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RESTORATION ADVISORY BOARD MEETING MINUTES 30 JANUARY 2017 NCBC
GULFPORT MS
1/30/2017
RESTORATION ADVISORY BOARD

RESTORATION ADVISORY BOARD MEETING: PUBLIC AVAILABILITY SESSION

JANUARY 30, 2017
6:00 – 7:30 PM

ISIAH FREDERICKS COMMUNITY CENTER
3312 MARTIN LUTHER KING BLVD
GULFPORT, MS 39501



Meeting Outreach

NCBC Gulfport Restoration Advisory Board (RAB) Meeting

—Topics—

Update on Environmental Restoration at Building 398

Solar Panel Project on Site 8 Cap

Public Input on Community Involvement Plan Update

When? Monday, January 30, 2017
6:00 - 7:30 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>

A meeting announcement (shown on the left) was placed in the *Sun Herald* on Sunday, January 29, 2017.

Flyers (shown on the right) were mailed to the interested parties on the RAB mailing list.

- Meeting Announcement -

Restoration Advisory Board (RAB) NCBC Gulfport

- Key Topics -

Update on Environmental Restoration at Building 398

Solar Panel Project on Site 8 Cap

Public Input on Community Involvement Plan Update

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

When: Monday, January 30, 2017
6:00 - 7:30 PM*

* Topics will be presented in a poster session format. Please arrive any time between 6:00 and 7:30 PM to discuss topics with project scientists and engineers.



Meeting Format

The January 2017 RAB meeting was presented in a poster session format to provide an opportunity for community members to engage in an informal dialogue with project team members.



Twelve presentation boards were on display at the RAB Meeting. In addition, fact sheets and handouts were also available for further information. Poster stations included the following:

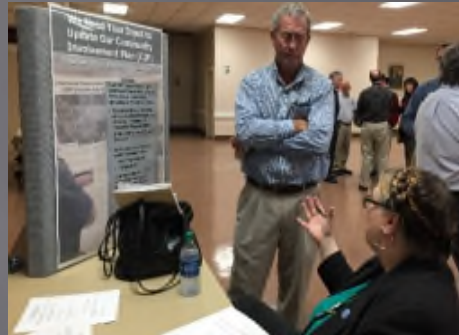
- ▣ Update on Environmental Restoration at Building 398
- ▣ Solar Panel Project on Site 8 Cap
- ▣ Chronology of Herbicide Orange at NCBC Gulfport
- ▣ Public Input on Community Involvement Plan Update



Summary of Discussions

Solar Panel Project on Site 8 Cap:

Community members expressed interest in the solar panel project and thought it would be an interesting topic to discuss at future meetings.



Community Involvement Plan Update:

Community members were asked to provide input into the Community Involvement Plan that was being updated at the time of the meeting. All interviewed stated they felt the level of community involvement is appropriate to this stage of the Environmental Restoration Program (ERP). Additional comments and recommendations provided at the meeting included the following:

- Continue announcing meetings in the newspaper and by mail.
- Consider a periodic newsletter as done in the past (i.e., prepare meeting announcements as a one-page “newsletter” with the meeting details on the back).
- Mail meeting announcements earlier (so that they arrive at least one week ahead of the meeting).
- Continue to post information about upcoming meetings and ERP progress on the NCBC ERP public website at <http://go.usa.gov/ZVGV>.
- Print the website URL and contact information on a card that can be handed out at meetings.
- Implement a mechanism to send an email alert when new content or meeting announcements are placed on the website.
- Use social media to update the public on progress.

Meeting Attendees

RAB Members:

Philip Shaw

Joyce Shaw

Dave Marshall

Jimmy Crellin (Mississippi Department of Environmental Quality)

Skip McDaniel (RAB Community Co-Chair)

James (J. D.) Spalding (Navy Community Co-Chair)

Gordon Crane (NCBC Gulfport Representative)

Community Members:

Christine Brice

Hendrick Casey

Councilman Truck Casey, Sr.

Peter Hour

Julie Johnson

Mattie Jordon

Ruth Strong

NCBC Gulfport:

Kevin Gillam (Community Liaison)

CDR Matt Gunderson (NCBC Gulfport Public Works Officer)

Lisa Nobel (Environmental Director)

Technical Support:

Dave Felter (Resolution Consultants)

Jon Overholtzer (CH2M)

Jeff Parillo (Resolution Consultants)

Greg Roof (Tetra Tech Project Manager)

Nancy Rouse (Tetra Tech Community Relations Specialist)

Eric Tidquist (Resolution Consultants)

Building 398 Fuel Spill

Naval Construction Battalion Center

Gulfport, Mississippi

The Building 398 site is an active service station located on the north portion of the Naval Construction Battalion Center (NCBC) in Gulfport, Mississippi.

Between 1997 and 2003, fuel dispenser islands and two 12,000-gallon aboveground storage tanks (ASTs) were installed. Similar to a retail service station, Building 398 is used to refuel NCBC fleet vehicles and heavy equipment.



Timeline of Events

2006 Reported releases of approximately 50 to 100 gallons of JP-8 (kerosene-based fuel) and 50 gallons of diesel fuel from leaks in underground fuel piping running from the ASTs to the dispenser island.

Investigations show soil and shallow groundwater impacted by benzene, toluene, ethylbenzene, and xylenes (BTEX), and polyaromatic hydrocarbons (PAHs). Groundwater flow direction in the site area determined to be to the west-southwest.

2007 Removal 500 tons of contaminated soil near the ASTs and 16,500 gallons of petroleum-contaminated water and free product from the excavation pit.

Residual soil contamination and free product remained in excavation.

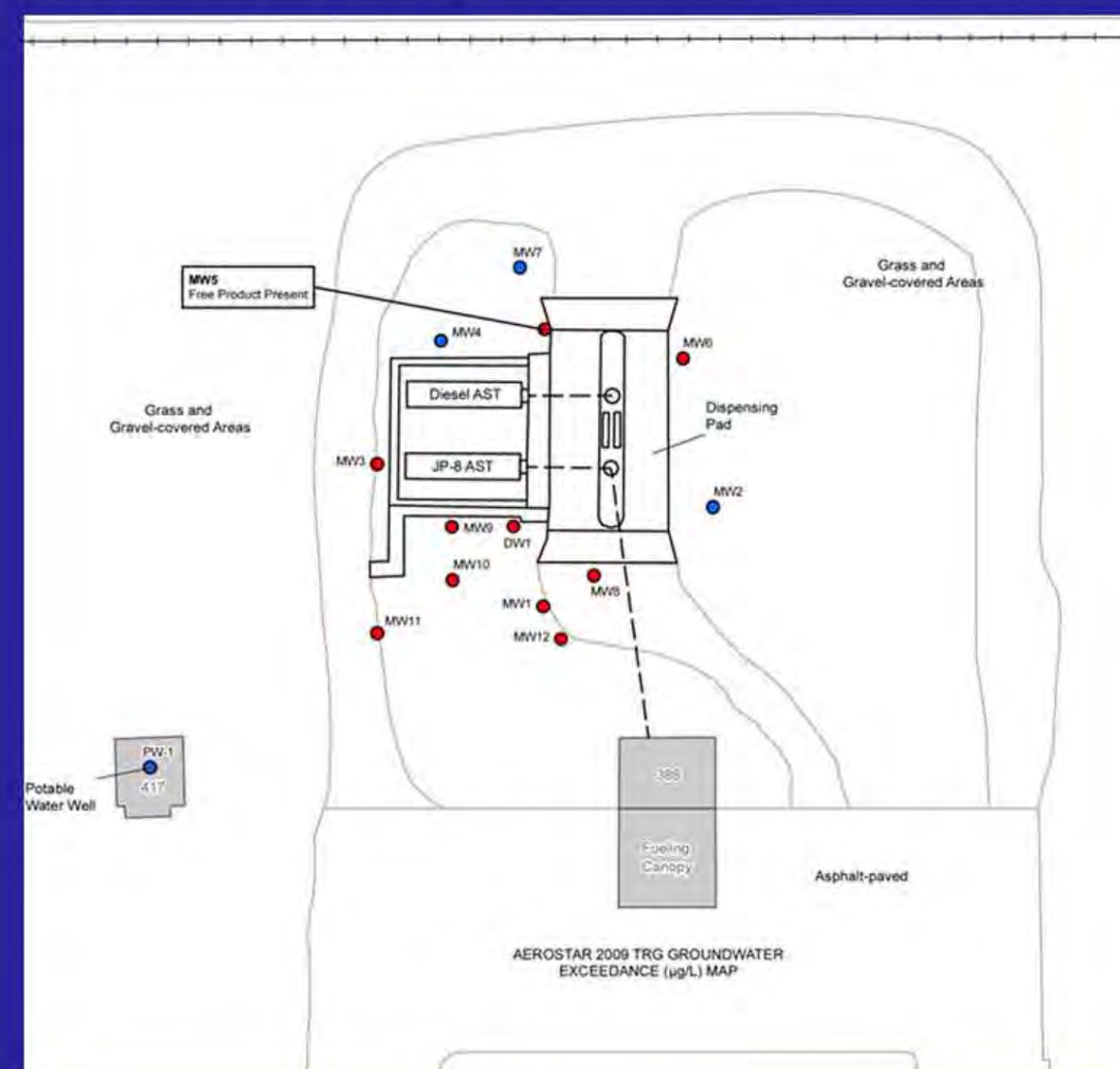
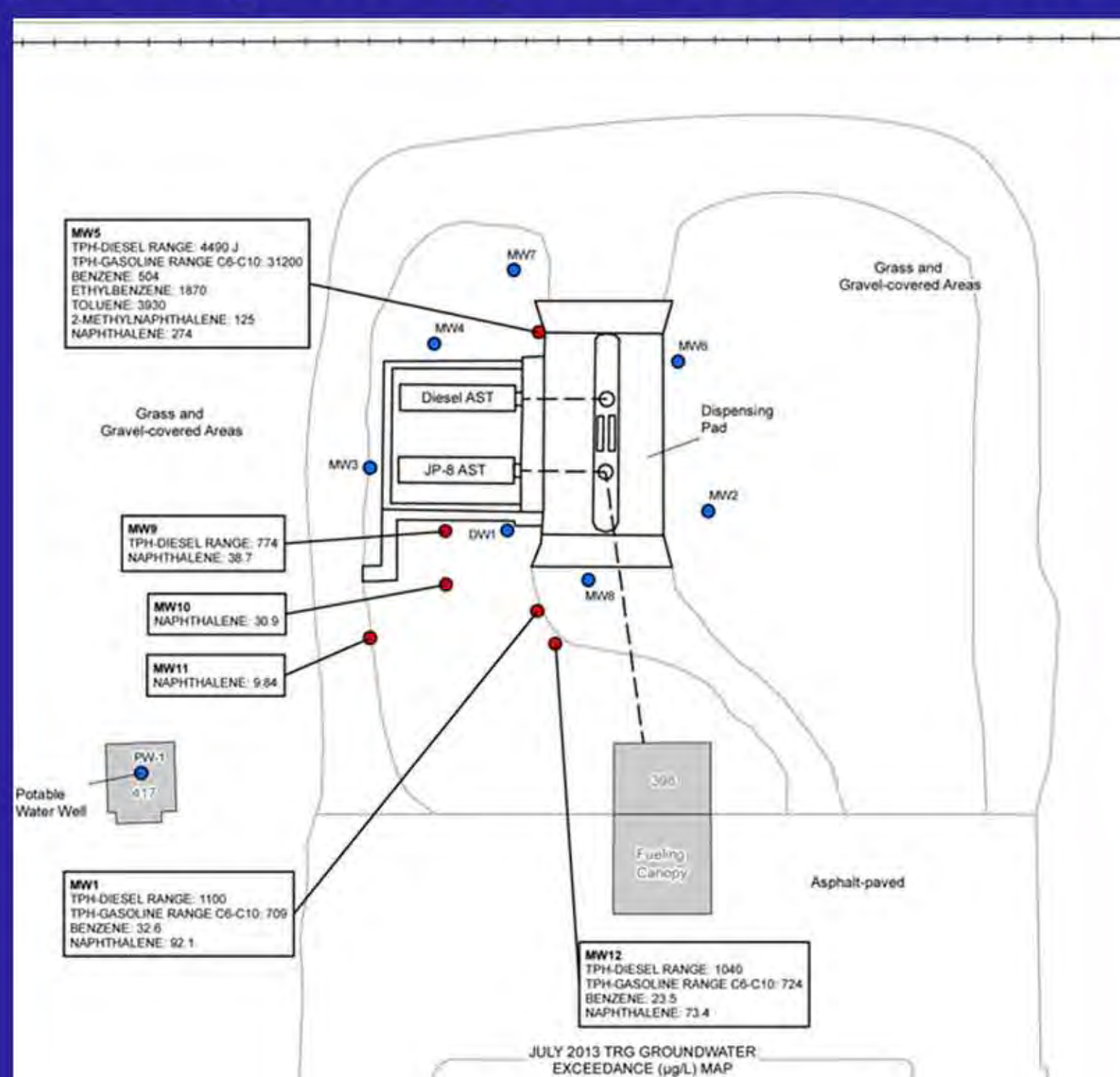


Building 398 Fuel Spill Naval Construction Battalion Center Gulfport, Mississippi

Timeline of Events (cont.)

2009 Subsurface investigation shows approximately 2 inches of free product in one well (MW-5) and a groundwater plume centered on the ASTs.

2013 Subsurface investigation shows no measurable free product and improvement of groundwater quality compared to 2009.



2014 Installation of in-situ Oxygen Release Compound (ORC) Advanced, to provide a controlled release of oxygen in the subsurface environment, accelerating the rate of naturally occurring aerobic biodegradation of soil contaminants.



2015 Subsurface investigation following AST system upgrades (including canopy installation and product line replacement), shows approximately 4.5 inches of free product in MW-5 and degradation of shallow groundwater quality compared to 2013.



Building 398 Fuel Spill Naval Construction Battalion Center Gulfport, Mississippi

Timeline of Events (cont.)

2016 Two additional wells installed downgradient of contaminant plume and all monitoring wells sampled.



Analytical results showed an overall improvement of groundwater quality since 2015. Approximately 1 inch of free product was present in MW-5 and petroleum contaminants were above regulatory limits (MDEQ Tier 1 Target Remediation Goals) in five other monitoring wells, predominantly in the hydraulically downgradient direction. The two new wells were below regulatory limits, resulting in definition of the contaminant plume in all directions.

SUMMARY AND CURRENT STATUS

Petroleum contamination from fuel releases in 2006 is confined to soil and groundwater immediately surrounding the fuel tanks.

Contamination has not impacted others areas of the base, drinking water sources, or off base properties.

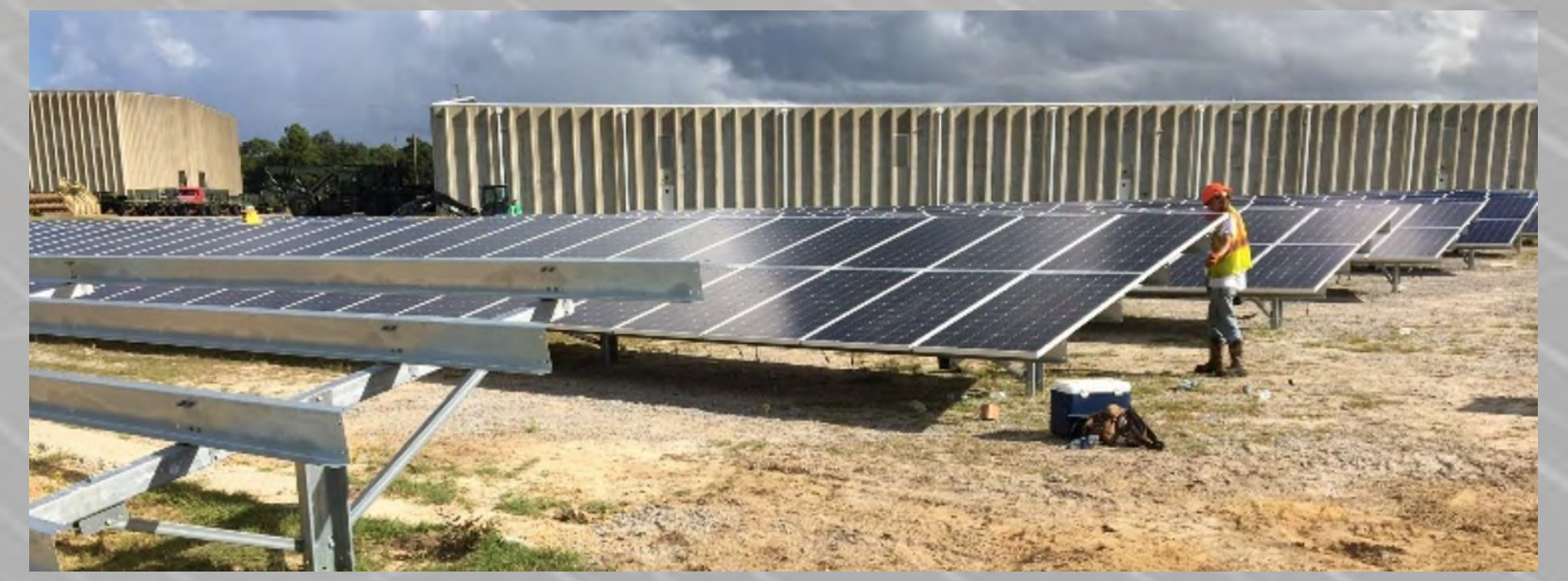
Remediation options are being evaluated to address the remaining residual contamination at Building 398. These options include various methods to recover free product from MW-5 and periodic groundwater sampling to monitor natural attenuation. Natural attenuation relies on natural processes such as biodegradation, evaporation, and dilution to decrease or "attenuate" concentrations of contaminants in soil and groundwater.

Solar Panel Installation on Site 8

Solar panels were recently placed over 14.9 acres within NCBC Gulfport boundaries.

Most of the panels (about 2/3) were placed on the Site 8A cap. The remaining panels were placed just north of the cap.

This new use of Site 8A was determined to be protective of human health and the environment.



Solar panels installed at NCBC Gulfport are capable of producing up to 4.2 megawatts during peak performance.

The area of the cap now used for solar power production was previously used for military vehicle storage. Deployed military personnel vehicles continue to be stored on the southernmost portion of the site.



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.

Herbicide Orange and Dioxins at NCBC Gulfport

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.



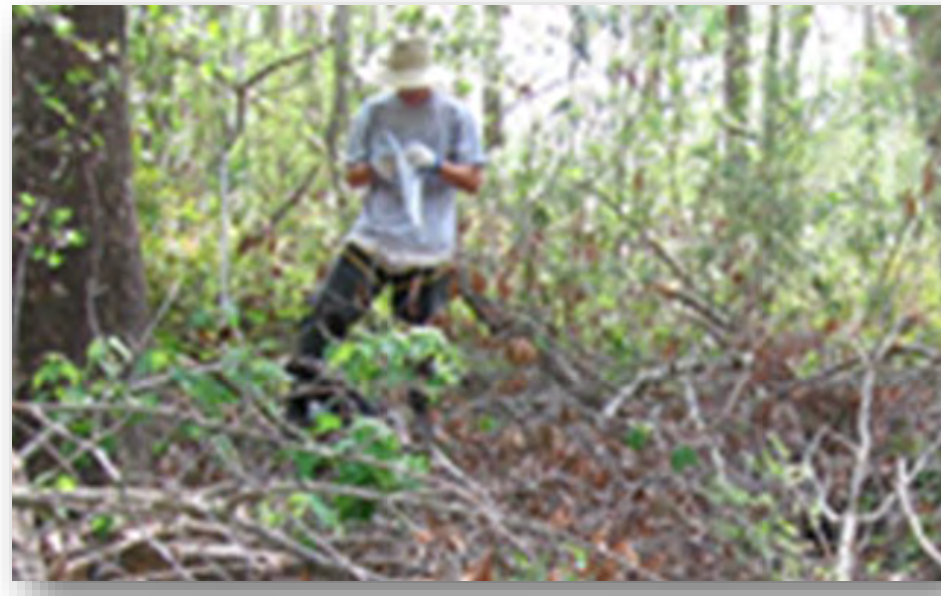
1996



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

Herbicide Orange and Dioxins at NCBC Gulfport

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.

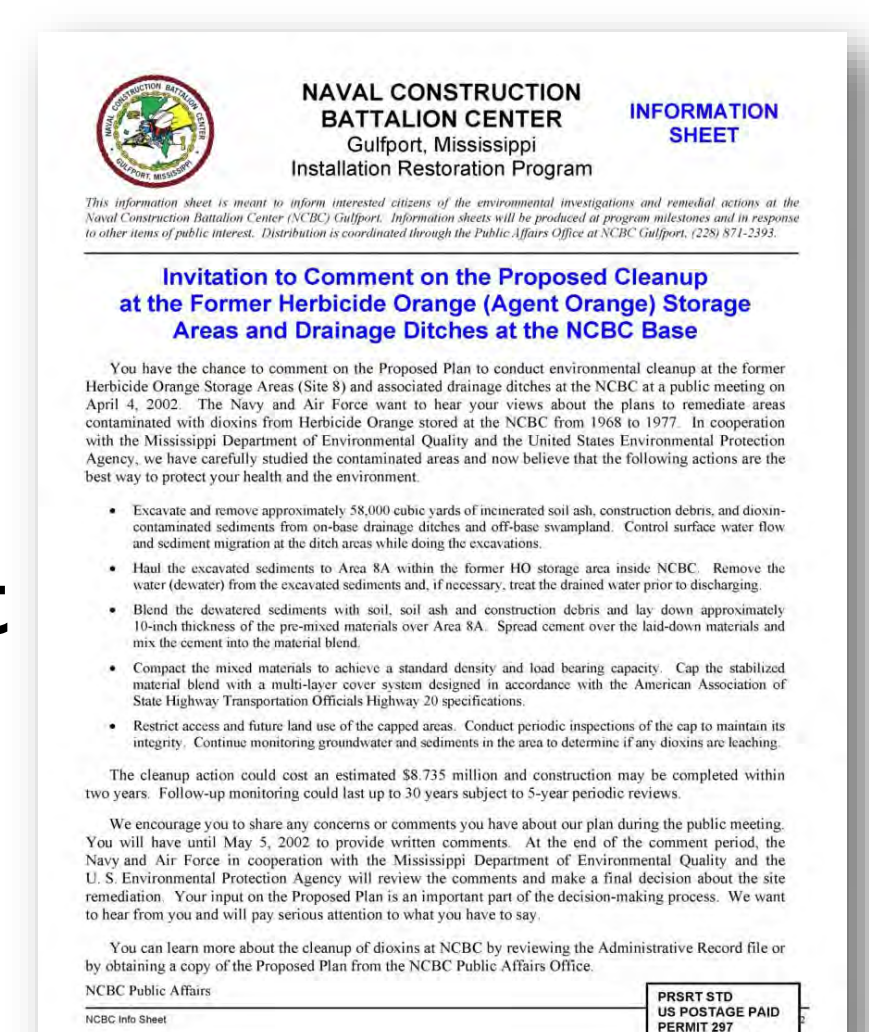
An Ecological Risk showed that potential ecological impacts due to the presence of dioxins would be eliminated by the anticipated remedy.



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.



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.



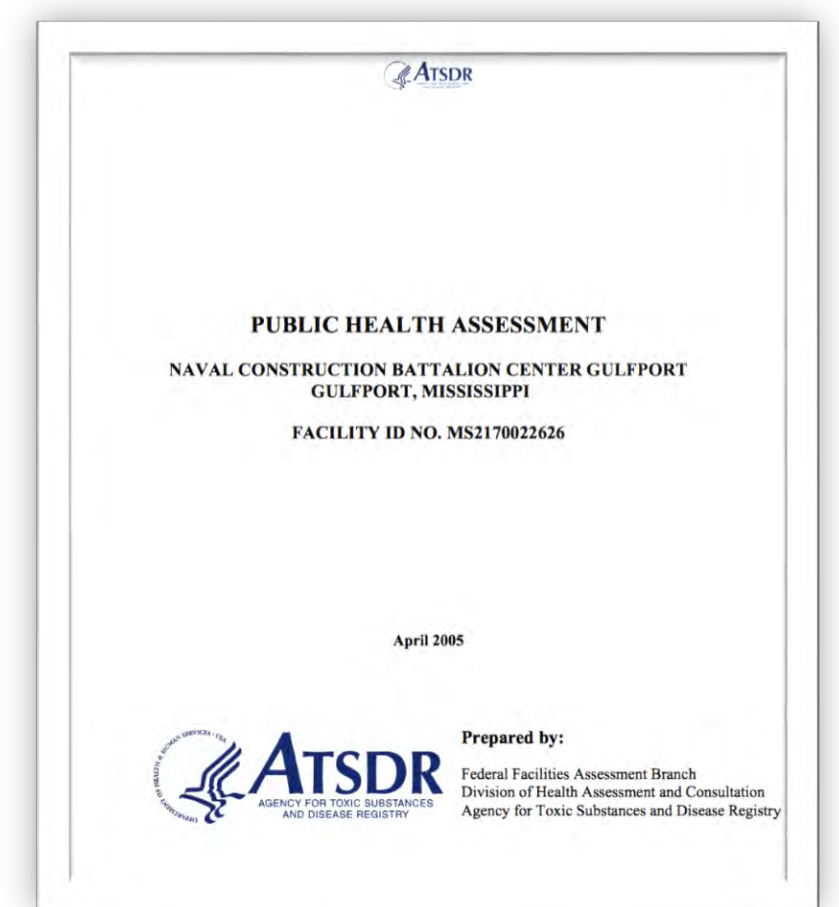
The cleanup was interrupted by Hurricane Katrina. Samples were collected immediately after the storm to assess movement of dioxin-containing material as a result of the storm.

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

Herbicide Orange and Dioxins at NCBC Gulfport

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.



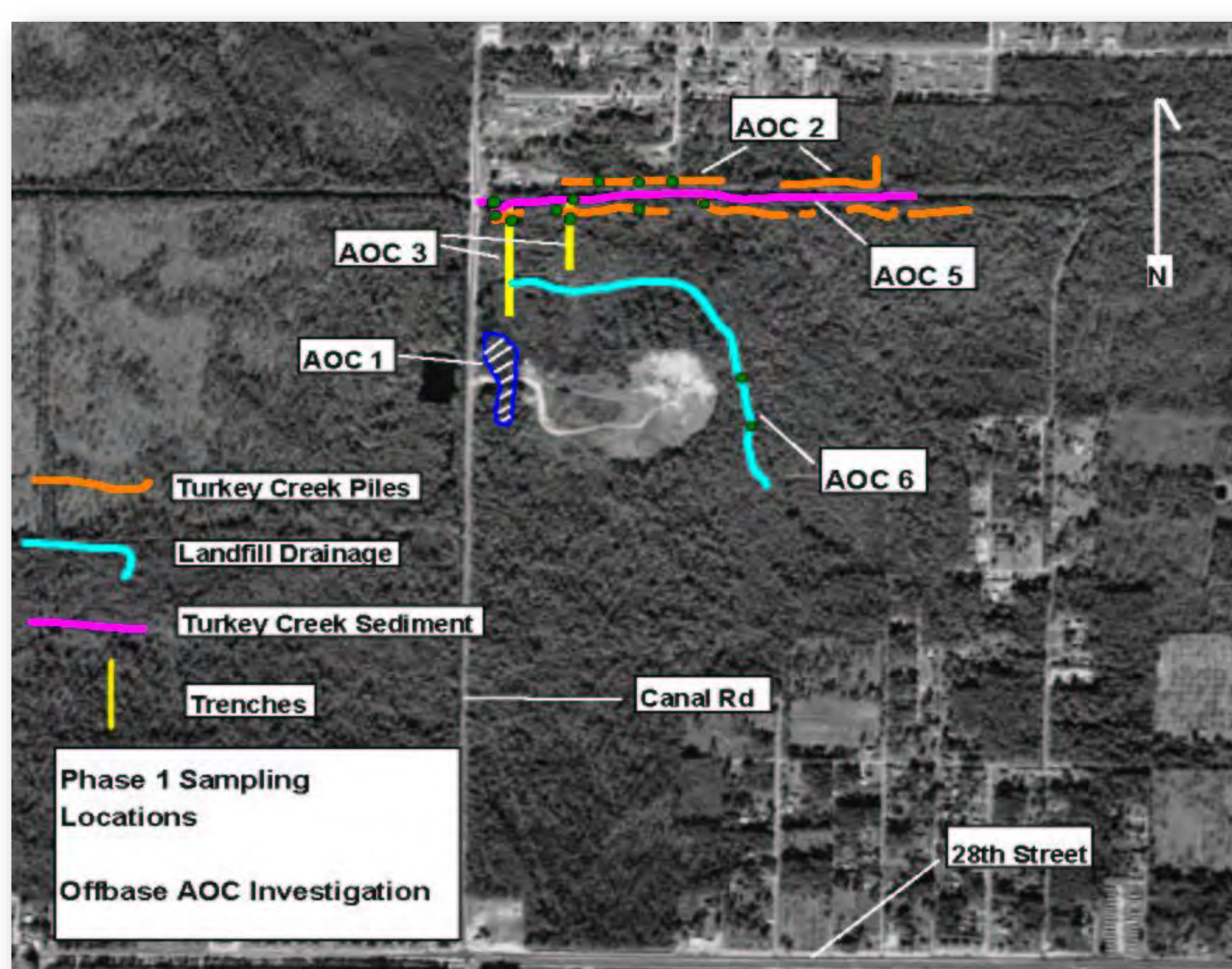
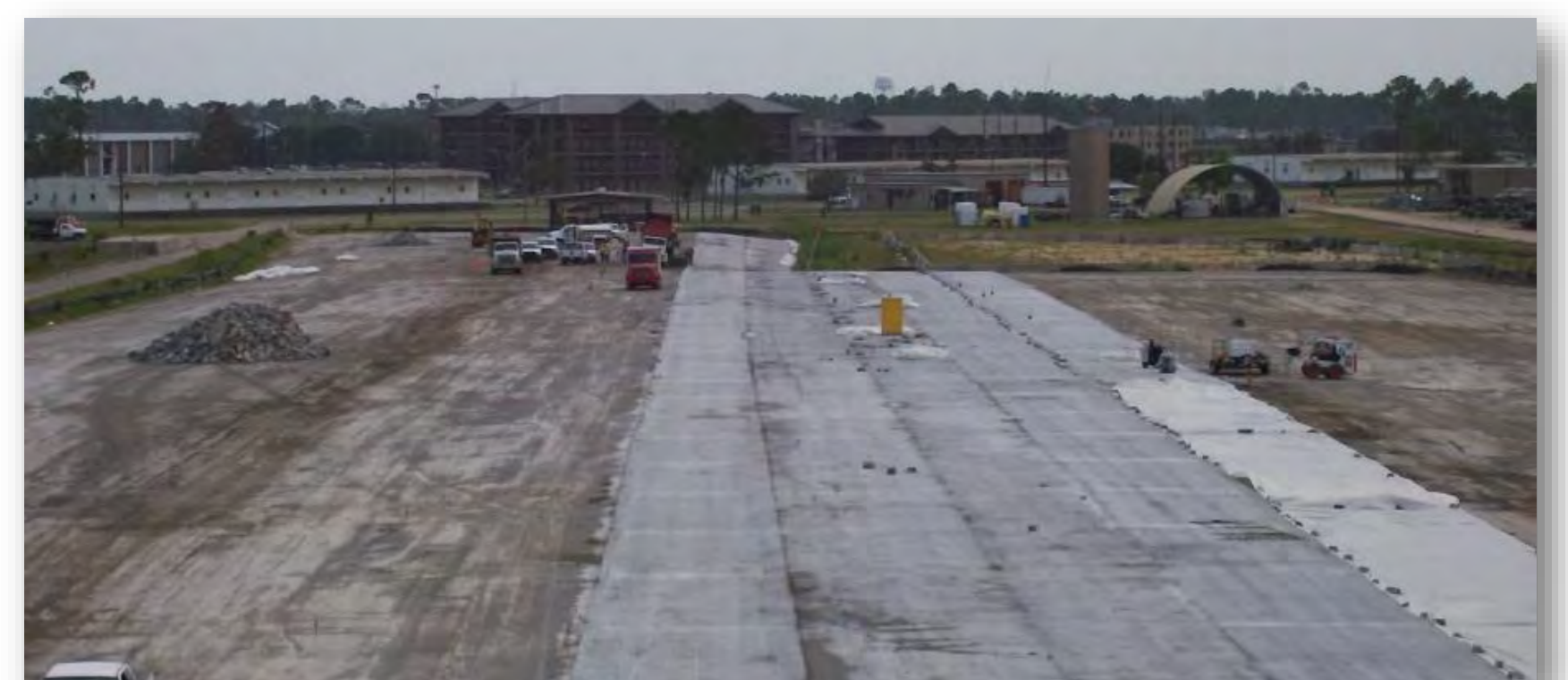
2006



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.

Herbicide Orange and Dioxins at NCBC Gulfport

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.

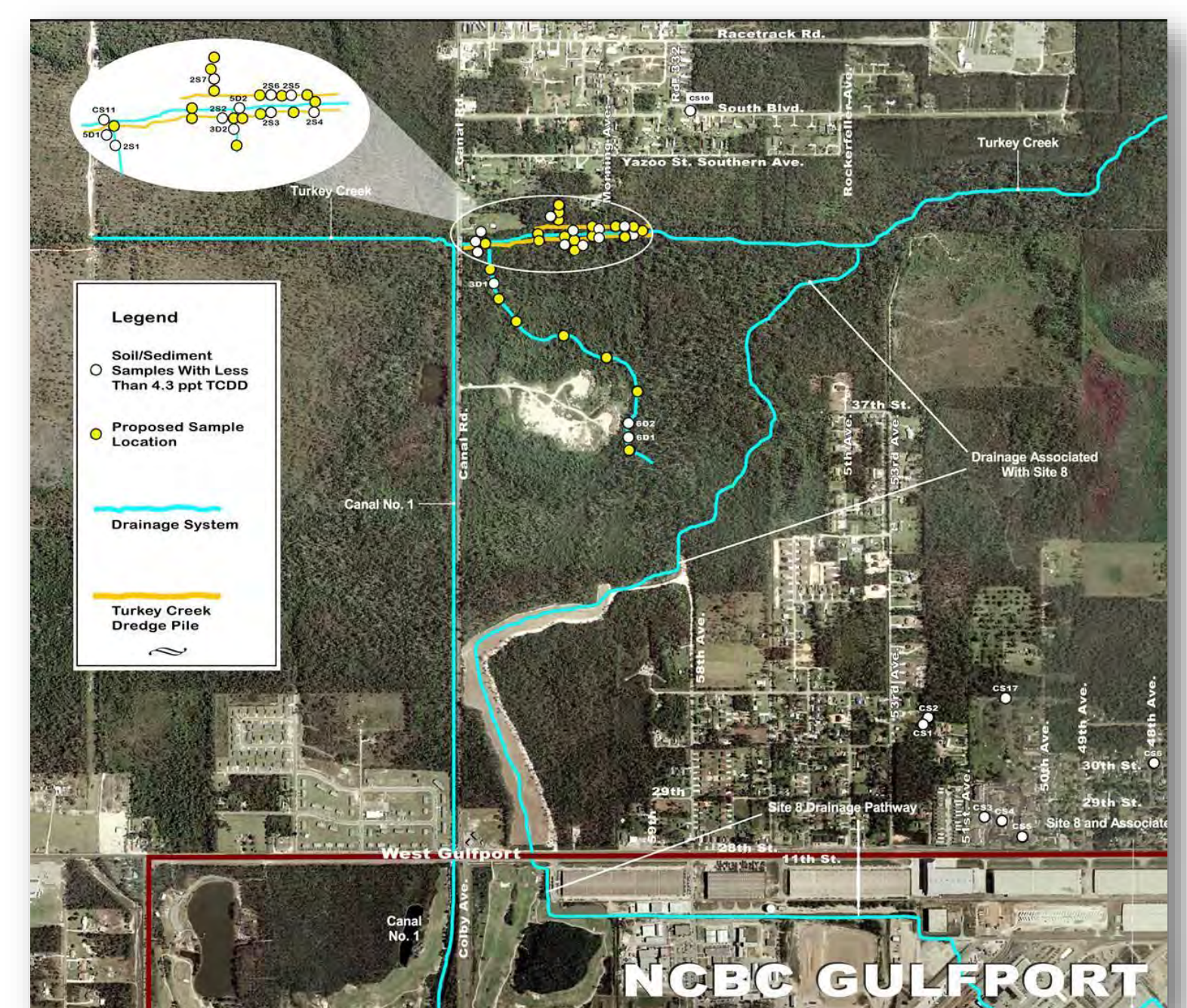
Excavated soil was stabilized by mixing it with Portland cement and spreading it in uniform layers. More than three acres of Site 8B were stabilized.



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.



Herbicide Orange and Dioxins at NCBC Gulfport

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.

We Need Your Input to Update Our Community Involvement Plan (CIP)

Please help us by completing a short questionnaire

The NCBC Gulfport Community Involvement Plan is being updated. Please help us by providing information on the following topics:

- Do you feel that we are doing enough to inform the community about our Environmental Restoration Program (ERP)?
If not, what do you think we can do better?
- What is your preferred way to receive information about:
 - Upcoming meetings?
 - ERP progress?
- Have you visited the NCBC Gulfport ERP website at <http://go.usa.gov/ZVGV>?
If so, do you think it is an effective tool for sharing information about upcoming meetings and ERP progress?

Thank you for your input!