

CITY OF COLUMBIA CITY WATER POLLUTION CONTROL FACILITY

Gravity Belt Thickener Operation Report

The following information is a comparison between our thickener vs. drying beds used previously.

Drying Beds

1. Two beds when filled would take about 2 – 3 weeks to dry before they could be cleaned out.
2. Each bed would hold between 30 – 35,000 gallons of sludge.
3. It would take 12 hours to fill just one bed.
4. Hauling sludge out and cleaning the beds would take from 4 – 6 hours each to complete.
5. To fill both beds it would take 55 gallons of polymer @ \$900.00/Barrel.
6. Total time for 70,000 gallons = 36 hours @ 14.00/Hr = \$504.00
7. Total \$1404.00 or \$0.02/gallon
8. This does not include electricity or water

Gravity Belt Thickener

1. In 11 weeks we have thickened 554,701 gallons of sludge
2. To complete this it has taken 63 hours @ 14.00/Hr = \$882.00
3. Polymer used was right at 45 gallons @ \$13.18/gallon = \$593.10
4. Total \$1475.00 or \$0.002/gallon less than a penny per gallon.
5. Does not include electricity or water.

To process 554,701 gallons with the drying beds it would take.

1. 96 hours to fill beds @ \$14.00/Hr = \$1344.00
2. 48 hours of hauling and clean up @ \$14.00/Hr = \$672.00
3. 8 drums of polymer to dewater 554,701 gallons @ \$900.00/barrel = \$7200.00
4. Total \$9216.00
5. Does not include electricity or water.
6. It would take 24 weeks to dewater 554,701 gallons using drying beds.

\$9216.00 Drying Beds
\$1475.00 Belt Thickener
\$7741.00 Savings - Labor & Chemical