



US Army Corps
of Engineers
Baltimore District

Poplar Island Environmental Monitoring

Dredged Material Management Plan Public Scoping Meeting Information Sheet

Authorizations Requiring Monitoring of the 1100-Acre Facility

Maryland Department of the Environment (MDE) issued the following to the Maryland Port Administration:

- Tidal Wetlands License
- Section 401 Water Quality Certification (96-WL-0728)

Monitoring During Construction

- Monitoring for turbidity (cloudiness) in the water during construction.
- MDE turbidity requirements must be met at the established monitoring area outside of construction limits.
- Turbidity meters on boats were used to measure the level of turbidity.
- Construction of Phase I and II were accomplished within the turbidity standards.

Monitoring During Operations

- Water quality monitoring occurs during the placement of dredged material at the site.
- Water released from the facility is tested daily for:

suspended solids	temperature
pH	salinity
turbidity	dissolved oxygen

- The discharge is monitored intermittently for nutrients, metals, organic chemicals and pesticides.
- Water quality samples were collected in 2001 and 2002 since operation of facility.

Monitoring During Operations

- Samples are collected at the spillways, stations 100 yards from the discharge weir, and reference stations.
- Allows comparison of water quality at various distances from the discharge point.
- Monitoring data is provided to MDE in quarterly reports.

Long-Term Monitoring

- Eleven stations around Poplar Island were established for the collection of baseline samples in 1995-96.
- Samples were taken again in 2001 at these stations as dredged material placement occurred and will continue with samples taken on monthly intervals.

Exterior Sediment Quality Monitoring

- Sediments are tested prior to placement at the site.
- Baseline sediment quality samples were collected in 1995-96 and analyzed for metals concentrations.
- Sampling in 2000 prior to the placement of the dredged material included a wider array of contaminants, including organics.
- Additional sediment sampling around Poplar Island will occur on an annual basis.
- These samples are analyzed for physical characteristics and contaminants.
- Data is reported annually to MDE.

Benthic and Tissue Monitoring

- Long-term monitoring of the animals living in the sediments adjacent to the island to monitor the health.
- Baseline values were generated for level of contaminants in their tissue, health of the community, and conditions they live in.
- Evaluations will be conducted annually and reported to MDE.

Habitat Value Monitoring

- Evaluation of the habitat that will be created at Poplar Island will be conducted for:
 - Wetlands created at the site.
 - Use of the wetlands and surrounding areas by fish and wildlife.
- Reference areas were established for comparison of habitat created to existing natural wetlands.
- Annual monitoring data will be reported .