

SAN BERNARDINO MUNICIPAL WATER DEPARTMENT CLASSIFICATION SPECIFICATION

TITLE: WATER RECLAMATION LEAD OPERATOR

DATE: 9/24/2019

JOB CODE: 21804

FLSA STATUS: NON-EXEMPT

UNIT REPRESENTATION: GEN

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 operate a variety of processes and equipment utilized in the treatment of wastewater and disposal of sludge; lead, guide, train, instruct, correct, and participate/perform fully in the work of and lead a staff of operators engaged in the unskilled, semi-skilled, and skilled day-to-day operation activities at a Water Reclamation facility; personally perform the more difficult and challenging aspects of the operation; assist higher level operational staff; implement process changes to ensure permit compliance; adjust equipment and ensure biological/chemical balance; and perform related duties as required.

DISTINGUISHING CHARACTERISTICS

This class is the lead level advanced skilled worker and working crew leader level in the Water Reclamation Operator series. The incumbent performs a variety of skilled, journey-level plant operation duties and possesses a detailed knowledge and application of wastewater treatment methods such as: primary clarification, activated sludge, extended aeration, sludge digestion, and sludge dewatering. Incumbents at this level require the demonstrated ability to perform the advanced functions including performing more complex analysis of the operations and developing appropriate solutions. The incumbent leads and participates in a variety of special projects. The incumbent is directly responsible for the implementation of and adherence to weekly work schedules, coordinating and evaluating the work performed by operational staff and providing guidance, training and oversight, and coordination with other sections. Incumbents also direct assigned operations staff during emergency situations, in the absence of supervisory staff, or during assigned off-hour or weekend working shifts. Supervision is received from the Process Control Supervisor, Water Reclamation (WR) RIX Supervisor, WR Plant Supervisor, and the WR Operations Superintendent. Lead direction is exercised over Water Reclamation Senior Operators, Operators, WR Trainees, and Volunteer Operator-in-Training (OIT) staff. The incumbent may be appointed by the Chief Plant Operator (CPO) as the Designated Operator-in Charge (DOIC), responsible for the overall operation of the wastewater treatment plants. Reports to the CPO when appointed DOIC. The Operations Section of the Water Reclamation Division is responsible for operating two (2) wastewater treatment facilities (33 MGD and 41 MGD). Incumbents in the Water Reclamation Senior Operator class are expected to exercise discretion and independent judgment within established guidelines.

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; act as a resource to Water Reclamation (WR) Senior Operators, WR Operators, WR Trainees, and Volunteer Operator in Training (OIT) staff;
- Routinely adhere to and support/promote City and Department goals;
- Participate, oversee, lead, direct, train, guide, check, monitor, correct, inspect, assign, and report on (collectively referred to as "Lead") the work of the operational staff in the performance of skilled, semi-skilled, and unskilled work in the operation of the wastewater reclamation facility; participate in the work of plant operators; responsible for scheduling, assigning and monitoring work of junior staff for completeness, accuracy and conformance with Department standards; provide information, instruction and training on processes, proper uses of equipment and safe work practices; provide input to supervisory staff on employee work performance and behaviors; estimate personnel, equipment and material requirements for assigned jobs; may order work materials and supplies; assist in ensuring a fair and open work environment;
- Conduct advanced-level visual inspections of wastewater reclamation process equipment according to established procedures to ensure proper function; monitor operations and equipment associated with the following processes: lift stations, preliminary treatment, primary treatment, activated sludge, secondary treatment, extended aeration, sludge thickening, sludge dewatering, anaerobic digestion, gas handling system, recycled water system, and any other processes or equipment utilized at the Water Reclamation Plant or RIX Facility. Read, record, and interpret gauges, meters, graphs, and other monitoring and recording devices into operating characteristics and regulating and adjusting equipment; troubleshoot readings outside normal parameters, make manual adjustments or assist in resolving problems and failures; notify appropriate staff of serious issues in accordance with established procedures;
- Adhere to, actively promote the use of, and assist in the development of Job Safety Analyses (JSAs), Standard Operating Procedures (SOPs), and all other operational directives and policies; perform all work in accordance with the established safety policies, procedures, and methods, including OSHA regulations relating to confined space entry, working around dangerous gases, and Lockout/Tagout/Blockout; take appropriate precautions to preserve own safety and the safety of others during the course of work;
- Participate in performing highly skilled and complex duties in wastewater treatment encompassing a complete and thorough understanding of the various processes and equipment utilized at the WRP facility; interpret gauges, meters and graphs and other monitoring and recording devices; collect and oversee the collection and testing of wastewater samples using various types of laboratory test equipment; calculate and adjust chemical dosage rates to remain within operating parameters; service and make operational repairs to equipment and facilities in accordance with SOPs;
- Operate positive displacement and centrifugal pumps, valves, blowers, motors, sludge drying, and related process equipment; perform plant check and operations adjustments required for compliant operations;
- Respond to assistance requests from operational, maintenance, and electrical staff; resolve serious operational issues and notify appropriate staff; perform simple preventive and corrective maintenance

and adjustments; assist specialized trade personnel and other operators in installation, maintenance, operations and repairs of equipment, machinery and systems;

- Monitor chemical usage, forecasts chemical consumption and order chemical shipments; order and monitor the receipt of chemical shipments, monitor delivery/unloading process to ensure proper procedures are followed, and ensure the calculation to determine the quantity being delivered is accurate; Mix and add chemicals; monitor chemical feed systems for proper operation, conduct chemical feed drawdowns to ensure proper dosage rates;
- Actively participate and monitor the Plants to ensure overall compliance, including such activities as: operating logs, checklists, exceedance reporting, and testing on all South Coast Air Quality Management District (SCAQMD) permitted equipment is thoroughly completed and accurate;
- Accurately maintain, monitor, and perform quality assurance checks on plant records, including operator logs and chemical inventory records, databases and spreadsheets; prepare regular reports, incident/accident/near-miss/unsafe condition reports, daily operations reports, call-out tracking, earthquake and power outage reports, and AQMD logs;
- Monitor and troubleshoot wastewater treatment and recycled water facilities operations by utilizing Supervisory Control and Data Acquisition (SCADA), operation and maintenance manuals, knowledge, and experience of process operation to regulate plant processes; read gauges, meters, charts and graphs, and operate pumps, valves, and related equipment; perform plant check and operations adjustments required for compliant operations;
- Actively participate and provide direction in the response and cleanup of sewage spills, solids, sludge, chemical spills and other related tasks;
- Ensure that samples are collected for process and compliance monitoring; perform basic analysis of samples using laboratory test equipment and record the results appropriately and correctly; analyze data to determine if any adjustments to process are necessary; review laboratory analysis reports; record data in the Water Information Management Solution (WIMS) software and report any discrepancies to the Process Control Supervisor;
- Prepare accurate reports and keep a variety of records, including timesheets, daily logs, work orders, safety worksheets, and other related documents; make oral and written reports as required;
- Assist supervision in training or instruction to WR Senior Operators, WR Operators, WR Trainees, and Volunteer OIT's; lead the work of others as a project leader;
- Attend and actively participates in briefings and meetings; participate in Department training;
- Assist in the review of operational data with supervisory staff; and assist in developing a plan of action to address potential operational or regulatory issues;
- Ensure the timely and accurate completion of all assigned activities;
- Assist with provision of information for personnel performance evaluations as required;
- Assist in the preparation of routine and special reports as required to ensure that wastewater is processed and discharged according to acceptable health and environmental standards;
- Coordinate activities with other Sections and Divisions of the Department;

- Assist in the evaluation of chemical use to ensure efficiency;
- Direct and actively participate in the performance of routine and non-routine maintenance and operational activities;
- Use personal computer and application software as applicable to complete administrative reporting, process control, records management, and SCADA operation;
- Assure adherence to permit requirements, personnel safety, cleanliness, and fire prevention rules and standards;
- Ensure staff adheres to Department procedures and policies;
- Operate Department vehicles in a safe manner following Departments Safety Standards; 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:

- Local, State and Federal regulations governing the operation of wastewater treatment plants;
- Principles, methods, procedures, equipment, tools, and processes of a water reclamation facility;
- The Globally Harmonized System (GHS) of Classification and Labeling of Chemical;
- Mid-level applied mathematics applicable to Water Reclamation Operations;
- General practices of supervision;
- Operation and preventive maintenance and chemical testing methods of modern primary, secondary and advanced wastewater treatment principles and practices;
- Uses of SCADA control systems and instrumentation, manual control systems and computer applications related to the work;
- Occupational hazards and safety precautions/practices, safe work methods, and safety regulations pertaining to the trade;
- Learn and properly adhere to permitted confined space entry and equipment protocols;
- Basic hydraulics, valves, pumps, and hydraulic systems;
- Basic business organization and budgeting principles; and

- Personal computer and application software use as applicable to process control, records management, and S.C.A.D.A operation.

Ability to:

- Perform all tasks noted in the Example of duties above;
- Learn the skilled functions of the Water Reclamation Process Control Supervisor classification within two (2) years of appointment;
- Demonstrate a comprehensive understanding of the WRP's Discharge Permit as issued by the Regional Water Quality Control Board within two (2) months of appointment;
- Demonstrate a complex understanding of the WRP's and RIX's wastewater treatment processes, including chemical usage, within six (6) months of appointment;
- Learn and apply new information;
- Understand the regulatory requirements for the WR Facilities; including, but not limited to, the State Water Resources Control Board, Santa Ana Region; South Coast Air Quality Management District, and the Environmental Protection Agency;
- Perform heavy physical labor for extended periods of time in all weather conditions anticipated within the Departments service area and in confined spaces;
- Lead and direct the work of others; serve as a supervisor in the absence or upon the direction of the supervisor;
- Analyze and interpret operational data problems as related to process control, evaluating alternative proposals, making sound recommendations, and troubleshooting all types of wastewater process systems;
- Work in an environment of wastewater treatment;
- Read and understand Safety Data Sheets (SDS);
- Assess from visual inspection the operational condition of wastewater treatment processes;
- Make complex arithmetic calculations with speed and accuracy;
- Perform mathematics related to the wastewater reclamation field;
- Operate a vehicle observing legal and defensive driving practices;
- Establish and maintain effective working relationships with City and Department staff, the public, and others encountered in the course of work; exercise patience, tact, and diplomacy, and courtesy in dealing with the public and employees;
- Analyze emergency situations accurately and take effective action;
- Recommend changes to improve the safety, efficiency or effectiveness of plant operation and

equipment;

- Properly wear personal protective equipment, including protective respiratory equipment as required by Department's policies;
- Read and interpret plans, specifications, manuals, data, information, and documents; write legibly and at a level sufficient for job success; understand and appropriately carry out oral and written instructions; communicate effectively, both orally and in writing; organize with the ability to prioritize work and exercise independent judgment, wisdom, common sense, and initiative, and work independently in the absence of supervision;
- Operate large cumbersome valves;
- Assist in planning and scheduling work assignments; set priorities, train, assist in providing information for evaluation, selection, and recommendation of discipline for subordinates;
- Prepare reports and maintain records;
- Work under moderate stress conditions;
- Perform frequent inspections of all plant equipment and processes to ensure proper operation;
- Work in confined space environments including the ability to wear self-contained breathing equipment (SCBA);
- Within six (6) months of appointment, obtain and maintain during the course of employment, the following:
 - CPR and first-aid certification
 - Forklift certification
- Work shift work (day-, swing-, and graveyard-) to include working weekends, holidays, overtime, and rotating shifts; unscheduled call-back; and
- Maintain a driving record which meets Vehicle Code Standards and is acceptable to the Department and its insurance carrier.

MINIMUM QUALIFICATIONS

- Education:** Graduation from high school, or equivalent,
- Experience:** Four (4) years of experience in the operation of a wastewater treatment facility which incorporates preliminary, primary, secondary (activated sludge), anaerobic sludge digestion, dewatering, filtration, and disinfection treatment processes.
- Certificate:** Must possess of a valid Wastewater Treatment Plant Operator Grade III certificate issued by the California State Water Resources Board. A copy of the required Wastewater Treatment Plant Operator Grade III certificate must be submitted at the time of application.

NECESSARY SPECIAL REQUIREMENTS

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

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

PHYSICAL TASKS, MENTAL DEMANDS, AND ENVIRONMENTAL CONDITIONS

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). The work involves exposure to potential physical harm, infectious disease and hazardous chemicals including smoke, fumes or airborne particles, gas, untreated wastewater, communicable disease, high frequency noise, risk of electrical shock, dirt, dust, grease, oil, chemicals, solvents and toxic agents. 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. 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. Incumbents may be required to work from heights on ladders, scaffoldings, motorized platforms, building roofs, or other elevated surfaces. Employee accommodations for physical or mental disabilities will be considered on a case-by-case basis.

Incumbents require sufficient mobility to work in a field setting in varying weather conditions, to operate various equipment, transport materials and supplies weighing up to 50 pounds and to travel to various locations. Must be able to see in the normal visual range with or without correction with vision sufficient to see color and read small print as well as distance. 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.

While performing the duties of this class, an employee uses written and oral communication skills; reads and interprets data, information and documents; analyzes and solves problems; uses math and mathematical reasoning; observes and interprets people and situations; learns and applies new information and skills; performs highly detailed work; deals with changing deadlines, constant interruptions and multiple concurrent tasks; responds to emergency situations; and interacts with others encountered in the course of work.

CAREER LADDER

From: Water Reclamation Lead Operator

To: Water Reclamation Process Control Supervisor
Water Reclamation RIX Supervisor
Water Reclamation Plant Supervisor

Job Description:

BOWC Approved:
Rev. Appr:

5/18/1999

5/17/2016

9/24/2019

Testing Standards: App Review/ Supp App Review