# SAN BERNARDINO MUNICIPAL WATER DEPARTMENT CLASSIFICATION SPECIFICATION

TITLE: WATER RECLAMATION MAINTENANCE SUPERINTENDENT

DATE: 3/26/2019 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 administrative direction of the Director of Water Reclamation, to plan, organize, direct, manage, monitor, inspect, and report on the activities of the Water Reclamation Maintenance Section and Maintenance/Mechanical Staff assigned to the RIX Section; plan, organize, implement, and control the work of staff engaged in a wide variety of unskilled, semi-skilled, and skilled duties related to the inspection, diagnosis, troubleshooting, construction, installation, maintenance, servicing, rehabilitation, and repair of facilities, industrial mechanical machinery and equipment associated with the operation of the Water Reclamation Division; perform related work as required.

The Water Reclamation Division is responsible for maintaining two (2) wastewater treatment facilities (33 MGD and 41 MGD) and fifteen (15) collections system lift stations (12 small and 3 large ranging from minimal to 12 MGD).

#### **DISTINGUISHING CHARACTERISTICS**

The class of Water Reclamation (WR) Maintenance Superintendent reports to the Director of Water Reclamation. Supervision is exercised over the mechanical and facilities maintenance staff assigned to the Water Reclamation Plant (WRP) and Lift Stations, RIX Facility, and other assigned Water Reclamation employees. The incumbent exercises significant authority and independence in implementing a broad range of activities with other Department executives and managers and involves the supervision of subordinate administrative staff and Section Supervisor. The class requires an in-depth and nuanced understanding of the Department's processes, systems, design, operations, and best maintenance practices. 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 Water Reclamation Division. 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 and Department staff;
- Routinely adhere to and maintain a positive attitude toward City and Department goals;
- Plan, organize, control, train, correct, integrate, evaluate, and ensure the timely and accurate completion of ("manages") the work of assigned staff; with staff, develop, implement, and monitor work plans to achieve goals and objectives; contribute to the development of and monitor performance against the annual Section budget; supervise and participate in developing, implementing and evaluating plans, work processes, systems and procedures to achieve annual goals, objectives, and work standards;
- Plan, direct, and participate in conducting administrative or management assessments relating to assigned requirements; identify problems, perform research and analysis, and evaluate alternatives; discuss findings with Department executives and managers; develop conclusions, recommendations, and implementation plans; direct, coordinate, and participate in implementing policies and practices;
- Conduct frequent inspections to reactively evaluate work completed by the Water Reclamation Maintenance staff (assigned at either WRP or RIX) to ensure conformance with Department standards ("Quality Control");
- Proactively lead the dynamic review and revision of existing procedures and methods to provide assurance that the Department will maintain high quality delivery of the Department's services ("Quality Assurance");
- Represent the Department with other agencies, organizations, and individuals; communicate with customers in accordance with the Department's policies and/or procedures on dissemination of information;
- Develop recommendations to improve the operation of the Department's systems and facilities; coordinate Section activities with other Sections, Divisions, Departments, and Agencies;
- Ensure compliance of Section's work to pertinent codes, regulations, and guidelines; review and coordinate with appropriate personnel the implementation of local, state, and federal laws and regulations;
- Develop and maintain contracts for the mechanical and facilities construction work done for the
  Department and closely coordinate with the Department's Contracts Section; ensure compliance with
  Department's purchasing and fixed assets policies, as well as the California Public Contract Code;
- Research and monitor technical developments in techniques, equipment, supplies, and materials used in the Department's facilities or mechanical systems;
- Assist technicians and/or supervisory staff with troubleshooting the most complex problems of the Section;
- Develop, document, and audit Standard Operating Procedures (SOPs), standards of performance, and job safety procedures;
- Interview applicants and recommend action on appointments; counsel employees and recommend disciplinary actions;
- Plan, organize, direct, and evaluate staff performance; establish performance requirements and personal development targets; regularly monitor performance and provide coaching for performance improvement and development; counsel employees; recommend, draft, and implement disciplinary action in accordance with the Department's personnel rules, policies, and labor agreements;

- Provide day-to-day leadership and work with staff to ensure a high performance, customer serviceoriented work environment which supports the Department's mission, strategic plan, objectives and maintains the Department's mission, strategic plan(s), objectives, and values;
- Manage employees engaged on a predictive, preventive, or reactive basis in performing unskilled, semi-skilled, and skilled work to manufacturer's specifications in inspecting, diagnosing, troubleshooting, constructing, installing, maintaining, testing, removal, disassembly, reassembly, replacement, realignment, servicing, and repairing facilities used in the operation of the Water Reclamation Division, such as facility grounds, tanks, structures, and industrial mechanical systems/equipment, components, machinery, gearheads, pumps (piston/plunger, eccentric screw, screw, gear, diaphragm, rotary vane, peristaltic, progressive cavity / positive displacement, centrifugal, vane, turbine, axial flow, and propeller), positive displacement and/or centrifugal blowers, compressors, small, medium, and large stationary diesel, methane, and natural gas engines and associated equipment, piping, valves (check, gate, plug, ball, needle), various mechanical sludge thickening and dewatering equipment, bar screens, flow gates, compressors, conveyors, belt drying systems, foul air scrubbers, clarifier drives and skimmers, grit classifiers, air dryers, gas treatment and flame arrestor 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, work in and around low voltage circuits, panels, and equipment;
- Manage employees engaged in performing unskilled, semi-skilled, and skilled work to manufacturer's specifications in the inspection; diagnosis; troubleshooting; construction; installation; predictive, preventive or reactive maintenance; removal, disassembly, reassembly, replacement, repair, and servicing of facilities of the Water Reclamation Division; various plant facilities include numerous buildings of an administrative, industrial, or storage nature and of various methods of construction; the 61-acre Water Reclamation Plant; the 126-acre Rapid Infiltration and Extraction (RIX) Facility; fifteen (15) wastewater lift stations; and several other properties; managed staff typically works with tractors, mowers, back-hoes, trucks, cranes, man-lifts, ditch witches, HVAC equipment, janitorial equipment, hand and power tools, and other large, medium, small, and hand-equipment in the performance of inspection, replacement, repair, construction, reconfiguration, modification, positioning, mounting, or rehabilitation of plumbing, painting, carpentry, masonry, janitorial, preparation, relocation, cleaning;
- 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; develop specifications and drawings for mechanical or facilities equipment; develop designs for mechanical modifications; participate in the analysis of trends such as population and industrial growth and the development of strategies to meet and serve expanding or declining community needs; confer with engineering staff, consultant, and contractors regarding the design and construction of new systems, facilities, and the renovation of existing facilities; assist in the preparation of the Department's Capital Improvement Plans;
- Read, interpret and direct others with regard to mechanical, structural, and civil plans, specifications, blueprints, sketches, wiring diagrams, and schematics;
- Inspect equipment installation work performed by contractors and other personnel for workmanship and compliance to ensure conformance with Department's standards and specifications;
- Estimate labor and materials 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;

- 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; continuously develop, audit, administer, maintain, and control the Computerized Maintenance Management System (CMMS) to ensure the Water Reclamation Division's assets are properly maintained; conduct or assign maintenance program analyses relating to Departmental, Divisional, or capital project issues and/or programs; identify problems, determine analytical techniques and statistical or information gathering processes, and obtain necessary information and data for analysis; analyze or review staff analyses and make recommendations; identify areas to improve efficiency and effectiveness including changes in equipment, materials, work flow, training, staffing, and technological support; prepare reports and discuss findings with management; develop implementation plans and assist with implementing policies and procedures;
- Respond to emergency situations (by telephone and/or in person) 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; ensure the
  Department's safety program and goals are implemented and carried out by assigned staff; develop
  and propose safety requirements to be carried out by 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 sections and Divisions of the Water Department;
- Work effectively with others;
- Prepare, review, and maintain a variety of written and oral records, reports, memoranda, correspondence, directives, time sheets, incident reports, maintenance requests, daily operation reports/logs, and other documents; review and approve payroll timekeeping records;
- Create, enter, and/or review data entered into computerized maintenance management programs or databases and perform extensive computer-based functions;
- Prepare the Section's annual operating and capital outlay budget requests; monitor expenditures
  against goals and objectives; approve procurement Requisitions; verify issuance of Purchase Orders;
  support the objectives and needs of the Purchasing Section and Finance Division with asset tracking;
- Schedule and conduct staff meetings; attend other meetings and meaningfully contribute comments and recommendations;
- Safely 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:

 Advanced principles, practices, and methods of administrative, organizational, and economic procedures; advanced principles of project and contract management, including scheduling; principles and practices of public administration, including budgeting and maintenance of public records; Principles and practices of administration, including goal setting, policy and procedure development and implementation, evaluation and work standards;

- Advanced levels of supervision, including appropriate laws and regulations concerning FLSA, EEO, ADA, and other requirements concerning discrimination, harassment, sexual harassment, and working conditions; principles and practices of effective management and supervision;
- Advanced principles, theory, standard practices, procedures, methods, techniques, tools, materials, and equipment used in the installation, maintenance, and repair of industrial mechanical equipment, pumps, plumbing and pipe fitting, motors, controllers, drives, lift stations, and machinery common to Water Reclamation or similar industrial facilities:
- Basic principles of electricity, electronics, programmable logic controllers (PLCs), and SCADA systems sufficient for job success;
- Basic engineering principles relative to hydraulics and fluid mechanics;
- Basic principles of wastewater treatment operations sufficient for job success;
- Asset management/CMMS at an advanced level; advanced principles and practices of preventive, predictive, and reliability-centered maintenance systems; applications and use of computerized maintenance management systems;
- Applicable codes and regulations;
- Safety standards and practices applicable to wastewater treatment; occupational hazards and safety precautions/practices, safe work methods, and safety regulations pertaining to the trade;
- The Globally Harmonized System (GHA) of Classification and Labeling of Chemicals;
- Tools, materials, methods and practices of the facilities maintenance and mechanical trades;
- Methods, materials, and equipment used in chemical feed systems installation and repair;
- Symbols and standard practices used in the preparation of mechanical drawings;
- Advanced-level applied mathematics applicable to the mechanical trade;
- · Advanced principles of project management;
- Appropriate safety precautions and procedures;
- Instrumentation calibration concepts and procedures:
- Advanced-level computer operation skills, including word processing, database programs, spreadsheets, electronic mail, Department utilized software application programs, and CMMS;
- Complex record keeping, documentation, and practices;
- Advanced level of English usage, spelling, grammar, and punctuation; verbal English to understand and be understood; written English to communicate in writing at an intermediate level;
- Research methodologies relating to regulatory issues;

- Federal, state, and local laws and regulations governing wastewater collection and treatment; Other applicable codes and regulations;
- Department personnel policies and labor agreement provisions.

#### Ability to:

- Digitally prepare clear, concise, and comprehensive correspondence, reports, studies, and other written materials that are generally free of grammatical error;
- Understand, carry out, and/or accurately convey oral and written instructions; read and write the English language at an advanced level; communicate clearly and concisely, both orally and in writing;
- Functionally use computer hardware, navigate the internet, functionally use Microsoft Office Suite
  products (Outlook, Word, Excel, and PowerPoint), and functionally use the Department's
  purchasing, work order management, GIS, and other software programs and applications;
- Exercise sound, expert, independent judgment within general policy guidelines;
- Exercise tact and diplomacy in dealing with sensitive, complex, and confidential issues and situations;
- Plan, organize, schedule, and monitor work for efficiency, quality, and timeliness;
- Recognize, analyze, and define a variety of routine to complex mechanical 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 mechanical activities; operate specialized test equipment;
- Perform a wide range of skilled water reclamation construction/installation, troubleshooting, repair, and maintenance work on systems in accordance with safety standards;
- Coordinate and implement an effective and appropriate maintenance schedule, making efficient use of all equipment and personnel, maximizing predictive and preventive maintenance schemes;
- Perform project management including scheduling, change orders, and project close out activities;
- Conduct thorough investigations, organize data, and draw sound conclusions;
- Interpret and apply Water Department policy;
- Select, motivate, and evaluate staff and provide for their training and development;
- Identify and implement effective courses of action to complete assigned work;
- 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 advanced arithmetical calculations involving fractions, decimals, and percentages with speed and accuracy;
- 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;
- Serve effectively in the absence of or upon the direction of the Director of Water Reclamation, performing all administrative functions;
- Respond to call-out or emergencies as required; handle emergency situations as directed.

# MINIMUM QUALIFICATIONS

#### **Education and Experience:**

High School graduation or equivalent <u>and</u> completion of sixty (60) semester units (90 quarter units) of college level course work in business or public administration, engineering, or closely related field <u>and</u> 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 <u>and</u> 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:

A valid California Water Environment Association (CWEA) Mechanical Technologist Grade II certificate is required within 12 months of approval of the job description or of appointment, whichever is later.

A valid California Water Environment Association (CWEA) Mechanical Technologist Grade III certificate is required within 18 months of approval of the job description or of appointment, whichever is later.

A valid California Water Environment Association (CWEA) Mechanical Technologist Grade IV certificate is required within 24 months of approval of the job description or of appointment, whichever is later.

Possession of a valid California Class "A" driver's license with tanker and air brake endorsements at the time of application is highly desirable.

Possession of a California Water Environment Association (CWEA) Mechanical Technologist Grade IV certification at the time of application is highly desirable.

# **NECESSARY SPECIAL REQUIREMENTS**

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).

Possession of a valid California Class "A" commercial driver's license with air brake endorsement, tanker endorsement, and valid Medical Examiner's Certificate appropriate for the equipment to be operated is required within 12 months of the date of approval of the job description or of appointment, whichever is later.

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

The physical tasks and environmental conditions below are representative of those necessary to perform the essential functions of this position. Reasonable accommodations for physical and/or mental disabilities may be considered on a case-by-case basis.

Work is primarily performed in a field environment that is frequently loud and prolonged, in a variety of environmental and extreme weather conditions (both indoors and out), and in or near street traffic with significant exposure to hazardous drivers. Incumbents regularly work near moving mechanical parts, are exposed to wet and/or humid conditions and heavy vibrations and work in precarious places. Incumbents frequently work o slippery or uneven surfaces or work occasionally involves exposure to potential harm, to fumes or airborne particles, sewage (untreated wastewater), communicable disease, toxic, hazardous, or caustic chemical, smoke, or fumes in various states (gaseous, liquid, or solid), and risk of electric shock.

Incumbents require sufficient mobility to work in a field setting in varying weather conditions, to operate hand tools and mechanical and motorized equipment, to transport materials and supplies, and to travel to various locations. Incumbents must regularly lift and/or move up to 50 pounds and frequently over 100 pounds.

Incumbents are regularly required to sit, walk, and stand, talk and hear, use hands to finger, handle, feel, or operate objects, tools, or controls, reach with hands and arms, perform repetitive movements of hands or wrists, climb or balance on ladders or stairs, stoop, kneel, bend at the waist, crouch or crawl, and smell. Incumbents may be required to work from heights on ladders, scaffoldings, motorized platforms,

building roofs, or other elevated surfaces. Incumbents must be able to identify and tolerate unpleasant order and environments and take appropriate safety precautions.

Incumbents must be able to see in the normal visual range, with or without correction, with vision sufficient enough to read small print and gauges, to see up close and at a distance, use both eyes, have depth perception, color vision, and the ability to adjust focus. Must be able to hear in the normal audio range with or without correction.

# **CAREER LADDER**

From: Water Reclamation Maintenance Superintendent

To: Director of Water Reclamation

**Job Description:** 

BOWC Approved: <u>2/5/1991</u>
Revised: <u>12/3/2002</u>

8/30/2011 3/26/2019

Testing Standards: App Review/Supp App Review