

MicroCED: Microbiological-based Chlorinated Ethene Destruction

Description:

MicroCED is an innovative treatment technology for the containment, detoxification and elimination of chlorinated ethenes (CE) in the environment. MicroCED consists of several novel microorganisms that are new to science. MicroCED rapidly and completely converts CE to non-toxic, safe end products without production or accumulation of toxic by-products. MicroCED can detoxify both saturated and unsaturated CE and is amendable for treatment of mixtures of these pollutants. MicroCED is a sensitive and efficient bio-process for CE. MicroCED is versatile; it can be used as a low cost, low maintenance standalone bioremediation treatment for widespread, low-level chloroethene contamination or in combination with aggressive source-zone treatment technologies. MicroCED is specifically designed to efficiently and reliably contain, reduce and destroy chloroethene contaminant plumes in the subsurface environment.

Applications:

- Environmental remediation of chloroethene contaminated groundwater and soils
- Potential end users could include stewards of the U.S. military, DOER or DOD, industry, privately owned lands contaminated by chlorinated ethenes, or environmental consultants and contractors that specialize in environmental restoration

Benefits:

- Versatile
- Can be used as a low cost, low maintenance standalone bioremediation treatment for widespread, low-level chloroethene contamination or in combination with aggressive source-zone treatment technologies
- Rapidly and completely converts chlorinated ethenes to non-toxic, safe end products without production or accumulation of toxic by-products
- Can detoxify both saturated and unsaturated chlorinated ethenes and is amendable for treatment of mixtures of these pollutants
- Sensitive and efficient bio-process

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Protection Status: Patent issued; # [7,615,153](#)

Licensing Status: Available for licensing

Additional Terms: Contamination, Ethene, Chlorinated Ethene, Bioremediation, Detoxification, Pollution

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