

ARE WE USING THE RIGHT LAB?

By Kevin Maine

A lab test is used to identify and monitor conditions specific to our wastewater or drinking water processes so that we can protect public health and the environment. A few examples are pH, DO, chlorine, toxicity, CBOD5 etc.

In our lab classes, we talk about proper sampling, sample preservation, proper containers, hold times and chains of custody. But we didn't discuss how we chose the Lab.

How did you choose your lab? Lowest bid, recommended by others, found them on the internet, or qualifications? Hopefully it was qualifications before price.

How do we know if they are qualified in New York? What approved Method and Standards are in use? How do you find laboratories? Did the lab farm your sample to another lab? Can you verify their ELAP number? The following link is a good starting point <https://apps.health.ny.gov/pubdoh/applinks/wc/elappublicweb/>. Remember, for reporting, all labs must be ELAP (Environmental Laboratory Approval Program) for the test required.

Now that you have sampled correctly and completed the chain of custody. Did the courier properly store your sample? Hopefully they kept wastewater and drinking water samples in separate coolers. Did the courier correctly complete the chain of custody? Now you're waiting for the results.

When you receive the results, be sure to read all notes and comments. i.e., was the sample analyzed after hold times? If so, those results are not valid. Was there contamination in the trip blank? Do you have to resample? Are there enough days left in the sample period to retest?

Last year there was an issue for the wastewater plants and WET (Whole Effluent Toxicity) testing. Many of the labs were not approved at that time. By January 2023, laboratories had to be accredited for reporting results. Be sure to check the method required for your facility. There are several categories of organism used.

For process control testing, the laboratory may not need certification. However, it's best if they are certified.

Be sure to read all sampling instructions for sample collection and read all notes on results. Remember our staff is available to assist with result interpretation, sample collection and preservation. 💧💧💧

Kevin Maine
Deputy Director/
Apprenticeship Manager
maine@nyruralwater.org

