AquaPyr®

ULTRA LOW WASTE FILTER

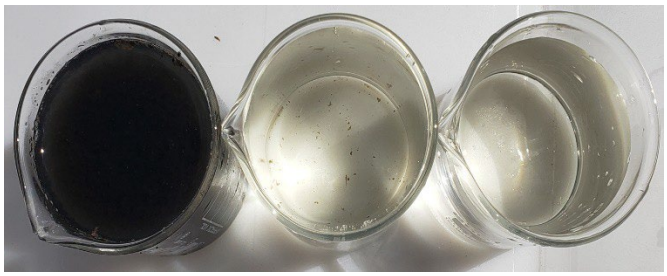
Why Minimizing Waste Volumes Matters

Overview

Total Suspended Solids (TSS) removal is always a part of water and wastewater treatment. Unfortunately, little has been done to improve the efficiency of TSS reduction processes such as sand filters, disk filters, and membranes. Fortunately, the AquaPyr Ultra Low Waste Filter (ULWF) uses Wet Solids Extraction, a non– backwashing filter cleaning method, that ends the wasteful use of water and dollars.

Reasons to Minimize Waste Volumes with AquaPyr ULWF

- **Water Scarcity / Net Water Yield**
  - Drought and Climate Change. Water Purification should not waste water.
- **Backwash Water Availability**
  - Most water treatment processes are less than 100 gpm and often there is insufficient backwater for proper filter cleaning.
- **Process Complexity**
  - Limited backwash water leads to clogged filtration processes or additional equipment including water tanks, pumps, automated valves.
- **Capital and Operating Expenses**
  - As the process complexity of backwash management equipment grows, capital and operating expenses grow.
- **High TSS Applications**
  - Waste volumes increase with more polluted feed water, exacerbating process upsets, increasing water use further.
- **Plant Capacity / Dewatering**
  - Waste volumes are a wasteful parasitic load within the water treatment process, using internal plant capacity in reactors, clarification processes, and dewatering systems.



Tertiary Filtration: < 0.05% Feed Vol. as Waste
L to R: Waste, Feed, Filtrate

Total P Reduction: < 1.0% Vol. as Waste
L to R: Feed, Waste, Filtrate

DAF Effluent: < 0.5% Feed Vol. as Waste
L to R: Waste, Filtrate, Feed