

Aqueous Mercuric Ion Removal with Organoclays and Bone Char

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Abstract

Lab tests and actual projects have shown that granular organoclay, bone char (EC-MB), and activated carbon are well suited to remove mercury ² from water. The organoclay (EC-199) removes (3 grams mercuric mercury per 100 grams of organoclay) some 3% of organoclay by weight, but it also removes organic compounds and helps prevent fouling of the bone char and carbon upstream in the treatment train. The bone char removes 14% by weight of mercury. The activated carbon removes any left over soluble compounds.

Powdered organoclay (PT-1E) fixates mercury, preventing its leaching into groundwater during soil/sediment stabilization projects.