

Ground Water
GWPC
Protection Council

The Geologic Solution
An Alternative to Arsenic Treatment
For Public Water Systems



The current drinking water standard for Arsenic, set by the USEPA is 10 parts per billion.



Current efforts are focused on the treatment of arsenic. However, the use of treatment technology is likely to be the most expensive option to mitigate arsenic. Small public water systems can often times not afford to spend the money it would take to treat for arsenic.

What Are My Options?

1. Pump and treat? Even if you choose to treat your water, you must still evaluate the water to decide which treatment option will work for you.
2. Replace? If available, you could choose to purchase water from a nearby system, at whatever the cost; **OR YOU COULD CONSIDER.....**

**The
Geologic Solution!**

Why Should I Check Out the Geologic Solution?

The geologic solution is a relatively low cost, low risk method for bringing water from wells back into compliance by using the natural features of aquifers and water chemistry to design a program for re-completing wells rather than treating or replacing water. By evaluating the geology, geochemistry and water chemistry in various water bearing zones a way can often be found to fix existing wells by moving pumps, plugging off high arsenic zones and even changing pumping rates to prevent arsenic from getting into the water in the first place.

The Ground Water Protection Council and STR, Inc. have developed a method for evaluating whether or not a particular well field is a good candidate for using the geologic solution. For a small fraction of the cost of treatment or replacement, you can see if your well field is a candidate for this low cost option. So what's the bottom line?

Check before you treat!

Case Study: The town of Nichols Hills in central Oklahoma was faced with the prospect of installing a \$3 M treatment system to remove arsenic from their well water. By choosing the geologic solution, they ending up spending less than \$1 M to solve their arsenic problem. Maybe your system could benefit from this option too?

To get more information about the geologic solution, or to discuss the possibility of evaluating your well field to see if the geologic solution might work for your system, call the Ground Water Protection Council at (405)-516-4972 or contact Mike Nickolaus at mnickolaus@gwpc.org

You can also read more about the geologic solution by reading “Arsenic Alternatives for the Small Community” located in the Documents section of the e-Library on our website at www.gwpc.org.

