



# Revision of Tanks MRBCA Guidance

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October 9, 2008



# Reason for Revision

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- ❑ Guidance implemented in 2004
- ❑ Soil type dependent RBTLs introduced 2005
- ❑ 4+ years using guidance showed incorrect, unclear, and missing provisions
- ❑ Development of rules dependent on revision of guidance



# Major Revisions - General

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- Site defined as extent of contamination
- Addition of soil type dependent RBTLs and associated processes



# UST Closure

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- ❑ Section 4.0 UST closure provisions removed from MRBCA guidance
- ❑ Separate guidance entitled “Tank Closure Guidance”
- ❑ Closure is a pre-RBCA activity
- ❑ DTLs or, if domestic use of gw pathway incomplete, Soil Type 1 Residential RBTLs apply at closure
- ❑ To apply other targets requires full RBCA evaluation



# Site Characterization

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- Migration of contamination off the property of origin
- Soil type determination provisions
- Collection of site-specific geotechnical data
- Delineation criteria set at DTLs or other approved Residential, Soil Type 1 RBTLs
- Soil gas sampling a Tier 1 activity
  - Soil gas RBTLs added



# Risk Assessment

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- RAFU – department will make RAFU decisions
- Requirements added re. migration of contamination off property of origin
- LNAPL requirements added/modified to:
  - Be consistent with regulatory requirements
  - Present methods for impracticability evaluations
  - Allow for mgmt. of residual under MRBCA



## Authority - 319.109 RSMo.

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- “. . . the department shall use risk-based corrective standards which take into account the level of risk to public health and the environment associated with site-specific conditions and future land usage. The hazardous waste management commission is authorized to promulgate rules to implement this section, in accordance with section 319.137. To the extent there is a conflict between this section and section 644.143, RSMo, or 644.026, RSMo, this section shall prevail.”



# RAFU

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- To develop RBCA standards that account for risk based on potential changes in land use in the future, a few options:
  - a) assume all sites residential unless legally binding assurance to the contrary (i.e. zoning, covenant, etc);
  - b) assume all sites residential unless a deed notice in chain of title ensures constructive notice reaches future buyers;
  - c) allow neighboring property owners to determine future land use;
  - d) allow responsible parties to determine future land use; or
  - e) require MDNR make RAFU determination, taking into account whatever information is available.



# Public Participation and Notice

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- All new provisions
- Trigger is migration of COCs off property of origin at levels > unrestricted use
- MDNR responsible for public participation and notification of affected neighbors
  - Allow RP to take on responsibilities



# LTS

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- Long-term stewardship required if COCs will remain above unrestricted use levels
- Minimum is information by deed notice or equivalent, restrictive covenant required in certain cases, other tools available
- Intended to ensure risk assessment assumptions do not change



# Corrective Action

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- CAP required when COCs > unrestricted
- Provisions added re. applicable targets when excavation used
- LTS if COCs will remain > unrestricted



# RBTLs

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- ❑ Incorporation of RAGS Subpart E – Dermal
- ❑ Information added re. source of toxicity values and dermal target level development
- ❑ Information added to allow calculation of COC concentrations in LNAPL
- ❑ RBTLs in tanks same as in departmental



# Representative Concentrations

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- Leaching to groundwater
- Vapor intrusion from soil and groundwater
  - Maximum value
  - Smear zone
  - Hypothetical evaluation required
- Groundwater RCs and plume stability
- RCs when LNAPL present



# Plume Stability

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- Provisions added
  - When determination required
  - Various methods to make determination
  - Two years minimum monitoring
  - Action required when plume not stable
- Moved to Appendix H