Developing Sediment Clean-up Criteria when the Weight-of-Evidence goes to Weight Watchers but eats at McDonalds. Randy Sturgeon, EPA/Region 3.

Determining easy-to-use contaminant level cleanup criteria based on site-specific ecological studies can be a challenging task, especially when multiple contaminants are present. At the DuPont-Newport Site in Newport, Delaware, EPA developed sediment clean-up criteria using the "triad" approach (chemistry, toxicity tests, and benthic studies) and other data for tidal and non-tidal wetlands and a freshwater tidal river. Developing the clean-up criteria was especially difficult because the high levels of heavy metal contamination (from paint production waste), while at times showed high bioavailability, often showed low levels of bioavailability. No single toxicity test (four types of organisms were used with multiple end points) correlated well with the chemistry. This presentation will show how the "weight-of-evidence" approach was used at the DuPont-Newport Site to set sediment clean-up criteria when a clear break point in the data was not readily apparent.