



New Mexico State Personnel Office

2600 Cerrillos Road
Santa Fe, New Mexico 87505-0127

Classification Description

WATER AND LIQUID WASTE TREATMENT PLANT AND SYSTEM OPERATORS

| <u>Class Title</u> | <u>Class Code</u> | <u>Pay Band</u> | <u>Alt Pay Band*</u> |
|--|-------------------|-----------------|----------------------|
| Water & Liquid Waste Treatment Plant-B | V8031B | 45 | |
| Water & Liquid Waste Treatment Plant-O | V8031O | 50 | |
| Water & Liquid Waste Treatment Plant-A | V8031A | 55 | |

**In accordance with SPB Rule 1.7.4.10 NMAC, the assignment to alternative pay bands shall be reviewed annually to determine their appropriateness.*

Occupation Description

Operate or control an entire process or system of machines, often through the use of control boards, to transfer or treat water or liquid waste.

Nature of Work

Water treatment plant and system operators run equipment, control processes, and monitor the treatment plant. Operators control equipment and monitor processes that remove or destroy harmful materials, chemicals, and microorganisms from the water. They also run tests to make sure processes are working correctly and maintain records of water quality and other indicators. Water and wastewater treatment plant operators operate and maintain the pumps and motors that move water and wastewater through filtration systems. They monitor the indicators at their plants and make adjustments as necessary. They read meters and gauges to make sure that plant equipment is working properly. They take samples and run tests to determine the quality of the water being produced. At times, they may adjust the amount of chemicals, such as chlorine and fluorine, being added to the water. Both tap water and wastewater are highly regulated by the U.S. Environmental Protection Agency. Plant operators must be familiar with these regulations and ensure that their high standards are met. Operators are also responsible for keeping records that document compliance and for being aware of new regulations that are enacted.

Distinguishing Characteristics of Levels

Note: Examples of Work are intended to be cumulative for each progressively higher level of work. The omission of specific statements does not preclude management from assigning other duties which are reasonably within the scope of the duties.

Basic

- Employees in this Role perform standardized duties under supervision that pertain to public water supplies and water and sewage treatment facilities.
- Employees also assist co-workers with more complex duties related to water and sewage treatment.

Recommended Education and Experience for Full Performance

WATER AND LIQUID WASTE TREATMENT PLANT AND SYSTEM OPERATORS

Associates Degree from a Technical/Vocational school and any experience as a water operator, water/wastewater operator, or experience with construction, backhoe operation, construction inspection, buried pipeline repair, pump and equipment repair, pipe fitting and/or reading meters.

Minimum Qualifications

High school diploma or GED and two (2) years of relevant experience in waste water treatment systems to include experience with construction, backhoe operation, construction inspection, buried pipeline repair, pump and equipment repair, pipe fitting and/or reading meters.

Operational

- Employees in this Role perform inspections of public water systems as well as sewage treatment facilities.
- Employees inspect water systems in relation to environmental, safety, operations, and supply issues; perform routine maintenance tasks independently, and perform repairs or implement new systems under the guidance of co-workers with specialized expertise.

Recommended Education and Experience for Full Performance

Associates Degree from a Technical/Vocational school and one (1) year of experience as a water operator, water/wastewater operator, to include experience with construction, backhoe operation, construction inspection, buried pipeline repair, pump and equipment repair, pipe fitting and/or reading meters.

Minimum Qualifications

Associates Degree from a Technical/Vocational school and any experience as a water operator, water/wastewater operator, or experience with construction, backhoe operation, construction inspection, buried pipeline repair, pump and equipment repair, pipe fitting and/or reading meters. Any combination of education from an accredited college or university in a related field and/or direct experience in this occupation totaling two (2) years may substitute for the required education and experience.

Advanced

- Employees in this Role perform complex operation, inspection and maintenance of water and wastewater treatment facilities.
- Employees are responsible for the safety of public water supplies and water and sewage treatment facilities; recommend design and construction of new treatment plants and/or changes to existing systems; are responsible for ongoing instruction in effective methods of operation; and oversee ongoing construction and repair of water and wastewater treatment facilities.

Recommended Education and Experience for Full Performance

Associates Degree from a Technical/Vocational school and four (4) years of experience as a water operator, water/wastewater operator, to include experience with construction, backhoe operation, construction inspection, buried pipeline repair, pump and equipment repair, pipe fitting and/or reading meters.

Minimum Qualifications

Associates Degree from a Technical/Vocational school and one (1) year of experience as a water operator, water/wastewater operator, to include experience with construction, backhoe

WATER AND LIQUID WASTE TREATMENT PLANT AND SYSTEM OPERATORS

operation, construction inspection, buried pipeline repair, pump and equipment repair, pipe fitting and/or reading meters. Any combination of education from an accredited college or university in a related field and/or direct experience in this occupation totaling three (3) years may substitute for the required education and experience.

Knowledge and Skills

*Note: This information has been produced by compiling information and documentation provided by O*NET. O*NET™ is a trademark of the U.S. Department of Labor, Employment and Training Administration.*

Knowledge

Mathematics — Knowledge of arithmetic, algebra, geometry, calculus, statistics, and their applications.

Mechanical — Knowledge of machines and tools, including their designs, uses, repair, and maintenance.

Chemistry — Knowledge of the chemical composition, structure, and properties of substances and of the chemical processes and transformations that they undergo. This includes uses of chemicals and their interactions, danger signs, production techniques, and disposal methods.

Public Safety and Security — Knowledge of relevant equipment, policies, procedures, and strategies to promote effective local, state, or national security operations for the protection of people, data, property, and institutions.

Physics — Knowledge and prediction of physical principles, laws, their interrelationships, and applications to understanding fluid, material, and atmospheric dynamics, and mechanical, electrical, atomic and sub-atomic structures and processes.

English Language — Knowledge of the structure and content of the English language including the meaning and spelling of words, rules of composition, and grammar.

Production and Processing — Knowledge of raw materials, production processes, quality control, costs, and other techniques for maximizing the effective manufacture and distribution of goods.

Biology — Knowledge of plant and animal organisms, their tissues, cells, functions, interdependencies, and interactions with each other and the environment.

Customer and Personal Service — Knowledge of principles and processes for providing customer and personal services. This includes customer needs assessment, meeting quality standards for services, and evaluation of customer satisfaction.

Education and Training — Knowledge of principles and methods for curriculum and training design, teaching and instruction for individuals and groups, and the measurement of training effects.

Skills

Operation and Control — Controlling operations of equipment or systems.

Operation Monitoring — Watching gauges, dials, or other indicators to make sure a machine is working properly.

Monitoring — Monitoring/Assessing performance of yourself, other individuals, or organizations to make improvements or take corrective action.

WATER AND LIQUID WASTE TREATMENT PLANT AND SYSTEM OPERATORS

Quality Control Analysis — Conducting tests and inspections of products, services, or processes to evaluate quality or performance.

Active Listening — Giving full attention to what other people are saying, taking time to understand the points being made, asking questions as appropriate, and not interrupting at inappropriate times.

Equipment Maintenance — Performing routine maintenance on equipment and determining when and what kind of maintenance is needed.

Reading Comprehension — Understanding written sentences and paragraphs in work related documents.

Troubleshooting — Determining causes of operating errors and deciding what to do about it.

Critical Thinking — Using logic and reasoning to identify the strengths and weaknesses of alternative solutions, conclusions or approaches to problems.

Repairing — Repairing machines or systems using the needed tools.

Statutory Requirements: N/A

Conditions of Employment: Working Conditions for individual positions in this classification will vary based on each *agency's utilization, essential functions, and the recruitment needs* at the time a vacancy is posted. All requirements are subject to possible modification to reasonably accommodate individuals with disabilities.

Default FLSA Status: Non-Exempt. FLSA status may be determined to be different at the agency level based on the agency's utilization of the position.

Bargaining Unit: This position may be covered by a collective bargaining agreement and all terms/conditions of that agreement apply and must be adhered to.

Established: 06/01/2007

Revised: 09/20/2011

**Adapted from the United States Bureau of Labor Statistics and are intended to illustrate the typical education and experience required for this occupation.*

Note: Classification description subject to change. Please refer to the SPO website www.spo.state.nm.us to ensure this represents the most current copy of the description.