

Best Practices and Lessons Learned for an Efficient and Equitable Allocation

Jessica A. Glenn (jglenn@intell-group.com) (TIG Environmental, Portland, OR, USA)
Philip Spadaro (pspadaro@intell-group.com) and **Audrey Hackett** (ahackett@intell-group.com)
(TIG Environmental, Seattle, WA, USA)

Background/Objectives. Contaminated sediment sites may be the result of a variety of factors. Although some contaminated sediment sites are the result of the actions of a single party and/or spill, many sediment sites in the U.S. are contaminated due to industrial operations conducted over a long period of time, by various owners and/or operators. The cleanup costs associated with contaminated sediment sites can be substantial, and include the costs for sampling, remedial design, remedy implementation, monitoring, and related activities. Consequently, potentially responsible parties often agree to participate in an allocation process to determine the cost shares. Although the allocation process includes consideration of several factors, there is generally no standard process. This evaluation identifies the factors that promote an efficient allocation process, and the considerations that lead to a more equitable allocation.

Approach/Activities. Allocation processes and outcomes for several Superfund sites with contaminated sediments were evaluated. In addition to considering the well-known factors that result in an equitable allocation, the allocation processes were evaluated to identify common best practices, with consideration for order and timing of allocation steps, as well as process gaps.

Results/Lessons Learned. There are many factors to consider in an allocation process. Although each site may require specific considerations, the strategic application of some common elements can promote an efficient allocation process that may also result in a more cost-effective and equitable allocation. Examples of best practices identified include use of a common database and geospatial data, and development of an allocation process framework. Timing is also important, and more focus should be placed on establishing these components earlier in the process to promote efficiency. One process gap that was identified was the lack of a hydrodynamic model, or a model that was developed at the end of the allocation process. In these scenarios, advocating for cost shares requires speculation about contaminant transport, which can result in a less equitable allocation decision. Speculation by parties also results in additional rounds of debate between parties, creating a less efficient process. If development of a hydrodynamic model occurs early in the process, it can foster greater insights about contaminant transport, which may allow for a more efficient allocation process and equitable outcome. It may also lead to more focused and targeted sampling efforts, potentially reducing project costs. This evaluation will identify additional considerations and best practices to promote an efficient and equitable allocation process.