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Who Should Pay for Sediment Management?

SedNet

Philip Spadaro, TIG Environmental

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Industrial Legacy = Contaminated Sediments

- Two important questions:
  - Technology: How will we clean up the contamination?
  - Finance: Who will we pay for the cleanup?
- Polluter should pay… correct?
  - Which polluter?
  - How much for each?
- How can we organize the process of distributing the cost?

Concept of Liability

- Liability is triggered by:
  - A “Release” or “Threatened Release”
  - Of a “Hazardous Substance”
  - At or from a “Facility”
  - At or above concentrations considered hazardous
  - And “causes” cleanup costs to be incurred
- These are very general concepts and open to a lot of interpretation
- Legal issues must be considered on a country-specific basis

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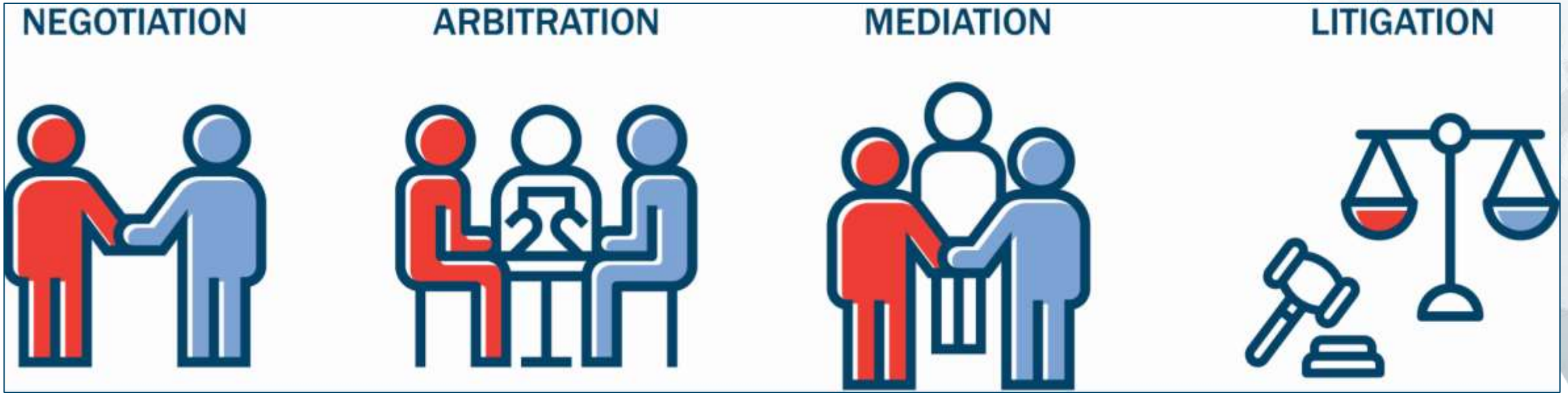
Liability… Who and How Much?

- Who can be liable?
  - Current owners and operators
  - Past owners and operators
  - Transporters and arrangers
  - Disposal facilities
- What is the magnitude?
  - Past costs of study or remediation
  - Increased operating or disposal cost due to contamination
  - Cost of remediation
  - Cost of monitoring

How to Decide Who Should Pay?

- Parties are often responsible for different types and amounts of contamination
- Each could be responsible for a different share of cleanup costs
- Often, allocation proceeds in a dispute resolution setting



Private Allocation vs. Litigation

- Private allocation can have some advantages:
  - Much greater control over process
  - Increased degree of certainty as to results
  - Ability to interview qualified candidates and to select experienced allocator
  - Ability to decide whether to participate in allocation process and to what extent
  - Retention of control over ultimate decision whether to accept allocation and to join settlement based on allocation
  - Opportunities for settlement negotiations and mediated settlement
- Litigation offers a prescribed process
  - Less control over the steps in the process
  - More finality of outcome

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What is the Approach to Organizing the Allocation?

- Within these settings, there is no prescribed method for allocating cleanup costs
- The allocation method must be developed specific to the site, and should account for:
  - Commonly accepted scaling factors
  - Area(s) requiring cleanup
  - Contaminant(s) requiring cleanup
  - Behavior of the waterbody where the site exists
  - Number of participating potentially responsible parties (PRPs)
  - Nature and extent of PRP contributions to the areas requiring cleanup

Factors Typically Used to Allocate Liability

- Amount of Substance
- Toxicity of Substance
- Degree of Fault
- Degree of Involvement
- Degree of Care
- Degree of Cooperation
- Permits to Discharge
- Knowledge/ability to act
- Finances/ability to pay
- Benefit received
- Timing
- Equitable Defenses
- Quality of Evidence
- Control

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Allocation Strategies

- Reducing the size of the pie
  - Is the site definition appropriate?
  - Is the site characterization sufficient?
  - Is the selected remedial/removal action appropriate?
  - Is adequate source control in place?
- Reducing your slice of the pie:
  - Defensive strategy – “We are not liable (or we have a defense to liability), because . . . ”
  - Divisibility – “We are not jointly and severally liable, because we can distinguish the harm caused by our release from others”
  - But-for argument – “But for the harm created by others, ours would not be a cause of action”
  - De minimis/de micromis argument – “Our contribution of hazardous substances is minimal, in amount and toxicity, compared to others and to the site as a whole”
  - Offensive strategy – “Those others caused the harm”

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Factual and Technical Challenges

- Site can include river, harbor, or other waterway bottom and adjacent land, while area of interest can include surrounding drainage area
  - Numerous industrial and commercial properties
  - Primary and secondary sources
  - Extensive transportation and utility infrastructure elements
- Sources can be distant from sediment cleanup area
  - Currents, tides, and vessels spread contamination
  - Sewer lines transport and discharge contaminants from upland sources
- Contamination can be result of multiple releases of multiple contaminants from multiple sources
  - Industrial and commercial facilities in close proximity
  - Multiple contributors to storm drains and combined sewer overflows
  - Vessels, vehicles, and other transportation modes
- Contaminants may have been released and deposited over the past century or even longer

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Develop a Strategic Approach

- Realize that this is a time consuming process
- Develop a consensus methodology – transparency is important
- Agree on data sources and rules
- Agree on schedule

Tools for Allocation Technical Support

- Sediment Quality data
- Particle transport studies.
- Historical research (ownership and operation)
- Waste discharge records and permits
- Sewer networks
- Particle transport modeling tracer studies
- Chemical and isotopic fingerprinting

Thank You

Philip Spadaro

Vice President and Principal Scientist

TIG Environmental

1200 Westlake Avenue North,
Suite 809
Seattle, WA 98109

pspadaro@intell-group.com

+1 (206) 438-3952

www.intell-group.com