

## Applicable Terminology and Publications

- Acute Whole Effluent Toxicity Testing – Biomonitoring conducted to determine the short-term (96-hour) toxic effects of a one-time exposure to a chemical or pollutants.
- DEP – Florida Department of Environmental Protection
- Additional Testing - All bioassays required by a DEP permit in the event of a failed bioassay.
- As-Needed Testing - Bioassays selected by the Project Manager (PM) to identify possible causes for test failure(s). As-Needed Testing procedures are performed pursuant to these technical specifications. As Needed Testing requested by the PM may include the addition of specific chemical(s) to the effluent or control water to test the toxic effects of that chemical(s).
- Bioassay - In vivo or in vitro experiments designed to reveal a chemical's toxic potential in order to determine the potential uses (or danger of use) for a chemical or pollutants.
- Bio-monitoring Program - The testing program set up to monitor the toxicity of effluents from wastewater treatment facilities.
- Chronic Whole Effluent Toxicity Testing – Bioassays conducted to determine the toxic effects of repeated or long-term exposure to a chemical or pollutants.
- Control Test - A bioassay performed under ideal conditions with purified water to establish a reference base for comparison with the results of similar bioassays conducted concurrently with real-world samples.
- DOH - Florida Department of Health
- DPD – Diethyl-p-phenylenediamine
- DMR QA Studies (Discharge Monitoring Report Quality Assurance Studies) - Program conducted by the State of Florida Department of Health (Office of Laboratory Certification) to evaluate a laboratory's ability to successfully perform the testing for which it is certified.
- Effluent - Domestic wastewater that has received at least secondary treatment and high-level disinfection, as defined by the DEP (Chapter 62-600, Florida Administrative Code (F.A.C.)). Effluent is suitable for re-use, and is also known as wastewater effluent, or reclaimed water.
- EPA - United States Environmental Protection Agency
- IC25 - 25 percent (%) inhibition concentration. The level at which the organisms exhibit 25 percent (%) reduction in a biological measurement such as reproduction or growth.
- Invalid Test - All repeated bioassays required by a DEP permit in the event of an invalid bioassay.
- LC50 – Lethal concentration in which 50% of the population is killed.
- Routine Testing - The minimum number and type of valid bioassays required by a DEP permit during a specified reporting interval.
- Sample - A designated volume of effluent collected and used in a bioassay.
- SRT QA - (Standard Reference Toxicant Quality Assurance) Tests serve to determine the sensitivity of the test organisms over time; assess comparability within and between laboratory test results; and identify potential sources of variability, such as test organism health, differences among batches of organisms, changes in laboratory water or food quality, and performance by laboratory analysts.
- Test Failure - A bioassay whose results indicate toxicity in excess of the maximum level allowed by the applicable permit for the test.
- Test Period - A period of time, predetermined by the approved test method being employed by the bioassay laboratory, to perform and complete a specified bioassay.
- Whole Effluent Toxicity Testing (Bioassay testing) - Biomonitoring conducted to identify the toxic effect of an effluent. For the purposes of submitting a bid, this term includes routine, additional, and as needed testing.
- NELAP – National Environmental Laboratory Accreditation Program
- The following publication(s) of the issue in effect on date of this solicitation, forms a part of this specification:
  - DOH/NELAP Certification Standards: [http://www.floridahealth.gov/licensing-and-regulation/environmental-laboratories/environmental-laboratory-certification/documents/64E\\_1.pdf](http://www.floridahealth.gov/licensing-and-regulation/environmental-laboratories/environmental-laboratory-certification/documents/64E_1.pdf)

- Short-term Method for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Freshwater Organisms (EPA-821-R02-013, or the most current edition): [https://www.epa.gov/sites/production/files/2015-08/documents/short-term-chronic-freshwater-wet-manual\\_2002.pdf](https://www.epa.gov/sites/production/files/2015-08/documents/short-term-chronic-freshwater-wet-manual_2002.pdf)
- Methods for Measuring the Acute Toxicity of Effluents and Receiving Waters to Freshwater and Marine Organisms (EPA-821-R02-012, or the most current edition): [https://www.epa.gov/sites/production/files/2015-08/documents/acute-freshwater-and-marine-wet-manual\\_2002.pdf](https://www.epa.gov/sites/production/files/2015-08/documents/acute-freshwater-and-marine-wet-manual_2002.pdf)
- Standard Methods for the Examination of Water and Wastewater, Section 4500 CI G, 21st Edition: <https://www.standardmethods.org/>
- NELAP Standards: <http://nelac-institute.org/content/NELAP/index.php>