



THE METROPOLITAN WATER DISTRICT
OF SOUTHERN CALIFORNIA

PUMP PLANT MAINTENANCE OPERATOR I

Group-Section: Water System Operations – Conveyance and Distribution	FLSA Status: Non-Exempt Bargaining Unit: AFSCME	Classification: Pump Plant Maintenance Operator Salary Grade: 32 Job #: TA21
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JOB SUMMARY

This is an intermediate-level position responsible for performing operational activities at the desert pumping plants, including water flow changes, equipment monitoring and inspection, and assisting with equipment maintenance. Other responsibilities include operating, maintaining, and testing domestic water systems within the pump plants and residential facilities.

SUPERVISION

Received: The supervisor or lead person provides continuing or individual assignments by indicating the work to be performed, limitations, quality and quantity expected, deadlines, and priorities. The supervisor or lead person provides additional, specific instructions for new, difficult, or unusual assignments, including suggested work methods or advice on available source material. Under general supervision, ensures that work is performed according to standards, procedures, rules and practices; deviations may be made after consultation with supervisor or lead person. The employee will obtain guidance on the approach to standard circumstances, tasks, and activities through procedures, manuals, rules or common craft practice. A lead person or supervisor will provide guidance on the approaches to tasks or activities encountered during nonroutine events.

May receive oversight from the Team, Unit, Section, Assistant Group, or Group Manager.

Given: None.

JOB DUTIES

1. Performs operational activities including: setting up, starting, stopping, and assisting in securing main pump units; monitoring, inspecting, recording, calculating, and reporting pump plant operations data and operating conditions of main motors, pumps, power transformers, and related pump plant equipment; changing water flows, including dewatering and refilling pipelines and aqueduct in association with system maintenance, repairs, and emergency response activities; supporting high-voltage switching operations and safety-related inspections of facilities and systems; handling hazardous materials, maintaining storage areas, and documenting and recording hazardous materials; assisting in responding to alarms and diagnosing problems; and reporting corrective actions as needed.
2. Conducts water quality analyses at various facilities (reservoirs and domestic water systems), including pH, hardness, chlorine, and turbidity; collects required water quality samples including bacteriological samples; adjusts chemicals and makes corrective actions to ensure compliance with water quality objectives.

3. Assists in inspecting, testing, calibrating, and recording readings for various mechanical/electrical systems and equipment to meet reliable equipment life and service expectations. Equipment includes motors, compressors, valves, pumps, flow meters, cranes and lifts, chemical storage and feed systems, sand traps, and other equipment used to convey water.
4. Assists with testing and monitoring the capabilities, limits, and effectiveness of equipment and subsystems, as well as other mechanical processes and systems directly related to power and water systems, to measure the ongoing effectiveness of those systems and to assure the quality of maintenance and/or improvements.
5. Assists with performing minor preventive and corrective maintenance functions on auxillary/ancillary equipment including, but not limited to: Copper Basin chemical feed system; aqueduct pumping plant related systems, processes and facilities; pipelines, aqueducts, canals, siphons, reservoirs, pumps, motors, generators, lubrication and cooling equipment, control and head gate structures and associated equipment/assets; residential facilities; circulation, fire, and domestic water systems, swimming pools, and wastewater systems. Maintains electronic and written station/facility logs.
6. Assists with securing mechanical and electrical equipment in preparation for clearances.
7. Performs other related job duties as required.

EMPLOYMENT STANDARDS

MINIMUM QUALIFICATIONS

Education and Experience: High school diploma or GED and 2 years experience as demonstrated by practical application of general and advanced techniques and practices specific to the operation, maintenance and repair of mechanical/low voltage electrical systems in a treatment or pump plant, power generation system, and related facilities.

Required Knowledge of: Employees in this classification are at the semi-skilled level, and should have a general understanding of the following: theories and practices of mechanical/electrical systems; safety practices and regulations for operating or working near mechanical/electrical equipment, industrial electrical systems, hazardous materials, and associated tools and equipment; and use of analog and digital instruments to make critical measurements and alignments as part of diagnostic and predictive maintenance.

Required Skills and Abilities to: Learn and utilize mechanical/electrical systems. Perform and/or assist in the planning or development of procedures, manuals, orders and similar documentation related to pump plant operations. Utilize hand and power tools related to the position, and diagnostic equipment to test and monitor equipment and asset condition. Repair, install, and replace equipment necessary to meet water demands and/or capacity. Use and maintain mechanical/electrical tools and equipment traditionally used in pump plants. Apply and guide others on safety practices and regulations for operating or working near mechanical/electrical equipment, industrial electrical systems, hazardous materials, and associated tools and equipment.

Certificates, Licenses, and Registrations Requirements

Employees in this position may be required to obtain and maintain the following certifications, licensing and registrations:

Certificates

Employees in this position are required to obtain and maintain the following certifications:

- California Department of Public Health Water Treatment Operator Certification Grade II
- Metropolitan High Voltage Switching Certification (Must be obtained within 1 year of entry into position)

Employees in this position may be required to obtain and maintain the following certifications:

- Forklift certification
- Manlift certification

Licenses

- Valid driver's license from state of residency equivalent to a California Class C.

Registrations

- None

PHYSICAL DEMANDS, WORK ENVIRONMENT, AND VISION REQUIREMENTS

Expectations of Hours of Service, Emergency and Stand-by Service: Employees in this position shall be required to work off-shift hours and/or stand-by service to address operational needs and emergencies as required. May be required to work extended periods away from the normal reporting location.

Physical Demands: Heavy tasks may require lifting and carrying items weighing up to 50 pounds, with intermittent need to lift and carry materials and/or equipment weighing up to 100 pounds with assistance. Frequently requires pushing, pulling, turning and positioning parts, assemblies, equipment and tools weighing as much as 100 pounds with assistance. May be required to lift and move heavy items with the assistance of others and with lifting devices such as jacks, hoists and cranes of varied types and capacities. Physical effort includes frequent walking, stooping, bending, reaching, standing, kneeling and sitting for long periods of time. May be required to use respiratory filtration and personal protection devices.

Work Environment: Work is performed indoors and outdoors at large pumping plants and conveyance systems under all types of conditions, including extreme temperatures, open and confined spaces ranging from crawl spaces to sub-structures as well as varied types of terrains. Job tasks may require working from heights and functioning from lifts, hoists, scaffolds, and cranes over surfaces ranging from earthen materials to concrete, steel and water. Work may be conducted in close proximity to high volume/pressurized water, as well as exposed, electrically energized equipment including high voltage systems. The work environment often involves exposure to equipment and tools producing high levels of noise, as well as potentially dangerous materials, chemicals, and machinery that require careful adherence to extensive safety precautions, rules and regulations.

Vision Requirements: Color vision (ability to identify and distinguish colors)