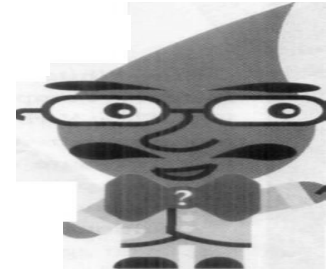


Professor POU/POE

Arsenic removal using ion exchange resin.

By David M. Bauman | Technical Editor



Q: I'm in an area where there is arsenic in the groundwater so I'm trying to learn more about treating it. Some arsenic removal methods I've read about involve oxidation.

How does the method work that uses ion exchange resin?

A: Your question is very timely because on January 6, 2006 the new US Environmental

Protection Agency (EPA) arsenic standard becomes effective. The Primary Drinking Water Standard will then list the MCL for arsenic at 10 ppb.

Although this MCL will not be

enforced for private wells, I'm sure our industry will use this public drinking water standard as a target the way we do now with other MCLs such as nitrate.

You're right that some arsenic removal methods require pre-oxidation to oxidize **As^{III}** to As^V.

However, most currently used methods do not need it. Methods that require pre-oxidation are standard strong base anion resin and reverse osmosis.

Other arsenic removal media include granular ferric hydroxide, granular ferric oxide, iron impregnated diatomaceous earth, iron impregnated activated alumina and iron impregnated anion resin.

Ion exchange resins

There are two types of ion exchange

For more information:

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For more information on related products, visit www.watertechnonline.com, select [Online Buyers Guide](#) from the site menu, and enter keyword: **Resin** or **Ion exchange**.