

SAFE DRINKING WATER ACT

N.J.A.C. 7:10-12.32 Disinfection of public noncommunity and nonpublic water systems.

(c) Regulations for disinfection by ultra-violet light are as follows:

1. Ultra-violet tubes shall be jacketed so that a temperature of 105 degrees Fahrenheit is maintained.
2. The jacket on the ultra-violet light tubes shall be quartz or high-silica glass with similar optical characteristics.
3. The ultra-violet light disinfection unit shall be designed to permit frequent mechanical cleaning of the water contact surface of the ultra-violet light tube jacket without disassembly of the unit.
4. The maximum water depth in the disinfection chamber, measured from the ultra-violet light tube surface to the outer walls of the chamber, shall not exceed three inches.
5. Ultra-violet radiation at a level of 2,537 Angstrom shall be applied at all points throughout the disinfection chamber at a minimum rate of 16,000 microwatt seconds per square centimeter.
6. An automatic flow control valve, accurate within the expected pressure range, shall be installed to restrict flow to the maximum design flow of the ultra-violet disinfection unit.
7. An accurately calibrated ultra-violet light intensity meter, filtered to confine its sensitivity to the range of disinfection spectrum, shall be installed in the wall of the disinfection chamber at the point of greatest water depth from the light transmitting source.
8. A flow diversion valve or automatic shut-off valve controlled by the ultra-violet light intensity meter shall be installed so as to permit water flow into the water system only when the minimum radiation level specified at (c) 5 is applied. When power is not being supplied to the unit, the valve shall be in a closed (fail-safe) position to prevent the flow of water into the water system.
9. The ultra-violet light disinfection unit shall be installed in a manner such that it cannot be bypassed.