

# Electrocoagulation

Water Recovery and Reuse

## Ground Water Cleanup Industry Applications

City drinking water suppliers, Department of Transportation,  
Department of Defense, developers, Homeland Security Administration

### Challenges

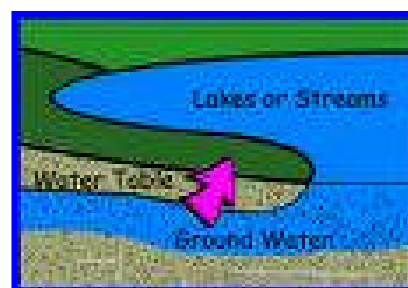
- Heavy metals such as arsenic and chromium, chlorinated solvents, BTEX, etc. from contaminated groundwater
- USEPA has recently lowered the standards for arsenic in drinking water from 50  $\mu\text{l}$  to 10  $\mu\text{l}$
- Up to 30% of all municipalities are now out of compliance

### Solution

#### Electrocoagulation:

- Is well suited for the reclamation of ground water
- Removes **heavy metals**.
- Removes high-weight hydrocarbons
- Removes **radioisotopes**.
- Removes halogenated hydrocarbons
- Removes pesticide complexes

Heavy Metal Contaminant	Before mg/l	After mg/l	Removal Rate %*
Aluminum	224	0.69	99+
Arsenic	0.076	ND <0.0022	97.1
Cadmium	0.1252	ND <0.004	96.8
Chromium	139	ND <0.1	99+
Lead	0.59	0.0032	99+
Mercury	0.72	ND <0.0031	98.45
Zinc	221	0.14	99+
Radioisotope Contaminant	Before	After	Removal Rate %*
Americium-241	71.99 pCi/l	0.57 pCi/l	99+
Plutonium-239	29.85 pCi/l	.29 pCi/l	99+
Radium	1093 pCi/l	0.1	99+
Uranium	0.13 mg/l	0.0002	99+



\*These published test results are specific examples and were conducted by a qualified independent laboratory or government facility.