

Advantages and Complexities of Tissue-Based Cleanup Goals

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Recently, the concept of developing tissue-based cleanup goals has been receiving more attention. Although it makes sense to link cleanup goals as directly as possible to the remedial action objective of interest (e.g., reducing risks to seafood consumers), caution needs to be exercised in the development and application of tissue-based goals at sediment sites. Tissue-based goals, coupled with post-remedy monitoring, are best seen in the light of risk communication, which serves an important public benefit. For a number of reasons, however, tissue-based goals should not be used as preliminary remedial goals. Specifically, concentrations of bioaccumulative chemicals in fish, crab, and clam populations can be highly variable as a result of numerous environmental factors, many of which are difficult to predict, much less control. In addition, the derivation of "background" and risk-based goals for tissue must be carefully considered, particularly for "market basket" seafood ingestion scenarios. This presentation will acknowledge the allure of developing tissue-based cleanup goals but also outline key uncertainties and complexities at sediment sites.