







Workgroup 6
RSR Evaluation – Groundwater and NAPL

November 7, 2012

- New legislation would provide entry into the new Cleanup Program, then the RSRs would provide pathways for an exit from the new program.
- Consequently, the RSRs must be "fixed" before the legislation is proposed.

Options and Mechanisms for Change

- What can be addressed with existing RSRs
- Minor RSR revisions
- What can be addressed with existing RSRs
- Major RSR revisions, including revisiting the numerical criteria
- Changes to other statutes /regulations critical to the RSRs— e.g. WQS, ELUR
- New legislation

Options For Closure

Use default criteria specified in modified RSRs

- Meet established numerical criteria through prescribed options.
- Need to increase the number of options/scenarios and default criteria

 e.g. increased number of categories of standards (GW1, GW2, GW3, etc.)
- Need more options for use of ELUR- or AUL-type solutions
- Need more self-implementing, prescribed alternatives acceptable under the RSRs.

Technical Impracticability

- Focus is on no risk to receptors and protection of human health and the environment.
- TI workgroup -- Topics under discussion include use of Engineered Controls for groundwater, TI for volatilization criteria, pesticides in groundwater, Monitored Natural Attenuation vs. TI.

Options For Closure

□ Site-Specific

- Need ability to use site-specific options under specified conditions, with LEP approval that site-specific conditions have been met.
- Elements of site-specific options, including risk characterization and risk assessment, have to be developed or enhanced, including:
 - effective audit program
 - decision tree
 - permanence of assumptions
 - transferability of satisfaction of closure requirements

Key issues for success – Increased options to closure under the default criteria; Self-implementing option allowed for both TI and site-specific scenarios.

If every option requires DEEP approval, program will be no different than today.

What is Not Working Well - Topics of Concern

Insufficient Process for Risk-based Exits

- Ground Water Monitoring requirements based on very low criteria, especially compliance and post –remediation monitoring
- 2) Criteria based on out-dated science
- Current tiered approach (GA, GB) is too limiting and not sufficient
- 4) Recalcitrant plumes no way to get to closure
- 5) Limitations on risk-based analysis and closure, especially when no pathway and receptors
- 6) MNA if it is working how much monitoring is required
- Opinion of "No Significant Risk" as option for LEPs

Prescriptive Nature of RSRs - Issues

- 8) Requirement for full GW assessment and/or compliance/post-remediation monitoring for shallow releases well above the water table
- 9) PMC impact but no GW impact
- 10) Clarification regarding what is upgradient, especially if the regulations become more release-based
- 11) Alternative SWPC not allowed for stagnant (lakes, ponds) or tidal water
- 12) Release-based investigation and remediation issues, especially overlapping plumes
- 13) Too rigid and inflexible create a Response Action Performance Standard or need more exposure scenarios (GW1, GW2, GW3, etc.)

What is Not Working Well - Topics of Concern

	LNAPL and TI Issues	Other
•	inition of NAPL needs to be revisited t Considerations	21) Secondary pollution caused by primary releases
16) Inco of LNAI	rporate ITRC science and knowledge PL	22) Deed restrictions for plumes that stay on-site
17) Dec	ouple from Federal and define able	23) Stringent SWPC for PCBs and other COCs
18) NAF	PL migration issues.	24) Need for Compliance Assistance from
19) Can	existing TI language work with better	DEEP
20) Can	't close sites with NAPL	25) Consistency with Other Regulations – e.g. WQS

Identification of Priorities

- Current tiered approach (GA, GB) is too limiting and not sufficient
- Recalcitrant plumes no way to get to closure, MNA, and very low criteria for monitoring requirements
- Limitations on risk-based analysis and closure, especially when no pathway and receptors
- Requirement for full GW assessment and/or compliance/post-remediation monitoring for shallow releases well above the water table
- PMC impact, but no GW impact
- Too rigid and inflexible create a Response Action Performance Standard, need more exposure scenarios (GW1, GW2, GW3, etc.)
- NAPL issues -- definition, mobility, etc.

Need for flexibility, especially default and self-implementing flexibility, within all three options for closure!

Over-arching Concepts

- Concepts outside groundwater provisions of RSRs, but considered important as part of the overall transformation
 - Response Action Performance Standard (RAPS)
 - Concept of No Significant Risk
 - Robust, consistent Audit Program
 - Compliance Assistance

Key Issues for Success

Need for flexibility and more self-implementing options

- Increased options to closure under default criteria
- Self-implementing options allowed for both TI and site-specific scenarios
- If every option requires DEEP approval, program will be no different than today

Importance of revisions to the numerical criteria (even 'though not part of workgroup's charge)