Excavation of Former Tannery Site

Problem: How to solidify very wet soil for transport without doubling or tripling waste volume?
Tannery Excavation Project.

Air temperature = 32-34° F

Very wet soil/sludge.

Excavation below water table.

Small, side pit dug into corner of large pit for sludge/polymer mixing.
Waste Lock® Polymer Addition

Polymer applied with plastic (coffee) cup to sludge surface…
Mixing of Sludge & Polymer

More sludge is added to top of polymer/sludge mixture.

More polymer is added to fresh, wet sludge.

Clamshell bucket mixes sludge & polymer in side pit.
Removal of Solidified Sludge from Pit

The clamshell scooped solidified sludge from side mixing pit into 3 yard bucket of front loader.

Front loader set 3 yard loads on plastic sheet for additional absorbency time before loading.

Front loader then filled 30 yard dump truck for transport to treatment facility.
**Waste Lock® Solidified Sludge**

**Ready for Shipping**

---

**Final Result:**

75 lbs of *Waste Lock®* added to approx. 30 tons of wet sludge. (Estimated weight of 50,000 lbs.)

Absorbency ratio of 800 X on weight basis.

Time for work: 2 hours.

Increase in waste weight or volume: *Negligible.*