GREENSAND FILTER MAINTENANCE INSTRUCTIONS:

1. Once a month: check potassium permanganate level in potassium permanganate solution tank. Add more purple permanganate powder when permanganate solution tank shows no sign of powder on top of felt pad inside of tank. For most systems: add 1 5 lb container every one to three months.

2. Once a year: disconnect potassium permanganate solution tank, pour out permanganate solution and rinse out tank with water. Replace felt pad, or clean in acid or vinegar and rinse well. Re-install solution tank, add water so water level is 2 to 4 inches above felt pad. Add 5 lbs potassium permanganate powder.

3. Once a year: clean or replace injector assembly in control valve. See diagram of exploded view of control valve. Replace, or clean in acid, items 8, 10 and 11... which are the injector nozzle, throat and screen.

To replace or clean these items follow these steps:
Put filter system on bypass or shut off water to system.
Turn center knob on timer assembly a few degrees clockwise until you hear control valve motor engage... this will release the water pressure in the control valve so you can change the injector assembly.

Once pressure is released, un-screw bolts (#14 in diagram), and using a small screwdriver, remove nozzle and throat, unscrewing counter-clockwise. You may need to use a paper clip or other piece of wire to remove the lower nozzle once it is unscrewed. Replace and/or clean in acid, and replace or clean screen.

Put system back online. Make sure timer assembly is advanced so the piston on the control valve is back in service position. If not sure, wait two hours until timer assembly does this automatically. If desired initiate a manual regeneration by turning the timer assembly knob a few degrees clockwise.

Note: wear gloves when handling permanganate, avoid contact with skin and avoid breathing in dust. Use lemon juice to clean any permanganate stains off hands if staining should accidentally occur.