

## RESPONDING TO WATER QUALITY EMERGENCIES

Natural disasters such as earthquakes, floods and hurricanes cause contamination of municipal water systems over a large area. Industrial and other chemical leaks can also cause contamination of water supplies. If a water quality emergency occurs in your location, follow your local municipality's instructions for addressing the emergency. If a boil order is issued, follow that boil order advisory until you have been notified by local authorities that your water is potable and safe to use.

Following is our recommended procedure for cleaning and start-up of Pentair water treatment systems using Pentair filters and RO membranes for commercial foodservice applications.

**OBEYING BOIL WATER ADVISORIES:** Obey them, period!

Contamination due to breaks in the mains, general flooding, or damage to the municipal waterworks itself should not be confused with situations in which contamination by protozoan cysts (*Cryptosporidium*, *Giardia*) is discovered in a water supply. Everpure submicron filters and RO membranes are NSF-Certified for removing such cysts, but not for killing or removing dangerous bacteria and viruses, which must be assumed to be present during the aftermath of a disaster, chemical spill or other water emergency.

When a Boil Water Advisory is announced and it is clear that there has been gross contamination, operators should stop using their filtration or RO system and boil their water as advised by their local authorities, until:

1. The "all clear" is given by local water authorities
2. Plumbing systems in your facility have been disinfected
3. Your Pentair system has been cleaned and any old or contaminated filter or RO cartridges have been replaced with new ones

**CLEANUP OF PENTAIR SYSTEMS:** When safe water is available again, all water-using equipment should be sanitized with an approved disinfectant, such as diluted chlorine bleach (5.25% sodium hypochlorite). The recommended dosage is 100-200 mg/L chlorine, which is easy to make. Fresh bleach has about 50 mg of chlorine in each mL, or about 500 mg in a capful. Four capfuls or an ounce in a 2 1/2 gal. bucket of water makes about 200 mg/L. Add a few drops of cleaning concentrate (dish detergent) to this solution, and use it to clean external surfaces.

Unexposed, interior plumbing surfaces can be sanitized in place using an Everpure JT Sanitizing/Flushing Cartridge. (Contact your local distributor or sales agent to acquire the JT can). This is an empty housing which can be filled with any cleaning or sanitizing solution and then be inserted into Everpure-branded filter heads. When the flow of water resumes, the disinfectant will be fed into the lines. When a strong chlorine smell is evident at the closest outlet, the flow should be stopped and the sanitizing solution left to soak for at least 30 minutes.

When sanitization is complete, remove the Flushing Cartridge and install new, unused filters or membrane cartridges. Rinse the equipment by flushing water through the system as directed in your system's Installation and Operation manual. Return your filtration or RO system to service.

**POST-EMERGENCY SYSTEM OPERATION:** Follow the replacement cartridge change-out schedule per your system's specifications. We suggest that you continue to monitor and follow your local water authority's post-emergency recommendations. Please note that water problems caused by natural disasters often include high turbidity, even muddy conditions. As a result, filter cartridges may clog faster and need replacing sooner than usual.

---

PENTAIR FILTRATION & PROCESS  
EVERPURE & SHURflo  
1040 MUIRFIELD DRIVE  
HANOVER PARK, IL 60133  
(630) 307-3000

TECHNICAL SERVICE TEAM  
(800) 942-1153 Toll Free  
[Servicespecialist@pentair.com](mailto:Servicespecialist@pentair.com)

Revised: 14 January 2014