A Survey of the Current Approaches to Contaminated Sediment Remediation in Various Countries

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Abstract: Contaminated sediment remediation is becoming more common throughout the world. Ongoing projects can be found in several European countries, Israel, Brazil, Australia, and throughout North America. During the SedNet meeting, it is an appropriate time to reflect on the developments in this field and the variety of approaches currently in use around the world. In particular, we should consider the following:

- What regulatory frameworks are in use or under consideration?
- What scientific approaches to evaluate risk are in use?
- What technologies are in active use or planning stages?

Through this survey of approaches we can develop a snapshot of our current state of the industry and evaluate the need for and value of additional development of the approaches and technologies.

As members of a community of professionals on the inside of the world of dredging, we have the privilege of observing our field of interest develop over the years. Indeed, it was common to hear at meetings in the early 1980s that “environmental issues” were not a welcome part of the agenda. This seems almost unbelievable today when we see how much these issues have become a critical element of our inward conversation (with ourselves and our fellow members of the community) and our outward conversation (with the public and the regulating community).

And here we are in 2010. These environmental issues have now gained a permanent place in our thinking about dredging. We have worked diligently to understand the potential environmental consequences of dredging. We have struggled as an industry to show the important benefits to society of dredging and how these positive attributes can and do balance the risks. While this debate has continued, the related concerns surrounding the occurrence, extent, and ecological or human health risks of contaminated sediments have continued to grow. These concerns were barely recognized three decades ago, except for a few notable exceptions. Now, we face ever increasing concerns and mounting expenditures in the private and public sectors to address concerns about sediment contamination.

It is not the objective of this work to debate the points made by others about the technical, local or regulatory merits of sediment contamination. Rather, it is the objective to observe the current situation and document conditions at the present time.