Ashland Superfund Site

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Foth Infrastructure & Environment
Site Location
Ashland Gas Works

History

62 Years of Gas Production
Superfund Project

- Superfund Program - started 1980
- Ashland Superfund Record of Decision (ROD) issued September, 2010.
- The ROD explained which cleanup alternatives to be used at the site.
Summary of Work

❖ Design/Build Project
  ➢ Building Demolitions, Slurry Wall,
  ➢ Bulkhead Wall,
  ➢ Soil Excavation, Soil Treatment
  ➢ Groundwater Extraction
  ➢ Water Treatment Plant
  ➢ Contaminated Sediment Cleanup
Multi-Year - Two Phases

Phase 1
- Chequamegon Bay (Lake Superior)
- Upper Bluff

Phase 2
- Klobuch Park
- Ashland Site Areas
Phase 1 Source Control

❖ Excavation: 90,000 tons
❖ Thermal Desorption: 70,000 tons
❖ Offsite Disposal: 20,000 tons
❖ Met All Soil Cleanup Standards
Soil Excavation and Treatment
Phase 2 Breakwater

❖ Primary Purpose
  ▸ Wave Barrier for 2016 Pilot Project
  ▸ Full-Scale Sediment Remedy Benefits
  ▸ Community Benefits
Breakwater Construction
Phase 2 Pilot Project
Pilot Project Work

- 40,000 square foot Pilot Study Dredge Area
- 8,000 cubic yards Removed
- 520 Truckloads to Sub-Title D Landfill
- 4 million gallons Water Treated
Pilot Project Successful!
Move to Full Scale
Phase 2 Dredging
Extensive Monitoring
Water Quality Results

- Over 10,000 samples analyzed
- >99.9% meet water quality standards
Enhanced Technologies

Multiple Barrier Curtain System

to contain work area impacts and protect Lake Superior

Vapor Phase Odor Control System
Sediment Pre-Project

SWAC = 409 ppm
Sediment Post Dredging

Meeting SWAC Performance Standard

Foth Envirocon
tPAH Mass Removal Summary

Estimated Mass Removal

- Pre-Project: 30,000 lbs. remaining, 0% mass removed
- Post-Mechanical End of 2017: 78% mass removed
- Post-Hydraulic 7/20/18: 94% mass removed
- Post-Cleanup Pass 8/2/18: 97% mass removed
- Post-Cleanup Pass 8/15/18: 97% mass removed
- Post-Cleanup Pass 8/25/18: 98% mass removed

Legend:
- Silt/Clay
- Sand
- Wood
- Percent Mass Removed
Restorative Layer

- Bay
- Contaminated Sediment
- Clean Sediment
- Dredge Residual
- Clean Sediment
- Cover/Backfill Habitat Material
- Clean Sediment
Ashland Kreher Park

- draft conceptual plan