

## SYSTEM MAINTENANCE SCHEDULE

System Aspect	Service Action	Daily	Weekly	Monthly	Bi-Annually	Annually
<b>Water Quality</b> <small>(Not required if Monitoring and Control Systems are supplied)</small>	Test and Record Water Quality Parameters Temp, pH, Ammonia, Nitrite, Nitrate, Conductivity, DO		X			
<b>Monitoring and Control Systems</b>	Clean Probes			X		
	Check System Alarms, Set Points				X	
	Run System Test				X	
	Check System Alarms, Set Points				X	
	Calibrate Probes*				X	
	Replace Probes*					X
<b>Plumbing</b>	Check System for Leaks	X				
	Clean Flow Meter				X	
<b>Ultraviolet Disinfection</b>	Check Operation	X				
	Clean Quartz Sleeve (As Needed)				X	
	Replace Quartz Sleeve*					X
	Replace UV Lamp*					X
<b>Holding Tanks</b>	Check Flow Meters, Adjust Flow as Necessary	X				
	Check Flow to Individual Tanks	X				
	Check Drainage from Tanks	X				
	Remove Compromised Animals	X				
	Siphon Debris from Tanks	X				
	Clean Covers	X				

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<b>Racks &amp; Housings</b>	Clean All Surfaces	X				
<b>Main System Pump</b>	Sound Check for Normal	X				
	Check Intake Basket and Clean (If Present)				X	
	Clean Motor Casing					X
	Change Eye-Seals and Lubricate *					X
	Maintenance*					X
<b>Reverse Osmosis System</b>	Check Basic Operation and Production	X				
	Replace Membrane*				X	
	Maintenance*				X	
<b>Chemical Dosing Systems</b>	Check Liquid Level and Adjust	X				
	Check Chemical Level and Adjust	X				
	Check Operation of Dosing Pump			X		
	Dis-Assemble and Clean Dosing Pump				X	
	Clean Dosing Hopper				X	
	Maintenance*				X	
<b>Prefilter Pad(s)</b>	Check, Clean and/or Replace*	X				
<b>Temperature Control</b>	Check System Temperature	X				
	Check Thermostat Set Points					X

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<b>Activated Carbon Filter</b>	Dispose and Replace Carbon*			X		
<b>Mechanical Particle Filter</b>	Clean and/or Replace Filter Element*			X		
<b>Biofilter</b>	Clean / Siphon				X	
<b>Level / Flow Sensors</b>	Clean / Test				X	
<b>Mechanical Sub-Systems:</b>						
<b>Lighting &amp; Ballasts</b>	Check Operation and Periodic Maintenance*	X				
<b>Aeration</b>	Check Operation and Periodic Maintenance*	X				
<b>Heating &amp; Refrigeration</b>	Check Operation and Periodic Maintenance*	X				

\*Refer to system manual and/or manufacturers recommendations for periodic service intervals and instructions.

The above chart provides guidelines for maintaining your system. Your particular requirements may vary. Marine Biotech strongly encourages a service and maintenance contract. Note: Cleaning and periodic maintenance requirements for aquatic holding systems is highly variable and will depend on many factors, including feed type and interval, system biomass, water characteristics (fresh/marine, hardness, etc...), ambient facility conditions, etc... Routine service will not overcome lack of daily attentiveness. Operator attention to these details will greatly improve the quality of the habitat and extend the life of the system.