

Project: Closed Landfills Maintenance & Upgrades

Client: Design Engineer & Property Owner

Location: Pearl River, New York

Value: \$2,400,000



Panther Technologies, Inc. (Panther) was awarded a contract to provide maintenance and perform upgrades at two (2) closed landfills, located on a former pharmaceutical manufacturing facility site in Pearl River, New York. The scope of work included new pumping systems (pumps, controls) for the two (2) landfill leachate collection systems, upgrades to an existing 5,000-gallon underground tank and the installation of a new 23,000 gallon double-wall steel underground leachate storage tank.

The leachate management systems included the installation of a new, 1,500 linear foot long double wall HDPE pipe that ran thru a series of precast concrete access vaults. One section of the new leachate pipeline was installed under a stream. Upgrades also included cutting into the existing leachate force main and installing new cleanouts to facilitate maintenance and periodic cleaning of the pipeline. **Panther** also performed drainage enhancements around the site include new culvert pipes under access driveways and cleaning out drainage swales that had silted in and were no longer functional.

During pipeline construction, landfill leachate was pumped into temporary holding tanks and hauled to an onsite collection manhole using a tanker truck. Approximately 800,000 gallons of leachate were managed in this manner. In addition to the leachate collection system upgrades, **Panther** repaired the slope of one landfill where a stream had eroded the slope into the buried materials. The stream was redirected away from the landfill, exposed waste was excavated and disposed offsite and the required low-permeability cap materials were installed along with topsoil and grass seed. Using boulders collected from the site, the slope was recontoured and armored and the stream flow restored.

Other site work included the elimination of heavy phragmite growth, using two applications of herbicide and stalk cutting. The 2-acre landfill surface was regraded to remove standing water from low areas and was covered with a 6" thick layer of new high organic topsoil, seed and mulch. The entire landfill areas was enclosed in 7,000 linear feet of new 6' tall chain link fence, installed thru heavily wooded terrain. The project was completed with over 13,000 safe manhours with zero accidents, incidents or injuries.

