

OFFICIAL COPY

PLANT MAINTENANCE MECHANIC SENIOR PLANT MAINTENANCE MECHANIC

Established:	Unknown
Resolution:	Unknown
Spec Adopted:	09/20/2001
Resolution:	CS01-101
Spec Amended:	12/07/2006
Resolution:	CS06-121
Spec Amended:	12/05/2007
Ratifying Resolution:	CS07-165
Spec Amended:	03/18/2010
Ratifying Resolution:	CS10-008
Spec Amended:	06/16/2011
Ratifying Resolution:	CS11-019
Spec Amended:	09/28/2016
Spec to CSC:	10/20/2016
Spec Amended:	03/20/24
Date to CSC:	04/18/24
CS Status:	Classified
Unit:	O & M
FLSA Status:	Non-Exempt

*Formerly Mechanical Maintenance
Worker III and Plant Equipment
Mechanic*

DEFINITION

Under general supervision, performs a variety of mechanical installation, repair, maintenance and modification work at either the wastewater or water treatment plant (hereinafter referred to as treatment plant) and related pumping station facilities; and performs related work as assigned.

CLASS CHARACTERISTICS

Entry level

Initially under close supervision, incumbents perform the more routine mechanical maintenance duties at a treatment plant and related pumping station facilities while learning City policies and procedures. As experience is gained, assignments become more diversified and are performed under less supervision.

Journey level

Under general supervision, incumbents are fully competent to perform the full range of assigned duties. Incumbents are expected to exercise independent judgment in accomplishing the full range of governmental accounting and auditing duties. This class is distinguished from Senior Plant Maintenance Mechanic in that the latter performs more complex mechanical maintenance work.

Senior level

Under supervision, incumbents perform more complex mechanical maintenance work and provide lead direction to crews engaged in plant mechanical maintenance activities on instructions received from the supervisor distributing work.

PRINCIPAL DUTIES (Illustrative Only)

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

All levels

- Performs troubleshooting, repair, maintenance, installation, and adjustment work to a variety of treatment plant facilities.
- Performs basic to complex maintenance, inspection, and repair or overhauling tasks on drive components, such as right-angle drive gears, reduction drives, variable speed, belt and chain drives.
- Overhauls, maintains, installs, adjusts, inspects, and repairs a variety of hydraulic and pneumatic systems and compressors.
- Performs basic preventative and corrective maintenance by isolating power, grounding wires, troubleshooting problems, making repairs, restoring power and checking for proper operation.
- Starts and stops equipment and adheres to lock out and tag procedures.
- Operates a boat; maintains designated waterways free of debris.

- Represents the City with dignity, integrity, and the spirit of cooperation in all relations with staff and the public.
- Fosters an environment that embraces integrity, service, inclusion and collaboration.
- Be an integral team player, which involves flexibility, cooperation, and communication.
- Builds and maintains positive working relationships with co-workers, other City employees and the public using principles of good customer service.
- Performs related duties as assigned.
- Must obtain and maintain a valid California Boater Card within 90 days as a required condition of employment with the City of Stockton. .
- Must obtain and maintain valid First Aid and CPR certification within 90 days as a required condition of continued employment with the City of Stockton.

Journey level

- Performs basic to complex maintenance and repair tasks on engines, such as changing oil, belts, and spark plugs; replaces filters; obtains oil and fuel samples; takes hydrometer readings of coolant and battery fluids.
- Properly uses and cares for hand and power tools such as grinders, saws, jacks, hydraulic presses, pullers, and pipe threaders; inspects, tests, and measures equipment and material using precision instruments such as scales, height and depth gauges, calipers, verniers, and micrometers of various types.
- Repairs, maintains, installs, inspects, troubleshoots, and adjusts a variety of mechanical equipment at treatment facilities. Equipment includes: sluice gates, compressors, and flights; hydraulic controls; mechanical, structural, and plumbing apparatus; belt, chain, and conveyors; internal combustion engines as well as related cogeneration equipment.
- Maintains, installs, inspects, and repairs a variety of pumps, such as centrifugal, positive displacement, and screw; services, lubricates, and adjusts chemical feed and processing equipment; determines excess wear and pump efficiencies; and follows preventive and predictive maintenance practices.
- Maintains, installs, inspects, and repairs piping systems of PVC, black and cast iron, stainless steel, and copper tubing; installs, removes, and repairs larger pipes and valves; draws minor new designs; modifies existing piping systems and welded steel pipe, such as nozzles and saddles; and taps, cuts, and threads pipes.
- Performs basic maintenance, inspection, and repair tasks on mechanical and electrical drive components.
- Welds and fabricates the less complex parts and fittings; makes assemblies and repair units used in maintenance work from work orders, drawings, specifications, sketches, manuals, and oral instructions.
- Observes safe work methods and safety precautions related to the work; utilizes appropriate safety equipment including SCBA and respirators in working around hazardous chemicals, gases, and raw sewage.
- Makes routine estimates of labor and materials necessary for performance of the work; keeps records and makes reports of work performed.
- Makes sketches of work to be performed or of work completed.

- Works underground in confined spaces such as sewers, channels, or other structures to remove obstructions or make repairs.
- Performs routine carpentry and painting work on plant equipment and facilities.

Senior level

- Plans, organizes, assigns, and directs the work of crew members; leads and directs crews engaged in the installation, repair, maintenance and modification of a wide variety of mechanical equipment including, but not limited to, lubrication systems, drive components, bearings, pumps and compressors, piping systems, hydraulic and pneumatic systems, boilers, heating systems, fuel systems, power generation systems, and chemical application and mixing systems.
- Performs the most skilled duties; provides technical assistance to crewmembers; instructs crew in work procedure and safe work practices; troubleshoots equipment problems.
- Estimates and secures tools, material, and equipment required for assigned jobs; discusses work to be performed with supervisors; assigns tasks to individuals at the work site.
- Monitors work in progress at the work site; directs corrections and modifications as appropriate; provides input to supervisor for job performance evaluations.
- Maintains written and computerized records of work performed and materials used; records as-built drawings of modifications; prepares a variety of written records and reports related to the work.
- Reads and interprets plans, schematics, blueprints, manuals, and specifications; designs modification as necessary.
- Directs the use and maintenance of a wide variety of hand, power and shop tools, test equipment, and other equipment related to the work; operates trucks and equipment.
- Observes safe work methods and ensures the use of safety equipment and precautions related to the work being performed; conducts tailgate safety meetings; assists in developing training programs.
- Coordinates work assignments with other divisions; responds to questions and requests as appropriate.
- Inspects contract work to ensure compliance with specifications; recommends corrective action as necessary.
- May perform complex overhauls of engines, pumps, and motors.

QUALIFICATIONS

Knowledge of:

All levels

- Methods, practices, materials, tools, and equipment used in the installation, repair, adjustment and maintenance of equipment common to a treatment plant;
- Safety regulations and practices pertaining to the work;
- Use and maintenance of a wide variety of hand, power, and shop tools, test equipment and other equipment related to the work;

- Rigging principles and techniques;
- Preventative maintenance practices and techniques;
- Shop mathematics;
- Internal combustion engines as well as related co-generation equipment;
- Methods and techniques of carpentry and painting trades;
- Computerized maintenance management programs;
- Modern office practices, methods, and computer equipment including relevant software programs;
- Oral and written communication skills; business English including vocabulary, spelling, and correct grammatical usage and punctuation;
- Safe work practices; and
- Principles and practices of excellent customer service.

Journey level and Senior level

- Welding, including cutting, torching, brazing and oxy acetylene;

Senior level

- Lead level principles and practices; on-the-job training, and work review;
- Codes, ordinances and regulations pertaining to the work to include Environmental Protection Agency and/or regional air quality regulations; and
- Methods, tools, materials and equipment used in the operation, maintenance, and repair of complex mechanical equipment and engines.

Skill in:

All levels

- Performing a variety of routine mechanical work on pump stations, collection systems, stationary equipment and engines such as found in treatment facilities;
- Reading and interpreting plans, schematics, manuals, blueprints, and sketches;
- Preparing rough sketches and making rough estimates;
- Troubleshooting and repairing operating problems in plant and pump station equipment;
- Keeping basic records of work performed;
- Understanding and carrying out oral and written instructions and prioritize workload to meet deadlines;
- Reading, writing and comprehending the English language at a level necessary for effective job performance exercising correct English usage, vocabulary, spelling, grammar and punctuation;
- Communicating effectively, tactfully and positively in both oral and written form;
- Operating and using modern office equipment and technology, including computers and applicable software;
- Utilizing appropriate safety procedures and practices for assigned duties;
- Establishing and maintaining effective working relationships with those contacted in the course of work; and
- Contributing effectively to the accomplishments of City goals, objectives and activities.

Senior level

- Estimating labor and materials for proposed work;
- Diagnosing and repairing defects in a variety of complex mechanical equipment common to treatment facilities;
- Instructing, directing, and providing input regarding evaluations; distributing work and providing work directions, reviewing work performance and conduct of staff and providing on-the-job training to staff;
- Determining the appropriate course of action in stressful and/or emergency situations; and
- Overseeing the work of contractors in the installation, repair, etc. of equipment.

Education:

All levels

Equivalent to a high school diploma or GED.

Experience:

Entry Level

One year of experience in the maintenance of treatment plant, distribution and production facilities or general mechanical maintenance work; or two years of experience in operating, maintaining, and repairing internal combustion engines and generators.

Journey level

Two years of experience in mechanical maintenance work at a treatment plant; or four years of experience in operating, maintaining, and repairing internal combustion engines and generators.

Senior level

Three years of journey level experience (at Step 3 or higher) in mechanical maintenance work at a treatment plant at a level equivalent to the City's class of Plant Maintenance Mechanic; or six years of journey level experience in operating, maintaining, and repairing internal combustion engines and generators.

Other Requirements:

Licenses and Certifications:

All levels

- Must possess a valid California Class C driver's license.
- Possession and maintenance of a California Class A driver's license and adherence to DOT regulations within one (1) year from date of hire is desirable.

Entry Level

- Must obtain and maintain a valid California Boater Card within the first 90 days of employment as a required condition of continued employment with the City of Stockton.
- Must obtain and maintain valid First Aid and CPR certifications within the first 90 days of employment as a required condition of continued employment with the City of Stockton.
- California Water Environment Association (CWEA) certification as a Grade I Plant Maintenance Mechanical Technologist is desirable.

Journey level

- Must obtain and maintain a valid California Boater Card within the first 90 days of employment as a required condition of continued employment with the City of Stockton.
- Must obtain and maintain valid First Aid and CPR certifications within the first 90 days of employment as a required condition of continued employment with the City of Stockton.
- California Water Environment Association (CWEA) certification as a Grade II Plant Maintenance Mechanical Technologist is desirable.

Senior level

- A valid California Boater Card and First Aid and CPR certifications is desirable.
- California Water Environment Association (CWEA) certification as a Grade III Plant Maintenance Mechanical Technologist is desirable.

Physical/Mental Abilities:

- Mobility – Occasional sitting, crouching, kneeling, reaching or crawling. Frequent walking and standing for long periods of time. Frequent bending stooping, lifting, and driving motorized vehicles.
- Lifting/Carrying – Occasional lifting and carrying up to 100 pounds;
- Vision – Constant use of overall vision; frequent reading and close-up work, color and depth vision; ability to read and see PC screens; ability to read and produce printed material and information displayed on a visual display terminal;
- Dexterity – Constant repetitive motion; writing; grasping, holding, and reaching;
- Hearing/Talking – Ability to detect specific noises, proper equipment, operation; ability to understand what people are saying in normal conversation, over the telephone and frequently over noises;
- Mental/Emotional – Occasional decision-making; frequent concentration; frequent co-worker contact; occasional working alone; ability to work with the public, exercise sound judgment and handle stressful situations;
- Environmental/Working Conditions – Occasional to frequent exposure to noise and outdoor conditions; occasional to moderate risk of exposure to hazardous materials i.e., dirt, dust, gas, smoke, fumes, poor ventilation; exposure to extremes in temperature, humidity or wetness; working in heights; work with bio-hazards such as blood borne pathogens, sewage, waste, etc.; and working around equipment and machinery; and
- Special Requirements – Must be willing to work weekends, overtime as required and off-hours

in emergency situations; must wear assigned safety equipment; and must be willing to work on a boat.

This class specification should not be interpreted as all inclusive. It is intended to identify the essential functions and requirements of this job. Incumbents may be requested to perform job-related responsibilities and tasks other than those stated in this specification. Any essential function or requirement of this class will be evaluated as necessary should an incumbent/applicant be unable to perform the function or requirement due to a disability as defined by the American with Disabilities Act (ADA). Reasonable accommodation for the specific disability will be made for the incumbent/applicant when possible.

APPROVED:



ROSEMARY RIVAS
DIRECTOR OF HUMAN RESOURCES

DATE: 3/20/2024