

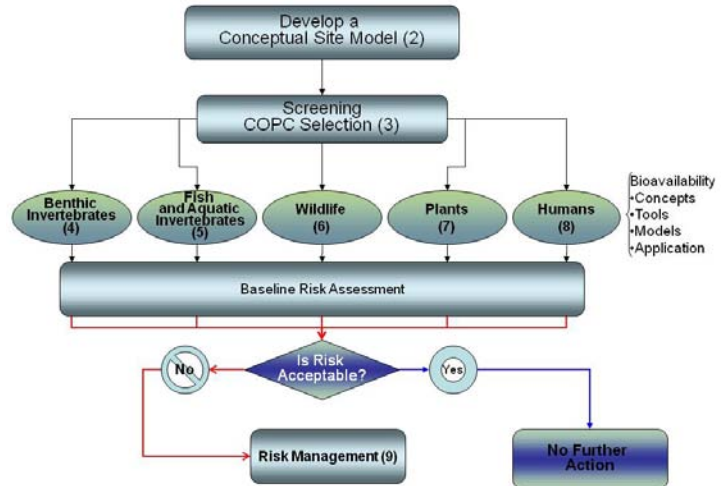


# ITRC Guidance Information for Academia

## Product Announcement (April 2011)

### ***Incorporating Bioavailability Considerations into the Evaluation of Contaminated Sediment Sites***

This new Web-based ITRC technical and regulatory guidance document helps regulators and practitioners to understand and incorporate the fundamental concepts of bioavailability into contaminated freshwater or marine sediment management practices. The guidance is constructed to assist users in identifying the most relevant places that bioavailability can be assessed and which tools and methods are the most useful and appropriate within exposure pathway assessments.



## Background

Methods to assess the potential effect of sediment contamination on human or ecological health are historically based on total contaminant concentrations in the bulk sediment. Unfortunately, the relationship between contaminant concentration in bulk sediments and risk from exposure is not linear. Research conducted over the past 15 years has shown that the bioavailable concentration of many contaminants that cause a toxic response in receptors is much less than the total concentration of these contaminants in the sediment.

This Web-based ITRC technical and regulatory guidance document is intended to assist state regulators and practitioners in understanding and incorporating the fundamental concepts of bioavailability in contaminated freshwater or marine sediment management practices.

## Benefits

- ▶ Easily navigable Web-based tool to become familiar with methods and tools used to assess bioavailability during the site exposure assessment process
- ▶ Applies to freshwater and marine sediments
- ▶ Describes bioavailability assessment to benthic invertebrates, fish and water-column invertebrates, wildlife, plant, and human health exposure assessment pathways
- ▶ Includes 35 case studies that highlight the application of bioavailability assessment tools and methodologies
- ▶ Valuable reference guide for those dealing with contaminated sediment issues
- ▶ Applicable information for experienced state, federal, and industry professionals
- ▶ Provides description of available tools and methods to assess bioavailability

## Actions

ITRC requests that environmental programs at your academic institution:

- ▶ Refer this guidance to all environmental science and engineering instructors
- ▶ Use this guidance in environmental science and engineering curricula
- ▶ Announce opportunities for environmental science students to attend Internet-based training
- ▶ Report to ITRC, via your Academic Representative, any successes or concerns related to this guidance

## Resources

This ITRC technical and regulatory guidance document is located at [www.itrcweb.org/contseds-bioavailability](http://www.itrcweb.org/contseds-bioavailability).

## Training

ITRC has developed a FREE Internet-based training course for this product. The training starts with an explanation of why the concept of bioavailability is important and how it can be used in making risk management decisions, followed by a description of available tools and methods for assessing bioavailability within different exposure pathways, and ends with a case study overview from the guidance.

ITRC's Internet-based training courses assist potential users of the ITRC guidance document to understand when and how to use the document and the associated technology and/or approach. Participants can take the training "live" from the comfort of their own office or access archives of past classes at their convenience. Through ITRC's partnership with U.S. EPA's Technology Innovation Program, ITRC delivers training courses via the Internet to reach a geographically dispersed audience of regulators, consultants, and other members of the environmental community. The training sessions last approximately 2 hours, cover technical and regulatory information specific to environmental technologies and innovative approaches, and are supported by consensus-based ITRC guidance documents.

**Cost:** Sponsored by ITRC and EPA with no cost for the participant

**Registration:** <http://clu-in.org/studio/seminar.cfm> (opens 4–6 weeks prior to class date)

**Associated guidance documents:** Available from [www.itrcweb.org](http://www.itrcweb.org)

If you have questions after completing the on-line registration, call (402) 201-2419 or send an e-mail to [training@itrcweb.org](mailto:training@itrcweb.org).

### Contacts

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## Regulatory Acceptance for New Solutions

Documents, free Internet-based training, contact information

[www.itrcweb.org](http://www.itrcweb.org)