Challenges to Risk Informed Decision Making

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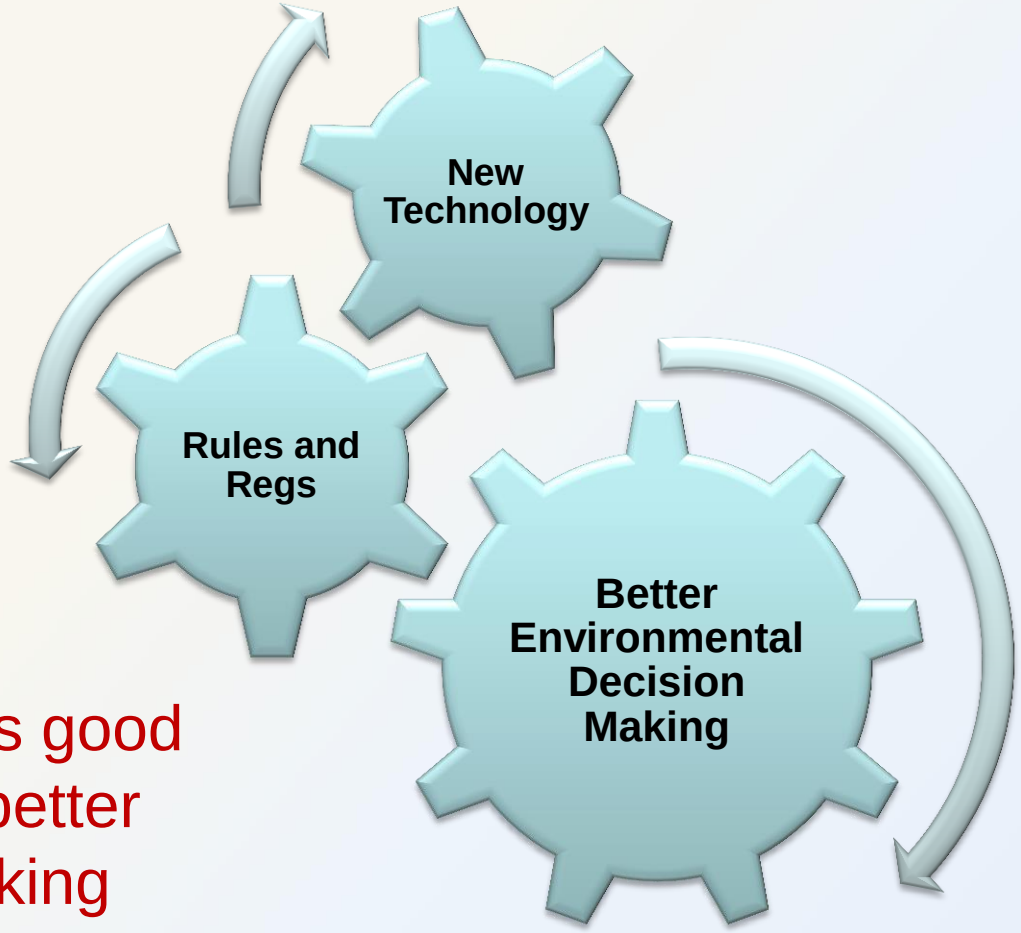
What is ITRC?

ITRC is a state-led coalition working to advance the use of innovative environmental technologies and approaches



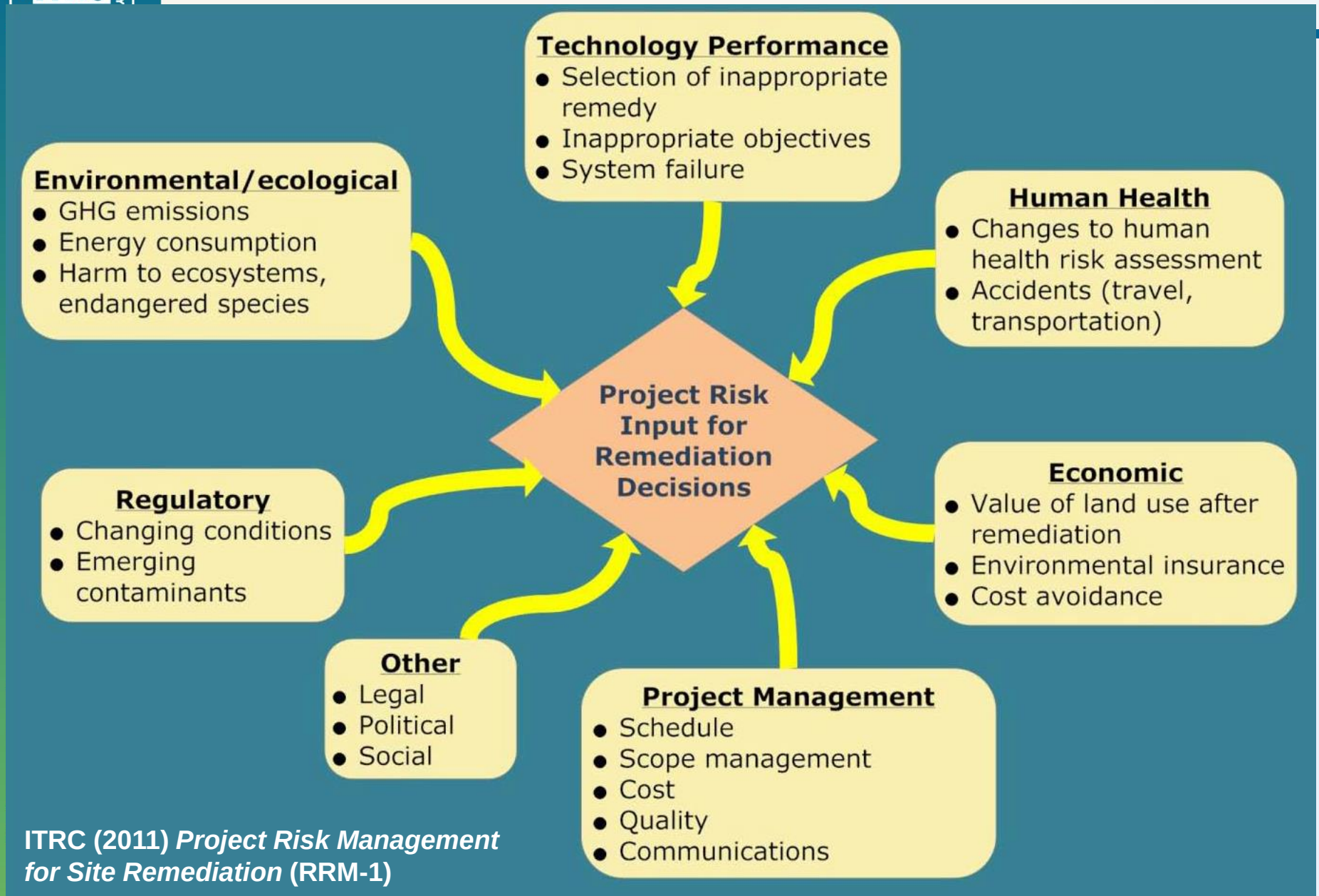
ITRC translates good science into better decision making

Challenges to Risk Based Decision Making

- Risk assessment - disagreements over interpretation of toxicological findings, impact of short term risks and population risks,
- Risk management - requires professional judgment – depends on risk tolerances and varying opinions on the future value of resources
- Risk reduction – disagreement over fate of chemicals in the subsurface and technical feasibility of clean up

➔No consistent determination of “maximum extent practicable” “technical impracticability” or “site closure” – definitions become a policy determination made by a regulatory agency

Examples of Project Risks



ITRC (2011) *Project Risk Management for Site Remediation* (RRM-1)

Related ITRC Projects

- Project risk management and ARAR waivers (focused on technical impracticability)
- Integrated DNAPL site strategy - discusses setting functional remediation goals with a 20 year performance period
- Risk assessment – aligning state approaches for site-specific risk assessments and their use in risk management
- New complex sites project seeks to better define a complex site and provide agreed upon approaches for management – including methods for predicting remediation performance and assessing when to transition to a passive remedy

ITRC Represents

Increasing knowledge

Decreasing approval time

Reducing environmental costs

Streamlining regulatory processes

Harmonizing approaches

Conclusion

Since 1995, we've been expediting quality regulatory decision making, while protecting human health and the environment.

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Context

Project Risk Management for Site Remediation (RRM-1), ITRC, March 2011

- RRM question: What if remedial objectives are not achieved in the designated timeframe?
- ITRC conducted a survey in 2008-2009 to learn how this issue is addressed by state environmental agencies (31 states responded)
- Results of survey published in RRM-1
- Results inspired RRM-2: Using Remediation Risk Management to Address Groundwater Cleanup Challenges at Complex Sites, Jan. 2012

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What options are considered if the selected remedy is not on track to meet remedial objectives?

- Land use/institutional controls (17 responses)
- Long term monitoring (17 responses)
- Monitored natural attenuation (17 responses)
- Alternative cleanup limits (9 responses)
- Additional modeling (9 responses)
- Technical impracticability (TI) waivers (9 responses)
- Other (8 responses) – Mixing zones, combinations, move compliance point, extend time to completion, reassess site risks

Does your state follow a protocol for TI waivers or alternative end points or equivalent if selected remedy is not on track to meet remedial objectives?

- Yes (14), No (13), Case-by-case (3)
- Comments:
  - We follow EPA guidelines for TI
  - We have never had or requested for a TI waiver
  - We do not allow or consider TI waivers
  - We use alternative clean up levels
  - It is up to the state PM, not a formal process
  - Application for LUCs requires public comment
  - Internal process for TI, no promulgated regulations
  - Under our program, there is no requirement to remediate groundwater if it is not used or if it can be treated (at point of use)…a risk management pathway is considered just as acceptable as complete removal

Would a document on how to do a technical assessment of whether any remedy will meet remedial objectives be useful?

- Yes (29 of 31 responses)
- No (1)
- Maybe (1)