Creating a Line-In Extension for Arsenic Removal in H₂O

Team 06
Senior Design
Calvin College, 2013-14
Meet the Team

Jesse Short, CvE – Client Relations
Steve Taplin, CvE – Team Editor
Lucas Timmer, CvE – Project Manager
Grant Mathews, CvE – Production Manager
Project Description

Create a filter component that will enable current point-of-use (POU) water filters to remove arsenic and effectively communicate filter exhaustion.

Demand

- Health effects of Arsenic
- Arsenic is a global issue
- POU target market

http://www.rsc.org/chemistryworld/News/2008/April/23040801.asp
Why Arsenic Removal?

Justice  Stewardship

http://illinois.edu/blog/view/789/97343
Scope

Research

Initial Lab Testing

Media Selection

Extensive Lab Testing

Prototype Development

Prototype Testing

Cost Analysis

Final Results
Status

Research
Arsenic chemistry, health effects, etc.
Current media
Communicate media exhaustion

Media Selection
GFH
Bayoxide E33
Metsorb
Aquabind
Hematite

Media Testing
Laboratory Plan
Questions...?

... and hopefully some answers