

## October 9, 2008 RBCA Rules Workshop Questions and Answers

NOTE: The questions listed below were initially raised during the October 9 workshop. Department staff initially responded to the questions during the workshop. However, to ensure clarity, additional detail is provided here.

- Q1: What is the applicability of the Missouri Environmental Covenants Act in the RBCA process?
- A1: As part of the departmental RBCA, MoECA – specifically a MoECA Environmental Covenant – may be used to meet LTS requirements. Although tank sites are specifically exempt from MoECA, this does not prevent the use of restrictive covenants altogether for tank sites.
- Q2: Will all rules pertaining to underground storage tanks move from under the Clean Water Commission and within the Code of State Regulations (CSR)? Will authority for above ground storage tanks also move?
- A2: All of the tank rules – both new and existing and for both USTs and ASTs – will move from Division 20 to Division 26. UST rules are under the authority of the Hazardous Waste Management Commission, or HWMC, while authority for ASTs remains under the Clean Water Commission, or CWC. A statutory change is required to shift authority for ASTs from the CWC to the HWMC.
- Q3: Can the HWMC change the department’s proposed rules and, if so, does the rulemaking process begin anew?
- A3: The HWMC may change the rules proposed by the department. If the HWMC agrees to do so, the department would modify the order of rulemaking to include the change or changes. The process would not begin anew, although a new Regulatory Impact Report and additional public notice may be necessary depending on the significance of the changes.
- Q4: Regarding LTS, what will the department require with respect to neighboring property owners and covenants or other LTS measures, and how do responsible parties go about getting neighboring property owners to enter into such covenants or other LTS measures?
- A4: LTS requirements pertain both to the property on which the contamination originated and any adjacent or neighboring properties affected by the contamination. The proposed rules require that contamination on an adjacent or neighboring property be either cleaned up to residential standards or cleaned up to non-residential standards with LTS measures. If the owner of an adjacent or neighboring property will not enter into a covenant but the contamination on his/her property renders it unsuitable for residential use, then the department would look to the responsible party to remediate the site to residential standards. In any case, the department would inform the third party and provide an opportunity to comment. If the parties are ultimately unable to agree on issues

such as site access or use of a covenant, then the department may require cleanup to residential use levels at the property boundary.

Q5: If the schedule plays out until the new RCBA for Tanks rules becomes effective, what is the governing authority now until these rules become effective?

A5: The rules currently in effect remain in effect until the new rules become final. Similarly, the guidance in effect at this time – the 2004 guidance as modified in March 2005 (available on the department’s website at <http://www.dnr.mo.gov/env/hwp/tanks/mrbca-pet/mrbca-pet-tanks.htm>) – will remain in effect until the new rules are final. However, parties responsible for sites in-process prior to the effective date of the rules may apply the process on a voluntary basis with the department’s permission. Permission is required so that the department is aware of the guidance being applied to a site from the start and, therefore, can provide appropriate oversight and ensure all new and amended guidance provisions are applied and applied correctly.

In amended rule 10 CSR 26-2.010, the department will propose provisions regarding applicability of the new rules and the conditions that must be met in order to continue to apply the 2004/2005 guidance. Clearly the new rules and guidance will be applicable to all sites discovered after the effective date of the rules. For sites already in process when the rules become effective, the rule will allow the option to apply either the new rules or the 2004/2005 guidance if a specific stage of the process has been achieved, for instance a work plan pertaining to site characterization, risk assessment, or corrective action has been approved by the department. Development of specific rule provisions regarding transitioning from the 2004/2005 guidance to the new rules is a bit more complicated than it initially seems and therefore the amended rule is not available at this time. The proposed rule will be available no later than January 30, 2009, as part of the department’s response to comments received regarding the Regulatory Impact Report.

Q6: Are the new RBCA tank rules in consideration of the ’05 tanks soil type dependent guidance?

A6: Yes, the new rules include the soil type dependent RBTLs and soil type determination process put into place in March 2005.

Q7: At current sites, should we be looking at the ’08 revised tanks guidance?

A7: The 2004 guidance as modified in 2005 is in effect at this time. The revised guidance will not be effective until the new rules are effective except when it is applied voluntarily with the permission of the department. For further explanation, see A5 above.

Q8: What should we look at for current remediation at a tank site?

A8: The 2004 guidance as modified in 2005 is in effect at this time. However, with the department’s permission, a responsible party may voluntarily apply the new target levels and revised tanks guidance provided the entirety of the revised

guidance is applied. Application of the revised guidance is not and will not be required until the rules are in effect. The 2005 target levels are in effect at this time. For further explanation, see A5 above.

Q9: Soil vapor numbers – 2006 departmental or 2005 tanks; which should be applied at a site having petroleum contamination?

A9: From a technical standpoint, the 2006 numbers could be applied, they are appropriate. However, as with the new RBCA rules and revised tanks guidance, the 2006 departmental guidance target levels should not be applied at a tank site without the consent of the department and then only if the entirety of the revised tanks guidance is applied. The use of the 2006 targets or new rules and revised tanks guidance may be proposed in a remedial action plan. For further information, refer to A5 above.

Q10: How will the Petroleum Storage Tank Insurance Fund approve payments during the transition between the current tanks guidance and the revised tanks guidance?

A10: The department anticipates PSTIF will reimburse the insured party to meet department requirements. The department will work with PSTIF during the transition period to ensure PSTIF is aware of the conditions under which the new rules and guidance must be applied and the conditions under which a responsible party may proceed under the 2004/2005 guidance.

Q11: Will changes to the draft tanks rules be included in the guidance?

A11: Yes, if the rule change affects current aspects of the guidance.

Q12: The tanks guidance document provides the “how to,” while the rules provide the “thou shall” (requirements) portions. Is there a conflict if the wording is not exactly the same?

A12: While some information (both the “how to” provisions and the requirements) may be in both the rule and the guidance, the department does not intend for the information to be in conflict. Nevertheless, in the event of a conflict, the rule language is controlling. The department will consider whether to modify the guidance in light of the requirements being in rule and encourages any stakeholder who perceives or knows of a conflict between the guidance and the rule to bring the matter to the attention of the department.

Q13: If the tanks rules incorporate the guidance provisions, do the guidance provisions then have the force and effect of rule?

A13: Yes, incorporation by reference gives that part of the guidance that is incorporated the force of rule. However, the department has only incorporated into rule the tier one target levels (which includes the default target levels) and certain parameters used in the development of the tier one targets. We chose not to incorporate all of the guidance in order to allow for greater flexibility.

Q14: If the tanks guidance is a guideline of “how to,” some of the sections require heavier involvement of DNR. What will be done to ensure DNR’s involvement does not cause the process to get “bogged” down?

A14: The process does not have to be overly complicated. The department is trying to build in standard components and review processes to ensure timely submittals and reviews. There will be time frames built in to some of the processes, some applicable to the department, others applicable to responsible parties and other affected parties.

Responsible parties always have opportunities to expedite the process by conducting cleanup in lieu of extended risk assessment.

Q15: In the tanks process, what is the value of a Reasonably Anticipated Future Use evaluation when Long-Term Stewardship is required for all sites not cleaned up to residential levels?

A15: Future Use evaluations determine the target levels that apply and, by that, the level or degree of corrective action warranted. LTS is intended to ensure that the decisions made today are still correct tomorrow.

Q16: A consultant indicated that he was continuing to experience situations where different department project managers were giving different answers for the same or similar questions or circumstances (both with regard to the departmental and tanks RBCA processes). How does the department suggest this be addressed?

A16: The department has worked hard to educate all involved in the RBCA process and continues to work to ensure consistent guidance and answers are provided by DNR staff. However, we feel designating a specific point of contact to coordinate the evaluation and resolution of such situations is appropriate. If you believe you are getting inconsistent answers on a RBCA project, please contact Tim Chibnall in the HWP Director’s Office. Mr. Chibnall can be reached at (573) 522-1833 or by email at [tim.chibnall@dnr.mo.gov](mailto:tim.chibnall@dnr.mo.gov).

The following questions and “critical outstanding RBCA tank rule issues” were submitted by Ron Leone, MPCA, in an October 13, 2008, email to Bob Geller and Tim Chibnall of the Hazardous Waste Program:

Q17: In general, I believe the compromise 2004 RBCA [tanks] Guidelines conflict with the DNR supported 2008 Revised RBCA Guidelines.

A17: The department does not believe the documents conflict with one another, as the 2008 revised guidance will replace the 2004 guidance. The guidance was revised to purposefully modify, correct, and add to the 2004 guidance. A conflict would exist only if both documents were to be in effect simultaneously, which is not the case.

The department believes the revisions to the January 2004 tanks RBCA guidance document are necessary to protect human health and the environment and

otherwise fulfill the department's statutory responsibilities. In addition, our understanding of the risk-based process has increased over time and that increased understanding is reflected in the 2008 revised guidance.

The guidance has evolved over time, with the January 2004 guidance modified in March 2005 (available on-line as per A8) to, in large part, address stakeholder concerns. The resulting guidance includes certain features not present in the original, features the Department believes are clearly accepted and preferred over the 2004 guidance. The 2008 revisions continue to seek improvements that make the process better and ensure protection of human health and the environment. Revision of the guidance is consistent with the department's earlier statements (during the guidance development process) that the guidance will evolve as we learn more about the RBCA process through its application to real-world sites.

Q18: The cleanup levels for various substances.

A18: The department is unaware of concerns regarding the cleanup levels. The tier one risk-based target levels for tank site chemicals of concern will be the same as those associated with the departmental RBCA process. Those target levels incorporate the most recent EPA-recognized toxicity and exposure factors and the new RAGS Subpart E dermal exposure assessment methodology. The department is unable to justify applying different tier one risk-based target levels to different types of sites, and therefore will apply only one set of RBTLs to all sites. The logical and justifiable choice is to apply the departmental RBTLs to tank sites rather than vice-versa.

On a related note, the department proposes to incorporate the tier one risk-based target levels (which includes the default target levels) into the RBCA rules. Incorporation will be by reference to the RBTLs found in tables 7-1(a) through 7-12 of the revised guidance. Language has been added to the rules to allow the department to apply alternative target levels based on site-specific conditions or changes in the scientific data used to develop the RBTLs.

Q19: The role adjoining property owners play in the cleanup process, if any. MPCA believes it is fair to say that most if not every adjoining property owner will want the tank site to be cleaned up to residential or unrestricted use levels, thus thwarting the fundamental goal and purpose of RBCA.

A19: The department believes everyone would agree that innocent property owners whose residential property is contaminated by a release from a petroleum storage tank have a reasonable right to expect their property to be cleaned up to allow for a level of protection appropriate for residential use. Situations on other properties may not be so clear; however, the property owner should have the ability to make their intentions known. That does not mean the DNR will require every site to be cleaned up to residential standards. "Risk-based" refers to the system of analyzing a contaminated site, including evaluating current and future risks. A cleanup to a residential or unrestricted use level is one possible outcome in risk-based corrective action. Risk-based corrective action should not be seen as a system that is used only to achieve cleanups to commercial or industrial levels.

The same risk-based procedures are used to achieve a cleanup to residential or an industrial level.

The purpose of risk-based corrective action is to conduct remediation to the extent needed to meet the requirements of a site (where the term “site” refers to the extent of contamination). The department is responsible for ensuring remediation protects human health, public welfare and the environment. Site owners, including owner/operators as well as adjacent property owners, may also have goals in remediation. The revised guidance and draft rules clearly explain the role neighboring property owners will play in the cleanup process. In addition, the guidance and rules clearly explain that the department will make decisions regarding future land use based on information provided it by the responsible party and the owner of the property to which the land use decision applies.

To the extent adjoining property owners have had their properties contaminated, the resulting risks associated with use of such neighboring properties will be considered. Owners of such property should be aware of the contamination and the proposed remediation and will be provided an opportunity to provide comment to the department. To the extent adjacent properties may have contributed to the contamination or its spread, their owners should also be part of the solution.

Q20: The reasonably anticipated future use (RAFU) of the tank site, and who decides what the RAFU is in the event there is no consensus.

A20: As the revised guidance and the draft rules clearly explain, the department will decide the reasonably anticipated future use of a site. The department has both the responsibility and authority to make such decisions. The department will make decisions on a weight of evidence basis.

Q21: Long-term stewardship (LTS) issues - what notices and/or restrictions should be placed on the tank site, if any, in the event the tank site cleanup is something other than to residential or unrestricted use levels.

A21: As mentioned at the October 9 workshop, the tanks LTS rule, 10 CSR 26-2.081 has been revised (the revised rule as well as the other RBCA rules are on-line at <http://www.dnr.mo.gov/env/hwp/docs/081107mrbcatanrules.pdf>). The following excerpt (in italics) is from the most recent draft of the proposed rule and, we believe, responds to the question:

*(2) Long-term stewardship measures shall be employed at any site where, following completion of corrective action activities, concentrations of chemicals of concern in soil or groundwater exceed applicable target levels for residential exposure.*

*(A) At a minimum, long-term stewardship measures must be designed to ensure disclosure so that appropriate information reaches current and future owners and users of the property or properties to which the measures apply. The information shall include the location and concentration of chemical(s) of concern on the*

*property and a statement that, without further action, the property is suitable for non-residential uses only.*

*(B) An enforceable long-term stewardship measure shall be used in the following circumstances:*

- 1. Where reasonably foreseeable and otherwise lawful actions on a property could cause an exposure pathway to become complete (such as the construction of a building or the installation of a water well); or*
- 2. Where failure to adequately inspect or maintain an engineered control might allow an exposure pathway to become complete; or*
- 3. Where the department or owners and operators otherwise determine that activity and use limitations or requirements are necessary to ensure remaining contaminants do not pose unacceptable risk.*

*(C) Any required long-term stewardship measures shall be maintained and shall ensure that exposure pathways remain incomplete for the period of time during which chemical(s) of concern remain at a concentration(s) that could pose an unacceptable risk to human health, public welfare or the environment.*

*(D) Long-term stewardship measures shall be readily accessible, durable, reliable, and consistent with the risk posed by the chemical(s) of concern.*

Enforceable LTS measure measures are needed when a responsible party chooses to leave contamination that could result in exposure and unacceptable risk if certain activities occur at the property or if the property is used in a certain manner. Some examples of enforceable LTS measures include local ordinances and supporting memoranda of agreement, well location and construction restriction rules, and restrictive covenants.

Q22: If the final RBCA tank rule incorporates by reference some or all of the 2004 or 2008 RBCA Guidelines, doesn't that transform the Guideline into a rule?

A22: Yes, to the extent the guidance is incorporated by reference, such portions have the force of rule. At this time, we intend to incorporate by reference only the tier one risk-based target levels (which includes the default target levels). The remainder of the guidance document is and will remain explanatory or advisory. Meanwhile, we will review the guidance to determine whether statements in the guidance that are also in rule can be removed from the guidance without significantly impairing the functionality of the guidance.

The guidance provides a larger discussion of how certain aspects of risk-based corrective action may be implemented, without being prescriptive about actions that must be taken (beyond restating requirements in rule). This allows those working on a site to examine the site from several perspectives, all within the risk-based framework, and determine a reasonable course of remediation. Neither the rule nor the guidance can address every contingency that may be encountered in a remediation project, and professional judgment is necessary to implement an effective program.

- Q23: Treating AST and UST sites the same under the RBCA rule.
- A23: The risk-based process can apply equally to AST and UST sites. However, there are some differences in the law with respect to how AST and UST sites are regulated. While these new RBCA rules apply to UST sites, the AST site characterization and corrective action regulations can also accommodate the RBCA process. We would welcome a discussion of more clearly unifying the remediation statutes and regulations. Meanwhile, using existing authority, we will continue to require action at AST release sites and we will continue to ask parties responsible for AST sites to address their site using the RBCA process.
- Q24: DNR is simultaneously drafting “Departmental” RBCA rules, which are general in nature and apply to all risk-based cleanups, and RBCA tank rules, which are specific in nature and apply only to tank sites. It remains to be seen if the “Departmental” RBCA rules complement or conflict with the RBCA tank rules.
- A24: There is no conflict with respect to coverage, as the departmental rule covers risk-based corrective action at any site, except for sites addressed under Tanks RBCA rules. With respect to content, the risk-based corrective action rules for tanks are similar to the departmental rule but contain parts that are specific to tank sites. Structurally, multiple rules for tanks are necessary since many different aspects of tanks have been covered by a variety of rules in the past. Some of these pertain to site investigation and corrective action while others pertain to UST operations only. Therefore, the Department plans to revise the current rules rather than replace them entirely (which would force the tanks community to learn a new system from scratch).

The department is not aware of any conflict between the tanks rules and the departmental rule. As above, the rules are fundamentally similar, with more specific requirements in the tanks rules to address issues specific to tank sites, such as the inability to use a MoECA environmental covenant as a LTS tool. Both the departmental rule and the tanks rules were carefully crafted to ensure consistency and at the same time address issues specific to tank sites. If any conflicts exist, they are not intentional and we would appreciate knowing about them in order to make appropriate revisions.

- Q25: Under the best case scenario and assuming no delays, the DNR believes that the RBCA tank rules – which will drastically change tank cleanup in Missouri as we know it - could be finalized as early as 10/30/09. That leaves far too much unknown during this 1 year+ transition period. The problem is that no one in the industry – PSTIF, tank site owners & consultants - is certain what cleanup standards, levels, and strategies should be applied to tank cleanups occurring between today and when the RBCA tank rules are finalized sometime in the future.
- A25: The department has limited control over the rulemaking schedule. Much of the schedule is dictated by statute or the Secretary of State’s office. Where we can, we have expedited the schedule to the extent practical. In light of the rulemaking requirements and practicality, the October 2009 date appears realistic.

During the period before the rules are final, current practices will remain in place. The current practices include the use of the January 2004 guidance as modified in March 2005. However, during the approximately one year period prior to the new rules being in place, the department will allow responsible parties to apply the revised 2008 guidance – provided it is applied in its entirety – on a voluntary basis with the department’s approval, as explained at A5 above.

In amended rule 10 CSR 26-2.010, the department will propose provisions regarding applicability of the new rules and the conditions that must be met in order to continue to apply the 2004/2005 guidance. Clearly the new rules and guidance will be applicable to all sites discovered after the effective date of the rules. For sites already in process when the rules become effective, the rule will allow the option to apply either the new rules or the 2004/2005 guidance if a specific stage of the process has been achieved, for instance a work plan pertaining to site characterization, risk assessment, or corrective action has been approved by the department. Development of specific rule provisions regarding transitioning from the 2004/2005 guidance to the new rules is a bit more complicated than it initially seems and therefore the amended rule is not available at this time. The proposed rule will be available no later than January 30, 2009, as part of the department’s response to comments received regarding the Regulatory Impact Report. Once the rules and guidance are final, the department will strive to provide training for those who will be using it.