A Humic Acid Extract from Lignite for Reclaiming Contaminated soils

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Abstract: A unique form of a humic compound was developed by A.I. Shulgin, A.A. Shapovalov and U.G. Putsykin of Moscow, Russia using a patented process from lignite coal. This material appears to have properties that complexes certain heavy metals such as Pb, Cu, Cd, etc as well as PCB's. This study was restricted to its interaction with Pb. Both greenhouse and laboratory studies were conducted from a quantity of humic acid (Stabilite) from the SET company in Louisville KY. Although Stabilite contains some Pb, in the laboratory study, significant reductions in Pb concentration occurred. Stabilite also reduced Pb levels of an artificially contaminated soil having 1000 ppm Pb for both the residual soil as well as water leached through this soil. Corn grown in this did not extract Pb from the Stabilite treated soil.

Additional Key words: Stabilite, lead, rehabilitation

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