Contaminated Sediments Update

U.S. EPA Contaminated Sediments Guidance

This year has been a very notable one in the contaminated sediments arena for a number of reasons. The United States Environmental Protection Agency (U.S. EPA) has continued its work on developing a comprehensive guidance for remedial project managers addressing contaminated sediment sites. Although the issuance of this draft guidance has been substantially delayed, it is expected to be released in draft form for public comment by mid-2002. In the interim, however, based upon discussions with the Sediment Management Work Group (SMWG) and other stakeholders, U.S. EPA issued a draft "11 Sediment Management Principles" which provide a management framework for evaluating contaminated sediment sites. Those Principles can be reviewed on U.S. EPA's webpage at www.epa.gov/superfund/new/sedpresent.htm.

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Issuance of these Principles was an important milestone from the industry perspective because the Principles reiterated the importance of evaluating all remedies fairly and objectively. One of the Principles confirms the policy that there is no presumptive remedy. A recent survey reported that 56 out of 63 contaminated sediment remedies selected historically involved dredging. In fact, the National Academy of Science Report on Contaminated Sediments (January 2001) commented that the Remedial Project Manager's thought process tended to immediately jump ahead to the remedy phase and often presumed dredging to be the likely solution. By not developing a comprehensive conceptual site model that identifies the source of the unacceptable risk (e.g., widespread low levels of the contaminant vs. discrete surficial areas,

the location of contaminants in the water column (e.g., at depth or at the surface), ongoing/continuing sources, etc.), mass removal may not actually lead to risk reduction. The emphasis on risk reduction in the EPA Principles also will encourage a more scientific and risk-based evaluation in the remedy selection process.

EPA Sediment Management Forum

In late May, 2000, EPA sponsored a forum on contaminated sediments which was attended by over 400 individuals. Over 30 experts in specific sediment-related fields participated as panelists. Fruitful discussion occurred on changes needed in sediment management investigation and evaluation methodologies and in the remedy selection process. Substantial discussion also occurred on the ingredients of an appropriate risk management framework for sediment management decision-making.

Sediment Stability Workshop

As an outgrowth of the EPA Sediments Forum, it was recognized that the issue of sediment stability most frequently governs the ultimate remedy selection. This recognition resulted in the development of an intensive three-day technical workshop jointly sponsored by U.S. EPA, the U.S. Army Corps of Engineers, the SMWG, the U.S. Navy and the South/Southwest Hazardous Substance Research Center. The objective of this conference is to provide detailed information about the scientific principles necessary to objectively evaluate sediment stability. Lack of comfort with sediment stability at most sites typically results in a conservative decision to remove all or most of the contamination even where such removal is not directly contributing to the unacceptable risk exposure at a given site. More information about

the conference is provided on the last page of this issue of the *Michigan Environmental Compliance Update.*

Recently Proposed Sediment Remedies

On the remedy selection front, very disconcerting news has been reported during the course of the year on two "mega" sediment sites. First, EPA Headquarters announced a proposed plan for the upper Hudson River just prior to the change in administration calling for removal of 2.65 million cubic yards of sediment. Although the estimated cost utilized by the government is reported to be $500 million, most industry experts believe that this estimate substantially underestimates the actual cost of the project. Ironically, EPA seems to have recognized some of the criticism of the effectiveness of the dredging remedy in achieving complete removal of the contaminants by virtue of its imposition of a requirement to backfill substantial volumes of clean material over the dredged areas. An estimated 57,000 truckloads of clean material would be required for this post-dredging cap.

Out in the Midwest, even more startling news occurred in early October when EPA and the Wisconsin Department of Natural Resources (WDNR) announced a proposed plan for the Fox River. The proposed plan would require removal of 7.25 million cubic yards of contaminated sediment, dwarfing the Hudson River volume. In addition, the Agency's projected price tag of slightly over $300 million is believed to grossly understate the total costs due to its understatement of sediment handling and disposal expenses. In addition, the feasibility of the proposed 28-mile pipeline to transport the sediment to a massive dewatering basin is being seriously questioned. If a mean dredging unit cost is utilized comparable to recently completed

projects of $275 per cubic yard, the actual costs for the Fox River dredging project would be over $1.9 billion.

SMWG Activities

Heightened interest and concern about sediment issues have continued to increase the membership and interest in the SMWG. The SMWG now consists of approximately 40 members who are dedicated to implementation of its mission statement "to advance risk-based, scientifically sound approaches for evaluation of sediment management decisions." The SMWG's spring meeting is scheduled for February 5-6, 2002 in Orlando, Florida. In 2002, a new category of affiliation, "Sponsor," also has been created for consultants and contractors. For more information about the SMWG, please contact the Group's Coordinating Director, Steven C. Nadeau, Honigman Miller Schwartz and Cohn at (313) 465-7492 or visit the SMWG's webpage at www.smwg.org.

In summary, in light of the ever increasing stakes involved with contaminated sediment sites and the proliferation of newly identified sites of concern, sediment management issues are likely to be the subject of substantial focus by the federal and state cleanup programs in 2002 and beyond.

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