

SAN BERNARDINO MUNICIPAL WATER DEPARTMENT CLASSIFICATION SPECIFICATION

TITLE: WATER RECLAMATION LEAD MECHANIC

DATE: 7/1/2020

JOB CODE: 21800

FLSA STATUS: NON-EXEMPT

UNIT REPRESENTATION: GENERAL

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 general supervision or direction, to lead, guide, train, instruct, correct, and participate/perform fully in the work of an assigned crew engaged in a wide variety of unskilled, semi-skilled, and skilled duties related to the inspection, diagnosis, troubleshooting, construction, installation, maintenance, repair, and servicing of industrial mechanical equipment and machinery used in the operation of the Water Reclamation Division; personally perform the more difficult work of the section; assist higher level maintenance staff; and perform related duties as assigned.

DISTINGUISHING CHARACTERISTICS

The Water Reclamation Lead Mechanic is the working crew leader level in the Department's Water Reclamation Maintenance Mechanical series. Incumbents routinely assign specific tasks to crew members at the job site and train, instruct, and correct the work of crew members, ensuring that acceptable work and safety methods are practiced. Incumbents lead and perform a broad range of routine to very complex level duties requiring advanced journey level expertise in the construction, installation, maintenance, repair, and servicing of industrial mechanical equipment and machinery used in the operation of the Water Reclamation Division, and in accurately diagnosing and resolving problems with Water Reclamation facilities. 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). The Water Reclamation Lead Mechanic provides significant input to the Water Reclamation Maintenance Supervisor regarding performance evaluations for field work and reports any issues of poor or negligent performance.

Incumbents in the Water Reclamation Lead Mechanic class are expected to use sound and independent judgment in carrying out job assignments and may serve in the absence of the Water Reclamation Maintenance Supervisor.

Employees in this class typically report to the Water Reclamation Maintenance Supervisor.

EXAMPLES OF DUTIES

- Provide courteous and expeditious customer service to the general public and City and Department staff;
- Routinely adhere to and support/promote City and Department goals;
- Participate, oversee, lead, direct, train, guide, check, monitor, inspect, assign, and report on (collectively referred to as “Lead”) the work of a crew engaged in the performance of skilled, semi-skilled, and unskilled work in the maintenance and repair of the wastewater reclamation facilities;
- Assign specific tasks to crew members at the job site;
- Train, instruct, and correct the work of crew members, ensuring that acceptable work and safety methods are practiced;
- Adhere to, actively promote the use of, and assist in the development of Standard Operating Procedures (SOPs) and all other maintenance directives and policies; perform all work in accordance with established safety policies, procedures and methods, including OSHA regulation relating to confined space entry and working around dangerous gases; take appropriate precaution to preserve own safety and the safety of other during the course of work;
- Lead and perform the more complex work of a crew 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, realignment, repair, and servicing of industrial mechanical equipment, components, facilities, and machinery used in the operation of the Water Reclamation Division; various plant equipment can include small, medium, and large stationary diesel, methane, and natural gas engines and associated equipment, positive displacement blowers, gearheads and lift pumps, centrifugal blowers, bar screens, pumps (piston/plunger, eccentric screw, screw, gear, diaphragm, rotary vane, peristaltic, progressive cavity/positive displacement, centrifugal, vane turbine, axial flow, and propeller), valves (check, gate, plug, ball, needle), flow gates, compressors, conveyors, belt drying systems, odor scrubbing systems, filter systems, digester gas flare systems, flame arrestor systems, clarifier drives and skimmers, grit classifiers, air dryers; work with pipes, tubes, rods, seals, shafts, stuffing boxes, packing, gears, motors, bearings, couplings, chemical storage and feed systems, motor controllers, transmitters, level controllers, alarm systems; test and monitor equipment and machinery for vibration, bearing temperature, and output capacity;
- Lead and perform mechanical maintenance and repair of de-energized ultraviolet (UV) system components outside electrical and control cabinets as well as inside de-energized air conditioning module, i.e. all work on and around UV racks and lamps as well as mechanical maintenance and repair on air conditioning components;
- Lead and perform a wide array of related duties associated with housekeeping, cleaning, clearing, relocating/moving, plumbing, masonry, fabrications, painting, repair, and maintenance of plant, field, and shop equipment, components, facilities, and machinery;
- Use and ensure the proper use of a variety of hand and power hand tools;
- Lead and operate equipment (standardized and specialty) and shop tools and fabricate parts and equipment; operate lathe, milling machine, and other machine tools in the repair of wastewater plant equipment; operate compressors, jackhammers, portable and stationary generators, mechanical lift

devices, steam cleaners, pneumatic, hydraulic and electric tools, and related tools and equipment;

- Where appropriately certified, lead and safely and legally operate trucks (standard, flatbed, dump, boom, etc.) forklifts, backhoes, loaders, tractors, cranes, water trucks, scrapers, and related equipment;
- Clean, oil, and lubricate generators, compressors, pumps, turbines, and other moving equipment; check for malfunctions;
- Use gas and/or electric equipment to heat, cut, braze, and weld;
- Submit requisitions and pick up parts and equipment needed for maintenance and repair work;
- Prepare accurate reports and keep and review a variety of records, including timesheets, daily logs, work orders, safety worksheets, equipment and vehicle usage logs, and other related documents; make and/or review oral and written reports for work performed;
- Enter and/or review data entered into computerized maintenance management programs or databases and perform other computer-based functions;
- Attend and actively participate in briefings and meetings, participate in Department provided training;
- Plan and lay out work from instructions and/or work orders using sketches, drawings, or verbal instructions;
- Coordinate activities with other sections and Divisions of the Department;
- Ensure the timely and accurate completion of all assigned activities;
- Monitor gas and oxygen levels in confined spaces; enter confined spaces or serve as an observer of a confined space;
- Will be required to respond to emergency situations in an on-call status;
- May take the place of the Water Reclamation Maintenance Supervisor in his/her absence; 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:

- General principles of supervision;
- Standard practices, principles, procedures, methods, techniques, tools, materials, and equipment used in the installation, inspection, 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;
- Occupational hazards and safety precautions/practices, safe work methods, and safety regulations pertaining to the trade;

- Advanced principles of internal combustion engines, pumps, and motors as well as lubricants, coolants, and other fluids used in industrial machinery;
- The Globally Harmonized System (GHS) of Classification and Labeling of Chemicals;
- Mid-level applied mathematics applicable to facility and equipment maintenance and repair;
- General computer knowledge/use;
- Relevant state and federal regulations including codes, ordinances, and regulations pertaining to the trade;
- Verbal English to understand and be understood; written English to communicate in writing at an intermediate level.

Ability to:

- Perform all tasks noted in the Examples of Duties noted above;
- Lead and direct the work of others; service as a supervisor in the absence or upon the direction of the supervisor, performing administrative functions including processing of work orders, payroll, and construction orders;
- Assist in planning and scheduling work assignments; set priorities, train, assist in providing information for evaluation, selection, and recommendation of discipline for subordinates;
- Learn and apply new information and skills;
- Perform heavy physical labor for extended periods of time in all weather conditions anticipated within the Department's Service Area and in confined spaces;
- Properly wear personal protective equipment, including protective respiratory equipment to include SCBA and personal escape respirator;
- Analyze and solve problems, identify and implement effective courses of action to complete assigned work;
- Use precision and diagnostic instruments to measure required tolerances of mechanical parts;
- Read and understand Safety Data Sheets (SDS);
- Demonstrate a detailed understanding of the wastewater treatment process including chemicals used within one (1) year of appointment for applicants not previously employed as a Water Reclamation Mechanic I, II, or III; demonstration at the time of appointment for applicants previously employed as a Water Reclamation Mechanic I, II, or III;
- Ensure and properly adhere to permitted confined space entry and equipment protocols;
- Read and interpret plans, specifications, manuals, data, information, and documents; write at

a level that is sufficient for job success; understand and appropriately carry out oral and written instructions; communicate effectively, both orally and in writing; keep accurate records; organize with the ability to prioritize work and exercise independent judgment, wisdom, common sense, and initiative, and work independently in the absence of supervision;

- Establish and maintain effective working relationships with City and Department staff, the public, and other encountered in the course of work; exercise patience, tact, diplomacy, and courtesy in dealing with the public and employees;
- Operate a vehicle observing legal and defensive driving practices;
- Maintain a driving record which meets Vehicle Code Standards and is acceptable to the Department and its insurance carrier;
- Within six (6) months of appointment obtain, and maintain during the course of employment, the following:
 - CPR and first aid certification;
 - Forklift certification;
- Work various shifts, overtime, stand-by at night and on weekends and holidays, and respond to call-out emergencies as required; handle emergency situations as directed.

MINIMUM QUALIFICATIONS

Education: Graduation from high school or equivalent; completion of college level course work is highly desirable;

Experience: At least five (5) years of progressively responsible experience in the installation, maintenance, and repair of wastewater or water facilities or similar industrial mechanical maintenance and repair. Experience in the installation, maintenance, and repair of pumping equipment, including valves, pumps, and motors specifically in a wastewater treatment or collections system environment is highly desirable;

Certificates: A valid California Water Environment Association (CWEA) Mechanical Technologist Grade I certificate is required within 12 months of appointment;

A valid California Water Environment Association (CWEA) Mechanical Technologist Grade II certificate is required within 18 months of appointment;

A valid California Water Environment Association (CWEA) Mechanical Technologist Grade III certificate is required within 24 months of appointment.

NECESSARY SPECIAL REQUIREMENTS

Possession of a valid California Class "C" driver's license is required upon application. For out of state applicants, a valid driver's license is required and a valid California Class "C" driver's license must be obtained 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 appointment.

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.

Employee may be required to be clean shaven or have trimmed facial hair in order to properly use personal respirators or SCBA equipment. Must pass a respirator medical exam and be physically able to wear SCBA equipment. Must be able to work in enclosed spaces while wearing protective clothing under extreme temperatures and hazardous environment.

There may be additional special requirements, depending on assignment.

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 on 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 Lead Mechanic

To: Water Reclamation Maintenance Supervisor
Water Reclamation Maintenance Superintendent

Job Description:

BOWC Approved:

Rev:

6/19/2001

3/26/2019

6/23/2020

Testing Standards: App Review/Supp App Review