ITRC Implementation Workshop

Risk Assessment

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Starting Point

- Risk Assessment
  - Abundant resources exist
  - Continues to evolve
  - Default approaches, scenarios and parameters are often defined
  - Challenges for project managers and decision makers when site-specific risk assessments are proposed
    - Need scientific and defensible rationale when default approaches, scenarios and parameters are not applicable
RISK-3 Document

- Decision Making at Contaminated Sites: Issues and Options in Human Health Risk Assessment
  - www.itrcweb.org/risk-3
- Provides support for site-specific approaches, scenarios and parameters
- Useful for state and federal project managers, consultants and industry and community members
- Different from existing ITRC and other risk assessment resources
Web-based Document Content

- Addresses key issues and potential solutions
  - Planning
  - Data evaluation
  - Toxicity
  - Exposure assessment
  - Risk characterization

- Includes a discussion of risk management and risk communication as they relate to risk assessment
Web-based Document Content

Each section presents

• Brief overview of the topic area addressed
• Key issues organized by general topic area
• Potential options for addressing the issue
• Links to specific references associated with the discussion of each option
• Links to additional resources and tools for each topic area
Decision Making at Contaminated Sites

Issues and Options in Human Health Risk Assessment

5. Toxicity

Chemical-specific toxicity values are frequently reassessed and are updated over time as new information becomes available. For some chemicals, consensus is established on the appropriate toxicity values to be used. For others, however, agencies have differing toxicity values. Selecting toxicity values without understanding how they were derived can lead to over- or underestimates of potential risks associated with chemical exposure, which may result in risk management decisions that are not defensible or protective of human health.

This chapter discusses and provides guidance on key issues associated with conducting toxicity assessments for risk assessment. The key issues are organized around the following topic areas:

Sources of Toxicity Values

- Choosing Among Toxicity Values from Multiple Sources
- What To Do When a Toxicity Value is Not Readily Available
- Assessing Toxicity of Chemical Groups/Mixtures
- Assessing Toxicity of Mutagenic Carcinogens
- Addressing Lead Toxicity

Effects of Toxicity Value Uncertainty on Risk Management Decisions

- Understanding Uncertainty in Toxicity Values

A discussion of toxicity value derivation and uncertainty as they relate to risk management decisions is provided in Appendix B.

5.1 Sources of Toxicity Values

Differences in regulatory agency policies for risk assessments, including the toxicity values used by the agencies, can result in large variations in decision outcomes (ITRC 2008). An uninformed selection of a toxicity value may result in inadequate protection of human health, overly conservative risk management decisions, or rejection of the risk...
## Potential Impacts by Sector

<table>
<thead>
<tr>
<th>EXPECTED USER GROUP</th>
<th>INTENDED USE</th>
<th>BENEFIT TO BE RECEIVED BY USERS</th>
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<tbody>
<tr>
<td>State regulatory program managers</td>
<td>Support review of site-specific risk assessments</td>
<td>• More clarity and confidence in implementation and review</td>
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<td></td>
<td></td>
<td>• Compilation of practical options and links to related resources and tools</td>
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<tr>
<td>Consultant project managers</td>
<td>Determine appropriate options</td>
<td>• Ease of use to find information</td>
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<tr>
<td>Industry project managers</td>
<td>Support work planning and review of risk assessments</td>
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Implementation Objectives

- Increase awareness of the RISK-3 document, including understanding its format and content

- Identify
  - State programs
  - Sites
  - Groups
  - Individuals

...that would benefit from using the RISK-3 document for their risk assessments
Small Group Discussion

▪ Share ideas for
  • state or other agency guidance that would benefit by incorporating or referencing this ITRC document
  • encouraging the use of the document for specific sites and by target users
  • other uses or benefits of the document outside of specific guidance
  • provide web-link to the document
Help Us Build ITRC Success

- Identify target users
- Promote document use to colleagues by sharing document information sheet
- Promote free web-based document and online training
- Report document use to ITRC

What action are you going to take?
Questions

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- Claudio Sorrentino, Team Leader
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  - 916-255-6656
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