

## ALABAMA RISK-BASED CORRECTIVE ACTION GUIDANCE MANUAL

## <u>Summary of Changes – February 2017 – Revision 3.0</u>

The following is a list of the major changes from the April 2008 version to the February 2017 version of the *Alabama Risk-Based Corrective Action (ARBCA) Guidance Manual*. This list does not contain every change made and is not intended to be a comprehensive list.

- The Department provided the regulated community with a more internet-based document containing links to various environmental documents that expand on the topic of interest. Reference to such guidance documents does not endorse or ensure the Department's acceptance of the methodologies mentioned. Communication between the regulated entity and the Department should occur to ensure complete transparency.
- An emphasis has been placed on the development of the Conceptual Site Model (CSM). Additional details and citation to documents that describe the CSM in greater detail have been provided.
- The USEPA Regional Screening Levels (RSLs) have been referred to as a replacement of ADEM's Preliminary Screening Values (PSVs).
- Toxicity Values and Physical and Chemical Properties refer to the RSL *User's Guide* rather than being provided in tabular form with the ARBCA Guidance Manual. This will provide for a more current list of toxicity values. The values presented within the RSLs are generally updated twice per year.
- Exposure Factors refer to both the RSL *User's Guide* as well as the USEPA *Exposure Factors Handbook* 2011 rather than being provided in tabular form within the manual.
- The USEPA Vapor Intrusion Screening Levels (VISLs) as well as the June 2015 USEPA Vapor Intrusion Guidance Manuals, Assessing and Mitigating the Vapor Intrusion Pathway from the Subsurface Vapor Sources to Indoor Air and Addressing Petroleum Vapor Intrusion at Leaking Underground Storage Tank Sites are referenced within the ARBCA Guidance Manual as the primary sources for the evaluation of the vapor intrusion pathway.
- Direct reference and guidance has been provided regarding the Uniform Environmental Covenants Act (UECA) and ADEM Admin. Code div. 335-5. In addition, more discussion has been provided on the use of land-use controls as a risk-management tool.
- Updated flow diagrams are provided for the various steps of the ARBCA process.
- Updates have been provided regarding the estimation of a representative concentration within a decision unit (DU) or exposure domain (ED).
- Updates have been made to the equations used to calculate the cumulative risk within a DU or ED. These same changes have been applied to the equations used to back calculate risk-based target levels (RBTLs).
- The addition of a section that may be used at petroleum-impacted sites has been added that provides information regarding the development of a site-specific biodecay rate.