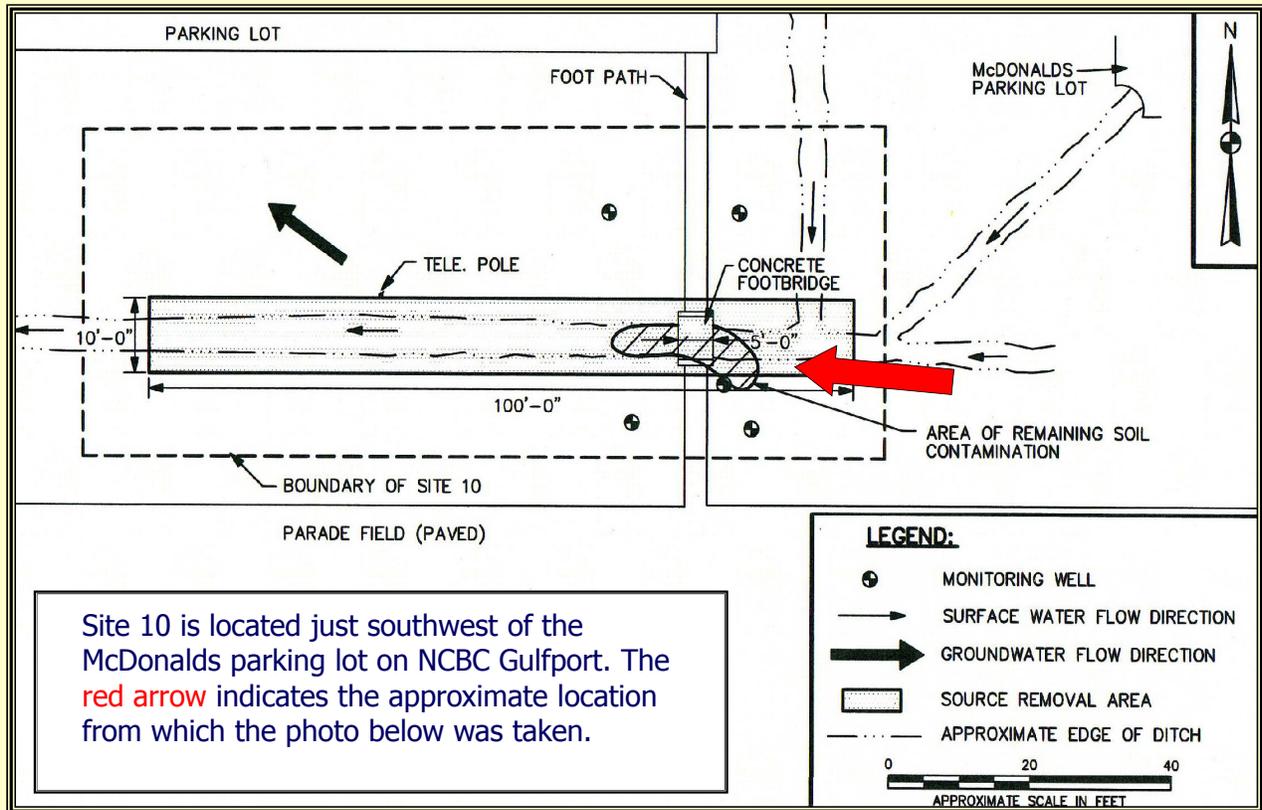


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FACT SHEET REGARDING REMEDIAL INVESTIGATION RESULTS AND CLEANUP
ALTERNATIVES SITE 10 NCBC GULFPORT MS
11/1/2007
NCBC GULFPORT

The Parade Field Ditch Site 10



The drainage ditch at Site 10 is approximately 10 feet wide, 80 feet long, and four feet deep. The most noticeable site feature is a foot bridge connecting the Parade Field on the left side of the bridge to the parking lot on the right.

Site 10 Facts

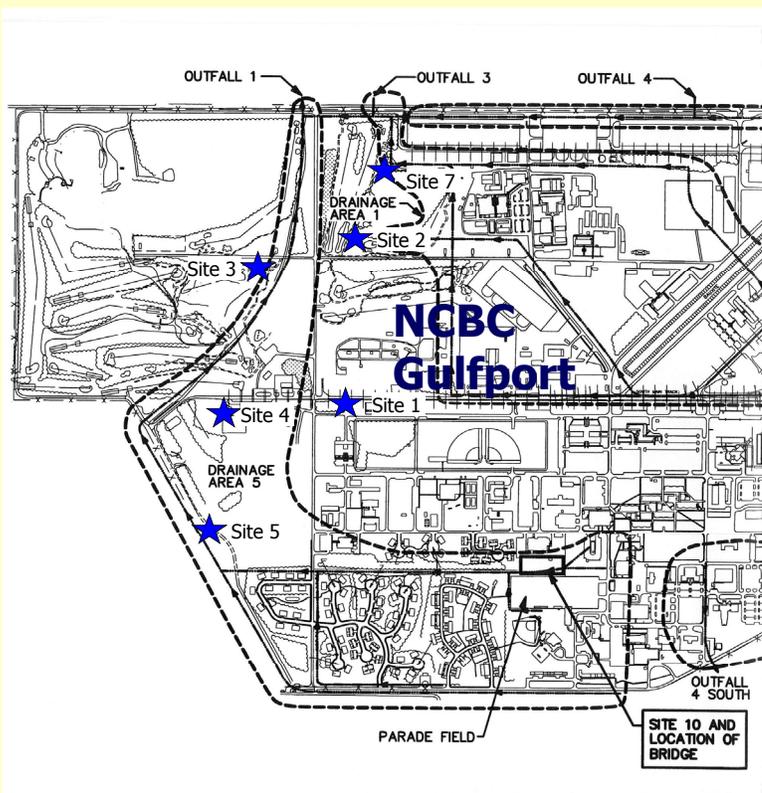
- The Parade Field Ditch site was discovered during a base-wide surface water and sediment study in 1997.
- This site is an 80-foot section of drainage ditch located in the south-central section of NCBC Gulfport that is bordered to the north by a parking area and to the south by the Parade Field.
- The types of PCBs found indicated that the source was old electric utility transformer oils.
- These findings prompted source removal excavations in 1999. Approximately 200 tons of sediment was removed from the vicinity of the footbridge.
- Sampling confirmed that the excavation successfully removed the PCB contamination from the surface of the ditch. However, it also showed that PCB contamination remained at depths below the ditch.

Remedial Investigation Results

Parade Field Ditch (Site 10)

The Remedial Investigation (RI)

- The RI involved collecting soil, sediment, surface water, and groundwater samples.
- The samples were collected and analyzed to determine the nature and extent of contamination remaining on Site 10. The RI also tested for other possible contaminants that could have been released at the site.
- The RI also included an evaluation of risks associated with the contaminants found at the site. Only PCBs were found to be at high enough concentrations to require cleanup.



Water from the Parade Field Ditch flows into Canal No. 1 which leaves NCBC Gulfport at Outfall 1, located near the intersection of Canal Road and 28th Street.

Polychlorinated Biphenyls (PCBs)



PCBs are a group of organic chemicals that are either oily liquids or solids and are colorless to light yellow. They have no known smell or taste. Because they do not burn easily and are good insulating materials, PCBs were used widely as coolants and lubricants in transformers, capacitors, and other electrical equipment.

Studies have linked PCBs with a number of different harmful effects, including certain types of cancer in humans. Based on the evidence for cancer in animals, the Department of Health and Human Services (DHHS) has stated that PCBs may reasonably be anticipated to be carcinogens. Both USEPA and the International Agency for Research on Cancer have determined that PCBs are probably carcinogenic to humans.

Remedial Investigation Sample Results

- PCBs were detected throughout the soil of Site 10 with concentrations ranging from 11 to 83,000 parts per billion (ppb). PCBs were found at depths up to 14 feet below the ground surface.
- PCBs were also detected in sediment at concentrations ranging from 65 to 710 ppb.
- PCBs were detected in one Site 10 surface water sample at a concentration of 1.1 ppb.
- In all, an estimated 450 cubic yards of contaminated soil/sediment containing 33 pounds of PCBs is present at Site 10
- PCBs were not detected in Site 10 groundwater.

Parts Per Billion

PCB concentrations in the soil are measured in parts per billion, or "ppb.". A ppb represents one part of PCB in 1 billion parts of soil. MDEQ uses 1 ppb as the action level for PCBs in soil.

Review of Cleanup Alternatives

The Parade Field Ditch (Site 10)

The Feasibility Study (FS) and Proposed Plan

- The FS evaluated four alternatives as potential cleanup remedies for Site 10.
- The Proposed Plan recommends Alternative 3, Concrete Cover, Land Use Controls, and Site Monitoring.

Alternative 1: No Action

- A no-action alternative is always used as a baseline for comparison with other alternatives.
- This option assumes that no changes would be made to the existing conditions at the site.

Alternative 2: Restricted Access

- Access would be restricted to prevent exposure to PCB-contaminated soil and sediment.
- Controls such as fencing would be used to limit access to PCB-contaminated soil.
- Site controls would include preventing residential development and posting signs to warn against unauthorized digging.
- Annual monitoring would be required.
- Every 5 years, the status of the site would be reviewed.



– The Preferred Remedy –

Alternative 3: Concrete Cover, Land Use Controls, and Site Monitoring

- PCB-contaminated soil would be covered with concrete to prevent contact with the contaminants.
- A 9-inch layer of concrete or a concrete culvert would cover roughly 85 feet of the ditch next to the NCBC Gulfport Parade Field.
- Approximately 27 square yards of soil next to the ditch would also be paved with concrete.
- A new pedestrian bridge would be constructed across the drainage channel.
- Land Use Controls would include preventing residential development and posting signs to warn against unauthorized digging.
- Periodic inspections and annual monitoring would be required to check the integrity of the concrete barrier.
- The status of the site would be reviewed once every five years.
- The Navy is recommending Alternative 3 because they believe it would be protective of human health and the environment and because it complies with all legal requirements and it has been shown to be cost-effective, implementable, and effective.

Alternative 4: Excavation and Disposal

- Alternative 4 would involve removing soil and sediment with PCB concentrations of greater than 1 ppb.
- After removing the soil, sampling would be used to confirm the successful removal of contaminated material.
- Excavated soil would be transported and disposed at a permitted off-site landfill (called a Treatment Storage or Disposal Facility).



Alternative 3, the **preferred remedy**, would include covering contaminated areas of the ditch and adjacent soil concrete and possibly lining the ditch with a concrete culvert.