

Town of Millsboro, Delaware

Activated Carbon Response for Emergency VOC Removal in a Public Drinking Water Supply

In Fall of 2005, water analysis test results from the Town of Millsboro public water supply that is used both locally and for export to a neighboring town, indicated that they were exceeding the Maximum Contaminant Level (MCL) for an organic compound, Trichloroethylene (TCE). TCE is a clear liquid that evaporates quickly, and is frequently used as a degreaser in industrial operations and has been identified by the Environmental Protection Agency as a carcinogen.

The town's water supply averaged 70 to 90 parts per billion (ppb) of trichloroethylene, about 14 times higher than the federal limit of 5 ppb. This discovery created a local water emergency with the town no longer being able to use the two contaminated wells for public supply. Siemens Water Technologies, formerly USFilter, was able to respond with a turnkey treatment system to remove TCE from the well water. Tanks, media, installation, and services were provided to ensure rapid remediation of the contaminant.

Siemens supplied two treatment systems, each of which will treat more than 250 gpm of drinking water. Each system consists of three PV[®] 2000 steel adsorber vessels that hold AquaCarb[®] 830AWS Granular Activated Carbon. Effluent from the treatment system was below detecting limits for TCE.

Siemens also provided the installation of the vessels at the site with interconnecting piping, loading of the activated carbon into the adsorber vessels and preparation of the carbon beds for operation. Since this work was performed by staff from the local branch, the time to bring the system on line was greatly reduced.

Significant Accomplishments

Although Granular Activated Carbon has long been recognized as the Best Available Treatment for VOC's, only Siemens was able to mobilize the equipment, media, and manpower to bring the contaminated drinking water wells back on line within four days of notification. Further, since Siemens Water Technologies used all their own personnel, the system was successfully brought online and the treated effluent met all state guidelines for potable water.

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| Facility | Municipal Drinking Water |
| Application | Trichloroethylene (TCE) Removal |
| Technology | Activated Carbon Adsorption |
| Scope of Services | System design Equipment and interconnecting piping installation Media loading, bed preparation, and start-up Maintenance service |
| Start Date | November 2005 |

PV[®] Series Adsorbers for VOC removal





Siemens Water Technologies North America Service Network

North America Service Network

Our North America service network is backed by more than 80 offices staffed with certified technicians and applications experts who can solve your problems. In addition, Siemens Water Technologies provides response flexibility through either a lease or capital purchase option, and the company offers assured liability protection through environmentally safe waste destruction.

Services Available

- Activated carbon supply, removal and reactivation services
- Filter media supply and removal
- Ion exchange resin supply
- Membrane supply and cleaning programs
- Parts and expendables
- Service contracts
- Temporary/emergency water systems

Technologies Available

- Reverse Osmosis (RO) membrane filtration
- Conventional clarification and filtration
- Oil/Water separation
- Granular activated carbon adsorption
- Demineralization
- Inorganic metals removal
- Chemical addition

Siemens Water Technologies delivers cost-effective, reliable systems guaranteed for quality, safety, and compliance. Our trained service staff is available to make sure your systems is running at peak performance and to your specification. For your water treatment system, choose the partner that is committed to taking care of the world's water...and yours.

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