



## Affordable Arsenic Control

### Arsenic and Small Systems

The new EPA Arsenic Guideline has set a limit of 10 µg/l for water, with compliance by 2006. The new rule is expected to require over 3,300 small systems throughout the United States to make improvements or find other water sources. The EPA has estimated that the cost of implementation of the new arsenic rule could exceed \$300 per household for small systems, which could mean major compliance problems for many small systems.

The small user is faced with major decisions around which technology is best for their system, and even which chemical treatment program is best. Waters that have high levels of arsenic often have other constituents that make the water difficult to treat and interfere with normal treatment programs. While it is well known that "every water is different", in the case of small systems containing arsenic, it is more likely that **"every system is very different"**.

There are many arsenic control technologies available to the small user, some that are well established and some that are still in the experimental stage. Among them are:

- Chemical precipitation
- Absorption
- Separation

These can all reduce arsenic to below 10 µg/l. The small user will need to evaluate the complexity and cost of various systems, not always an easy task when other considerations often affect this choice.

**Orca Water Technologies** has many years of experience in arsenic treatment. Our expertise in this area is recognized globally.

**Orca Water Technologies** recognizes the difficulties facing small systems operators. We are working closely with the EPA to develop effective technologies that will enable small systems to meet the new guidelines in a cost-effective manner. Orca's recent participation in an EPA/NSF sponsored Environmental Technology Verification (ETV) of Orca's Kemloop 1000 finished with good results. The report and verification statement are currently under preparation so data is not yet available from the test. Critical to this, is to find methods that are easy to operate after installation.

**Orca Water Technologies** will evaluate your system, starting with on-site jar testing and pilot studies. Our treatability report will detail the various treatment options their efficiencies and their applied cost, including sludge disposal costs.

Small systems operators need a customized approach to these issues. Contact **Orca Water Technologies** now to see how we can help you with your arsenic problem.

**Orca Water Technologies, LLC.**  
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**Take advantage of over 100 years of combined experience in all aspects of water and wastewater treatment technology.**