



**Advanced Aeration
Vacuum Bubble Technology
Flows < 10,000 gpd with High Strength Waste**

This Management Plan identifies some basic requirements for proper operation and maintenance of the Vacuum Bubble Technology (VBT) wastewater treatment device for high strength wastewater (HSW) use up to 10,000 gpd. Refer to the manufacturer’s Operation and Maintenance Manual for VBT wastewater treatment products for detailed instructions on proper system operation and maintenance. Refer to your soil treatment system management plan (below or above-grade) for additional management requirements.

The VBT Manual, submitted by the manufacturer as part of the registration of this product in Minnesota, can be found at the Minnesota Pollution Control Agency’s website <http://www.pca.state.mn.us/programs/ists/productregistration.html>.

SYSTEM COMPONENT	TASK	MINIMUM FREQUENCY	RESPONSIBLE PARTY
Advanced Aeration, Inc. Vacuum Bubble Technology (VBT) with Flows up to 10,000 gpd with High Strength Wastewater	Monitor alarm	On-going	User
	Clean air intake vents	Monthly for First Sixth Months Adjusted based on performance thereafter	Service Provider For seasonal use, follow manufacturers guidelines
	Monitor flow		
	Check unit for structural integrity: <ul style="list-style-type: none"> • Air Tube firmly in place • Motor mount secure • Air plate properly aligned • Impeller secure Verify motor runs smoothly and quietly, check amperage.		
	Perform operational field tests on influent/effluent quality including odor, color, turbidity, temperature, dissolved oxygen and pH as appropriate		
	Sample effluent as required in the local Operating Permit		
	Check sludge levels in VBT tank(s); follow manufacturers recommendations for solids removal		
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	for solids removal		Maintainer
	Check solid levels in grease trap and septic tanks (grease and sludge)		

Items not permitted in the VBT wastewater systems are specified in the VBT Manual for Minnesota.

At the time of each service visit, the CIDWT Form 7-2: Aerobic Treatment Unit should be completed or a similar form. See <http://www.onsiteconsortium.org/omspchecklists.html>. **Sampling requirements** are specified in local operating permits. The protocol for collection of wastewater samples is specified in the Vacuum Bubble Technology Manual for Minnesota.

Minimum sampling frequencies:

Treatment Goal	Design Flow (gpd)	Parameter	Minimum Sampling Requirement*
C	<10,000 gpd	BOD, TSS & O&G	Quarterly for year one Bi-annual, thereafter

*These minimum sampling requirements assume a system that is operated year round. These values may be reduced if the system is not used year round or system performance is established.