



AEROBIC SYSTEMS TECHNICAL UPDATE

Hoot Aerobic Systems, Inc.

2885 Highway 14 East Lake Charles, Louisiana 70607
(337) 474-2804 phone (337) 477-7904 fax

Dear Homeowner,

Hoot Aerobic Systems, along with **all manufactures** of wastewater treatment products, and the TNRCC, prohibit the introduction of backwash water from any type of water softener. Properly softened water does not cause any negative effects to the treatment process. It is the return of the back wash debris, which is highly concentrated in salts, wether it is Sodium Chloride or Potassium, that causes problems.

The aerobic treatment process is a biological ecosystem, the microorganisms and bacteria being supplied by the homeowner in their waste products. The aerobic treatment process enhances or speeds up the natural degradation process by providing optimal conditions for the microbes to thrive. These enhanced components of life are an ample supply of water and air for respiration, a temperature between 60 and 100 degrees Fahrenheit and neutral pH.

The backwash generated by water softeners sends a highly concentrated slug of salts, which have detrimental and adverse effects to the treatment process. Inside the treatment tank there are many microorganisms, bacteria and single celled amoebas which all have a vital function in the treatment process. These organisms range from the very large, which can be seen by the naked eye, to very small single celled creatures. Basically, the large ones eat the incoming sewage, their waste product is eaten by a smaller organism and so on down the line. Any interruption to the chain of life can cause incomplete digestion, produce odors and eventual malfunction to the equipment.

Salts, change the characteristics of the water, and the environment in which they live. The salts go into solution in the water, and are taken in by the organisms. Their reaction to this increased level of salt is to take in additional water to balance and bring the organism back into its natural saline equilibrium. The problem is that the additional water that is infused into the organism also contains the salt and the vicious cycle ends when the organism lycees, or explodes as a result of the process.

Hoot Aerobic Systems cannot help or trouble shoot any system with properly functioning mechanical components, that complain of an odor or incomplete digestion, if the system is hooked up to a water softener. Before any trouble shooting assistance or time in analyzing the problem will made, we require that the water softener back wash be removed from the system, and the system completely pumped out, washed out, and pumped out again. Any sedimentation as result of the water softener must be completely removed prior to restart or the same problem will result.

Our warranty on the effluent pump will be voided as result of the introduction of any back wash to the system. Over time, these salts will build up and will create wear on the stages of the pump which will result in premature failure. Any home with a water softener should separate the backwash water and dispose of it in a dry sink or by other means. If no alternatives are available for the disposal of the back wash water, the back wash line could be directly introduced to the pump tank. At this point, the digestion process has completely taken place, disinfection agents have been added, and no biological life should exist. It should be noted that this will result in premature failure of the pump and will not be covered by warranty. When the pump is analyzed at our facilities for repair, the effects are obvious and you will be charged not only for the new or rebuilt pump, but for the unscheduled service call by your installer/service provider.

This letter was prepared as an aid for you in your decision to proceed with the installation of your water softener or removal of the back wash line from your current Hoot system.

If you have any additional questions or concerns, please feel free to contact me at (337) 474-2804.

Sincerely,

A handwritten signature in black ink, appearing to read "Ron Suchecki". The signature is fluid and cursive, with a prominent flourish at the end.

Ron Suchecki
Environmental Specialist
Hoot Aerobic Systems