Grand Calumet River Project

Location: Gary, Indiana

Site Issue: Contaminated sediments in the Grand Calumet River.

Solution: Dredge contaminated sediments and place in a Corrective Action Management Unit.

Client: U.S. Steel

Brief History

The Grand Calumet River flows through a heavy industrial area in Northwest Indiana and Northeast Illinois. High concentrations of large number of contaminants, including PCBs, volatile and semivolatile organics, and metals, have been detected in the river sediment.

U.S. EPA has issued an Administrative Order on Consent (AOC) covering a five mile stretch of the river. The AOC sets forth a multiyear Grand Calumet River Sediment Remediation Plan, which requires the performance of extensive sediment investigation, treatability studies, and remedial technology evaluation activities, as well as the design and implementation of a sediment removal program.

HE&C personnel are in the process of completing a number of the sediment investigation, technology assessment, and sediment removal study activities required by the Grand Calumet River Sediment Remediation Plan. HE&C personnel are supplying sediment removal and marine construction consulting services for the project. Other activities performed by HE&C personnel include:

Primary Activities Performed by HE&C Personnel

- Performed sediment sampling, bench-scale sediment settleability and dewatering tests, and water treatment jar tests.
- Provided services related to the sediment removal and corrective action management unit (CAMU) remedial design.
- Designed and constructed a one-of-a-kind test chamber to evaluate air emissions from dredging and sediment dewatering activities and prepare and implement a detailed emission testing program.
- Located and evaluated foundation conditions, earthwork requirements, and structural needs for downstream river access ramps.
- Evaluated and selected sites for dredging and remedial equipment decontamination activities and develop protocols and procedures.
- Evaluated foundation conditions for installation of bulkheads.
- Evaluated and selected a method for tie-ins of bulkheads to active industrial outfall to the river.

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