

Electrocoagulation

Water Recovery and Reuse

Radioactive Isotopes

Industry Applications

City drinking water suppliers, nuclear power plants, institutions and organizations disposing of nuclear and mining wastes, groundwater remediation environmental companies, research scientists, federal agencies such as the EPA, and the Department of Energy.

Challenges

- Current methods of radioactive wastewater treatment are very costly and not completely effective in remediating tritium and deuterium
- Disposal methods and facilities must meet strict environmental protection and pollution prevention standards
- Ineffective and costly storage and containment

Solution

Electrocoagulation:

- On-site, closed loop treatment system effectively removes metal radioisotopes from wastewater converting them into an oxide form that allows safe non-hazardous disposal.
- Avoids rigorous requirements, and often fines, of several regulatory boards.
- Cuts costs by omitting the need for specialized transportation or storage facilities; reuse water in the production process; no regulatory fines; save on immense cleanup costs.

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+
Heavy Metal Contaminant	Before mg/l	After mg/l	Removal Rate %*
Aluminum	224	0.69	99+
Arsenic	0.076	ND <0.002	97
Cadmium	0.125	ND <0.004	96
Chromium	139	<0.1	99+
Lead	0.59	0.0032	99+
Mercury	0.72	ND <0.003	98
Zinc	221	0.14	99+

