



Division of Remediation – Oak Ridge Office  
Environmental Sample Analytical Testing Services

**Specifications**

TDEC Division of Remediation-Oak Ridge (TDEC DoR-OR) is seeking a multiyear (3-year contract with two (2) 1-year renewal options) contract for Remediation Related Analytical Testing of multiple types of environmental samples including but not limited to air, soils, water, vegetation, and biological samples such as fish tissue or benthic macro-invertebrates.

This Invitation to Bid (ITB) includes this “Specifications” sheet as well as 5 tabs /attachments in Excel.

- Attachment 1 is the “Instructions Sheet”
- Attachment 2 is the “ITB Bid Sheet”
- Attachment 3 is the “Estimated Sampling Quantities”
- Attachment 4 is the “General Information Table 1”
- Attachment 5 is the TDEC DoR-OR Standard Electronic Data Deliverable (SEDD) Format Example

Attachments 2,3, and 4 provide the lists and specifications of the testing the division will require.

**Definitions:**

EPA’s approved methods index can be found at the following two links for further description and definition of the listed EPA methodologies in this spec and bid sheet.

- a) EPA approved methods index <https://www.epa.gov/measurements-modeling/index-epa-test-methods>,
- b) EPA approved methods collections <https://www.epa.gov/measurements-modeling/collection-methods#1>

**Scope:**

1. Bidder must be able to perform analysis in a laboratory having a Radioactive Material License (Rad License). Bidder shall provide Rad License upon request but before bid award for the Group.
  - a. Note: Department of Energy Laboratory Accreditation Program (DOELAP) accreditation is not required. Please note the accreditation in your response materials, if you have it.
2. Turnaround times (laboratory receipt to analysis to invoicing) for requested tests
  - a. Bidding Laboratory should bid scope at standard turnaround time on Bid Sheet but shall have the capacity to support expedited turn times or rush testing orders on request if necessary. Bidding Laboratory can make a statement as to the cost for expedited analysis, but this will not be use in evaluating this ITB.
3. Bidder shall have ability to provide Level 4 Data Packages as defined by EPA.
  - a. <https://www.epa.gov/quality/epa-region-4-data-validation-standard-operating-procedures-contract-laboratory-program>
4. Bidder shall provide Electronic Data Deliverables in the format provided by TDEC in this ITB package. (Provided as "Attachment 5" titled "SEDD Required Format").
  - a. For reference: SEDD is defined as a Standardized Electronic Data Deliverable and is described by the EPA as a standardized data delivery format with a hierarchal file created by the Laboratory Information Management System (LIMS) containing the information regarding chemical analysis of samples (EPA, 2023).
5. Bidder shall provide a sample bottle kit for collecting and shipping the environmental sample media including quality control samples.
  - a. Sample kit to include the following
    - i. sample bottles
    - ii. coolers, sample tags
    - iii. chain of custodies
    - iv. nano-pure water (when requested)
    - v. Temperature blanks
    - vi. Trip blanks (where appropriate)
    - vii. costs to include sample kit shipping to TDEC prior to sampling event.
6. Bidder for Grouping shall have the ability to analyze general inorganics samples using the listed EPA approved methods. Please see General Information Table 1 – Tests and General Info table 2 – Analytes for additional information.

7. Bidder for Grouping shall have the ability to analyze general metals (ICP-MS and ICP-OES) tests using EPA approved methods. Please see General Information Table 1 – Tests and General Info table 2 – Analytes for additional information.
8. Bidder for Grouping shall have the ability to analyze general organics (Semi-volatile, Volatile, PCBs, Pesticides, and Dioxin/Furans) tests using EPA approved methods. Please see General Information Table 1 – Tests and General Info table 2 – Analytes for additional information.
9. Bidders in this Group shall have the ability to analyze biological media for general metals, general radiological, general inorganics, general organics, low level mercury, and methyl mercury tests using EPA approved methods. Please see General Information Table 1 – Tests and General Info table 2 – Analytes for additional information.
  - a. Biological media may include
    - i. Insects
    - ii. bird eggs
    - iii. vegetables
    - iv. hay
    - v. reptiles
    - vi. fish
    - vii. spiders
    - viii. milk

**Shipping and Receiving of Samples:**

1. Awarded Bidder shall provide sample bottle kit as described above. Sample kits shall include any required paperwork, including sample Chain of Custodies (COCs) if appropriate.
2. Awarded Bidder shall provide all sample containers with bottle sets / sample kits to TDEC DoR-OR within 14 days of request.
3. Awarded Bidder shall be responsible for all sample disposition.

**A responsive bidder will provide:**

1. The completed ITB Bid Sheet
2. A cover sheet defining rad licenses (if appropriate), comments and list of assumptions if made.

3. A statement that the bidder is able to return data in the SEDD format.
4. Annual escalation rates, if applicable.
5. A statement as to the percent increase in price per analysis for expedited turnaround time.

**Instructions to complete the ITB Bid Sheet**

Note: These instructions are also provided on Instructions Sheet Tab in the Excel file.

1. Complete the ITB Bid Sheet (Table) with a cost per test for each media type and associated line items in the highlighted areas.

Analytical Tests	Chemical Abstracts Services Registry Number (CAS #) or <i>See (2nd Tab) ITB Test WATER Table for TESTS with MULTIPLE ANALYTES</i>	Sample Matrix	TDEC DoR-OR Needed Analytical Method(s) <i>or Enter Laboratory Equivalent</i>	TDEC DoR-OR Needed WATER Reporting Limit (RL) <i>for TN AWQC (µg/L) or EPA LHAL (ng/L) - (* KEY)</i>	Laboratory Minimum Detection Limit (MDL) <i>Responding Lab please provide MDL</i>	Cost Per Test with Level 2 QC Data Package (** KEY) <i>Enter Cost Below</i>	Cost Per Test with Level 4 QC Data Package (***) KEY) <i>Enter Costs Below</i>
General Inorganics (all Water except Particle Size Distribution)							
Alkalinity (total)	NA	Water	EPA 310.2			\$ -	\$ -
Ammonia	7664-41-7	Water	EPA-350.1			\$ -	\$ -
Bromide	24959-67-9	Water	EPA-300.0			\$ -	\$ -

- a. Estimated sample quantities over the course of the contract are presented on Attachment 3.

2. Supplemental information attachments are included as Gen Info (General Information) Table 1 – Tests and Gen Info Table 2 – Analytes and include method and analyte specific information that may be useful for the bidder during the evaluation and costing process. For example, these General Information (Gen. Info.) tables include specific CAS numbers and detailed analyte lists broken out in detail for the analysis type listed in the bid sheet.

- a. For reference: the example of the bid sheet above shows the Metals-ICP-MS analysis type in the bid line, but the additional information breaks out the list of analytes that are specifically included in that category.

Analytical Fraction Test Tables	Analyte	Chemical Abstract Services Registry Number CAS #	DoR-OR Needed Analytical Method(s) or <i>Enter Laboratory Standard Equivalent</i>
Metals ICP-MS	Aluminum	7429-90-5	EPA-200.8
Metals ICP-MS	Antimony	7440-36-0	EPA-200.8
Metals ICP-MS	Arsenic	7440-38-2	EPA-200.8
Metals ICP-MS	Barium	7440-39-3	EPA-200.8
Metals ICP-MS	Beryllium	7440-41-7	EPA-200.8
Metals ICP-MS	Cadmium	7440-43-9	EPA-200.8
Metals ICP-MS	Chromium	7440-47-3	EPA-200.8
Metals ICP-MS	Cobalt	7440-48-4	EPA-200.8
Metals ICP-MS	Copper	7440-50-8	EPA-200.8
Metals ICP-MS	Lead	7439-92-1	EPA-200.8
Metals ICP-MS	Manganese	7439-96-5	EPA-200.8
Metals ICP-MS	Molybdenum	7439-98-7	EPA-200.8
Metals ICP-MS	Nickel	7440-02-0	EPA-200.8
Metals ICP-MS	Selenium	7782-49-2	EPA-200.8
Metals ICP-MS	Silver	7440-22-4	EPA-200.8
Metals ICP-MS	Thallium	7440-28-0	EPA-200.8
Metals ICP-MS	<i>Thorium (NOT in ICP-OES)</i>	7440-29-1	EPA-200.8
Metals ICP-MS	<i>Uranium (NOT in ICP-OES)</i>	7440-61-1	EPA-200.8
Metals ICP-MS	Vanadium	7440-62-2	EPA-200.8
Metals ICP-MS	Zinc	7440-66-6	EPA-200.8

3. This bid sheet has 1 group (see example below). Group 1 is the largest grouping with 19 analysis types and 64 cost boxes.

4. The State shall award Group 1 to one Bidder. They will not split up the analysis to different labs from within the groupings themselves.
5. Lab shall include in the test prices, the costs for sample kits to be provided initially within 14 days of request shipped to the TDEC DoR-OR office located at 761 Emory Valley Rd, Oak Ridge, TN, 37830.
6. TDEC DoR-OR shall cover the costs associated with shipping the samples and cooler back to the lab for analysis. The return shipping costs for analysis should not be included in the test costs.
7. Bidding Laboratory should bid scope at standard turnaround time on Bid Sheet but shall have the capacity to support expedited turn times or rush testing orders on request, if necessary. Bidding Laboratory can make a statement as to the cost for expedited analysis, but this will not be use in evaluating this ITB.

Unless otherwise noted standard turn times will be as follows:

- I. VOCs - maximum turn time 14 calendar days (days)
- II. SVOCs - maximum turn time 14 days
- III. Dioxin / Furans - maximum turn time 20 days
- IV. PFAS - maximum turn time 30 days
- V. PCBs- maximum turn time 30 days
- VI. Pesticides - maximum turn time 30 days
- VII. Radiological samples - maximum turn time 30 days
- VIII. Mercury - maximum turn time 30 days
- IX. Toxicity – maximum turn time 20 days