

CITY OF SANTA CLARA, CALIFORNIA
CLASS SPECIFICATION

LEGEND:AdditionsDeletions

Approved September, 1994

Proposed July, 2019

~~CITY OF SANTA CLARA, CALIFORNIA~~**TITLE: PUMP MAINTENANCE TECHNICIAN (677)**

<u>DEPARTMENT</u>	<u>ACCOUNTABLE TO</u>	<u>FLSA STATUS</u>
<u>Water and Sewer</u>	<u>Varies</u> (677)	<u>Non-Exempt</u>

EDUCATION AND EXPERIENCE

- Graduation from high school or GED ~~and~~
- Two (2) years of construction, operations or maintenance experience in a water or wastewater agency, at least one (1) year of which shall have included maintenance experience for motor driven pumps, controls and their appurtenances as are used for water, sewage or storm water pumping.

LICENSES/CERTIFICATIONS

- ~~Possession of an appropriate~~ A valid California Class C driver's license is required at the time of appointment and for the duration of employment.
- ~~Possession of, or ability to obtain within 12 months of appointment, a~~ A valid Mechanical Technologist Certificate (Grade 1) issued by the California Water ~~Pollution Control Association is required~~ Environment Federation Association (CWEA) within 12 months of appointment.
- ~~must be obtained within 12 months of appointment.~~ A valid Collection System Maintenance Certificate (Grade 1) issued by the California Water Environmental Association (CWEA) at the time of appointment.
- A valid Water Distribution System Operator (Grade D-21 or above) issued by the California Department of Public Health Water Resources Control Board at the time of appointment.

If assigned to the Water Utility:

- ~~In addition, within 12 months of being assigned to the Water Utility or the Sewer Utility, the incumbent must obtain~~ A valid Water Treatment Operator Certificate (Grade T1) issued by the State of California Water Resources Control Board ~~Department of Health Services~~ must be obtained within 12 months of appointment.
- ~~if~~ A valid Water Distribution System Operator (Grade D2) issued by the California Water Resources Control Board must be obtained within 12 months of appointment.

If assigned to the Sewer Utility:

- ~~the incumbent is assigned to the Water Utility, or a~~ A valid Collection System Maintenance Certificate (Grade 12) issued by the California Water ~~Pollution Control~~ Environmental Association ~~if the incumbent is assigned to the Sewer Utility, must be obtained within 12~~

PUMP MAINTENANCE TECHNICIAN (continued)

months of appointment.

DISTINGUISHING CHARACTERISTICS

The incumbent in this position will possess a thorough understanding of installation, operation and routine maintenance procedures required for swimming pool and domestic hot water solar heating systems, pumps and pump stations and their appurtenances as are used for the pumping of potable water, non-potable(recycled) water, sewer and storm waters in the City of Santa Clara Water & Sewer Utility and in the Street Department Storm Drain Division. The incumbent may be assigned to work in either the Water Utility or the Sewer Utility and will be capable of exercising independent judgement in performing routine tasks, as well as making recommendations regarding major maintenance requirements or operational changes as might be indicated to assure the best use of pumping plants and related equipment.

TYPICAL TASKS/DUTIES

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

Independently, under general supervision, or as a member of a crew:

- Operates, adjusts, and programs S-C-A-D-A- system
- Utilizes technology such as computers, mobile devices, and Computerized Maintenance Management Systems (CMMS)
- Install, troubleshoots and repairs radio telemetry equipment
- Adjusts and repairs pressure control valves
- Performs fire flow tests
- Operates overhead electric hoist and/or truck mounted crane
- Schedules service and installation appointments
- Performs skilled work in the installation, repair and maintenance of water, storm, or sewer pump systems and solar heating equipment;
- Removes, overhauls, repairs and replaces motors, pumps, pressure control and check valves;
- Monitors and tests the operation of solar, sanitary, and storm lift station equipment; tests for efficiency and function of deep well and water system booster pumps;
- Operates disinfection treatment equipment and facilities;
- Performs related maintenance and repair work as required, including changing and interpreting flow recorder charts, taking water levels, recording water and electric meter readings, painting control panels and pumps, lubricating water meters, and making minor repairs;
- Drives trucks, including hauling hazardous materials;
- May perform minor electrical work in connection with solar installations and pump controls; and
- May lead, direct, or train a small utility crew as assigned.
- Performs related work as required.

KNOWLEDGE, SKILLS, & ABILITIES

Considerable knowledge of

- The operation and maintenance of a wide variety of pumps and pumping facilities including top drive (line-shaft) and submersible pumps used in deep wells, centrifugal and turbine

PUMP MAINTENANCE TECHNICIAN (continued)

booster pumps for potable water systems, non-potable (recycled) water systems and pumps used for lift stations in storm water and sanitary sewer systems;

- ~~Incidental knowledge of~~ clutches; gear drives; pump motor controls; level, flow, temperature and pressure measuring devices; ladder safety; roofing systems; auxiliary power supply and standby engine-driven pumps;

Knowledge of

- Water treatment and hydraulics;
- Use of preventative and predictive maintenance practices to minimize or eliminate pump downtime.
- Use of power and manual hand tools;
- Plumbing installation and repairs for PVC and copper piping;
- Electrical theory and safety; -ability to read and interpret basic wiring diagrams
- Keep accurate records of site maintenance and major site work using CMMS and site log book

Good ability to:

- To perform heavy manual labor
 - Utilize and stay abreast with technology and programs such as computers, mobile devices, and Computerized Maintenance Management Systems (CMMS)
 - Communicate effectively orally and in writing
 - Deal tactfully and courteously with others
 - Establish and maintain effective working relationships with those contacted in the course of work, including the general public
 - Work in a team-based environment and achieve common goals
 - Effectively handle multiple priorities, organize workload and meet strict deadlines
 - Follow oral and written instructions and
 - Walk or stand for extended periods of time
- Bend, stoop, reach, carry, crawl, climb and lift as necessary to perform assigned duties
- ~~To perform heavy manual labor.~~

SUPERVISION RECEIVED

Works under the general supervision of a Manager, Superintendent, Assistant Superintendent, ~~Assistant Superintendent~~ Manager or Utility Crew Supervisor ~~level~~ in the Water & Sewer Utilities, or other supervision ~~as assigned~~.

SUPERVISION EXERCISED

May ~~act as Utility Crew Supervisor over a small utility crew in the absence of higher authority~~ lead, direct, or train a small utility crew staff as assigned.

SPECIAL CONDITIONS

Incumbents of this classification may be required to work shift work, weekends, unusual hours in emergency situations and to be available on an "on call" basis.

CLASSIFICATION HISTORY

Created 11/1994; Rev. 07/2019

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DEPARTMENT	ACCOUNTABLE TO	FLSA STATUS
Water and Sewer	Varies	Non-Exempt

EDUCATION AND EXPERIENCE

- Graduation from high school or GED.
- Two (2) years of construction, operations or maintenance experience in a water or wastewater agency, at least one (1) year of which shall have included maintenance experience for motor driven pumps, controls and their appurtenances as are used for water, sewage or storm water pumping.

LICENSES/CERTIFICATIONS

- A valid California Class C driver's license is required at the time of appointment and for the duration of employment.
- A valid Mechanical Technologist Certificate (Grade 1) issued by the California Water Environment Association (CWEA) within 12 months of appointment.
- A valid Collection System Maintenance Certificate (Grade 1) issued by the California Water Environmental Association (CWEA) at the time of appointment.
- A valid Water Distribution System Operator (Grade D1) issued by the California Water Resources Control Board at the time of appointment.

If assigned to the Water Utility:

- A valid Water Treatment Operator Certificate (Grade T1) issued by the State of California Water Resources Control Board must be obtained within 12 months of appointment.
- A valid Water Distribution System Operator (Grade D2) issued by the California Water Resources Control Board must be obtained within 12 months of appointment.

If assigned to the Sewer Utility:

- A valid Collection System Maintenance Certificate (Grade 2) issued by the California Water Environmental Association must be obtained within 12 months of appointment.

DISTINGUISHING CHARACTERISTICS

The incumbent in this position will possess a thorough understanding of installation, operation and routine maintenance procedures required for swimming pool and domestic hot water solar heating systems, pumps and pump stations and their appurtenances as are used for the pumping of potable water, non-potable(recycled) water, sewer and storm water in the City of Santa Clara Water & Sewer Utility and in the Street Department Storm Drain Division. The incumbent may be assigned to work in either the Water Utility or the Sewer Utility and will be capable of exercising independent judgement in performing routine tasks, as well as making recommendations regarding major maintenance requirements or operational changes as might be indicated to assure the best use of pumping plants and related equipment.

TYPICAL DUTIES

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

PUMP MAINTENANCE TECHNICIAN (continued)

Independently, under general supervision, or as a member of a crew:

- Operates, adjusts, and programs SCADA system
- Utilizes technology such as computers, mobile devices, and Computerized Maintenance Management Systems (CMMS)
- Install, troubleshoots and repairs radio telemetry equipment
- Adjusts and repairs pressure control valves
- Performs fire flow tests
- Operates overhead electric hoist and/or truck mounted crane
- Schedules service and installation appointments
- Performs skilled work in the installation, repair and maintenance of water, storm, or sewer pump systems and solar heating equipment
- Removes, overhauls, repairs and replaces motors, pumps, pressure control and check valves
- Monitors and tests the operation of solar, sanitary, and storm lift station equipment; tests for efficiency and function of deep well and water system booster pumps
- Operates disinfection treatment equipment and facilities
- Performs related maintenance and repair work as required, including changing and interpreting flow recorder charts, taking water levels, recording water and electric meter readings, painting control panels and pumps, lubricating water meters, and making minor repairs
- Drives trucks, including hauling hazardous materials
- May perform minor electrical work in connection with solar installations and pump controls
- May lead, direct, or train a small utility crew as assigned
- Performs related work as required

KNOWLEDGE, SKILLS, & ABILITIES

Knowledge of

- The operation and maintenance of a wide variety of pumps and pumping facilities including top drive (line-shaft) and submersible pumps used in deep wells, centrifugal and turbine booster pumps for potable water systems, non-potable (recycled) water systems and pumps used for lift stations in storm water and sanitary sewer systems
- Clutches; gear drives; pump motor controls; level, flow, temperature and pressure measuring devices; ladder safety; roofing systems; auxiliary power supply and standby engine-driven pumps
- Water treatment and hydraulics
- Use of preventative and predictive maintenance practices to minimize or eliminate pump downtime
- Use of power and manual hand tools
- Plumbing installation and repairs for PVC and copper piping
- Electrical theory and safety ability to read and interpret basic wiring diagrams
- Keep accurate records of site maintenance and major site work using CMMS and site log book

Ability to:

- To perform heavy manual labor

PUMP MAINTENANCE TECHNICIAN (continued)

- Utilize and stay abreast with technology and programs such as computers, mobile devices, and Computerized Maintenance Management Systems (CMMS)
- Communicate effectively orally and in writing
- Deal tactfully and courteously with others
- Establish and maintain effective working relationships with those contacted in the course of work, including the general public
- Work in a team-based environment and achieve common goals
- Effectively handle multiple priorities, organize workload and meet strict deadlines
- Follow oral and written instructions
- Walk or stand for extended periods of time
- Bend, stoop, reach, carry, crawl, climb and lift as necessary to perform assigned duties

SUPERVISION RECEIVED

Works under the general supervision of a Manager, Superintendent, Assistant Superintendent or Utility Crew Supervisor in the Water & Sewer Utilities, or other supervisor as assigned.

SUPERVISION EXERCISED

May lead, direct, or train a small utility crew as assigned.

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