



*“The solidBLOX process provides very low odors as well as increased volatile solids reduction which results in lower sludge disposal. These benefits are of greatest value to the District with regards to this system. We expected improved odors with this biosolids project, but were pleasantly surprised by just how little odor there is with this process. It is a good system that will serve us well so I would recommend the solidBLOX system to other clients who are considering it.”*

- NPSD Bob Hembrock, Executive Director

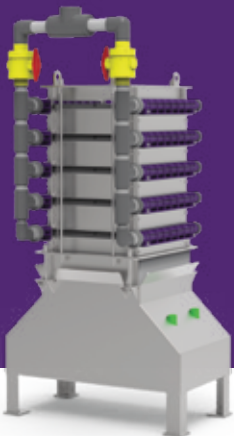
## DON'T MAKE A STINK



- ❑ NORTHEAST PUBLIC SEWER DISTRICT (NPSD) SOLIDBLOX PROCESS AT THE SALINE CREEK WASTEWATER TREATMENT PLANT (WWTP).
- ❑ MINIMIZE ODORS DUE TO THE CLOSE PROXIMITY OF HOMES NEAR THE WWTP.
- ❑ MAXIMIZE SLUDGE STORAGE CAPACITY THAT MINIMIZE DISPOSAL COSTS.
- ❑ THICKEN WAS UP TO 3.8% WITHOUT POLYMERS.
- ❑ UNIQUE DIFFUSER CASE WITH NON-CLOG DIFFUSER DESIGN

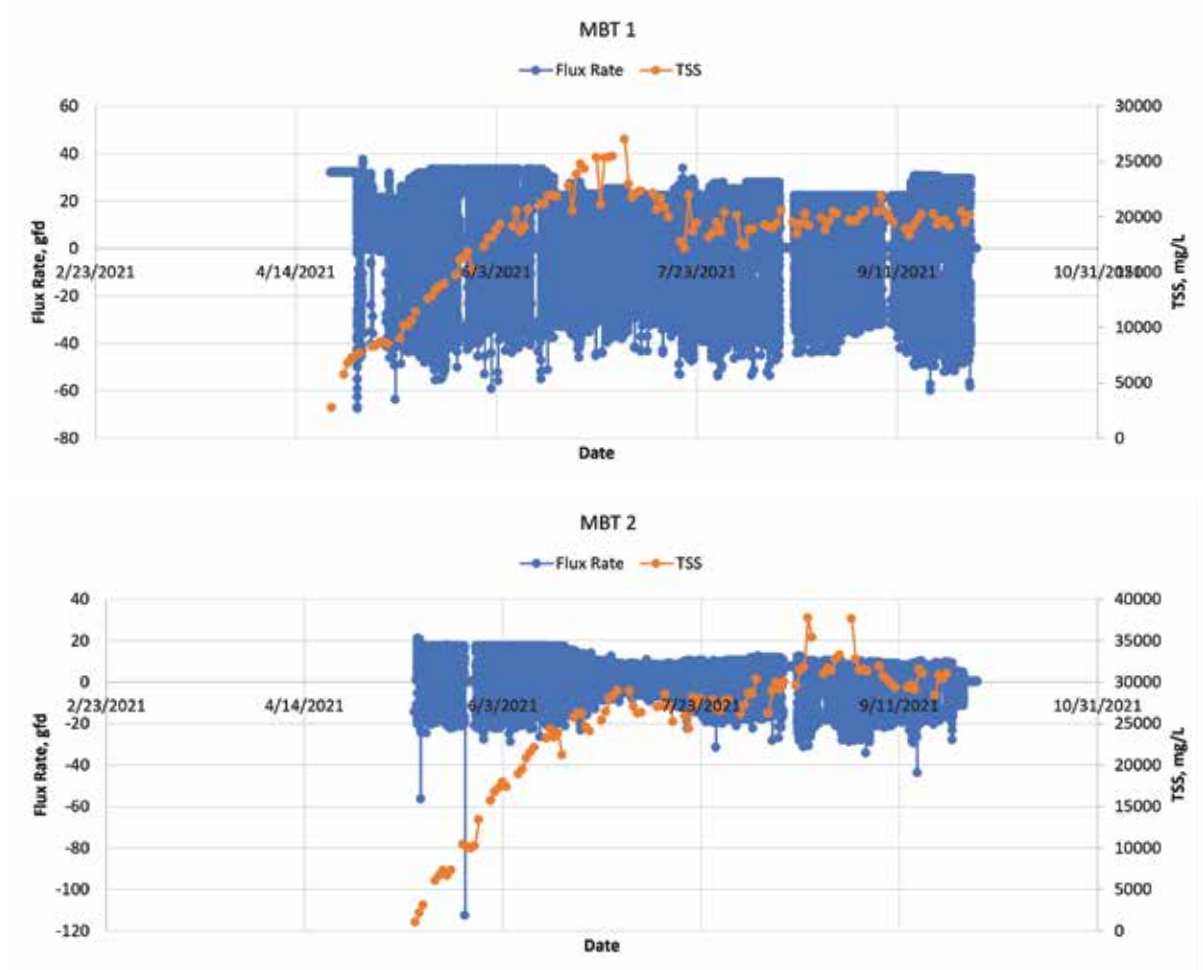
Aerating and mixing solids in aerobic digesters can be challenging. If proper oxygen is not adequately transferred and the contents in the tanks are not well mixed ammonia can accumulate causing nuisance odors.

The solidBLOX process at the Saline Creek facility integrates membrane sludge thickening with a controlled and optimized aerobic digestion system that features aeration equipment ideal for mixing and aerating thickened solids. Nuisance odors at the Saline Creek facility are well managed and minimized because ammonia in the digesters as shown in the figure below are well below the OSHA ammonia odor threshold of 50 ppm. In addition, as shown in the chart below the solidBLOX process thickens the WAS up to 3.5% solids which is a 175% improvement compared to the previous conventional decanting system. Improved thickening results in greater sludge storage capacity.



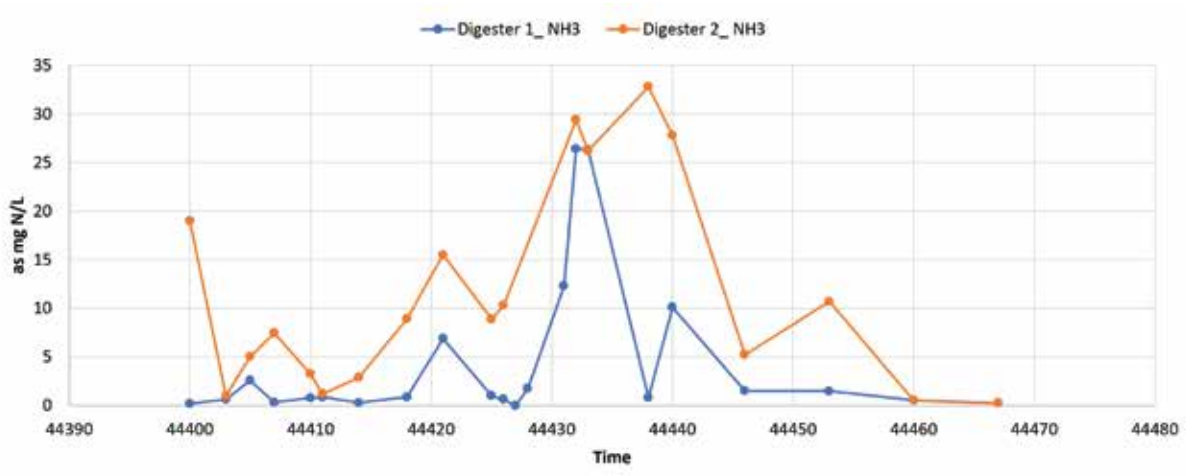
**EX** SERIES  
for Sludge Thickening

# solidBLOX Flux rate and TSS Data



solidBLOX™ technology showed sustained flux rate of 20 gfd to 25 gfd @ 2% solids in MBT 1 and sustained flux rate of 12 gfd to 15 gfd @ 3% solids or more in MBT 2

# solidBLOX Process Ammonia Data



solidBLOX™ technology maintain ammonia less than 50 mg/L which is the OSHA odor threshold limit for ammonia