

**NAYADIC WASTE TREATMENT SYSTEM  
OPERATIONAL CONTROL CHART**

<b>OPERATION CONDITION</b>	<b>COLOR: AERATION TANK</b>	<b>ODOR</b>	<b>SLUDGE VOLUME</b>	<b>EFFLUENT QUALITY</b>	<b>AERATION TANK</b>	<b>POSSIBLE PROBLEM</b>	<b>CORRECTIVE ACTION</b>
Plant start up 0-6 weeks	Clear to light brown	None	Settleable solids <5% Scum <1"	Slightly turbid to clear	Good turbulence White foam/suds	No problem: Normal start-up condition	No action required Re-check in 6 months
Plant in operation for More than 3 months	Clear to light brown	None to slight	Settleable solids <5%; very fine suspended particles Scum <1"	Slightly turbid to clear	Good turbulence White foam/suds	Light loading to plant; Insufficient food for organisms	Refer to Troubleshooting Section III-C & III-D
Plant in operation for 0-6 months (Plant preceded by septic tank)	Light grey	Slightly septic	Settleable solids <5% Scum <1"	Slightly turbid with slight odor	Good turbulence	Slow start-up due to septic tank; probable hydraulic surges (i.s., laundry)	Check air pressure at diffuser; reduce laundry frequency to 3x day. Refer to Trouble-shooting Section III-E
Normal operation: Typically less than 2 years of use since last pumping	Light brown to medium brown	None	Settleable solids = 5-30% with clear supernatant scum <2"	Clear	Good turbulence with light brown foam	No problem	None, re-check in 6 months (routine)
Normal operation: Typically, 2-3 years of use since last pumping	Very dark brown	Slight	Settleable solids = 20 – 50% Scum > 6"	Clear	Good turbulence with heavy brown foam	No immediate problem; anticipate pumping tank in 6- 12 months	None; re-check in 6 months (routine) (Pumping recommended if not on service contract)
Plant in operation for more than 3 months Poor treatment	Grey (similar to dishwater)	Slight to moderate septic or ammonia odor	Settleable solids <5% Scum > 4" Scum has yellowish color and noticeable odor	Turbid to bluish- grey	Slight to moderate turbulence; patches of foam across tank surface	Insufficient aeration due to reduced air flow at plant	Refer to Troubleshooting Section III-E
					Good turbulence but minimal solids buildup	Settled sludge restricting return to aeration chamber	Draft tube may need to be shortened: Section IV-F Contact factory
Plant in operation for more than 3 months Poor treatment	Greyish-brown to Grey to black	Slight to strong septic odor	Settleable solids <5% Scum > 4" Possible presence of grease balls	Grey	Good turbulence; 4-6" ring of foam around circumference of inner tank	Organic overload	Refer to Troubleshooting Section III-F
						Excessive greywater; heavy hydraulic surge flows	Refer to Troubleshooting Section III-E
Previous plant operation has been normal; Sudden, unexpected development of poor treatment and operation	Grey to black	Strong, may be septic or from some type of chemical	Settleable solids = 0- 50% Scum > 4"	Turbid to bluish- grey	Good turbulence Possible presences of grease balls or oil	Plant die-off due to discharge of toxic materials or oil/grease	1. Identify source of toxic material 2. Eliminate above source 3. Pump plant completely and allow to start up