

# CITY OF REDWOOD CITY UTILITIES WORKER

## **DEFINITION**

To inspect, maintain, and repair pumps, pumping structures, control valves, and other system controls in the water, sewer, and storm drain systems; maintain the Supervisory Control and Data Acquisition (SCADA) system; and perform other specialized water quality control functions as assigned.

## **DISTINGUISHING CHARACTERISTICS**

This is a journey level class in the Public Works class series. The Utilities Worker assists the section's Utilities Specialist and the Public Works Supervisor in scheduling, assigning and reviewing the work of incumbents in lower level classifications. This position works independently and serves as an assistant to the Utilities Specialist.

## **SUPERVISION RECEIVED AND EXERCISED**

Receives direction from a Public Works Supervisor. Technical and functional supervision is provided by a Utilities Specialist.

Assignment may require providing technical and job related guidance and training to lower level classes in the Public Works class series.

## **EXAMPLES OF DUTIES** - Duties may include, but are not limited to, the following:

1. Inspect, maintain, and repair pumps and related equipment at the City's pumping stations, water storage stations, and lift stations; lubricate and repack pumps and motors.
2. Perform minor carpentry, basic electrical, and various maintenance activities on station equipment.
3. Maintain water pressure and wastewater (sewer and storm) systems controls.
4. Inspect, adjust, and maintain SCADA system and related parts; replace parts, make repairs, or call for necessary outside assistance.
5. Inspect and service standby generators, diesel and natural gas engines and prepare auxiliary generators, and coordinate work with Fleet Service.
6. Prepare work reports, repair reports, and requisitions; maintain records and logs related to system operations, maintenance work performed and unusual conditions.

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7. Advise engineering on structure and new developments; participate in final inspections; inspect contractors' work and when appropriate, verify completion of payment.
8. Perform emergency maintenance work, as required.
9. Responsible for meeting all safety requirements, rules and regulations pertaining to Redwood City policies and standards, OSHA, JSA, Confined Space and Lock Out/Tag Out at job site.
10. Responsible for proper care and maintenance of all assigned vehicle and appurtenances, tools, and equipment used in performance of work tasks.

**ADDITIONAL EXAMPLES OF ESSENTIAL AND IMPORTANT DUTIES**

**Storm Drains Maintenance Section**

11. Maintain Redwood Shores lagoon system including operation of dewatering, pumping system, storm water containment through properly regulating water levels in the waterway in accordance with Redwood Shores Lagoon Management Plan.
12. Read tide tables and determine settings in waterways.
13. Clean screens at storm and/or sewer pump stations.
14. Understand and implement storm water performance standards and Best Management Practices (BMPs).
15. Understand and respond appropriately to system needs including emergency situations such as power outages, emergency generator operations, storms, and potential flooding.
16. Maintain City inlet, outlet and dewatering structures.
17. Maintain and clean wet well, grates to ensure safe ingress and egress to all station manholes.
18. Repair and/or replace flap gates at each station and upgrade them to latest and highest standards possible.
19. Understand seasonal responsibilities and their effect on the community; plan, schedule and coordinate activities to minimize negative impacts.

**Sanitary Sewer Maintenance Section**

20. Inspect, maintain, and repair pumps and related equipment at the City's sewer lift stations; lubricate and repack pumps and motors.

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21. Initiate sewer force main shut down procedures and sewer system bypass procedures, as appropriate.
22. Inspect backflow prevention devices at sewage stations and schedule necessary repairs.
23. Perform minor carpentry, electrical and various maintenance work on lift stations and station equipment.
24. Read meters, change charts, wind clocks, repair valves, clean wet wells, and enter readings in log book.

**Water System Maintenance Section**

25. Read meters, repair valves, clean main line valve ejector screens; view and record readings using the SCADA system.
26. Inspect, maintain, and repair pumps and related equipment at the City's water distribution stations; lubricate and repack pumps and motors.
27. Inspect and maintain water storage reservoirs and related equipment at the City's water distribution stations.
28. Perform minor carpentry, electrical and various maintenance work on water distribution stations and station equipment.
29. Maintain "Y" strainers on equipped Cla-Vals.
30. Set pressure on control valves as needed.
31. Prepare work reports, repair reports, and requisitions.
32. Understand and respond appropriately to system needs including emergency situations such as water or power outages, emergency generator operation, water system flushing and disinfection.
33. Inspect and maintain water distribution system cathodic protection.

**OTHER RELATED DUTIES**

Perform related duties as assigned.

**JOB RELATED AND ESSENTIAL QUALIFICATIONS**

**Knowledge of:**

Operation, maintenance, and repair of pumps, pump controls, and related equipment.

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Operation and maintenance of the SCADA System.

Federal, State and City policies, procedures, regulations, standards and best practices for the safe operation and maintenance of water, sewer and storm pumping systems.

Principles, procedures, requirements and techniques for operation, maintenance, and repair of electrical control systems, mechanical control systems, hydraulic control valves, pump control valves and related instruments.

Control standards and operating characteristics of a City water distribution system, sewage collection system, and storm drain system.

Principles and techniques of water distribution, wastewater collection systems, including storm water discharge and sanitary sewer collection system.

Principles of hydraulics.

Basic electricity and instrumentation and process control to measure amps and volts.

Accepted safety practices.

**Ability to:**

Assist with maintenance of SCADA, the City's public works water system, sanitary sewer collection system and storm drain system.

Prepare reports and documents associated with illicit discharges and sanitary sewer spills, in compliance with regulations and laws.

Communicate clearly and concisely, both orally and in writing.

Establish and maintain cooperative relationships with City staff and the public.

Safely use and care for a variety of both light and heavy equipment, tools and apparatus, according to set standards.

Perform basic repair work on mechanical and plumbing systems.

Safely use and apply chemicals as required in maintenance work.

Complete permitting procedures and maintain pump station fuel tanks in compliance with related regulations and laws.

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Understand wastewater treatment plant and lift station processes.

Read and interpret blueprints, as-builts, diagrams, and schematics.

Evaluate maintenance and repair needs; take appropriate action.

Work independently and exercise sound judgment.

**Experience and Training Guidelines:**

*Any combination of experience and education that would likely provide the required knowledge and abilities is qualifying. A typical way to obtain the knowledge and abilities would be:*

**Experience:**

Three years of experience maintaining water, sewer, and/or storm utility systems, with an emphasis on mechanical maintenance of pumps and motors.

**Education:**

Equivalent to completion of the twelfth grade.

**License or Certificate:**

If assigned to the Wastewater Management Services division, possession of a valid California Water Environment Association (CWEA) Wastewater Collection System Maintenance Grade II certificate is required.

If assigned to the Water Utilities Services Division, possession of a valid D-3 Water Distribution Operator certificate issued by the State of California Department of Health is required.

Must obtain a valid Class A California Commercial Driver's License with the hazardous material, tanker endorsements and no automatic transmission restriction within six months of employment.

Must obtain a Crane Operator Certificate within eighteen months of employment.

CPR and First Aid certificate.

**Special Requirements:**

*Essential duties require the following physical abilities and work environments:*

Must be able to: perform heavy manual labor; work in various locations in the City; operate a motor vehicle; maintain a satisfactory driving record; sit, stand, stoop, climb, kneel, or balance; occasionally lift heavy objects up to 50 pounds; work

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outside in varying climatic conditions; availability for stand-by and call back; work varying shift, including nights and weekends, if required; and be in sufficiently good health to perform job duties.

**Effective Date:** February, 1985 (title at that time: Water Control Specialist)

**Bargaining Group:** Service Employees' International Union - Local 521

**Amended:** October, 2008

**Amended:** October, 2011