

WWTP meets new PCB regulation with LakeTank™ and filtration system



PROJECT SCOPE

Provide a storage and treatment system to remove PCBs from sludge at WWTP.

CLIENT

Wastewater Treatment Plant

INDUSTRY SEGMENT

Municipal

SAFETY

Prevent PCB contamination

EQUIPMENT

- LakeTank™
- 21,000 gallon tanks
- Mixer Tanks
- DV100c, HH80, DV400c
- 36-2 Media Filters
- BF200, PF200

BACKGROUND

An increase in PCBs at wastewater treatment plants due to illegal dumping across South Carolina prompted a new law to reduce PCB levels in treated water to below 3 parts-per-billion. Plants around the state needed to act fast to protect their customers and population from PCB contamination and avoid costly fines. The wastewater treatment plants also faced disposal fees doubling while PCBs were above the limit.

OUTCOME

Rain for Rent's solution saved the plant more than \$50,000 in carbon filtration costs through a robust 200 GPM filtration system that reduced PCBs to a non-detect level, well below the mandated 3 PPB limit. The treatment plant realized additional savings by avoiding potential fines and lower sludge disposal fees.

HIGHLIGHTS

Rain for Rent used a combination of ten 21,000 gallon tanks, mixer tanks and the LakeTank™ to store and treat the contaminated digester sludge from the basins while crews used a belt press and Rain for Rent filtration equipment to remove PCBs from the sludge.

After the sludge was pressed, the 200 GPM effluent ran through a media filter, a bag and a particulate filter with increasingly fine micron bags and cartridges to meet the discharge regulations. Rain for Rent also provided a 30 MGD influent pump station bypass while the wet wells were decontaminated and upgrades to the plant's pumps were made.

CUSTOMER FEEDBACK

The Plant Foreman, said of Rain for Rent's service, "The customer service and professionalism has been outstanding and I would personally recommend their services to anyone." Currently, Rain for Rent has provided similar systems for four municipalities in the area dealing with PCB contamination.

