

## **Dredging and Material Management of a Superfund Alternative Project Located within a Historic Town**

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**Background/Objectives.** Cedar Creek Operable Unit 2A (OU-2A) was remediated under a Non-Time-Critical Removal Action addressing soil and sediment containing polychlorinated biphenyls (PCBs) as part of a larger Cedar Creek Superfund Alternative Site located in Ozaukee County, just north of Milwaukee, Wisconsin. Cedar Creek OU-2A includes a mill race (comprised of both culverted and open areas), a free-flowing creek section upstream of the Columbia Pond, and two impoundments (Columbia Pond and Wire and Nail Pond). Land use along the site includes commercial facilities, private residences, wooded and undeveloped land, and public parks.

**Approach/Activities.** Over 70,000 cubic yards of soil and sediment containing PCBs at both Toxic Substances Control Act (TSCA)-regulated and non-TSCA concentrations were removed from Cedar Creek OU-2A in 2016 and 2017 using predominantly hydraulic dredging. Hydraulically dredged sediments were dewatered using geotextile tubes staged within a footprint of about 4 acres in a public park in the heart of historic Cedarburg, Wisconsin. Dewatered sediments were ultimately transported to landfills for final disposition. Following removal, a residual cover was placed over the dredged area and upland areas were backfilled and restored in consultation with property owners.

**Results/Lessons Learned.** This paper will focus on three aspects of the project that presented unique challenges associated with dewatering and disposal of the dredged sediment to achieve the remediation goals. These challenges included designing a dredging and dewatering system to efficiently remove and process TSCA and non-TSCA material separately; operating the system under a small footprint; and disposing of dewatered sediments at an off-site disposal facility with undefinable geotechnical landfill criteria.