Background & Project Challenges

The U.S. EPA’s Pownal Tannery Superfund Site in North Pownal, Vermont, required the environmentally safe and structurally sound disposal of 55,000 cubic yards of sludge, contaminated with oils, solvents, lead, and chromium. The sludge had been generated by tanning operations between 1937 and 1988, whereby raw discharges were poured into waste lagoons abutting the Hoosic River in Vermont.

Cleanup efforts called for the dense, but structurally weak, sludge to be stabilized and compacted into a consolidation landfill, the surface of which was to be used for recreation facilities for the Town of North Pownal.

Project challenge was to gain acceptance of U.S. EPA of modified test method(s).

GeoTesting Role & Accomplishments

GeoTesting Express (GTX) conducted the “shake-down” testing, as well as quality control testing throughout the project. “Shake-down” testing had to be completed within one week in order to maintain that the landfill would be constructed on schedule.

Sludge properties and required construction operations prevented representative samples from being taken using standard sampling techniques. Subsequently, unconfined compressive strengths measured in the laboratory were frequently below the strength criteria. GTX proposed a modified (laboratory-measured) unconfined compressive strength requirement, as well as alternative test methods, the results of which would more accurately correlate to the true in-field strengths.

GeoTesting Express’ engineering support and quickness in providing solutions to critical challenges allowed the project team to move the Pownal Tannery Superfund project forward, on schedule and under budget.