

Tonka Equipment Company

Response to MHRA questions regarding arsenic water treatment systems

In general Tonka Equipment Company can offer two different technologies to treat for arsenic

Option 1: TONKA AsTEC

- We are a licensee of ADI group arsenic technology called media G2.
- This is an adsorbative media specifically designed for arsenic treatment.
- It is NSF listed media and CAETV verified.
- This technology will work on arsenic over 100ppb with results below 5ppb to non detect.
- Flow range will be 100gpm and up.
- This media will pass TCLP as a non-hazardous waste.
- Cost for just the equipment for a 200gpm manual system is \$ 190,000.
- Media life is 3 months to multiple years depending on water chemistry
- This does not include pipe fit-up, building, installation, and wiring.
- Typical operation costs are from \$0.25-\$1.00 per 1,000 gal treated.
- Typical operator time would be 1 hr per day plus 2 hrs once per two weeks to backwash the filters.
- Lead time is 20 weeks
- This product has the longest track record in the USA for this type of technology with over 6 years operating on line at a facility in MI.

Option 2: Co-Precipitation

- This would use a standard filter system modified slightly to maximize arsenic removal.
- We have had systems treating for arsenic for over 10 years.
- Media life of 10-20 years before disposal of media.
- Backwashes once a day to once a week depending on water chemistry.
- Backwash is a non hazardous waste per EPA.
- Typical cost fully automated \$140,000.
- Operating costs \$0.07-\$0.15 per 1000 gal treated.
- May or may not need additional ferric chloride addition.
- If well water has iron levels that are 20:1 ratio to arsenic then may not need ferric chloride.
- Widely accepted standard operating design. Multiple sites in operation and multiple pilots completed with multiple jobs in design.
- Lead time 20 weeks.

Richard P. Mann
Vice President Sales
Tonka Equipment Company
13305 Watertower Circle
Plymouth, MN 55441
763-252-0064