

Bio-Desolve Wastewater Treatment in Aerobic Digesters:

Aerobic digestion is a bacterial process occurring in the presence of oxygen. Under aerobic conditions, bacteria rapidly consume organic matter and convert it into water and carbon dioxide. When allowed to settle, supernatant is decanted and moved back through the headworks of the WWTP. The remaining solids are transferred into a solids holding tank.

Once there is a lack of organic matter, bacteria die and are used as food by other bacteria. This stage of the process is known as endogenous respiration. Solids reduction occurs in this phase. Because the aerobic digestion occurs much faster than anaerobic digestion, the capital costs of aerobic digestion are lower. However, the operating costs are characteristically much greater for aerobic digestion because of energy costs for aeration needed to add oxygen to the process.

Bio-Desolve in aerobic digesters:

- Accelerates bio-digestion of solids
- Increases sludge storage capacity by increasing decantable supernate
 - Real Results Example (Town with population of 3500): Prior to Bio-Desolve, 13m³ of supernate was decanted and pumped back to head works per day. After Bio-Desolve, 41m³ of supernate was decanted.
- Reduces solids wasted into sludge holding tank
- Significantly reduces septic odours
- Reduces Total Suspended Solids

