



## PROJECT

The Municipal Sanitary Landfill Authority (MSLA) 1D Landfill

## APPLICATION

Remediation

## SCOPE

Deliver a unique hardware and software monitoring solution to mitigate contamination of surface water and ground water due to landfill activities.

## EQUIPMENT AND SERVICES

Piezometers, inclinometer casing, in-place inclinometers, wireless dataloggers and the MissionOS software measure contamination of surface water and ground water

## SUPPLIER

Spectro Technology

## DATE

2017



# The Municipal Sanitary Landfill Authority (MSLA) 1D Landfill

**SCOPE:** Deliver a unique hardware and software monitoring solution to mitigate contamination of surface water and ground water due to landfill activities.

## SERVICES DELIVERED:

- Spectro Technology supplied piezometers, inclinometer casing, in-place inclinometers, wireless dataloggers and the MissionOS software for this innovative project.

## PROJECT OVERVIEW

- The Municipal Sanitary Landfill Authority (MSLA) 1D Landfill is located just off the NJ Turnpike, in the Town of Kearny, NJ. In 2017, the New Jersey Department of Environmental Protection (NJDEP) authorized remedial actions to cap and contain pollution at the Landfill site.
- The work has been organized into two main actions – Leachate control to mitigate contamination of surface water and ground water
- Before landfill capping, leachate control measures will be implemented. This will allow the landfill to dewater to some degree and increase in stability prior to adding the additional weight of a cap. A subsurface barrier wall is proposed to enclose the waste material. The wall will be keyed into the sand, silt, and clay formation at depths of approximately 50 feet.
- The second major action will consist of constructing an impermeable cap over the landfill, including a landfill gas collection system.
- To ensure stability, pore water pressure and lateral movement within the soil are required to be monitored during construction, which is anticipated to last up to two years.

## UNIQUE CHALLENGES

- Landfill capping to control gas emissions, prevent direct contact with contaminated materials, and reduce leachate generation.