

LOUISVILLE GAS & ELECTRIC COMPANY SLUDGE PONDS OVERFLOW

The Louisville Gas & Electric Company is a coal burning power generating plant near Louisville, Kentucky. They had a problem in which the sludge ponds that settled out the scrubbing from the chimney were full and overflowing onto the road.

THE PROBLEM

The sludge, which consisted mostly of lime and gypsum, was being cleaned from the ponds with a long reach excavator, spread out to dry, and hauled to a landfill. This process was not keeping up with the input rate of solids, the excavator was too slow and there was not enough room to dry the sludge. The sludge could not be land-filled without dewatering. If something was not done the plant would have to shut down.



THE SOLUTION

Working together with Midwest Dredge, we did a test, pumping with dredge into a 30 ft. circumference x 50 ft. long tube. The test went well and the plant hired Midwest Dredge to pump the sludge from the ponds to the tubes for dewatering. By the end of the first full day of pumping the plant was out of trouble. The project engineer informed us that the whole clean up was costing much less than he had anticipated. All three ponds were emptied into the tubes, dewatered and hauled to the landfill without a mishap. The tubes were 30 ft. circumference x 200 ft. long made of 4x6 geotextile fabric. Each tube was pumped several times as it dewatered, and were stacked on top of each other to conserve space.



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