Proposed Sediment Cleanup Plan for East Chicago Waterways Public Meeting

June 25, 2015
Fernando Treviño, ECWMD
Diana Mally, U.S. EPA
Jim Wescott, Tetra Tech
Agenda

• Welcome - Fernando Treviño, ECWMD
• Past Work Summary – Diana Mally, U.S. EPA
• Project and Cleanup Options Review – Jim Wescott, Tetra Tech
• Community Comments
Past Project Work
Current Project Area – GCR/IHC
Project Summary

- Sampling & Remedial Investigation
- Feasibility Study
- Preliminary Design
- Final Design
- Phased Construction
RI/FS Tasks

Remedial Investigation

- Sediment Sampling
- Pore Water Sampling
- Source Control Evaluation

Feasibility Study

- Bathymetric and Topographic Surveys
- Geotechnical Sampling
- Clean Up Goals Development
- Remedial Alternative Screening and Evaluation
- Clean Up Alternatives
Proposed Cleanup Alternatives

- **Alternative 1: No Action**
- **Alternative 2: Removal of Contaminated Sediment**
  - Sediment would be dredged hydraulically
  - Floating equipment would be used to remove and transport sediment through a pipeline to a drying area
  - Sediment would then be transferred to an off-site landfill
- **Alternative 3: Containment**
  - Several types of capping materials would be used, depending on the conditions of the area, to capture and impede the movement of contaminants
    - Containment cap
      - Could include materials like clean sand and clay or an activated carbon layer covered by a protective layer of gravel
      - Prevents erosion
    - Multi-layer reactive cap
      - A containment cap that also includes a layer of reactive material
- **Alternative 4: Removal with Containment**
  - A combination of dredging and disposal of impacted sediment and containment of the remaining sediment
    - Removal as described in Alternative 2 would occur in areas where contaminant concentrations are too high or a steep slope would prevent a containment system to be installed
    - A containment cap or multilayer reactive cap as described in Alternative 3
Selection Considerations

• Cost
• Permits
• Site Access
• Utilities and other Debris
• Sediment Characteristics
• Long-Term Effectiveness
• Potential for Recontamination
• Future End Use
• Stakeholder and Community Acceptance
• West Branch – Alternative 4: Containment with Removal
• East Branch – Alternative 3: Containment
Indiana Harbor Canal

• Alternative 4: Containment with Removal
Lake George Canal

• East Section – Alternative 2: Removal
• Middle Section – Alternative 3: Containment
• West Section – Alternative 2: Removal
Typical Remedial Tasks
Time Frame and Costs

• Begin Dredging 2016

• Complete remedial action 2018 – 2020

• Cost Ranges from $61 Mil to $66 Mil

• Schedule heavily dependent on non-federal and federal funding

• Construction could be broken into smaller pieces to facilitate funding and stakeholder priorities
Questions?

Jim Wescott
Tetra Tech
jim.wescott@tetratech.com
312.201.7781
For More Information

Fernando Treviño  
ECWMD  
219-397-4362  
fmtconsulting@aol.com

Diana Mally  
U.S. EPA  
312-886-7275  
mally.diana@epa.gov

Copies of the Remedial Investigation/Feasibility Study and other documents about the project can be viewed at the following locations:

ECWMD  
4444 Railroad Avenue  
East Chicago

East Chicago Public Library  
2401 Columbia Drive  
East Chicago

Websites:   www.in.gov/ecwmd/          www.greatlakesmud.org
Community Comments

- Cleanup Options Comments
- Future Use Ideas