CHAUTAUQUA COUNTY HEALTH DEPARTMENT PRIVATE DRINKING WATER STANDARD FOR ULTRA VIOLET DISINFECTION

This system is intended for use in private homes whose water does not meet bacteriological quality standards.

Note to installer: you must certify that ALL steps below have been completed by placing a check mark in each box, signing this form and returning it to the Chautauqua County Health Department.

 \Box 1. Water Quality – In order to disinfect with UV light the water must meet the following quality criteria or the system will not disinfect properly. Use a certified lab or a water treatment professional to test the water for the following parameters **before** you purchase a UV system. Results must be attached to this form and be certified in writing by the tester. Pre-treatment such as a softener is usually required for UV to work effectively.

<u>Parameter</u>	<u>Limit</u>
Iron	0.3 mg/l
Manganese	0.05 mg/l
Hardness (calcium)	300 mg/l
Hydrogen sulfide	1 mg/l and/or no apparent odor
Turbidity	1 NTU
Color	15 color units and/or no apparent color

\Box 2. UV light:

- \Box a.) Must be NSF or UL approved for use with drinking water.
- □ b.) Must be sized to pump capacity, or flow restriction provided

 \Box c.) Must have automatic, audible alarm <u>and</u> indicator lights, or intensity meter to monitor bulb output. An automatic shutoff valve <u>is not</u> required for a private home.

- \Box d.) Quartz sleeve must be easily or automatically cleaned.
- \Box 3. A spare bulb must be kept on site in a cool dry place.
- □ 4. The unit must be cleaned and the bulb replaced following manufacturers recommendations, typically once per year.
- \Box 5. Disinfect the plumbing with chlorine after the installation of the light.
- □ 6. Test water for bacteria after the system has been installed and all of the chlorine has been flushed from the plumbing.
- \Box 7. We recommend that you have your water tested for bacteria at least once a year to check the effectiveness of your system.
- \Box 8. If it is a seasonal home the system should be disinfected with chlorine at the beginning of each season.
- \Box 9. Homeowner must be provided with all manufacturers' literature.

UV light Disinfection Schematic

