

WASTEWATER MECHANICAL SPECIALIST

DEFINITION

Under supervision, repairs, services, and maintains equipment, machinery, and related apparatus at the City's Wastewater Treatment Plant facilities.

DISTINGUISHING CHARACTERISTICS

Wastewater Mechanical Specialist is the journey level class in the Wastewater Mechanical series. Incumbents perform the more complex assignments in the repair, service, maintenance, fabrication, and installation of Wastewater Treatment Plant equipment and machinery. This class differs from Wastewater Mechanical Technician in that an incumbent of the latter performs at the entry level under close supervision. Wastewater Mechanical Specialist differs from Senior Wastewater Mechanical Specialist in that the incumbent of the latter provides lead direction to lower level staff.

SUPERVISION RECEIVED/EXERCISED

Receives supervision from a Wastewater System Supervisor or lead direction from a Senior Wastewater Mechanical Specialist. This classification does not exercise supervision.

EXAMPLES OF IMPORTANT AND ESSENTIAL DUTIES

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

Maintains and repairs a variety of equipment, machinery, and control systems in the treatment plants to assure efficient plant operations.

Overhauls pumps, motors, gearboxes, valves, hydraulics, conveyor systems, and other equipment.

Diagnoses pumping, drive, hydraulic, and pneumatic problems and makes necessary repairs; maintains records of work performed.

Installs or replaces equipment and machinery; participates in major plant installations and overhauls.

Conducts demolition and decommissioning of equipment and machinery.

Services machinery and equipment through preventive maintenance by performing periodic lubrication, adjustment, cleaning, and inspections for worn parts. Performs related duties as required.

JOB RELATED AND ESSENTIAL QUALIFICATIONS

Knowledge of:

Practices, methods, tools, and materials of the mechanical, electrical, and welding trades.

Operation of pumps, motors, gearboxes, and related Wastewater Treatment Plant equipment and machinery.

Occupational and safety hazards and methods to perform duties safely and efficiently.

Accurate use of measurement devices such as precision measuring, lasers, micrometers, calipers, gauges, tape measure.

Skill/Ability to:

Diagnose and correct operating malfunctions in mechanical, hydraulic, pneumatic, and pumping systems.

Understand and work from technical materials, blueprints, drawings, schematics or other related materials.

Establish and maintain effective working relationships with supervisors and co-workers.

Work on elevated platforms and in confined spaces.

Work on chemical systems that contain bases and acids.

Use tools and equipment of the mechanical, electrical, and welding trades.

Evaluate, review, and utilize information and specifications of equipment.

Use standard office equipment including computers, cell phones, or tablets with various software applications.

MINIMUM QUALIFICATIONS

Education:

Possession of a High School Diploma or equivalent GED completion.

Experience:

Four (4) years of experience performing mechanical maintenance in a municipal or industrial facility with emphasis on fluid pumping and mechanical drive systems.

Special Requirement(s):

Possession of a valid California Class C Driver's License is required at the time of application and continued maintenance throughout the entire term of employment in this classification.

Depending upon assignment, possession of a valid Commercial Class B California Driver's License may be required at the time of application and continued maintenance throughout the entire term of employment in this classification.

Valid California Water Environmental Association (CWEA) Mechanical Technologist Grade II certification is desirable.

PHYSICAL DEMANDS

The physical demands described here are representative of those that are necessary to safely, effectively, and efficiently perform the essential functions of this job with or without reasonable accommodation.

This classification's physical demands involve heavy work exerting up to 100 pounds of force occasionally with assistance, and/or up to 50 pounds of force frequently, and/or up to 20 pounds of force constantly to move objects. Additionally, the following physical demands may be required balancing, climbing, crawling, crouching, feeling, manual dexterity, grasping, handling, hearing, kneeling, lifting, mental acuity, pulling, pushing, reaching, repetitive motion, speaking, standing, stooping, talking, visual acuity, walking.

APPROVED: Signature on File DATE: 10/20/2025
Director of Personnel Services

MR:MA:sn/O5/31/88
5913C/195
Revised 11/12 TJ:scm
Revised 10/28/16
Revised: EVG/C&C: 10/20/2025