Force continued to store Herbicide Orange on NCBC Gulfport until 1977.

1977

In June of 1977, the remaining herbicide was removed from the drums and transported to the Port of Gulfport by train to the incinerator ship *Vulcanus* on which it was incinerated at sea.

The Air Force completed a post-removal investigation in 1977. Concentrations of dioxins found were lower than one part per billion – EPA's action level for soil and sediment at that time.

1984 Studies of Site 8, the Former Herbicide Storage Area and associated ditches, found dioxins in soil and sediment at levels higher than one part per billion.

Revised March 2016

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1987–1988 The Air Force incinerated the dioxin-contaminated soil at Site 8 to reduce dioxin levels to meet EPA's regulatory level of one part per billion (ppb). Approximately 27,000 cubic yards of soil were incinerated.

Ash generated by the incinerator was stored within a fenced area on Site 8.

1990 Mississippi established a new, stricter standard for dioxin of 4.26 parts per trillion (ppt) based on health studies.

1994 Routine environmental sampling revealed the need to further investigate possible dioxin contamination on NCBC Gulfport.

1995

Further investigation found dioxin-contaminated sediment in the ditches north of NCBC Gulfport. Nearly 250 tons of dioxin-containing sediment were removed from the ditches.

Sediment recovery traps (SRTs) were installed to slow the flow of sediment from the base through the ditches. The Navy later collected samples to verify the effectiveness of the SRTs.

1996

A neighborhood survey of over 800 residents was completed as the first step to determine if dioxin contamination could be causing health effects.

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1997-2001

Extensive soil, sediment, and surface water sampling was completed both on and off base to determine where dioxin was present and in what concentrations.

1999

Studies of local fishing habits were done to gain a better understanding of how fish were caught and eaten in the areas near NCBC Gulfport.

Fish were also collected and sampled to test for dioxins. The fish were found to be safe to eat.

1999

Groundwater was sampled on the base. Results showed that dioxin was not leaving the base in the groundwater.

2001

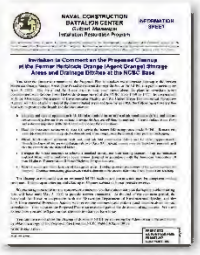
A Human Health Risk Assessment shows a possible health risk if someone were to live on Site 8 or the affected ditch system.

An Ecological Risk showed that potential ecological impacts due to the presence of dioxins would be eliminated by the anticipated remedy.

An engineering and a Feasibility Study were performed to begin the process of identifying a suitable cleanup approach.

2002

The recommended cleanup approach was presented at a public meeting in April 2002. Feedback from the community was received during a 60-day public comment period that followed the meeting. Community feedback included requests for a public health assessment and further sampling north and south of the base.



NAVAL CONSTRUCTION BATTALION CENTER
Gulfport, Mississippi
Installation Restoration Program

INFORMATION SHEET

Invitation to Comment on the Proposed Cleanup of the Former Herbicide Orange (Agent Orange) Storage Area and Drainage Ditches at the NCBC Base

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Herbicide Orange and Dioxins at NCBC Gulfport

2003

Results of the additional off-base sampling (requested during the Public Comment Period) were presented in January 2003. No evidence of dioxin contamination from Site 8 was found.

A Public Health Assessment was initiated by the Agency for Toxic Substances and Disease Registry (ATSDR). A public meeting was held in October 2003.

A Remedial Design developed the cleanup plans, which included bringing all dioxin-containing material to Site 8, stabilizing it with Portland cement, spreading and compacting the mixture on Site 8, and covering the material with a concrete layer.

2004

The off-base cleanup began with construction of a haul road and clearing of trees.

Based on information from a community member a concurrent investigation was initiated on the west side of Canal Road just north of the base. Low concentrations of dioxins were found.

2005

Cleanup north of the base continued with excavating dioxin-contaminated sediment, transporting it to Site 8A on NCBC Gulfport, and stabilizing it with Portland cement.

The cleanup was interrupted by Hurricane Katrina. Samples were collected immediately after the storm to assess movement of dioxin-containing material as a result of the storm.

The Navy formed a Wetlands Restoration Committee to guide the post-cleanup wetlands restoration effort. The committee included community leaders and wetlands experts.

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2005

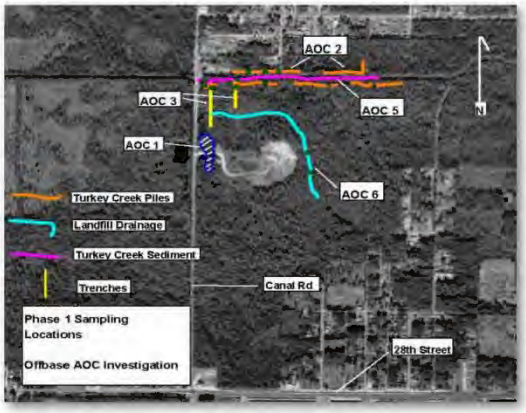
The Public Health Assessment was finalized by the ATSDR in 2005. The report indicated that past exposures to dioxins in soil and sediment off-site did not result in harmful exposures and that current and future exposures did not pose a public health hazard.

2006

Samples were collected from Dredge Piles located along Canal Road. Dioxin concentrations were lower than levels acceptable at industrial sites, but higher than acceptable in residential locations. In response, the Navy began plans to remove the dioxin-containing soils from the dredge piles.

2007

The off-base excavation and restoration was completed. The contaminated material was placed on the Former Herbicide Orange Storage Area (Site 8) and mixed with Portland cement. The stabilized material is then covered with 12 inches of clean concrete.



Sampling of six additional Off Base Areas of Concern began in September 2007. These additional areas of concern were identified by community members.

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2008

The Canal Road Dredge Pile cleanup began with building a road to access the piles.

Approximately 6000 tons of contaminated soil was excavated and transported to Site 8B.

Excavated soil was stabilized by mixing it with Portland cement and spreading it in uniform layers. More than three acres of Site 8B were stabilized.

2009

Results of Off Base Areas of Concern sampling are reported in March 2008. Additional sampling of four of the areas was recommended.

Off Base Area of Concern sampling continued with the collection of a second phase of surface water, sediment, and soil samples. No significant levels of dioxins were found.

Four permanent groundwater wells were installed and sampled off base. No dioxin related to Herbicide Orange was found in the groundwater.

2011

A Five-Year Review of Site 8 was completed. The review found the remedy to be protective of human health and the environment at that time.

2012

The Long Term Monitoring Program began in March 2012 with the collection of groundwater and sediment samples from four monitoring wells and sediment samples from a drainage feature downstream of Site 8.

In July 2012 sediment samples collected at a nearby site (Site 7) contained dioxin. In response, sediments removed during ditch maintenance activities were stockpiled on Site 8B for further evaluation.

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2013

A fence was installed around Sites 8B and 8C to prevent unauthorized use of the site.

Sampling in January found dioxin in a sediment sample collected from a ditch located northeast of Site 8A. Further sampling found dioxin in ditch sediments that were stockpiled at Site 8B and in sediment samples from Sites 8B and 8C.

Sediment data from Site 8B and Site 8C indicated that the selected remedy for these areas (Long Term Monitoring and Land Use Controls) would not continue to be protective of human health and the environment. However, samples collected for Site 8A indicated that the remedy for that area (solidification of dioxin containing material and capping) continued to be protective and was functioning as designed.

2014

Four off-base wells were sampled for dioxin. Only very low concentrations (below the target remediation goal) were found.

2015

A sediment stabilization treatability test was conducted on the stockpiled sediment at Site 8B.

Maintenance of the perimeter ditch around Site 8A included brush removal and rip rap repair.

A Remedial Action Optimization Study confirmed that the selected remedy for Site A was protective of human health and the environment, but that additional work was needed to ensure that contaminants remain on Site 8B and Site 8C.

A pilot study was conducted to follow the treatability study of the stockpiled sediment at Site 8B. This pilot study involved successfully stabilizing 7700 tons of sediment on 3.5 acres at the southwest end of Site 8B.

Example of a Solar Panel Farm

Planned use of Site 8A was changed from vehicle storage to a solar panel farm.

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