

Tin Mill Canal Maintenance Cleanup





Tin Mill Canal Location

Approximately 7,500 feet in length

Overview

- ▶ **Canal Summary:**
 - ▶ Constructed for conveyance of stormwater and wastewater to central WWTP prior to discharge through NPDES-permitted outfall
 - ▶ Sediments contain polychlorinated biphenyls (PCBs) and oil/grease
 - ▶ Canal is approximately 7,500 feet long, 50 feet wide
 - ▶ Receives runoff from on-site and off-site (upslope)

Overview (Contd.)

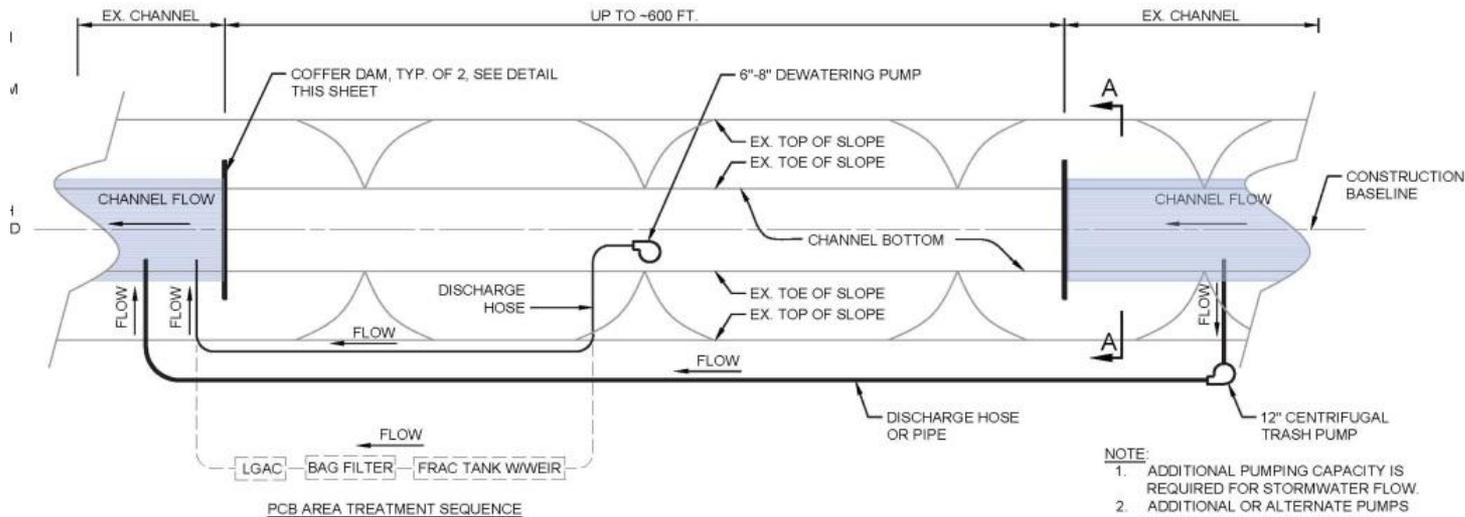
▶ **Project Objectives:**

- ▶ Remove impacted sediments
- ▶ Restore the canal bed to near the original grades and capacity
- ▶ Protect human health and the environment

Project Implementation

- ▶ Establish erosion and sediment controls
- ▶ Clear vegetation (mostly phragmites) to ground surface
- ▶ Demolish/remove structures along canal (utility poles, oil removal stations, etc.)
- ▶ Construct staging areas and dewatering pads
- ▶ Sediment excavation, handling, and disposal
 - ▶ place upstream/downstream coffer dams to protect active work area
 - ▶ pump water around work area to keep it dry
 - ▶ excavate sediments along canal and transport to dewatering pad
 - ▶ drain sediments back into canal and mix with drying agents (lime kiln dust or phragmites)
 - ▶ transport sediments for on-site disposal (Greys Landfill) or off-site disposal (TSCA landfill for PCBs > 50 mg/kg) when free-draining liquids are gone

Typical Canal Work Section

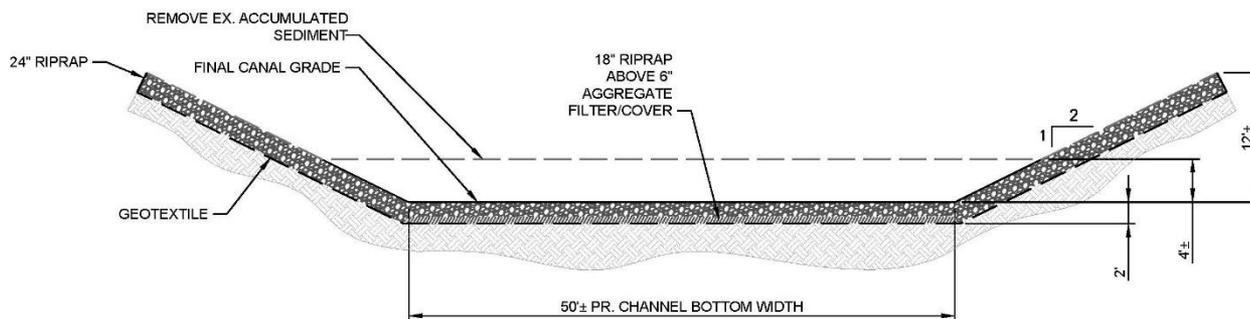


PLAN: TYPICAL CHANNEL BYPASS PUMPING

SCALE: 1" = 40'

Canal Lining/Capping

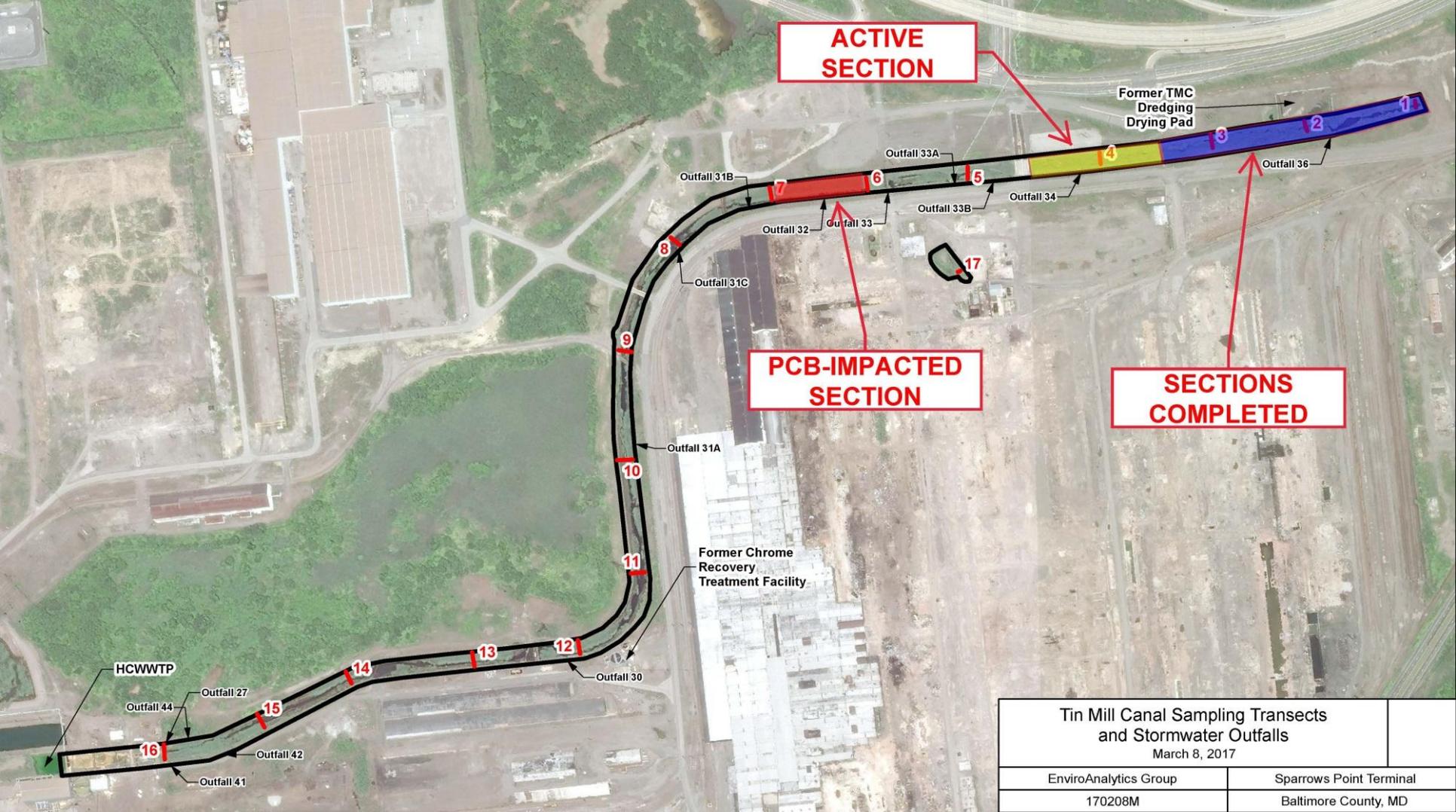
- ▶ Channel restoration and capping
 - ▶ place geotextile fabric, slag fines, and rip-rap to establish 2-foot thick cap
- ▶ Progressively move operations downstream
- ▶ Final stabilization and cleanup of disturbed areas



TYPICAL CANAL CROSS-SECTION AND 2-FOOT THICK CAP

Current Status

- ▶ Sediment removal started in January 2018.
- ▶ Through April 2018, approximately 1,200 feet (of 7,500 foot canal) has been completed.
- ▶ Approximately 15,000 cubic yards of sediments have been dewatered and transported to the on-site landfill.
- ▶ Work initiated on Section #3 April 16, 2018.
- ▶ Work anticipated to be completed by early 2019.



MAP OF CANAL WORKING SECTIONS (APRIL 2018)



Removing Phragmites from Tin Mill Canal Prior to Sediment Removal



Removing Sediments From Tin Mill Canal



View of Cofferd Dam at Upslope End of Active Work Section



Completed Section of Tin Mill Canal



Sections #1 and #2 of Tin Mill Canal Following Placement of Rip- Rap