

Responsiveness Summary
RBCA stakeholder comment period

Changes resulting from internal conversations and discussions with laboratories:

General Editorial Changes: Editorial changes were made throughout the document to increase readability, clarity and applicability to multiple remediation programs.

Petroleum Fraction Refinement Sections were deleted as these subtractions are part of the method and the sections on refinement may cause confusion on how to do subtractions with the new Mass method references.

1 and 2- methylnaphthalene were added back into the tables as 2-methylnaphthalene is part of the Diesel PAH analytes in the EPH method and both analytes are commonly detected in diesel.

Deletion of metals table and metals text throughout the document and reference to program specific guides on metals.

Explanation of changes text has been revised to better clarify use of updated methods, and document text that has been revised.

EPA RSL Nov 2023 Updates Incorporated:

Fluorene has a new PPRTV subchronic RfD that was incorporated into the EPA RSL tables in Nov, 2023 and was updated in the RBCA tables.

Methyl tert-butyl Ether (MTBE) has a new Final subchronic RfC and subchronic RfD in Nov, 2023 and was updated in the RBCA tables.

Note: The subchronic RfDs and RfCs only affect the construction worker screening levels.

External comments:

Comment: Several MADEP references were not matching with the toxicity values.

Response: Thank you for catching this. This was an oversight in the update and though MADEP was determined to be the correct reference, several of the RfC and s-RfC toxicity numbers were from other documents. These were updated, which affected fraction screening levels. These levels have all been updated in the tables.

Comment: Table A, Recommend inclusion of a comment/requirement in table regarding moisture analysis and sample requirements.

Response: A comment was included for VPH and a line item for moisture added to the table.

Comment: Table A and C, Recommend removing designation of method version lettering (C/D/E) and include footnote that an approved version of the method is required. This would allow flexibility as methods are revised to incorporate the newest approved version of the method without requiring revision of this document-

Response: Method versions were deleted and a footnote to both soils and water tables were included stating "Alternate approved versions of the methods are allowed".

Comment: Table C, Method allows for alternate acids for preservation. Recommend same allowance here.

Response: "or alternate acids, as allowed by the method" added.

Comment: Table C, For VOCs, the requirement listed is 2 vials; however, for lead scavengers the requirement is 6 vials (3 for 8260, 3 for 8011). Recommend updating for consistency. Laboratories will ultimately designate the number required for the requested parameter based on instrumentation, QC requirements, risk of reruns, etc.

Response: Modified VOC method 8260 sample container to Three 40 ml vials for consistency.

Comment: Table C, Recommend adding to field filtered 0.45 um for *dissolved metals*.

Response: "for dissolved metals" added to RCRA metals line in aqueous sampling table.

Comment: Table C, SW-846 method 7470 requires refrigeration only for non-aqueous samples. Aqueous samples do not have a cooling requirement in the method or in Chapter 3.

EPA 245.1 also only includes the requirement to preserve to pH<2 with nitric acid, without requiring thermal preservation. Recommend removing thermal preservation requirement for groundwater sampling.

Response: Table C, mercury thermal preservation requirement removed.

Comment: Section 2.4.2.2. Aqueous Sample Preservation: It may be beneficial to address samples where carbonaceous materials are present. SW-846 Chapter 4, Table 4-1 indicates a 7-day holding time "if carbonaceous materials are present."

Response: Thank you, the following sentence was added to Section 2.4.2.2. If carbonaceous materials are present, or MTBE or other oxygenate ethers are present and the sample is not acid preserved because the method uses a high-temperature sample preparative method, the holding time is 7 days instead of 14 shown in Table C, 8260 and sw 846, table 4-1.

Comment: The commenter stated that they had reviewed the VF calculations for the December 2023 RBSL calculations and found an error that may have been associated with the 2018 VF calculations. Using all the MADEP and EPA input parameters for C9-C18 Aliphatics as referenced for the other fractions that go into calculation of the apparent diffusivity (Da), I get a Da of 0.00006 cm²/s, instead of 0.000035 cm²/s. The difference in Da results in a VF of 14,752 m³/kg, rather than 11,092 m³/kg. Using this VF in the RBSL calculations results in slightly different RBSLs for the three scenarios as follows:

Residential 286 mg/kg rounded to 290 mg/kg
Commercial 1556 mg/kg rounded to 1600 mg/kg
Construction 5969 mg/kg rounded to 6000 mg/kg

Response: The department appreciates the comment and agrees that the MADEP and EPA input parameters for C9-C18 aliphatics results in an apparent diffusivity (Da) of .00006 cm²/s, which results in changes to the residential, commercial and construction worker RBSLs for C9-C18. The change in the C9-C18 aliphatic Da and resulting screening levels have been incorporated into the updated RBCA guide and the RBCA date modified to February 2024.

