

TABLE 2 Comparison of Anaerobic Process Technologies

Design Consideration	Plug Flow	Stirred Tank	Fixed Film	Upflow Sludge Blanket
Feedstock Solids and Waste Strength	Very high solids (>10%) e.g. dairy cattle manure	High strength, high solids (2-10%) e.g. swine manure or municipal sewage sludge	Moderate to high strength (4,000-80,000 mg COD/L) - low to moderate suspended solids e.g. dilute manure, cheese whey, bean blanching wastewater	Moderate to high strength (4,000-80,000 mg COD/L) - low suspended solids e.g. run distillery slops, sugar refining effluent
Hydraulic Retention Time (HRT)	Typical 20-30 d	Typical 10-20 d	Typical 1-10 d	0.3 d - 10 d possible
Effluent Criteria	Poor; high effluent SS	Poor; high effluent SS	Soluble COD removal 95% +	Soluble COD removal 95% +
SCP Recovery	High potential	High potential	Reduced potential	Reduced potential