

# Press Release

Region 2 - New York, New Jersey, Puerto Rico and the U.S. Virgin Islands

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## **Technology Turns Contaminated Sediment into Useful Product Environmental Headache Can Become Valuable Product**

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(NEW YORK, NY – March 24, 2006) The soil we use to landscape our lawns will some day come from contaminated river and harbor sediments, as U.S. EPA Regional Administrator, Alan J. Steinberg demonstrated today in Woodbridge, New Jersey at the first full-scale facility designed to turn this problem into an asset. Joining EPA to tour the facility was U.S. Army Corps of Engineers New York District Engineer Colonel Richard J. Polo, Jr. The technology being showcased uses water under high pressure and biodegradable detergents to strip away contaminants and leave behind soil that can be blended with compost or yard waste to produce high quality top soil. It is patented by BioGenesis Enterprises, Inc. and is being used in the Woodbridge facility to treat more than 4500 cubic yards of contaminated sediment from the lower Passaic River.

“This technology and other technologies that turn contaminated gunk into useful products takes us into the future,” said EPA Regional Administrator Alan J. Steinberg. “These innovative technologies complement the President’s charge for EPA to pick up the pace of environmental protection while finding ways to keep the economy strong.”

The new technology is part of a demonstration program to decontaminate dredged materials from the Port of New York and New Jersey. The program is being funded and implemented by EPA and the New Jersey Department of Transportation (NJDOT). In addition to sediment washing technology, EPA and NJDOT are evaluating a technology that heats the sediment to 2600 degrees Fahrenheit and blends it with cement. This technology, patented by Endesco Clean Harbors, will be used at the International Matex Tank Terminal in Bayonne, New Jersey to treat sediment currently stored in the

Valgocen, a large cargo vessel docked on the Raritan River at Bayshore Recycling. Sediment washing and thermal destruction may be among the technologies available for treated dredged sediments from the New York/New Jersey Harbor and large aquatic Superfund sites such as the lower Passaic River, with an ultimate goal of creating a self-sustaining industry that uses treated dredged sediments as building material.

The BioGenesis Sediment Washing Technology strips contaminants, such as PCBs, dioxins, heavy metals (i.e. mercury and arsenic) and petroleum related compounds, from sediment particles using a specially-developed biodegradable detergent and high-pressure water jets. Manufactured soil can be produced from the decontaminated sediment. The soil could be used in a number of land-based applications, such as remediation and landscaping. Beneficial-use products also include construction-grade cement, lightweight aggregate, composite bricks, and structural fill.

These demonstration projects receive project management support from the U.S. Department of Energy, Brookhaven National Laboratory, and regional research support from Rutgers University and Montclair State University. These agencies and universities work together to demonstrate different innovative technologies for decontaminating dredged materials to produce environmentally acceptable, beneficial-use products.

Information and technical reports on EPA's sediment decontamination program can be found at <http://www.bnl.gov/wrdadcon>. Information on EPA's national dredged materials management program can be found at

<http://www.epa.gov/owow/oceans/regulatory/dumpdredged/dredgemgmt.html>.

Information on beneficial uses of treated sediments can be found at

<http://el.ercd.usace.army.mil/dots/budm/>.

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