

Welcome to the November 2002 SedWeb E-Mail Update, a periodic summary of recent developments about contaminated sediments remediation. This update is a service the Sediments Web Community (<http://www.sediments.org>), an online resource for researchers and environmental managers created by the U.S. EPA-sponsored Hazardous Substance Research Centers/South & Southwest (HSRC/SSW).

We invite your submissions for future updates. Contact Mark Hodges at mark.hodges@gtri.gatech.edu to make submissions or suggestions, or to add or remove your name from this list.

Publication of news items in this report does not constitute an endorsement of their contents by either the HSRCs or EPA. We present them because of their potential relevance to sediments researchers and managers.

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Regulatory and Legislative Updates

GREAT LAKES CONTAMINATED SEDIMENTS LEGISLATION. Congress has approved the Great Lakes and Lake Champlain Act of 2002, which provides for assistance in the cleanup of sediment contamination in these bodies of water. The bill authorizes the following appropriations to EPA in each of the fiscal years 2004 to 2008 for areas of concern of the Great Lakes: 1) \$25 million per year for contaminated sediments remediation; 2) \$1 million per year for public information on sediments remediation; and 3) \$3 million per year for research on development and use of innovative approaches, technologies, and techniques for sediments remediation. In addition, the legislation calls for appropriation of \$11 million per year from FY 2004 to 2008 for the Lake Champlain Basin Program. To see a copy of the bill, go to the following web address and type in "H.R. 1070" in the space for the bill number.

<http://thomas.loc.gov/>

Reports/Publications

IN-SITU CAPPING ON THE PALOS VERDES SHELF IN SOUTHERN CALIFORNIA. The U.S. Army Corps of Engineers has published a report of a field pilot study of in-situ capping on the Palos Verdes (PV) Shelf off the coast of Los Angeles, California. This study was sponsored by EPA Region 9 as part of an ongoing Superfund investigation. EPA will use the study results to decide whether to propose in-situ capping for remediation of contaminated sediments on the PV Shelf. To download the report, go to:

<http://www.wes.army.mil/el/elpubs/pdf/tr02-5.pdf>

CONTAMINATED SEDIMENTS NEWSLETTER. EPA's November Contaminated Sediments newsletter for November, with current news, conference announcements, and summaries of journal articles of interest, is now line. <http://www.epa.gov/waterscience/pc/csnews/issue31.htm#A1>

Research Programs

CALCASIEU ESTAURY INITIATIVE DATABASE UPDATED. In March 1999, EPA decided to conduct a remedial investigation and feasibility study to evaluate sediment contamination in the Calcasieu Estuary in Louisiana. The agency has established a web-available database with information on estuary samplings made in this initiative, and in September 2002 Phase 2 biota sampling data was added. The database adds the results of the recent estuary sampling to past measurements and is available for download along with two software programs, Query Manager and Marplot. Sampling and analysis plans are available that describe sample locations and chemical tests that were performed. These documents include maps showing where samples were collected and rationales for collection of specific samples.

<http://www.epa.gov/earth1r6/6sf/sfsites/datarep.htm>

CONTAMINATED SEDIMENTS RESEARCH PROGRESS REPORTS. At the November meeting of the Hazardous Substance Research Centers/South & Southwest, investigators working on five research projects at

Rice University, LSU, and Texas A&M University presented progress reports. Project topics include: 1) bioturbation and bioavailability of residual, desorption-resistant contaminants; 2) contaminant release during removal and resuspension; 3) in-situ containment and treatment: engineering cap integrity and reactivity; and 4) phytoremediation in wetlands and confined disposal facilities. To read the initial proposals and progress reports for these projects, go to the following web address: <http://www.hsrb-sww.org/ssw-abstracts.html>

Conferences/Meetings/Workshops

WORKSHOP ON ENVIRONMENTAL STABILITY OF CHEMICALS. The announcement, agenda, and registration form for the Sediment Management Work Group's (SMWG) upcoming workshop on environmental stability of chemicals are now available in PDF format. This previously announced workshop will be held April 8-10, 2003, at the Wyndham San Diego Emerald Plaza. The conference will focus on the important biogeochemical and physical factors that modify the stability, mobility, and/or bioavailability of inorganic and organic contaminants in aquatic sediments. Participants will explore the fate, effects and risks of sediment-bound contaminants and seek agreement on general yet pragmatic guidance for the assessment and management of contaminated sediments that may pose an unacceptable human health and/or environmental risk. To download the workshop announcement, agenda, and registration form, go to: <http://www.sediments.org/env-stab.html>.

Remediation Programs

HUDSON RIVER SAMPLING PROGRAM. General Electric is concluding its sediment sampling program for the season at the Hudson River PCBs Site. In spring 2003, GE will publish a report summarizing work to date and detailing sampling results. This news was reported on EPA's Hudson River List-Serv November 18. In other news, the list-serv reported that EPA has hired Ecology & Environment, Inc. (E&E) to help the agency find possible locations to place sediment processing/transfer facilities. E&E's upcoming report to EPA on its methodology for choosing the sediment processing/transfer facility locations will be available to the public. EPA will soon announce the dates for public meetings in the Upper Hudson area where the selection process and engineering criteria will be discussed. To subscribe to this free list-serv go to: <http://www.epa.gov/hudson/listserv.htm>

Requests for Assistance

FEDERAL FLOOD INSURANCE ACT: AN ARAR FOR A SEDIMENT CAP REMEDY? Kevin Parrett, a project manager at the Oregon Department of Environmental Quality, poses the following question: Is the Federal Flood Insurance Act of 1968 and, specifically, 44 CFR 60.3(d)(3) a potential Applicable or Relevant and Appropriate Requirement (ARAR) for a sediment cap remedy at a CERCLA site? Parrett goes on to write: *"This Act provides Federal Flood Insurance for Communities who comply with certain requirements such as 'prohibiting encroachments, including fill...within the adopted regulatory floodplain...' The Federal Emergency Management Agency (FEMA) developed policy stating 'that this regulation [44 CFR 60.3(d)(3)] is to be interpreted exactly, and strictly, as written; that is, 'no' rise above the Base Flood Elevation [100-year floodplain] will be permitted. Therefore, nothing that offers any resistance to the flow of floodwaters may be placed within a regulatory floodway unless compensatory action is taken to restore the lost conveyance.'* The municipality in which my site is located has insisted that this federal regulation (and their local code relating to this regulation) be complied with fully. The municipality states that in order to achieve compliance a balance cut and fill must be incorporated into the cap design. In other words, I would need to pre-dredge the footprint of the sediment cap (approximately 100,000 CY over 24 acres)." Anyone with guidance or information to pass along to Parrett on this topic can write him at: parrett.kevin@deq.state.or.us. Please also copy the note to mark.hodges@gtri.gatech.edu if you would like the information to be passed along to the SedWeb e-mail advisory group at large.

Remediation Technologies

BIOLOGICAL EARLY WARNING SYSTEM. Limco International in Germany has developed a Multispecies Freshwater Biomonitor (MFB), a system based on impedance technology that uses indicator species to provide early warnings of pollution in water, soil, and sediments. Organisms of all species and sizes and in all media (water, soil, sediment) can be used. They are placed in test chambers filled with sediment and their movements are recorded online. The MFB can detect changes in their behavior and produce a warning when appropriate. The MFB can also be used for whole sediment toxicity testing, where survival and behaviour are the toxicity parameters. Papers have been published on the technology in the *Journal of Soils and Sediments* (Gerhardt and Schmidt) and in *Environmental Pollution-New Initiatives* (Gerhardt et al.). To further information, contact Dr. Almut Gerhardt at AlmutG@web.de or visit the Limco web site. <http://www.limco-int.com>