University of Pennsylvania

Institute for Environmental Studies

Presents

Kevin H. Gardner

University of New Hampshire

Reactive Capping for *in-situ* Management of Contaminated Sediments

Hydrophobic organic contaminants (HOCs) such as polychlorinated biphenyls (PCBs) and Polycyclic Aromatic Hydrocarbons (PAHs) are of great concern in riverine and marine environments due to their accumulation in sediments and their bioaccumulation through aquatic food webs. The most common technologies for treatment of sediments contaminated with HOCs are dredging followed by treatment and disposal, and monitored natural recovery (MNR). In-situ treatment methods such as reactive capping technologies are under intense research for their potential effective use. The main objective of this research is to evaluate the performance of a reactive capping mat impregnated with apatite minerals, which are capable of sequestering metals effectively, and sorbent materials that are capable of sequestering HOCs for in-situ management of contaminated sediments. This presentation will provide a general overview of issues related to contaminated sediments, provide a national picture of the magnitude of the problem, discuss laboratory research and field evaluation (NH and TX) of reactive capping research including interesting aspects such as the use of passive samplers to measure bioavailable contaminant concentrations.

Date: April 8, 2009
Time: NOON - 1:30 pm
Place: Carolyn Hoff Lynch Auditorium
On the Penn campus: Chemistry Building
34 & Spruce Sts. (enter on 34 St)

NO REGISTRATION REQUIRED
Direct questions to: 215-573-3164
ies_penn@sas.upenn.edu
http://www.sas.upenn.edu/earth/ies

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