

**CLASS SPECIFICATION**  
**County of Fairfax, Virginia**

**CLASS CODE:** 5190

**TITLE:** ENVIRONMENTAL TECHNOLOGIST I

**GRADE:** S-19

**DEFINITION:**

Under general supervision, performs one of three Levels of professional chemical, biochemical, microbiological, and physical tests and/or regulatory control work in the Environmental Monitoring Laboratory; and performs related work as required.

**DISTINGUISHING CHARACTERISTICS:**

The Environmental Technologist I and Environmental Technologist II classes are distinguished by progressively more difficult and complex Levels of laboratory analysis work. Incumbents in the Environmental Technologist I class at Level 3, who fulfill the requirements for the Environmental Technologist II class in Level 1 can move non-competitively to that class.

**ILLUSTRATIVE DUTIES:**

*(The illustrative duties listed in this specification are representative of the class but are not an all inclusive list. A complete list of position duties and unique physical requirements can be found in the position description.)*

**Level I**

Performs all routine and non-routine tests or regulatory functions associated with wastewater, air, stream, estuary, sediment, sludge, ash, leachate, groundwater, and toxic or controlled substances or discharges;

Routinely performs instrumental analyses, employing equipment such as the Flow Injector Analyzer, and Discrete Analyzer. Additional instrumentation utilized may include; Atomic Absorption Spectrophotometer, Gas Chromatograph, Inductively Coupled Plasma Emission Spectrometer, Auto Analyzer II, Zero Head Space Extractor, Closed Loop Stripping Apparatus, TOC Analyzer, Specific Ion Meter, and Isokinetic Samplers;

Prepares concomitant statistics and quality control;

Participates in equipment maintenance, field work, method development, laboratory analyses, and write-up of results;

**Level 2**

Performs all analyses and testing procedures in the General Testing Laboratory, using instrumentation software and associated parsers;

Analyzes samples including all bacteriological testing and characterization of filamentous bacteria;

Ensures that all testing is done within approved parameters;

Performs preventative maintenance and trouble shooting.

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Level 3

Performs all advanced analyses and testing procedures within either the Metals OR Organics Laboratory, using all instrumentation software and associated parsers;  
Ensures that all testing is done within approved parameters;  
Performs preventative maintenance and trouble shooting.

**REQUIRED KNOWLEDGE, SKILLS AND ABILITIES:**

*(The knowledge, skills and abilities listed in this specification are representative of the class but are not an all inclusive list.)*

Level 1

Knowledge of the principles and techniques of analytical chemistry, biochemistry and microbiology;  
Ability to perform associated analysis and record accurate conclusions;  
Knowledge of applicable Federal, State and County procedures and regulations;  
Ability to identify violations;  
Ability to train others;  
Ability to work independently and make relevant independent judgments;  
Ability to perform normal mathematical operations as well as some advanced algebra;  
Ability to perform Level 1 analyses and record accurate conclusions.

Level 2

*(Includes all from Level 1, plus below as listed)*

Ability to perform all procedures/parameters in the General Laboratory, documented through Demonstration of Capability procedure;  
Ability to analyze samples including all bacteriological testing and characterization of filamentous bacteria;  
Ability to use all instrumentation software and associated parsers.

Level 3

*(Includes all from Level 2, plus below as listed)*

Ability to demonstrate capability for all procedures/parameters in either Metals or Organics;  
Ability to analyze samples for all methods/parameters within either Metals or Organics;  
Ability to use all instrumentation software and parsers with either Metals or Organics.

**EMPLOYMENT STANDARDS:**

Level 1

Any combination of education, experience and training equivalent to graduation from an accredited four year college or a university with a degree in chemistry, biology or related science; plus one year of directly related experience.

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**NECESSARY SPECIAL REQUIREMENTS:**

See the Environmental Monitoring Laboratory's Upward Mobility Program Policy for the requirements necessary to move from Level 1 through Level 2 and 3.

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| REVISED:             | August 15, 2012  |
| REFORMATTED/REVISED: | December 3, 2007 |
| ESTABLISHED:         | July 1977        |
| REVISED:             | July 27, 1987    |