

Filtronics, Inc.

Response to MHRA questions regarding arsenic water treatment systems

1. Name(s) of your system(s)

"Electromedia I or Electromedia V."

2. Will the system be available for installation and operation prior to the EPA mandated date of January 23, 2006?

Yes, we have had operating arsenic systems since the early 1970's.

3. Manufacturer and distributor contact information.

Filtronics, Inc, 3726 Miraloma ave, Anaheim, CA 92806, 714-630-5040, FAX 714-630-1160, Bill Hoyer, whoyer@filtronics.com

4. Basic description of your technology (i.e. activated alumina, modified lime softening, etc.).

Coagulation and High Rate Filtration.

5. Maximum arsenic levels that can be mitigated to below the 10ppm standard using your system.

We have systems in operation in the 60 ug/l range reducing it to 5 ug/l or less.

6. Range of system capacities available with your system.

Our systems run from 20 gpm to 15MGD or larger.

7. What method of disposal has been approved for the media type? Is it considered hazardous material or will they pass TCLP as non-hazardous waste?

Our filters are backwashed and the residuals can go to a sanitary sewer. If the sewer is not available, we can furnish a reclaim system and process the residuals. The processed residuals will pass the TCLP test. We have had a 1000 gallon per minute system on line with arsenic levels in the 50 to 60 ug/l range. The residuals pass TCLP and the utility pay \$240 a year for disposal to a sanitary land fill.

8. Approximate cost for a typical 200gpm system, including engineering, design, drawings, specifications, equipment, installation, and start-up. Do not including the building to house the system or piping to and from the plant.

We will need more specific water quality information to estimate an equipment cost. Generally for a 200 gpm system, it might run \$140,000.

9. Approximate ongoing annual operational costs for a 200gpm system, including chemicals, media replacement, disposal, electrical power, etc., as applicable. Please also include approximate labor requirements in labor-hours and the level of training/skill required by operators.

It is impossible to estimate chemical cost without specific water quality information. We are sending you a copy of our "Arsenic Report" for review that addresses several different sites and their operating costs. The plants are automated for unattended operation. Labor is about 2 hours a week to do the required reporting for the health department and to insure there is adequate chemical for processing.

10. What is the lead time required from purchase to operational installation?

Our lead time is normally 3 months. This can be accelerated. It would take about a month for installation but much of the work can be done concurrently with our manufacture. For a 200 gpm system, it would require less than a week to commission.

11. Describe the track record of the system and supplier including examples of existing installations, if any.

As discussed earlier, we have been in the arsenic removal business for over 30 years with systems in operation for extended periods.

12. List and explain any site-specific factors (such as appropriate water pH and mineral levels) that may affect the decision to use your system.