

Nuclear WWTP Installation Announcement

In mid-2023, Retaw Engineering selected Entex's WavTex™ Integrated Fixed-Film Activated Sludge (IFAS) technology to strengthen biological treatment at a Nuclear Power Station wastewater treatment plant in central Virginia.

Two WavTex modules were installed, each equipped with 60 self-buoyant EnTextile media sheets and integral coarse bubble aeration grids, expanding biomass surface area to deliver consistent nitrification and alkalinity recovery with minimal maintenance.

Parameter	Average	Units
Influent Flow	0.03	MGD
Influent BOD	307.5	mg/L
Influent TSS	635	mg/L
Influent TKN	171.5	mg/L
Influent NH ₃ -N	107.5	mg/L
Influent TP	17.15	mg/L
pH	7.23	--
Alkalinity Recovery	103	ppd CaCO ₃
Oxygen Recovery	82	ppd O ₂



Application

Extended operating license, sustained alkalinity demand, and nitrification challenges

Solution

Install two WavTex modules with cyclic air scour operation

Objective

Increased biomass to support consistent alkalinity recovery under high TKN conditions