WATER AGENCY PLANT OPERATOR-IN-TRAINING

Definition

Under close-direct supervision, during an assigned shift, learns to operate and maintain water distribution, and water and wastewater treatment plant equipment and machinery; complete water and wastewater treatment processes, and perform related duties as required.

Distinguishing Characteristics

The Water Agency Plant Operator series is alternately staffed through the Senior level.

Promotion to the next higher level in the series is based upon possession of the minimum qualifications of the next higher-level classification.

The Water Agency Plant Operator-in-Training is an entry and trainee position in the Water Agency Operator series providing experience, and coupled with education completed outside of the workplace, can provide a career ladder to athe next level in the series which is the full-working, journey level class of Water Agency Plant Operator. The Water Agency Plant Operator-in-Training is expected to gain sufficient training, knowledge, and ability and obtain the California State Water Resources Control Board Wastewater Treatment Plant Operator Grade II and Water Treatment Plant Operator Grade T2 certificates, within three years of hire, in order to qualify for promotion to Water Agency Plant Operator within three years of hire. Failure to obtain the certificates within three years of hire would result in termination.

On assigned shifts, incumbents are trained to perform tasks associated with the operations, including minor mechanical maintenance of water distribution, water, and wastewater treatment plant equipment and machinery. Single shift assignments and potential emergency actions require the operators to use independent judgment, initiative, and perform essential activities within established operational parameters.

This class is distinguished from the Water Agency Plant Operator in that the latter is the full working, journey level class in the Water Agency Plant Operator series.

This class is exempt from the Civil Service Rules of the County of Sonoma as stated in Section 5 of Ordinance No. 305-A, as amended.

Typical Duties

Duties may include, but are not limited to, the following:

Learns to and operates pumps, valves, chlorinators, telemetry controls, sludge presses, and other water and wastewater flow regulating controls and equipment.

Learns to and maintains reservoir levels and coordinates water storage, usage, and allotments; inspects treatment plants, pump stations, and related equipment and facilities for proper operating activities.

Learns to and adjusts and maintains process control variables, reads and records information

from voltmeters, ammeters, water pressure gauges, water flow meters, chlorine residual recorders, pump cooling pressures, operating equipment temperatures, reservoir water levels, motor bearings oil levels, and accumulator pump pressures.

Learns to and manually operates and adjusts wastewater treatment processing valves, gates, motors, pumps, and chemical feed systems, including chlorine, sulfur dioxide, caustic soda, and, polymers.

Learns to and sets up and monitors irrigation systems for reclamation.

Collects water and wastewater samples and maintains proper residual levels.

Learns to and performs routine laboratory analysis of water and wastewater samples using accepted analyzing techniques.

Computes volumes and percentages using both standard and metric systems.

Calculates customer potable water entitlements and usage, and records and maintains observed findings.

Maintains detailed operational records.

Learns to and uses a computer-based supervisory control and data acquisition system (SCADA) to operate and maintain water supply, water and wastewater treatment, and reclamation facilities and plants.

Produces and maintains computerized reports.

Other Duties

Learns to and performs routine maintenance and calibration of pH meters, titrators, and other similar analytical instrumentation.

Learns to and oils, greases, adjusts, and performs other routine maintenance of equipment and machinery. May perform basic physical and chemical water and wastewater tests.

May assist in troubleshooting master and remote terminal units.

Knowledge and Abilities

Knowledge of: operation and preventive maintenance of piping systems, including pipes, valves, pumps, motors, and related appurtenances; methods, materials, tools, and equipment used in the operation of a water treatment facility; basic chemistry and algebra; safety equipment and practices, including the handling and storage of hazardous chemicals; basic mechanical, electrical, and hydraulic principles; basic operational maintenance practices of electrical motors, pumps, and circuitry; and basic computer software programs including Outlook, Word, and Excel.

Ability to: -accurately read meters and charts; perform basic arithmetic calculations and compute volumes and percentages using both standard and metric systems; learn to perform

routine chemical tests using accepted laboratory practices and procedures; read, write, and follow oral and written directions in English; learn the operation and routine maintenance of computerized instrumentation and plant operational equipment; establish and maintain effective working relations with co-workers, employees of other departments and agencies, and the public.

Working Conditions

Position requires working assigned shifts which may include nights, weekends, and holidays. The position also requires walking on non-level, uneven, and slippery surfaces; reaching; kneeling; climbing; crawling; and grasping, holding, and twisting various objects in the performance of daily activities. The need to lift and carry air packs, pumps, hoses, lab equipment, and paper boxes weighing up to 50 pounds and the need to move cylinders of gas weighing more than 200 pounds in accordance with safe work practices is also required. The incumbents are exposed to a variety of conditions including wet, heat, cold, heavy dust and pollens, and bio-hazards. Additionally, the working environment and equipment used exposes the incumbents to loud noises, vibrations, mechanical and equipment hazards, pesticides, raw and treated sewage, fumes, solvents, diesel, chlorine, and other chemicals and risks. The nature of the work may also require the incumbents to wear self-contained breathing equipment, climb ladders and scaffolds, drive motorized vehicles, and handle noise producing tools and equipment.

Minimum Qualifications

<u>Education and Experience</u>: Any combination of education, training, and experience which would provide an opportunity to acquire the knowledge, skills, and abilities listed above.

License/Certification:

Possession of a valid driver's license at the appropriate level including special endorsements, as required by the State of California, may be required depending upon assignment to perform the essential job functions of the position.

Special Provision

-Upon obtaining a-the California State Water Resources Control Board Wastewater Treatment Plant Operator Grade II and Water Treatment Plant Operator Grade T2 certifications, the Water Agency Plant Operator-in-Training will be eligible for promote-promotion to Water Agency Plant Operator. Should the Water Agency Plant Operator-in-Training fail to obtain a California Wastewater Treatment Plan Operator Grade II certification both certifications within three years of hire, employment will be terminated.

WATER AGENCY PLANT OPERATOR

Definition

Under general supervision, <u>during an assigned shift</u>, operates and maintains water distribution, <u>and</u> water and wastewater treatment plant equipment and machinery; completes water and wastewater treatment processes, and performs related duties as required.

Distinguishing Characteristics

The Water Agency Plant Operator series is alternately staffed through the Senior level.

Promotion to the next higher level in the series is based upon demonstrated knowledge and abilities, certificates obtained, and successful performance.

The Water Agency Plant Operator is a the full working, journey level class in the Water Agency Plant Operator series. On assigned shifts, incumbents perform the full range of tasks associated with the operations, including minor mechanical maintenance, of water distribution, and water and wastewater treatment plant equipment and machinery. Single shift assignments and potential emergency actions require the operators to use independent judgment, initiative, and perform essential activities within established operational parameters. As assigned, incumbents may independently operate any Sonoma Water facility and function as "designated operator-incharge" for which they hold the appropriate level of certification, in accordance with the required-California State Water Resources Control Board plant classification.

This class is distinguished from the <u>next lower_entry level_class_of</u> Water Agency Plant Operator-In-Training in that the latter is the trainee class in the series and learns to perform tasks associated with the operations, including minor mechanical maintenance of water distribution, and water, and wastewater treatment plant equipment and machinery.

This class is distinguished from the Water Agency Senior Plant Operator in that the latter is the full working, advanced journey level class, and incumbents possess the California State Water Resources Control Board Wastewater Plant Operator's Grade III and Water Treatment Plant Operator Grade T3 certificates.

This class is distinguished from the Water Agency Operations Superintendent Coordinator in that the superintendent Coordinator has the overall responsibility of the systems operation whereas the journey level Water Agency Planto Operators are is responsible for an assigned shift or activity.

This class is exempt from the Civil Service Rules of the County of Sonoma as stated in Section 5 of Ordinance No. 305-A, as amended.

Typical Duties

Duties include, but are not limited to, the following:

Operates pumps, valves, chlorinators, telemetry controls, sludge presses, and other water and wastewater flow regulating controls and equipment.

Maintains reservoir levels and coordinates water storage, usage, and allotments; inspects treatment plants, pump stations, and related equipment and facilities for proper operating activities.

Adjusts and maintains process control variables, reads and records information from voltmeters, ammeters, water pressure gauges, water flow meters, chlorine residual recorders, pump cooling pressures, operating equipment temperatures, reservoir water levels, motor bearings oil levels, and accumulator pump pressures.

Manually operates and adjusts wastewater treatment processing valves, gates, motors, pumps, and chemical feed systems, including chlorine, caustic, <u>and</u> polymers.

Sets up and monitors irrigation systems for reclamation.

Collects water and wastewater samples and maintains proper residual levels.

Performs routine laboratory analysis of water and wastewater samples using accepted analyzing techniques.

Computes volumes and percentages using both standard and metric systems.

Calculates customer potable water entitlements and usage, and records and maintains observed findings.

<u>Coordinates and confers with Water Agency staff to determine equipment problems and complete repairs; suggests methods of minimizing such problems in an operational setting.</u>

Maintains detailed operational records.

May use a computer-based supervisory control and data acquisition (SCADA) system to operate and maintain water supply, water and wastewater treatment, and reclamation facilities and plants.

Produces and maintains computerized reports.

Assist and train other operators.

Other Duties

Performs routine maintenance and calibration of pH meters, titrators, and other similar operational instrumentation.

Oils, greases, adjusts, and performs other routine maintenance of equipment and machinery. May perform basic physical and chemical water and wastewater tests.

May assist in troubleshooting master and remote terminal units.

Knowledge and Abilities

Knowledge of: -water collection, water and wastewater treatment, water distribution, wastewater disposal, and recycled water reuse processes, systems, and facilities; <u>the</u> use and principles of computerized electronic equipment in the collection, storage, and interpretation of water and wastewater operational data; basic chemistry and general laboratory practices and procedures; <u>and</u>-general operational and laboratory safety practices and procedures.

Skill in: -operating and maintaining control and other equipment and machinery related to water and wastewater treatment.

Ability to: -accurately read meters and charts; maintain safe and proper reservoir levels; coordinate potable water storage, usage, and allotments; maintain written records of shift operations; perform basic arithmetic calculations and compute volumes and percentages using both standard and metric systems; perform routine chemical tests using accepted laboratory practices and procedures; read, write, and follow oral and written directions in English; learn the operation and routine maintenance of computerized instrumentation and plant operational equipment; establish and maintain effective working relations with co-workers, employees of other departments and agencies, and the public.

Working Conditions

Position requires working assigned shifts which may include nights, weekends, and holidays. The position also requires walking on non-level, uneven, and slippery surfaces; reaching; kneeling; climbing; crawling; grasping, holding, and twisting various objects in the performance of daily activities. The need to lift and carry air packs, pumps, hoses, lab equipment, and paper boxes weighing up to 50 pounds and the need to move cylinders of gas weighing more than 200 pounds in accordance with safe work practices is also required. The incumbents are exposed to a variety of conditions including wet, heat, cold, heavy dust and pollens, and bio-hazards. Additionally, the working environment and equipment used exposes the incumbents to loud noises, vibrations, mechanical and equipment hazards, pesticides, raw and treated sewage, fumes, solvents, diesel, chlorine, and other chemicals and risks. The nature of the work may also require the incumbents to wear self-contained breathing equipment, climb ladders and scaffolds, drive motorized vehicles, and handle noise producing tools and equipment.

Minimum Qualifications

<u>Education and Experience</u>: Any combination of education, training, and experience which would provide an opportunity to acquire the knowledge, skills, and abilities listed. Normally, the attainment of recognized journey level status as a water and wastewater operator performing the full range of operations of a water and/or wastewater distribution and treatment system

would provide such an opportunity.

License/Certification

<u>License:</u> Possession of a valid driver's license at the appropriate level, including special endorsements, as required by the State of California, may be required depending upon assignment to perform the essential job functions of the position.

Certificates: Possession of the California State Water Resources Control Board Wastewater Plant Operator's Grade II certificate and Water Treatment Plant Operator Grade T2 certificates. Possession of a California Water Treatment Plant Operator's Grade T2 certificate is required within two years after employment; California Water Treatment Plant Operator Grade T3 required within 4 years from date of employment. Possession of a California State Water Resources Control Board Water Distribution Operator Grade D1 or above highly desired.

Incumbents in the Water Agency Plant Operator classification are expected to attain the California State Water Resources Control Board Wastewater Plant Operator Grade III and Water Treatment Plant Operator Grade T3 certifications within five (5) years of hire.

Special Provision

When an incumbent of this job class obtains the California State Water Resources Control

Board Wastewater Plant Operator's Grade III certificate and the California Water Treatment

Plant Operator's Grade T3 certificates, he or she they will be placed into eligible and assessed for promotion to the next higher job class of Water Agency Senior Plant Operator.

WATER AGENCY SENIOR PLANT OPERATOR

Definition

Under general supervision, <u>during an assigned shift</u>, <u>independently</u> operates and maintains water distribution, <u>and</u> water and wastewater treatment plant equipment and machinery; completes water and wastewater treatment processes, <u>provides technical and functional direction over the work performed by others in the Water Agency Plant Operator series; and performs related duties as required.</u>

Distinguishing Characteristics

The Water Agency Plant Operator series is alternately staffed through the Senior level.

Promotion to the next higher level in the series is based upon demonstrated knowledge and abilities, certificates obtained, and successful performance.

The Water Agency Senior Plant Operator is a full working, the advanced journey level class in the Water Agency Plant Operator series. -On assigned shifts, incumbents perform the full range of tasks associated with the operations, including minor mechanical maintenance, of water distribution, and water and wastewater treatment plant equipment and machinery. -Single shift assignments and potential emergency actions require the operators to use independent judgment, initiative, and perform essential activities within established operational parameters. Incumbents function as "designated operator-in-charge" as defined by State regulations, in accordance with the California State Water Resources Control Board plant classification.

This class is distinguished from the Water Agency Plant Operator in that the latter is the journey level in the Water Agency Plant Operator series and incumbents provide functional and technical lead supervision and are expected to perform the more difficult full range of assignments and are expected to use judgment in applying guidelines, processes, and procedures when performing tasks and making decisions.

with minimum supervision. The incumbent functions as "Shift Supervisor" as defined by State regulations.

This class is distinguished from the Water Agency Plant Operator in Training in that the latter is the trainee class in the series.

-This class is distinguished from the Water Agency Operations Superintendent Supervisor or Water Agency Coordinator in that they superintendent has have the overall responsibility of the systems operation whereas the Water Agency Plant Operators are responsible for an assigned shift or activity.

This class is exempt from the Civil Service Rules of the County of Sonoma as stated in Section 5 of Ordinance No. 305-A, as amended.

Typical Duties

Duties include, but are not limited to, the following:

Monitors and controls the operation of the wastewater treatment plants, in accordance with federal and state regulations by controlling flow and processing of wastewater biosolids and effluent.

Operates pumps, valves, chlorinators, telemetry controls, sludge presses, and other water and wastewater flow regulating controls and equipment.

Maintains reservoir levels and coordinates water storage, usage, and allotments; inspects treatment plants, pump stations, and related equipment and facilities for proper operating activities.

Adjusts and maintains process control variables, reads and records information from voltmeters, ammeters, water pressure gauges, water flow meters, chlorine residual recorders, pump cooling pressures, operating equipment temperatures, reservoir water levels, motor bearings oil levels, and accumulator pump pressures.

Manually operates and adjusts wastewater treatment processing valves, gates, motors, pumps, and chemical feed systems, including chlorine, caustic, and polymers.

Set up and monitor irrigation systems for reclamation.

Collects water and wastewater samples, and maintains proper residual levels.

Performs routine laboratory analysis of water and wastewater samples using accepted analyzing techniques and interprets results.

Computes volumes and percentages using both standard and metric systems.

Calculates customer potable water entitlements and usage, and records and maintains observed findings.

<u>Coordinates and confers with Water Agency staff to determine equipment problems and complete repairs; suggests methods of minimizing such problems in an operational setting.</u>

Maintains detailed operational records.

May Uuses a computer-based supervisory control and data acquisition (SCADA) system to

operate and maintain water supply, water and wastewater treatment, and reclamation facilities and plants.

Produces and maintains computerized reports.

Assists and trains other operators; provides functional and technical lead supervision.

Other Duties

Performs routine maintenance and calibration of pH meters, titrators, and other similar operational instrumentation.

Oils, greases, adjusts, and performs other routine maintenance of equipment and machinery.

May perform basic physical and chemical water and wastewater tests.

May assist in troubleshooting master and remote terminal units.

Knowledge and Abilities

Knowledge of: water collection, water and wastewater treatment, water distribution, wastewater disposal, and recycled water reuse processes, systems, and facilities; <u>the</u> use and principles of computerized electronic equipment in the collection, storage, and interpretation of water and wastewater operational data; basic chemistry and general laboratory practices and procedures; <u>and</u>-general operational and laboratory safety practices and procedures.

Skill in: operating and maintaining control and other equipment and machinery related to water and wastewater treatment.

Ability to: work safely and effectively on various shifts; accurately read meters and charts; maintain safe and proper reservoir levels; coordinate potable water storage, usage, and allotments; maintain written records of shift operations; perform basic arithmetic calculations and compute volumes and percentages using both standard and metric systems; perform routine chemical tests using accepted laboratory practices and procedures; adjust processes as indicated by conditions; read, write, and follow oral and written directions in English; learn the operation and routine maintenance of computerized instrumentation and plant operational equipment; work independently; establish and maintain effective working relations with coworkers, employees of other departments and agencies, and the public.

Working Conditions

Position requires working assigned shifts which may include day, swing, nights, weekends, and holidays. -The position also requires walking on non-level, uneven and slippery surfaces, reaching, kneeling, climbing, crawling, grasping, holding, and twisting various objects in the performance of daily activities. -The need to lift and carry air packs, pumps, hoses, lab

equipment, and paper boxes weighing up to 50 pounds and the need to move cylinders of gas weighing more than 200 pounds, in accordance with safe work practices, is also required. -The incumbents are exposed to a variety of conditions including wet, heat, cold, heavy dust and pollens, and bio-hazards. -Additionally, the working environment and equipment used exposes the incumbents to loud noises, vibrations, mechanical and equipment hazards, pesticides, raw and treated sewage, fumes, solvents, diesel, chlorine, and other chemicals and risks. -The nature of the work may also require the incumbents to wear self-contained breathing equipment, climb ladders and scaffolds, drive motorized vehicles, and handle noise producing tools and equipment.

Minimum Qualifications

Education and Experience: Any combination of education, training, and experience that would provide an opportunity to acquire the knowledge, skills, and abilities listed above. -Normally, the attainment of recognized journey level status as a water and wastewater operator performing the full range of operations of a water and/or wastewater distribution and treatment system would provide such an opportunity.

Other Requirements

License: -Possession of a valid driver's license at the appropriate level including special endorsements, as required by the State of California, may be required depending upon assignment to perform the essential job functions of the position.

Certificates: -Possession of <u>athe</u> California <u>State Water Resources Control Board</u> Wastewater Plant Operator Grade III <u>certificate</u> and <u>California</u> Water Treatment Plant Operator Grade T3 certificates <u>isare</u> required. -Possession of a California <u>State Water Resources Control Board</u> Water Distribution Operator Grade D1 or above and a Laboratory Analyst Grade I certificate <u>isare</u> highly desired.