

DETAILED LIST OF CHANGES TO THE RISK EVALUATION CORRECTIVE ACTION PROGRAM

ADDITIONAL GUIDANCE CLARIFYING REQUIREMENTS INCLUDE:

- The introductory section was changed to provide for continued site management under the previous RECAP document until the current phase or task of the project has been completed and approved by the Department.
- Data used under RECAP must be obtained from a laboratory accredited by the State of Louisiana.
- Text was added to clarify how to identify the Constituents of Concern (COC) for each management option.
- A new section was added that provides additional guidance on the identification of the Area of Investigation (AOI) based on site-specific conditions.
- Soil intervals for evaluation were redefined. The new definition combines potential surface soil evaluation (3 feet to 15 feet) with surface soil (0 to 3 feet) into one interval of surface soil (0 feet to 15 feet). The second interval remains subsurface soil (15 feet below ground surface to depth of contamination).
- Additional guidance was added on the identification of the point of compliance and the point of exposure for volatilization of constituents from groundwater to an enclosed space and/or ambient air.
- Additional guidance was included on the identification of background concentrations.
- A new section was added providing additional clarification on defining acceptable ecological risks for ecological risk assessments.
- Clarification regarding conveyance notification requirements was added.
- A new section was included on the use of Applicable or Relevant and Appropriate Requirements (ARAR) under RECAP.
- Guidance was included on determining the Area of Investigation Concentration (AOIC) for the volatilization of constituents from soil into an enclosed structure.
- The use of wet-weight data vs. dry-weight data was added.

- Additional guidance was included on self-implementation of Site Investigation and demonstration that an AOI complies with RECAP.
- Submittal requirements were included for the Screening Option (SO), Management Option 1 (MO-1), Management Option 2 (MO-2), and Management Option 3 (MO-3). Also added was a summary of general data requirements for each management option for standardized reporting.
- Air sampling guidelines were clarified.
- Groundwater reporting requirements were added.
- Examples were revised showing how to account for additive effects by multiple constituents that attack the same target organ or system and a table that identifies target organs/critical effects was added.
- Critical Effects and Target Organs/Systems table for petroleum constituents was added.
- Lead model default values were updated.
- Surrogate toxicity values were added for a few PAHs.
- Guidance was added for addressing nontraditional parameters (chlorides, pH, etc).

ADDITIONAL GUIDANCE IN THE EVALUATION OF PATHWAYS INCLUDES:

- A section was added that addresses all of the RECAP standards (RS) and screening standards (SS) including volatilization of constituents present at a depth less than 15 feet into ambient air from soil and groundwater.
- Volatilization of constituents from soil and/or groundwater into ambient air or an enclosed structure was changed and now considered under MO-1 with default RS presented in Table 2 and 3.

CONSISTENCY WITH FEDERAL GUIDANCE AND WIDELY ACCEPTED METHODOLOGY INCLUDE:

- The North American Industry Classification System group numbers defining industrial land use were updated.
- A new section was added to address the issue of possible health risks associated with short-term exposure for sensitive sub-populations.

- A new section was added that provides guidance on the identification of toxicity values for the development of SS and MO-1 RS for COC not in Tables 1-3 and for the development of MO-2 and MO-3 RS.
- Guidance was included on use of Monitored Natural Attenuation under RECAP.
- SS and RS were updated based on revised U.S. EPA toxicity values and default parameters.
- Total Petroleum Hydrocarbon (TPH) ranges were redefined for TPH-Gas Range Organics, TPH-Diesel Range Organics, and TPH-Oil Range Organics.
- The methods recommended were changed and additional available methods were included for analysis of the TPH fractions and TPH-G, D, and O mixtures.
- Guidance for addressing polychlorinated dioxins and furans using the TEF approach were included.

APPENDICES H, I, AND J INCLUDE:

- Appendices H (SO), I (MO-1), and J (MO-2) were combined into one appendix for ease to RECAP calculations and to avoid unnecessary repetition.
- Additional guidance for MO-3 evaluations was included.
- A new table of contents and equations list was included for easy reference.
- Default values for RECAP calculations were updated based on current EPA recommendations.
- The Ca (acceptable air concentrations) values for the calculation of the volatilization of COCs from soil and/or groundwater into an enclosed structure and ambient air were revised to include the use of LAC 33.III Ch. 51 Table 51.2 air standards in addition to risk-based standards (as calculated under RECAP 2000) for consistency throughout the Department.
- Guidance was added on the identification and application of the limiting SS, RS and other site data.

MISCELLANEOUS CHANGES INCLUDE:

- Text within the document was added/changed/moved/deleted for clarification purposes.
- Various terminologies were changed for clarification purposes.

- For aquifers hydraulically connected to a surface water body, the zone may be classified as a groundwater 3 zone if the submitter adequately demonstrates that the well yield measurements are influenced by pumpage from the surface water body.
- New section was added that sets forth landowner identification requirements for off-site migration.
- The option to conduct a baseline risk assessment under MO-3 was eliminated. The submitter must develop site-specific MO-3 RS if the evaluation reaches this tier in the RECAP process.
- The area of impacted soil that triggers a screening level Ecological Risk Assessment increased from one acre to five acres.