New Mexico State Personnel Office



2600 Cerrillos Road Santa Fe, New Mexico 87505-0127

Classification Description

STEAM PLANT AND BOILER OPERATORS

Class Title	Class Code	Pay Band	Alt Pay Band*
Steam Plant/Boiler Operator-B	V8021B	45	
Steam Plant/Boiler Operator-O	V8021O	50	
Steam Plant/Boiler Operator-A	V8021A	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 maintain stationary engines, boilers, or other mechanical equipment to provide utilities for buildings or industrial processes. Operate equipment, such as steam engines, generators, motors, turbines, and steam boilers.

Nature of Work

Stationary Plant and Boiler Operators control and maintain electrical power and steam systems, which include boilers, chillers, air-conditioning and refrigeration equipment, diesel engines, turbines, and generators. Stationary Plant and Boiler Operators start up, regulate, repair, and shut down equipment. They ensure that the equipment operates safely, economically, and within established limits by monitoring meters, gauges, and computerized controls. When necessary, they control equipment manually and make adjustments using hand and power tools. They watch and listen to machinery and routinely check safety devices, record data in logs, and identify any potential problems.

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 assist coworkers in the operation of steam and hot water plants and auxiliary equipment.
- Assist in operating high-pressure steam generating boilers.
- Perform a variety of routine operational and safety checks.
- Test boiler water for impurities and treat water to bring to standards; records readings of gauges and meters and fuel/power consumption, and maintain emergency equipment.

Recommended Education and Experience for Full Performance

High School diploma or GED and one (1) year experience in the operation or maintenance of mechanical equipment to provide utilities for building and/or industrial processes.

Minimum Qualifications

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High School diploma or GED and six (6) months experience in the operation or maintenance of mechanical equipment to provide utilities for building and/or industrial processes.

Operational

- Employees in this Role monitor and inspect primary and auxiliary equipment and controls.
- Establish maintenance schedules, as well as testing and checking procedures.
- Establish record keeping systems and reporting protocol.
- Requisition fuel, parts, supplies, and tools.

Recommended Education and Experience for Full Performance*

High School diploma or GED and two (2) years experience in the operation or maintenance of mechanical equipment to provide utilities for building and/or industrial processes.

Minimum Qualifications

High School diploma or GED and one (1) year experience in the operation or maintenance of mechanical equipment to provide utilities for building and/or industrial processes.

Advanced

- Employees in this Role oversee projects related to steam and hot water plants.
- Function as a technical consultant in regard to boiler plant operations, as well as an expert in auxiliary equipment and controls.
- May have specialized expertise in one area of steam and hot water plants, or be well-versed
 in several areas related to boiler plant operations.

Recommended Education and Experience for Full Performance

High School diploma or GED and three (3) years experience in the operation or maintenance of mechanical equipment to provide utilities for building and/or industrial processes.

Minimum Qualifications

High School diploma or GED and two (2) years experience in the operation or maintenance of mechanical equipment to provide utilities for building and/or industrial processes.

Knowledge and Skills

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

Knowledge

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

Engineering and Technology — Knowledge of the practical application of engineering science and technology. This includes applying principles, techniques, procedures, and equipment to the design and production of various goods and services.

Administration and Management — Knowledge of business and management principles involved in strategic planning, resource allocation, human resources modeling, leadership technique, production methods, and coordination of people and resources.

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

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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.

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.

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

Skills

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

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.

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

Operation and Control — Controlling operations of equipment or systems.

Speaking — Talking to others to convey information effectively.

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

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

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

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

Complex Problem Solving — Identifying complex problems and reviewing related information to develop and evaluate options and implement solutions.

Statutory Requirements: This occupation is subject to regulation under 14.7.7.1, NMAC, 1-1-08, 2009 New Mexico Existing Building Code, effective 1/1/11. 14.9.2 NMAC, 2009 New Mexico Mechanical Code, effective 1/1/11.

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.

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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: 07/07/2001 **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 <u>www.spo.state.nm.us</u> to ensure this represents the most current copy of the description.