

- » 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