

HOW TO SELECT A TOXICOLOGY LABORATORY

If your assessment program requires, or would benefit from, evaluating the potential toxicity of an environmental sample or a substance, you will need to identify a qualified, reliable and reputable laboratory. There are several things you can do that will help you during the selection process to ensure the delivery of scientifically defensible and unbiased results.

Some key questions to ask bidding laboratories:

Is the laboratory accredited for the required test methodologies? Accreditation is the best indicator that a lab has the capability to do a good job. Ask for the lab to provide documentation or do your own research.

Does the laboratory have the capacity to handle my samples? Many labs are unable to handle large numbers of samples in a timely manner.

How long has the lab been operating? Startup labs often provide low bids to get work in the door. Lack of experience is a risk factor you need to evaluate.

Who are the staff members? It is a good idea to see who the scientists are, what their training is, and how long they have been with the firm. High employee turnover of analysts can be indicative of inexperience.

Does the laboratory have established and effective quality assurance (QA) procedures? Request a copy of the QA plan, standard operating procedures (SOPs), and accreditation documents. This will affirm that the lab is committed to quality assurance.

Do the analyses include a summary of the Quality Assurance? All reporting of analytical data should include a statement and/or evidence of the QA steps performed and the results.

Is the lab active in the current scientific community publications and attendance at scientific conferences?

Where is the lab located? Proximity to your project site may be a factor; however, most labs are within reach of an overnight shipment within the contiguous US and is sufficient to meet most sample holding times for effluents (36 hours) and sediments (8 weeks).

What does the lab charge for its services? Unusually low or high bids should raise a red flag. Remember, you get what you pay for...up to a point. Consider that for obtaining analytical data of highly defensible quality, one must also account for the years of training and experience that are required to provide the requested product.

When coordinating with your lab, come prepared! Below is a list of information that will help your lab respond to your request:

- What is the objective of the toxicological assessment? (compliance, regulatory, investigative)
- Permit number/regulatory body
- Type of environment (water, sediment, freshwater, marine, terrestrial soil)
- Number of Samples
- Sample Frequency
- Period of performance (when)
- Location

Keywords:

- Aquatic Toxicity Testing,
- Bioassay
- Whole Effluent Toxicity (WET)
- Acute or Chronic Toxicity
- "Fish Test"
- Dangerous Waste Bioassay