



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

**Specifications**

TDEC Division of Remediation-Oak Ridge is seeking a multiyear (3-year contract with two (2) follow on 1-year 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 “General Information Table 1”
- Attachment 4 is the “General Information Table 2”
- 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 shall 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 all Groups:
  - a. Note: Department of Energy Laboratory Accreditation Program (DOELAP) accreditation is not required for all groups, but please note it in your response materials, if you have it.
2. Turnaround times, (laboratory receipt > analysis > invoicing), for requested tests
  - a. Bidding Laboratory should bid scope at standard turnaround time on page 7 of the Specifications, 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 have the ability to provide a sample bottle kit for collecting and shipping various 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 1 shall have the ability to analyze general inorganics samples using the listed EPA approved methods. Please see General Info. Table 1 – Tests and General Info Table 2 – Analytes for additional information.
7. Bidder for Grouping 1 shall have the ability to analyze general metals (ICP-MS and ICP-OES) tests using EPA approved methods. Please see General Info. Table 1 – Tests and General Info Table 2 – Analytes for additional information.
8. Bidder for Grouping 1 shall have the ability to analyze general organics (Semi-volatile, Volatile, PCBs, Pesticides, and Dioxin/Furans) tests using EPA approved methods. Please see General Info. Table 1 – Tests and General Info Table 2 – Analytes for additional information.
9. Bidder for Grouping 2 shall have the ability to analyze emerging contaminants including PFAS tests using EPA approved methods. Please see General Info. Table 1 – Tests and General Info Table 2 – Analytes for additional information
10. Bidder for Grouping 4 shall have the ability to analyze general radiological tests using the listed EPA approved methods. Please see General Info. Table 1 – Tests and General Info Table 2 – Analytes for additional information.
11. Bidder for Grouping 5 shall have the ability to analyze low level mercury samples using EPA approved methods. Please see General Info. Table 1 – Tests and General Info Table 2 – Analytes for additional information
12. Bidder for Grouping 5 shall have the ability to analyze methyl mercury test using EPA approved methods Please see General Info. Table 1 – Tests and General Info Table 2 – Analytes for additional information.
13. Bidders in Groups 1, 4, and 5, 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 Info. 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

14. Bidder for Grouping 6 shall have the ability to analyze water toxicity tests using EPA approved methods please see General Info. Table 1 – Tests and General Info Table 2 – Analytes for Additional Information.

**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 shall provide:**

1. The completed ITB Bid Sheet (Note: If there are any discrepancies in pricing from the bid sheet to Edison line items, the lower price will control.)
2. A cover sheet defining rad licenses (if appropriate), comments and list of assumptions if made.
3. A statement that the bidder is either able to return data in the SEDD format or not.
4. 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 non-shaded areas.

		Division of Remediation, Oak Ridge Office (DoR-OR) 865-481-0995			
761 Emory Valley Rd.					
line item groupings	analysis type	method required	Cost		
			air filters (20)	biota (25)	fish tis
	Metals ICP-MS	EPA-200.8	\$	\$	\$
	Metals ICP-OES	EPA-200.7	\$	\$	\$
	Semi VOAs	SW846-8270	\$	\$	\$
	VOA	SW846-8260	\$	\$	\$
	Inorganic Anions by IC	EPA 300.0			
	Alkalinity (total)	SM-2320-B, EPA 310.2			

- a. Each cost box correlates to the method required for the analysis of the specific media listed at the top of that column. The numbers in notated (xx) next to the media type, reflect generally the quantity of that type of sample that could be anticipated over the course of the contract.
- b. Each column will have a total cost at the bottom of each group and a Total Bid Cost for the entire Group on the right.

5	Mercury - low level	EPA-1631	\$ 1.00	\$ 1.00	\$ 1.00	\$ 1.00	\$ 1.00	\$ 1.00	\$ 1.00	\$ 1.00	\$ 1.00	\$ 1.00	\$ 1.00	\$ 1.00
	Methyl mercury	EPA-1630	\$ 1.00	\$ 1.00	\$ 1.00	\$ 1.00	\$ 1.00	\$ 1.00	\$ 1.00	\$ 1.00	\$ 1.00	\$ 1.00	\$ 1.00	\$ 1.00
	<b>Group 5 Column Totals</b>		\$ 300.00	\$ 50.00	\$ 50.00	\$ 50.00	\$ 80.00	\$ 10.00	\$ 300.00	\$ 100.00	\$ 10.00	\$ 500.00	\$	1450.00

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	DoR-OR Needed Analytical Method(s) or <i>Enter</i> Laboratory Standard Equivalent
		CAS #	
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	Thorium (NOT in ICP-OES)	7440-29-1	EPA-200.8
Metals ICP-MS	Uranium (NOT in ICP-OES)	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

- This bid sheet is separated into 6 groups (see example below). Group 1 is the largest grouping with 19 analysis types and 64 cost boxes. Group 6 is the smallest with only 2 cost boxes.
- The State may award one or more of these 6 groupings to different Bidders or all 6 groupings to one Bidder. They will not split up the analysis to different labs from within the groupings themselves, however.

	Gamma (examples)	HPGe Gamma Spectroscopy, EPA 901.1	\$
	Transuranics (examples)	Alpha Spectroscopy, DOE HASL 300	\$
4	Gross Alpha / Gross Beta	Gas Porportional Counting, EPA 900.0	\$
	carbon 14	CO2 Evollution LSC, EPA EERF	\$
	Tech 99 / tritium	Beta Liquid Scintillation, DOE HASL 300	\$
5	Mercury - low level	EPA-1631	\$
	Methyl mercury	EPA-1630	\$
6	Aquatic Toxicity IC25 Defin. Ceriodaphnia Dubia-5 Dilution	EPA-1002	
	Aquatic Toxicity IC25 Defin. Minnows-Pimephales promelas-5 Dilution	EPA-1000	

- 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.
- 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 shall bid scope at standard turnaround time below.

Standard turn times shall 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