

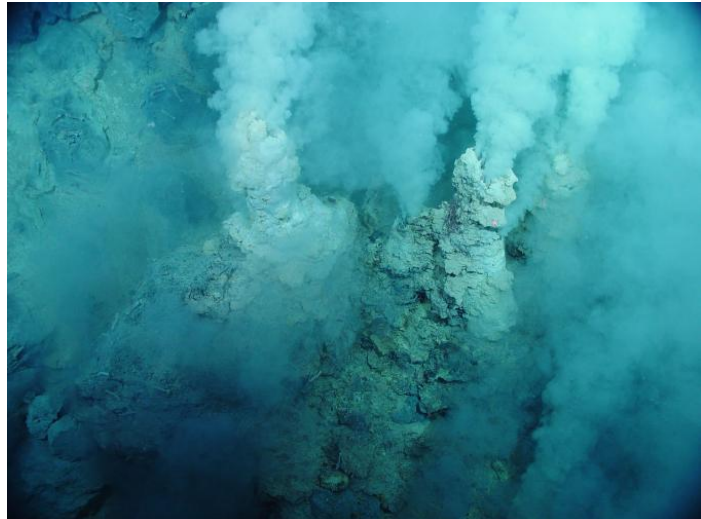
CyCurex®

A Revolution in Clean Technology

CyCurex® Technology Overview

CyCurex® of Cylenchar Limited UK is a generic reagent for the remediation of toxic heavy metals contaminated materials.

The risks of harm from toxic heavy metals wastes are dramatically increased if they are in soluble or latently soluble forms. CyCurex treatment converts soluble metal compounds into stabilised metal sulphides. The sulphide ores of heavy metals are stable and amongst the most insoluble of heavy metal compounds. Therefore, they are of dramatically lower toxicity and greater stability than their other adducts. This stability is why sulphide metal ores are so abundant in nature.



The CyCurex® process was designed to replicate natural geochemical processes that occur in hydrothermal vents, such as the 'deep sea smokers' on oceanic ridges. As so many heavy metals are derived from their sulphide ores, it is reasoned that Cylenchar technology acts to revert these materials back to the form in which nature intended them to be!

CyCurex® can bind and stabilise a broad spectrum of heavy metals in a wide variety of substrates, and eliminate or reduce metals leaching to within internationally accepted regulatory limits, thereby preventing contamination of soil and/or ground water. Treated soils can be rendered compliant with US-EPA-Universal Treatment Standard (UTS) Limits and EU Waste Acceptance Criteria (WAC) limits set out in WAC Directive 2003/33/EC and derived from Directive EU 1999/31/EU. Treated materials will pass testing by US-TCLP, DIN38,414S(4), UK-NRA, UNI 10802.A.2 and EN12457 methodologies. Successfully treated substrates will withstand Multiple Extraction Procedure (MEP) long-term stability tests, indicating >1,000 year treatment stability to acid rain and oxidative degradation.

Potential applications: In-situ and ex-situ contaminated land remediation. Heavy metals sequestration of combustion gases from coal fired power plants, cement kilns and waste incinerators, contaminated water treatment, chemical waste treatment, oil field off-gas sequestration, abatement of radio-nucleotide contamination...



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Cylenchar Limited, *Barrow in Furness, Cumbria, United Kingdom, LA14 5NP*
Tel: +44 (0)161 663 0031, fax: +44 (0)161 663 0032
e-mail: enquiries@cylenchar.com <http://www.cylenchar.com>