



August 17, 2012

Suggested Installation of Gray-water Sinks in Boat Houses, Lake Cypress Springs

Background:

The EPA defines gray-water as drainage from dishwashing, laundry, bath, or wash-basin drains.

Texas defines gray-water as wastewater from showers, bathtubs, hand-washing lavatories, sinks not used for disposal of hazardous or toxic ingredients, or sinks that are not used for food preparation or disposal, and does not include wastewater soiled with human excreta or wastewater that has come into contact with toilet waste.

Comments:

Because the wastewater may contain food waste on occasion, the wastewater should be treated as "sewage," waste that is primarily organic and biodegradable or decomposable. As such, and because the sink will be installed in boat-houses, over water, in what should be considered a "no discharge zone," then any installation should be comparable to disposal through a US Coast Guard approved Type 3 marine sanitation device (MSD), a device that prevents "over-board" discharge, and includes holding tanks. Any device installed should be water-tight and should limit any possibility of treated or un-treated sewage or any waste derived from sewage being discharged to surrounding waters.

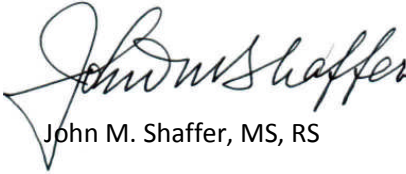
To meet these criteria, our recommendation is the installation of a JABSCO Type 3 Waste Management System, Model 38-110, which consists of a 7.5 gallon polyethylene holding tank, considered an "appliance," with integral run-dry macerator pump mounted on the tank, with a touch-pad for macerator activities, with auto shut-off and illuminated wastewater level indication. The unit runs on 12 volts, so will require an inverter.

To transfer the waste from "ship to shore," we would recommend 1" tubing which is seamless, i.e., no joints, between the holding tank and the first tank in the adjoining lake house on-site sewage system, tying into the sewer line between the house and first tank, with a simple flapper –style back-flow prevention device in place just up-stream from the house sewer line. If the tubing is not rated for burial in the earth, then the tubing should be run in a 4-inch PVC chase from the seawall to the house.

The following requirements and precautions are part of this recommendation:

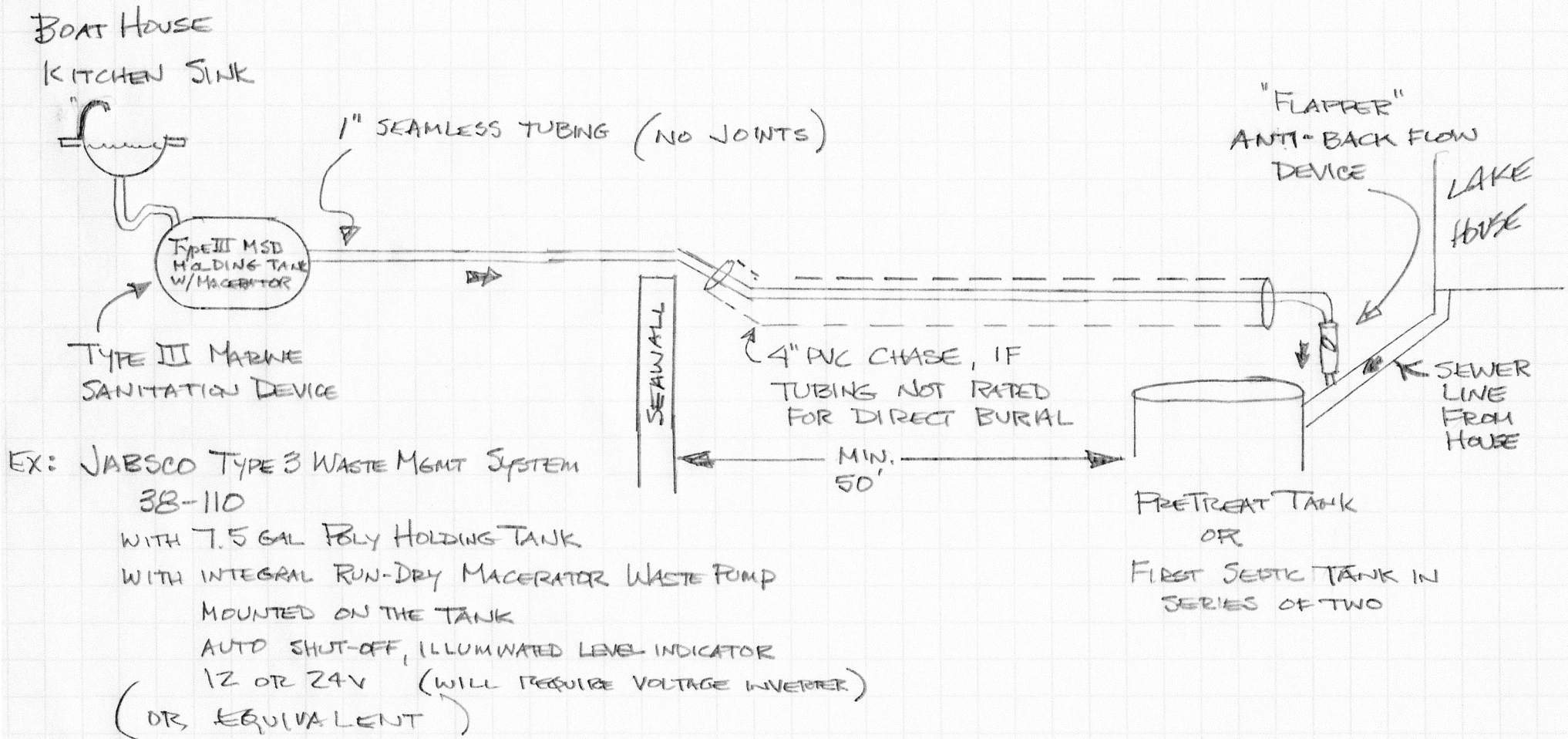
- (1.) The existing on-site sewage system must be in compliance with current rule, 30 TAC Chapter 285.
- (2.) For existing aerobic treatment units, the property owner must have or initiate a current OSSF maintenance contract.
- (3.) This unit is for gray-water disposal only, NOT for human waste.
- (4.) User/property owner should practice “dry-scrapping” of food debris to “dry garbage”, before disposal of the remainder by the Type 3 MSD.
- (5.) The user/property owner should provide instruction to occasional users or provide “signage” as to proper use and disposal of gray-water generated in the boat-house.

Given the above recommendations, the potential for pollution of Lake Cypress Springs should be significantly reduced and of low probability. Such installation may require an approval of a Request for Variance by the Franklin County OSSF Regulator/Designated Representative.


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SUGGESTED INSTALLATION OF GRAY WATER SINK IN BOATHOUSE



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