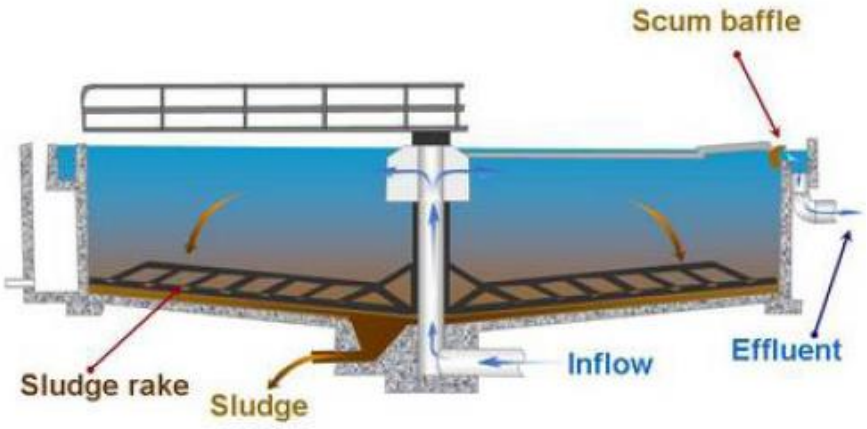
Problem	Possible cause	Corrective action
Low solids content in sludge	Hydraulic overload due to high influent flow rate	Provide more even flow distribution in all PSTs
	Short circuiting of follow-through tanks	Change weir and baffle settings
	Over-pumping of sludge	Reduce frequency and duration of sludge pumping cycles
Poor suspended solids removal	Hydraulic overloading	Use all available tankage and divert recycle flows
	Poor sludge removal practices	Increase the frequency and duration of sludge withdrawal
	Wind or temperature related factors	Install wind barrier and eliminate storm flows from sewer system
Floating sludge	Scrapers worn or damaged	Repair or replace scrapers
	Sludge decomposing in tank	Increase frequency and duration of sludge withdrawal
	Return of well nitrified waste activated sludge	Dispose of waste activated sludge on drying beds
Black and odorous septic sludge	Insufficient rate of sludge scraper system	Increase run time of scraper system
	Insufficient rate of sludge pumping	Increase frequency and duration of sludge pumping
Sludge hard to remove from hopper	Excessive grit and other easily compacted material	Improve operation of grit removal unit
	Pipe or pump clogged	Back flush clogged pipe lines and pump sludge more frequently
	Low velocity in sludge withdrawal lines	Increase pump capacity.



References: Water Institute of Southern Africa – Handbook for the operation of wastewater treatment plants.