Instructions for flushing an improperly maintained RO Bucket

It happens! You think you are going to use your RO Bucket again in a couple of days and soon weeks have gone by. Your RO Bucket will develop odors if not maintained properly. The following instructions are used to flush bacteria and odors from your Bucket.

- **Step 1:** Remove the old pre-filer and install a new one.
- **Step 2:** Open the needle valve all the way (or remove it completely). Run 10 gallons of clean, non-chlorinated water through the system. (This can be well water, permeate water, distilled water, spring water, etc. If chlorinated water is your only source, use a 5 micron carbon activated filter in place of the 5 micron prefilter). Allow the system to run completely dry (after 10 gallons has passed through it, disconnect it from the water source and keep it running until it begins pushing air out of the concentrate hose).
- **Step 3:** Mix up a vial of our membrane flush/preservative with 5 gallons of non-chlorinated water (5 dose vial, makes 5 gallons of membrane flush). Alternatively, flush with 5 gallons of water and "RO soap" from a local maple syrup dealer adjusted to a pH of 13. Place all three hoses (intake, permeate, and concentrate) into the 5 gallon bucket of membrane flush mix. Allow the contents of the 5 gallon bucket to recirculate for 30 minutes (with the needle valve wide open or removed). After 30 minutes, turn the system off, leaving it full of membrane flush mix. Let is sit for 2 to 24 hours with the membrane preservative inside.
- **Step 4:** Turn on the system and allow it to completely drain out. At this time, install a new 5 micron prefilter and run an additional 10 gallons of non-chlorinated water through the system (we are now flushing the membrane flush mix out of the system.
- **Step 5:** After flushing/rinsing with 10 gallons of water, recirculate 5 gallons of water through the system (all three hoses in same container) for 30 minutes. If you have a pH meter, measure the pH of the discharge. Flushing is complete when the pH measures the same as the initial water source. Alternatively, flush liberally.

If you still notice odors after flushing with membrane flush/preservative, you can flush the membranes with hydrogen peroxide as follows:

- **Step 1:** Completely empty the RO system by turning it on until air discharges from the concentrate hose. If the pre filter has been in contact with anything other than membrane flush or water, replace it (otherwise you can use it again). Mix up 2 gallons of .2% hydrogen peroxide. To do this, mix 2 cups of 3% (found in stores) hydrogen peroxide with 2 gallon of non-chlorinated water.
- **Step 2:** Recirculate this solution (all three hoses in same container with no restriction) for 5 minutes and then turn the system off (leaving it full of the solution). Let it sit for 2 hours, then drain the system (turn it on until air discharges from the concentrate hose).
- **Step 3:** Flush the unit with water similar to **Step 5** above. Replace the prefilter before running sap through the system.

At this point, there should be little odor and performance of your membranes should be restored.