

SAN BERNARDINO MUNICIPAL WATER DEPARTMENT CLASSIFICATION SPECIFICATION

TITLE: WATER RECLAMATION MAINTENANCE SUPERINTENDENT

DATE: 8/30/11

JOB CODE: 51828

FLSA STATUS: EXEMPT

UNIT REPRESENTATION: MID-MGMT

Class specifications are intended to present a descriptive list of the range of duties performed by employees in the class. Specifications are not intended to reflect all duties performed within the job.

DUTIES SUMMARY

Under the general direction of the Director of Water Reclamation, to plan, organize, implement, and control installation, maintenance, operation, rehabilitation, and repair of facilities, mechanical systems, and equipment associated with water and wastewater utilities; schedule, assign, monitor, and inspect work in progress and upon completion; supervise assigned administrative staff and maintenance personnel involved in the preventative maintenance, adjustment, repair, overhaul, replacement, and installation of mechanical equipment and related systems and devices; ensure work is completed following appropriate and applicable provisions of the Electric Code, building codes, approved plans and specifications, installation/operation/maintenance manuals, and standard industry practices; research and prepare a variety of studies and reports regarding the Department's short and long-term wastewater treatment/recycling facilities and related systems requirements; perform related work as required..

DISTINGUISHING CHARACTERISTICS

The class of Water Reclamation (WR) Maintenance Superintendent reports to the Director of Water Reclamation. Supervision is exercised over the RIX Facility maintenance personnel, Facility Maintenance Section, Plant Maintenance Section, and assigned Water Reclamation employees. This class may act as designee in the absence of the Director of Water Reclamation. This is a single-incumbent class responsible for planning, coordinating, and directing the construction, installation, maintenance, repair, and servicing of all industrial mechanical and facilities-related systems and equipment used in the wastewater/recycling utility. The work of this class is complex and involves significant accountability and decision-making responsibilities. The ability to understand customer's needs and balance response with cost effective scheduling is essential.

EXAMPLES OF DUTIES

The following duties are typical essential duties for positions in this classification. Any single position may not perform all of these duties and/or may perform similar related duties not listed here:

- Provide courteous and expeditious customer service to the general public and City department staff;
- Routinely adhere to and maintain a positive attitude toward City and Department goals;
- Supervise, train, develop, and evaluate the performance of foremen, supervisors, and crafts workers;

- Establish standards of performance, standard operating/maintenance procedures, and job safety procedures;
- Audit, administer, and control the Computerized Maintenance Management System (CMMS) to ensure the division's assets are properly maintained;
- Interview applicants and recommend action on appointments; counsel employees and recommend disciplinary actions;
- Plan and evaluate staff performance; establish performance requirements and personal development targets; regularly monitor performance and provide coaching for performance improvement and development;
- Provide day-to-day leadership and work with staff to ensure a high performance, customer service-oriented work environment which supports the Department's mission, strategic plan, objectives and maintains the Department's values;
- Supervise employees engaged in constructing, installing, maintaining, testing and repairing facility grounds, tanks, structures, and mechanical systems/equipment, pumps, blowers, compressors, engines, piping, valves, various mechanical sludge thickening and dewatering equipment, foul air scrubbers, gas treatment equipment, waste gas burner, tertiary filters and percolation basins, irrigation systems, HVAC systems, electrical power generating systems, heavy equipment, clay valves, automatic control valves (ACVs), chemical feed systems, heat exchangers, anaerobic digesters and support equipment, chlorination control systems, and other electrical equipment and apparatuses; work in and around low voltage circuits, panels, and equipment;
- Oversee troubleshooting and repairing of mechanical systems, control and process loops, PIDs, and associated equipment;
- Supervise and direct the installation, maintenance, and repair of wastewater treatment processes and systems;
- Participate in the Department's short- and long-range planning process for water reclamation/recycling needs and requirements; review engineering design plans for the Department's systems and facilities to ensure conformance with Department standards and policies;
- Oversee and direct the installation, repair, modification, calibration, and preventative maintenance on a wide variety of complex digital, analog, programmable, and other auxiliary equipment used in the collection, transmission and treatment of water/wastewater;
- Oversee and monitor the work of others performing calibration and maintenance of meters, analyzers, recorders, control systems, and feed systems, including but not limited to electric, electronic, pneumatic, hydraulic, and mechanical equipment; keep accurate maintenance records;
- Monitor the work performed by others related to mechanical, electrical, and electronic apparatuses and instrumentation including repair, replacement, disassembling, assembling, installing, and testing;
- Read, interpret and direct others with regard to mechanical, structural, and civil plans, specifications, blueprints, sketches, wiring diagrams, and schematics;
- Supervise the testing of new equipment; oversee others engaged in performing routine maintenance of mechanical equipment and supplies;
- Supervise the inspection of equipment installation work performed by contractors and other personnel for workmanship and compliance;

- Estimate labor and material for mechanical installations and repairs; lay out work on the project site; prepare reports of time and material expended;
- Maintain an inventory of parts, materials, tools, and supplies necessary to support reliable operation of facilities, systems, and equipment;
- Oversee and participate in the documentation of all programming, testing, and updates performed;
- Evaluate and maintain records of maintenance and repair functions; prepare routine and special reports on equipment maintenance and repair;
- Assure effective cost and manpower controls through a formal and continuing maintenance management program;
- Respond to emergency situations during off hours as required;
- Review and provide input and suggestions on new system requirements;
- Participate in the safety program and coordinate the training of assigned staff;
- Keep up to date on the latest safety requirements and procedures, and provide for continuing instruction of supervisors and employees;
- Inspect and assure that safety equipment is consistently used by employees and that proper safety standards and procedures are adhered to and enforced;
- Exercise a high level of tact and diplomacy in dealing with the public as well as other divisions of the Water Department;
- Work effectively with others;
- Prepare written and oral reports, memorandums, and correspondence;
- Assist in preparing/administering the annual budget;
- Assist in the preparation of the Department's Capital Improvement Plans;
- Review and approve payroll timekeeping records;
- Schedule and conduct staff meetings;
- Operate Department vehicles; and
- Perform related duties as assigned.

QUALIFICATIONS

Any combination of education, training, and experience that would likely provide the knowledge, skills, and abilities to successfully perform in the position is qualifying. A typical combination includes:

Knowledge of:

- Principles, theory, and practices of electricity, electronics, pneumatics, hydraulics, and mechanics as they apply to installation, maintenance, and repair of equipment and instruments commonly found in water and wastewater production, transmission, distribution, and treatment facilities;

- Principles of operation of mechanical and electrical/instrumentation systems, devices, and equipment utilized in the operation of wastewater treatment and recycling;
- Asset management/CMMS at an advanced level;
- SCADA theory at an intermediate level;
- Programmable logic controller (PLC) programming theory at an intermediate level for testing, troubleshooting and repairs of PLC components and data highway systems;
- Applicable codes and regulations;
- Safety standards and practices applicable to wastewater treatment;
- Industrial electricity and safety practices, precautions and procedures;
- Tools, materials, methods and practices of the facilities maintenance, mechanical, electrical, electronic, and instrumentation trades;
- Methods, materials, and equipment used in chemical feed systems installation and repair;
- Symbols and standard practices used in the preparation of process and instrument flow diagrams;
- Electrical installations and maintenance in water utility or reclamation facilities including low voltage (600V or less) electrical circuit;
- Shop mathematics applicable to the mechanical trade;
- Advanced principles of project management;
- Appropriate safety precautions and procedures;
- Instrumentation calibration concepts and procedures;
- Mid-level computer operation skills, including word processing, database programs, spreadsheets, electronic mail, Department utilized software application programs, CMMS, and SCADA operation;
- Complex record keeping, documentation, and practices;
- English usage, spelling, grammar, and punctuation;
- General principles of supervision, scheduling, and training.

Ability to:

- Plan, organize, schedule, and monitor work for efficiency, quality, and timeliness;
- Recognize, analyze, and define a variety of routine to complex mechanical, electrical, and instrumentation problems and direct necessary repairs;
- Correct equipment operating problems and make recommendations for system modifications to meet operational needs without close supervision;

- Operate power tools, hand tools, and light equipment used in electrical/mechanical activities; operate specialized test equipment such as milliamp and millivolt calibrators, multimeters, power supplies, and gas analyzers;
- Perform a wide range of skilled water utility or water reclamation construction/installation, troubleshooting, repair, and maintenance work on systems in accordance with safety standards;
- Read, understand, interpret, and apply moderately complex materials including technical manuals, drawings, specifications, layouts, diagrams, blueprints, plans, and schematics;
- Keep detailed, complex, and accurate records;
- Develop equipment specifications;
- Recognize, report, and correct unsafe working conditions;
- Understand and carry out routine to complex instructions furnished in oral, written or diagrammatic form;
- Make arithmetical calculations involving fractions, decimals, and percentages with speed and accuracy;
- Communicate clearly and concisely, both orally and in writing;
- Establish and maintain effective relationships with those contacted in the course of work;
- Operate a vehicle observing legal and defensive driving practices;;
- Work under moderate or high stress conditions;
- Make work assignments, set priorities for, train, and review the work of subordinate supervisors and assigned staff;
- Maintain a driving record which meets Vehicle Code Standards and is acceptable to the Department and its insurance carrier;
- Respond to call-out or emergencies as required; handle emergency situations as directed.

MINIMUM QUALIFICATIONS

Education and Experience:

High School graduation or G.E.D. equivalent and completion of sixty (60) semester units (90 quarter units) of college level course work in business or public administration, engineering, or closely related field and five (5) years of progressively responsible supervisory experience in the maintenance, operation, and/or design/construction of industrial facilities (water or wastewater treatment facilities preferred). One year of additional qualifying experience may be substituted for 30 semester units of the required education.

OR

A Bachelor's Degree from an accredited college or university in business or public administration, engineering, or closely related field and three (3) years of progressively responsible supervisory experience in the maintenance, operation, and/or

design/construction of industrial facilities (water or wastewater treatment facilities preferred).

OR

High School graduation or G.E.D. equivalent and ten (10) years of journey level experience in the maintenance, operation, and/or design/construction of industrial facilities (water or wastewater treatment facilities preferred) and at least five (5) years of progressively responsible supervisory experience in the maintenance, operation, and/or design/construction of industrial facilities (water or wastewater treatment facilities preferred).

And

Certificates: Possession of a valid California Class "C" driver's license required upon application. For out-of-state applicants, a valid driver's license is required and a valid California Class "C" driver's license is required within ten (10) days of appointment (CA Vehicle Code 12505c).

NECESSARY SPECIAL REQUIREMENTS

An employee within this classification may be designated as a "key responder" and as such shall be required to respond to non-normal working hour emergency operational conditions.

PHYSICAL TASKS AND ENVIRONMENTAL CONDITIONS

Work involves exposure to potential physical harm, infectious disease, and hazardous chemicals including smoke, fumes, gas, treated water, high frequency noise, dirt, dust, grease, oil, chemicals, solvents, and toxic agents. Incumbents need to be able to tolerate unpleasant odors, wet conditions, and uncomfortable climate conditions. There is frequent need to stand, stoop, walk, crawl, climb, and perform other similar actions during the course of the workday. Employee accommodations for physical or mental disabilities will be considered on a case-by-case basis.

Incumbents require sufficient mobility to work in a variety of environmental and weather conditions, transport materials and supplies weighing up to 50 pounds, work in boom truck with lift of 30 to 60 feet, and work to heights of 150 feet. Must be able to see in the normal visual range with or without correction. Must be able to hear in the normal audio range with or without correction. Employee accommodations for physical or mental disabilities will be considered on a case-by-case basis.

CAREER LADDER

From: Water Reclamation Maintenance Superintendent

To: Director of Water Reclamation

Job Description:

BOWC Approved:

2/5/1991

Revised:

12/3/2002

8/30/11

Testing Standards: Open/City Promo/Supp Appl

CSB Approved:

09/13/2011