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Ensuring optimal POU filtration system performance

POU microbiological purification provides a measure of confidence in drinking water.

A recent item seen in *The Quad-City Times* of Iowa, dated Feb. 9, 2011, draws attention to a serious issue: How customers are notified when their water supply may be contaminated and they are requested to boil water as a precaution.

According to the article, boil orders are mostly handled door-to-door in Davenport and Bettendorf, Iowa. Iowa American Water stated that they are “able to manage the leaks so as to not need an advisory at all or if they do, they notify the small number of customers affected on a door-to-door basis.”

“We do not typically notify the news media when these small, isolated advisories occur because it affects a very small number of customers and it would cause confusion and misunderstanding for the majority of our customers not in the affected area or under the advisory,” said Lisa Reisen of Iowa American. She added, “If the boil water advisory area is large and door-to-door notification is not feasible or timely, the company relies on news media and also has used a reverse 911 system.”

What if you, as a customer, are not home at the time of the boil water alert, and thus are not notified of the issue? Or you didn’t hear the doorbell? Should you still be concerned? The answer is yes.

A solution for this situation is to install a point-of-use (POU) water filtration system that is certified for bacteria reduction, virus reduction and cyst reduction.

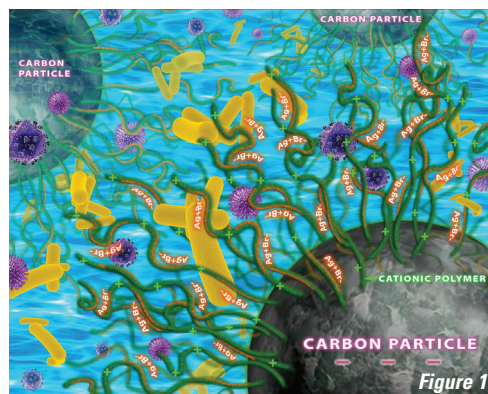
Enhanced performance claims including bacteria, virus and cyst reduction can be made with carbon block technology for POU water filtration systems by specially modifying microporous activated carbon. An extruded carbon block can be manufactured containing a microbiologically high-molecular-weight polycationic interception agent and a cationic silver halide complex. Cyst reduction occurs via mechanical filtration. Figure 1 is a graphical representation of this mechanism.

Microbiological-reduction carbon blocks undergo rigorous product testing and certification processes. They must meet the performance and material safety requirements of NSF/ANSI standards 42 and 53. Microbial cyst reduction claims can be certified using NSF/ANSI Standard 53; bacterial, cyst and virus reduction for the microbiological interception carbon block is verified using protocols adapted from the EPA’s purifier guide protocol.

Microbiological-reduction carbon blocks include a patented fail-safe shutoff mechanism ensuring no microbiologically contaminated water ever passes through the system. This fail-safe feature is a key requirement for certification by the State of California. By comparison, hollow-fiber technology is not able to meet this shutoff requirement — if one of the fibers is broken, consumers will not know if they are receiving contaminated water.

Maintain POU performance

POU filtration systems, whether offering a relatively simple performance claim, such as chlorine taste and odor reduction, or enhanced performance



claims, including bacteria, virus and cyst reduction, should be installed and operated in order to obtain maximum performance. Best practices would include the following:

1. Determine the optimal system to install at the customer’s location based on appropriate testing and analysis of the customer’s drinking water and infrastructure, water pressure, water usage and any other pertinent factors that may impact how the filtration system is used.
2. Teach the customer about the filtration system and how it works. If the customer understands their filtration system, they will be better enabled to use it correctly and know the importance of maintaining their system.
3. Ensure the customer knows the model number and part numbers for their filtration system and replacement filters. Dealers should ensure the filtration systems and filters have the dealer’s name and contact information on them. The dealer’s name, contact information and the filtration system model and replacement part numbers should be placed prominently next to the system.
4. Make it easy for your customer to contact you for service, repair or replacement parts. Do they have your phone number? Do you have a website you can share with them? Do you have a way they can find

their filtration system and replacement parts on your website? Do you maintain a Facebook® page they can locate so you can share information easily with them? Did you give them a business card for their files? Do you keep track of all of their contact information?

5. Keep a record of the customer's filtration system purchase in your files so you can assist the customer if they do not have the information you need in order to service their account. Remember, labels can be torn off and manuals can be misplaced.

6. Consider setting up a regular filter replacement appointment for your customer based on the estimated filter performance life.

7. Contact the customer on the anniversary of their filter system purchase to inquire about their use of the system and if they would like a service appointment so you can check the filtration system, clean it and replace any parts that need replacement.

8. The filter change-out contacts provide opportunities to sell other water treatment products.

The importance of POU

Customers who rely on drinking water supplied by a municipal system may be subject to infrastructure failures such as those that require them to boil water before consumption. There has been an increase over the past several years of boil water alerts as infrastructure continues to suffer breakdowns due to age, materials, weather or accidents. A bigger issue is whether the customers have been informed of whether a boil water alert is in effect in their area.

Dealers can assist their customers by providing information on filtration systems designed to provide clean, clear and safe drinking water in the event their municipally-supplied source is compromised. Customers who have been subject to boil water alerts (or perhaps several such

alerts) may prefer POU microbiological purification that will provide a measure of confidence in their drinking water regardless of whether they received notice of an alert. In this way, customers can take ownership, as they should, of the quality of drinking water entering their home. **WT**

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