

JOB DESCRIPTION

TITLE: BOILER PLANT OPERATOR

DEPT: SITE OPERATIONS, FT. WAINWRIGHT CHPP

REPORTS TO: SHIFT ENGINEER **WAGE:** PER PUBLISHED SCALE

POSITION OBJECTIVES:

This position is an advanced-level training position working toward a position as a Shift Engineer. Workers of this job description are expected to maintain progress through the levels as training and openings permit while working toward Shift Engineer qualifications. The position works under the direction of the Shift Engineer. The position is responsible for performing a combination of functions on an assigned shift, including assisting with operating boilers, turbines, generators & auxiliary equipment at the Central Heat & Power Plant (CHPP). Workers are responsible for ensuring the safe operation of plant equipment and machinery, the safe use of tools & the safety of others working in the immediate area. Plant Operators will assist in training Assistant Operators & other lower level positions assigned to the operating crew. Work is performed independently under the direction of the Shift Engineer, Maintenance Supervisor or the Superintendent & is reviewed for conformance to operating standards and instructions. The Plant Operator is also capable of relieving the Shift Engineer as needed and of making control room log book entries. Rotating shift work is required. Additional assignments may include but are not limited to sweeping, mopping, general cleaning, assisting maintenance personnel in overhauling and repairing equipment and machinery. The position is exposed to weather variations, fumes, odors, coal dust and heat.

MAIN ACTIVITIES:

1. Operate and serve as boiler operator in charge of the boiler room on a rotating shift.
2. Concurrently operate 3 to 5 boilers, each rated at approximately 150,000 pounds per hour steam flow.
3. Safely operate Central Heat & Power Plant (CHPP) equipment that produces superheated steam in the plant, including control and adjustment of all auxiliary equipment required to maintain constant, specified pressures required for the operation of generators in the production of electrical power.
4. Operate, control, and adjust manual and automatic controls on individual boiler control boards to increase or decrease feed water to boilers for the maintenance of proper and safe water levels in boiler drums.
5. Obtain maximum boiler combustion efficiency by increasing or decreasing flow of coal through stokers, adjusting flow of air through forced draft fans for proper pressure within furnace, and adjusting fuel to air ratio to produce maximum efficiency, and maintain proper fire and efficient removal of ash from fire boxes by adjusting the speed of traveling grates.

6. Place boilers in and out of service as instructed or as necessitated by malfunctioning equipment and or fluctuating power or heating requirements on post.
7. Use manual controls to place in or out of service all auxiliary equipment in proper sequence to start or shutdown boilers.
8. Properly record plant operational metrics such as hourly readings on motors, gauges, indicators, thermometers, etc., on plant log sheets.
9. Performs preventive maintenance on equipment associated with the boiler operations.
10. In the event of a power failure, employee participates in the conversion from electric to steam drive to assure plant safety. Is responsible for adhering to all safety practices and measures prescribed for operation of high pressure boilers and auxiliary equipment.
11. Effectively communicate with and properly relay instructions to the next shift operator, ensuring problems, load changes, equipment changes and action taken due to problems including equipment failures are noted and understood.

SKILLS AND QUALIFICATIONS:

1. Demonstrate mechanical aptitude of equipment and how to properly maintain boilers and auxiliary equipment.
2. Must possess and maintain a Boiler Operator License IV or higher level of certification.
3. Possess skills required to operate boilers and auxiliary equipment such as adjusting traveling grates, coal stokers, air flow through forced draft fans and adjusting air/fuel ratios.
4. Overall knowledge of CHPP operations.
5. Knowledge of on site water softening equipment and how to properly maintain the assigned equipment.
6. Knowledge of the use of tools to operate and maintain the boiler equipment and machinery.
7. Ability to properly regulate air and fuel flows using both manual and automatic controls.
8. Ability to understand and execute written and oral instructions and relay instructions to follow-on shifts when multi-shift operations are used.
9. Sufficient physical strength, ability, dexterity, vision and hearing to perform all the work of this position.
10. Ability to communicate effectively with supervisor, other operators and plant personnel.
11. Must demonstrate initiative and be able to work with little supervision.
12. Must be able to identify potential safety hazards, including unsafe boiler operations and take immediate action to correct the hazard and report the situation to supervisory personnel on site.
13. Must be able to lift a minimum of 50 pounds to shoulder level and exhibit the dexterity to work in awkward positions. The ability to lift, pull, push or work in uncomfortable positions is required.

14. Must be willing to maintain plant and equipment in a safe, clean and serviceable condition.
15. Must be willing to work shift work.
16. Licensed as a Boiler Operator IV or higher.
17. Maintain an Alaska Drivers License.

WORKING ENVIRONMENT:

Works primarily indoors where employee is subject to exposure to abnormal heat hazards or ash and coal dust. The work environment is typically a noise hazard area requiring the use of hearing protection throughout the shift. There is a risk of steam burns, falls from ladders and catwalks in inadequately lighted areas. Constant standing, walking, climbing and bending is required. Able to remain focused on operation of the boilers for the duration of a shift without being distracted. Required to properly wear and use safety equipment as directed, including hearing protection, respirators, disposable clothing or coveralls, hard hats, safety glasses and safety shoes. Frequently works alone with little direct supervision.

CONDITIONS OF EMPLOYMENT:

1. Incumbent must be able to maintain a level of physical fitness to perform the duties of Boiler Plant Operator.
2. Maintain a Boiler Operator IV License or higher.
3. The incumbent is subject to pre-hire and random drug testing in accordance with the published policy of Doyon Utilities.
4. Must be eligible to work on a military installation in Alaska.
5. Willingness to be scheduled for shift work on an equitable basis with other Boiler Plant Operators.
6. Must have a valid driver's license issued by the State of Alaska.
7. Willingness to report for duty during emergencies or to cover shifts under short notice to ensure adequate staffing to operate the plant.
8. Completion of an approved confined space entry class.

EDUCATION AND TRAINING:

High School Diploma or Equivalent
Boiler Operator IV License or higher

EMPLOYMENT CLASSIFICATION:

Non-Exempt/Full Time Permanent