



## LABORATORY TECHNICIAN SPECIALIST - WATER/WASTEWATER

<b>RESOURCE CATEGORY</b>	Public Works
<b>RESOURCE KIND</b>	Personnel
<b>OVERALL FUNCTION</b>	The Laboratory Technician Specialist - Water/Wastewater performs water and wastewater sampling, testing, and analysis
<b>COMPOSITION AND ORDERING SPECIFICATIONS</b>	<ol style="list-style-type: none"> <li>1. This position can be ordered as a single resource.</li> <li>2. Discuss logistics for deploying this position, such as working conditions, safety, length of deployment, security, lodging, transportation, and meals, prior to deployment</li> <li>3. Requestor specifies personal protective equipment (PPE) such as hard hats, reflective vests, eye protection, ear protection, and other equipment based on incident conditions</li> <li>4. Requestor and provider discuss safety and work environment prior to deployment</li> <li>5. This position may be responsible for field sampling and analysis, depending on Authority Having Jurisdiction (AHJ) needs</li> </ol>

Each type of resource builds on the qualifications of the type below it. For example, Type 1 qualifications include the qualifications in Type 2, plus an increase in capability. Type 1 is the highest qualification level.

COMPONENT	TYPE 1	TYPE 2	NOTES
<b>DESCRIPTION</b>	Same as Type 2, PLUS: <ol style="list-style-type: none"> <li>1. Performs chemical analyses to measure or determine pH, conductivity, turbidity, solids, acidity, alkalinity, volatile acids, demand, ammonia, total Kjeldahl nitrogen, total phosphorus, oil and grease, cyanide, chlorophyll, phenolics, metals, residual chlorine, color, odor, and microbiological analyses</li> <li>2. Determines total and fecal coliform, performs Microtox testing, and conducts organic and metals preparatory procedures in accordance with industry standards</li> <li>3. Calibrates, operates, and maintains testing equipment</li> </ol>	The Laboratory Technician Specialist: <ol style="list-style-type: none"> <li>1. Analyzes water and wastewater samples for water quality determination, as necessary</li> <li>2. Performs basic laboratory testing and analysis functions, including preparing samples and performing chemical and bacteriological analyses that require basic laboratory skills</li> <li>3. Serves as the sample custodian to log, verify, and confirm preservation of samples</li> <li>4. Performs required quality control</li> </ol>	Not Specified
<b>EDUCATION</b>	Not Specified	Not Specified	Not Specified
<b>TRAINING</b>	Same as Type 2	Completion of the following: <ol style="list-style-type: none"> <li>1. IS-100: Introduction to the Incident Command System, ICS-100</li> <li>2. IS-200: Basic Incident Command System for Initial Response, ICS-200</li> <li>3. IS-700: National Incident Management System, An Introduction</li> <li>4. IS-800: National Response Framework, An Introduction</li> </ol>	Not Specified



Position Qualification for Infrastructure Systems  
Public Works

COMPONENT	TYPE 1	TYPE 2	NOTES
<b>EXPERIENCE</b>	Same as Type 2, PLUS: Experience: 1. Two years of experience in laboratory testing and analysis 2. Experience performing chemical and biological laboratory analysis and testing	Knowledge, Skills, and Abilities: Knowledge of water and wastewater laboratory testing  Experience: Experience in conducting water and wastewater testing under controlled laboratory conditions	Not Specified
<b>PHYSICAL/MEDICAL FITNESS</b>	Same as Type 2	1. Moderate 2. Is able to work while wearing appropriate PPE	1. National Incident Management System (NIMS) Guideline for the National Qualification System (NQS) defines Physical/Medical Fitness levels for NIMS positions. 2. PPE is mission-specific and may vary by work environment; it includes protective footwear, protective clothing for skin exposure, eye and ear protection, respirators, gloves, and masks.
<b>CURRENCY</b>	Same as Type 2	Functions in this position during an operational incident, planned event, exercise, drill, or simulation at least once every three years	Not Specified
<b>PROFESSIONAL AND TECHNICAL LICENSES AND CERTIFICATIONS</b>	Registered Environmental Laboratory Technologist (RELT) certification	Not Specified	1. AHJ specifies necessary licenses or certifications. 2. AHJ determines reciprocity or equivalency with the providing jurisdiction before deployment.



## NOTES

Nationally typed resources represent the minimum criteria for the associated component and capability.

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## REFERENCES

1. FEMA, National Incident Management System (NIMS), October 2017
2. FEMA, NIMS Guideline for the NQS, November 2017
3. FEMA, National Response Framework, June 2016