HUMASORB®

Solution To Pollution

Low Cost for Simultaneous Cleanup of Heavy Metals, Radionuclides and Organics

Metals, Radionuclides, Organics

Multi-Purpose Adsorber

High Cation-Exchange Capacity

Can Be Regenerated

Cost-Effective

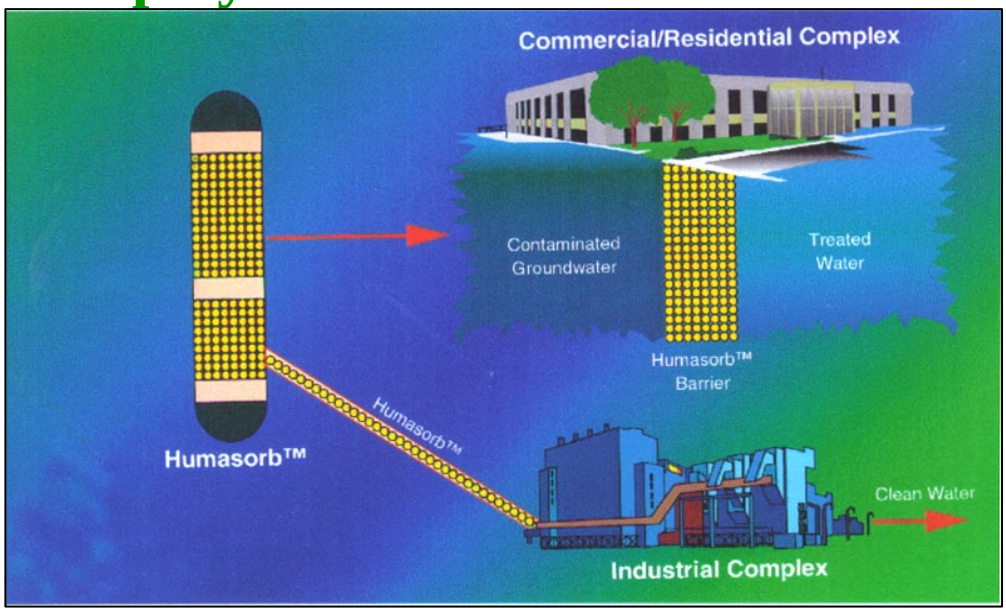
Environmentally Friendly

ARCTECH

Preserving tomorrow's world... today

HUMASORB® is based on the natural properties of humic acid and incorporates high ion-exchange capacity, the ability to chelate metals, adsorb organics, and also reduce toxic forms of contaminants such as Cr (VI) and chlorinated organics into non-toxic components.

Deployment of HUMASORB®



as an in-situ barrier

in pump and treat mode

HUMASORB® EFFECTIVE ON:

Metals:

Barium, Lead, Cadmium, Chromium, Nickel, Mercury, Arsenic, Copper, Zinc, Aluminum, Cobalt, Beryllium, Iron, Zirconium, Gold, Manganese, Magnesium, Vanadium, Boron

Radionuclides:

Uranium, Strontium, Cesium, Cerium (Plutonium Surrogate), Rhenium (Technetium Surrogate)

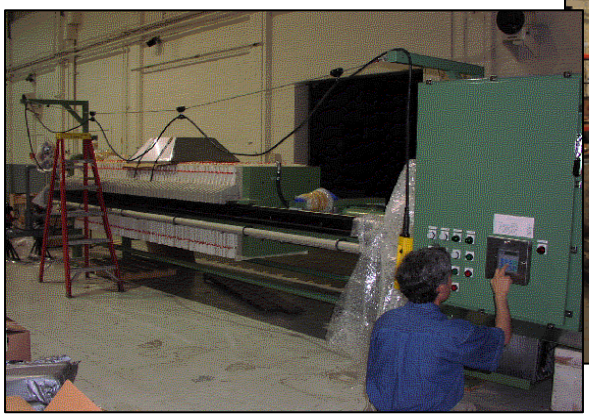
Organic Contaminants:

TCE, PCE, PCB, Chloroform, Carbon Tetrachloride

Additional contaminants under evaluation

Successes of HUMASORB® Technology

HUMASORB® Treatment Unit For Removal of Toxic Metals from Wastewaters at U.S. Army - Johnston Island



Demonstration for resource recovery and treatment of acid mine water of Berkeley Pit Butte, Montana

- ❖ Successful treatment to recover metals such as copper and iron, and remove toxic metals such as cadmium to regulatory limits
- ❖ Fertilizer product recovered from the process successfully evaluated in field tests for growth of crops
- ❖ Demonstration established profitable approach

Treatment of waste brines at U.S. Army Chemical Weapons Destruction Facility at Johnston Island in Pacific

- ❖ Treated waste brines to remove arsenic, mercury and lead
- ❖ Successful treatment to meet EPA TCLP requirements
- ❖ Provided solution to a problem for which no solution existed

Treatability tests for removal of radio nuclides contaminants at DOE - Idaho Weapons Complex

- ❖ Effective for removal of cesium-137 and strontium-85 from Idaho Chemical Processing Plant (ICPP) Groundwater
- ❖ High affinity for radioactive strontium and cesium compared to background metals such as calcium
- ❖ Significant cost advantages compared to other media

Our HUMASORB® Process Mobile Unit is Available for Specific Technology Applications.

For More Information Contact:

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