

ALCOSAN Clean Water Plan

Owner:

Allegheny County Sanitary Authority (ALCOSAN)
Pittsburgh, PA

Client:

CDM Smith

Role:

Program Director Team - Technical Advisor for Geotechnical and Tunnel Engineering

Key Characteristics:

- \$2B Capital Improvement Program to reduce CSOs into the Allegheny, Monongahela, and Ohio Rivers
- 16-miles of 14- to 18-ft dia. 120 to 350-ft deep tunnels in sedimentary rock
- Design-Bid-Build Project Delivery
- Construction in an urban environment

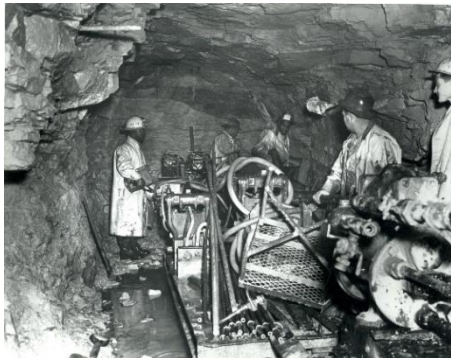
Professional Services:

From: January 2017

To: Present

Allegheny County Sanitary Authority (ALCOSAN) is implementing its Clean Water Plan to eliminate sanitary sewer overflows (SSOs) and significantly reduce combined sewer overflows (CSOs) into the Allegheny, Monongahela, and Ohio Rivers. This federally mandated program is anticipated to include approximately 16-miles of 14- to 18-foot diameter regional tunnels in sedimentary rock together with other overflow mitigation measures and green solutions.

As part of the Program Director team, JCK Underground has been integral to assisting ALCOSAN's Program Management Organization, acting as a technical resource for geotechnical and tunneling expertise and providing strategic advice to manage program risks. Tasks have included: developing and implementing the Phase I geotechnical investigation, generating a Geotechnical Data Report; providing guidance regarding site



Blasting Operations for the Existing 1950's Tunnel System



Phase I Drilling at ALCOSAN's Treatment Plant

selection and feasibility studies considering preliminary staging needs; conducting analysis and investigations of prior local tunnel construction experience; consultation and peer review of geotechnical investigations by others; risk identification and mitigation; and reviewing key deliverables during preliminary design.

Link: <https://www.alcosan.org/our-plan/plan-documents/clean-water-plan>

"...JCK Underground's summary report of existing tunneling was a real eye opener that provided ALCOSAN additional insight on geology. ..." Mike Lichte, ALCOSAN Manager of Planning