

- » Primary clarifiers
- » Digester supernatant
- » Biological reactor
- » Secondary clarifier
- » Pre-filter
- » Addition of chemicals for precipitation, typically include Ferric Chloride (Ferric), Aluminum (Alum), PACl (polyaluminum chloride)
- Addition of polymer is sometimes required to create stable floc
  - » Typically water based, anionic
  - » Dosage usually 0.1 mg/l – 1.0 mg/l
  - » Requires flocculation process
- Solids-liquid separation
  - Removes only particle-associated Phosphorous

**BNR Suspended Solids Typically Contain  
3-5% Phosphorus**

Effluent TSS (mg/l)	P in Effluent TSS (mg/l)
2	0.06-0.10
5	0.15-0.25
10	0.3-0.5
15	0.45-0.75

Data excludes soluble phosphorus

- AquaDisk®, Aqua MiniDisk®, AquaDiamond®, AquaDrum®, AquaABF®
  - » Effluent quality of < 0.1 mg/l Total Phosphorous can be achieved, depending on soluble concentration
- AquaMB Process, Aqua-Aerobic MBR
  - » Effluent quality as low as 0.04 mg/l Total Phosphorous can be achieved, depending on soluble concentration