

## BOILER OPERATOR I

Work in this class involves the operation of steam boilers for heating purposes. Employees serve as shift operators in smaller, less complex steam plants or as assistant operators in steam plants of medium size and/or complexity. Duties include starting and shutting down boilers, monitoring various operational readings and making necessary adjustments to maintain optional efficiency, performing water tests and adding chemicals to water as necessary, performing routine boiler maintenance and assisting in more complex maintenance jobs. In smaller plants work is performed under the general supervision of a steam plant supervisor and in plants of medium size and/o complexity work is performed under the direct supervision of a shift operator.

### I. DIFFICULTY OF WORK:

Complexity of Work - Work involves all phases of the operation and routine maintenance of smaller, less operationally complex boilers.

Intricacy of Work - Periodic rounds are made to record various indicator readings. If any readings are outside of required tolerance, valves, pumps, fans, etc. must be adjusted to bring readings back into normal ranges. Precise measurements and readings must be made when performing water tests.

Controls Over Work - Employees functioning as shift operators perform operational duties without access to technical assistance. Employees functioning as assistant operators perform routine operational duties independently but refer non-routine situations to the shift operator.

Judgmental Demands - The start up, operation, shut down, and routine maintenance of boilers are covered by standard operational procedures. Judgment is required in determining which boiler to operate, and course of action to be taken upon failure of a boiler.

### II. RESPONSIBILITY:

Potential - Failure to monitor indicators and make necessary adjustments could lead to structural damage to smaller, less costly boilers. Failure to maintain boiler efficiency would increase heating costs. Improper operation could cause an institution to lose heat or hot water.

Care and Attention - Indicators must be read accurately and according to schedule. Readings which are out of acceptable ranges must be recognized and adjustments made accordingly. Step by step start up and shut down procedures must be followed exactly.

### III. PHYSICAL EFFORT:

Intensity of Effort - Employees walk, climb and bend to get to and read indicators while making scheduled rounds. Maintenance tasks require the lifting and moving of heavy pumps, valves, etc. Boiler inspection requires working with hand tools in awkward positions.

Frequency and Duration - Indicators must be read periodically throughout the shift-Maintenance tasks are performed periodically. Inspections are generally performed two to four times per year.

IV. WORK SURROUNDINGS AND HAZARDS:

Worker Surroundings - Steam plants are continuously noisy and generally hot in the summer months. Employees are exposed to oil and grease while performing routine maintenance tasks and soot and ashes while performing inspections.

Hazardous Conditions - Continuous exposure to noise could cause some hearing impairment. If proper operational procedures are not followed and safety devices fail, serious accidents could occur endangering the lives of employees.

V. RECRUITMENT STANDARDS:

Knowledges, Skills, and Abilities - Working knowledge of the principles and techniques involved in mechanical maintenance. Skill in the use of tools and equipment used in mechanical maintenance. Ability to follow oral and written instructions.

Ability to accurately record indicator readings. Ability to perform work independently. Physical strength sufficient to perform heavy physical tasks on a periodic basis. Ability to perform elementary arithmetic calculations.

Minimum Education and Experience - Completion of grammar school and one year of progressive experience in the performance of tasks associated with mechanical maintenance or boiler operation; or an equivalent combination of education and experience.

Minimum Education and Experience for a Trainee Appointment - Completion of grammar school.