

CITY OF MADERA

WASTEWATER TREATMENT PLANT MECHANIC

*Class specifications are only intended to present a descriptive summary of the range of duties and responsibilities associated with specified positions. Therefore, specifications **may not include all** duties performed by individuals within a classification. In addition, specifications are intended to outline the **minimum** qualifications necessary for entry into the class and do not necessarily convey the qualifications of incumbents within the position.*

DEFINITION:

Under general supervision, performs a variety of skilled inspection, diagnosis, repairs, service, and maintenance on equipment, machinery and related apparatus at the City's Wastewater Treatment Plant facilities; demonstrates a full understanding of all applicable policies, procedures and work methods associated with assigned duties; performs other related duties as required.

DISTINGUISHING CHARACTERISTICS:

The **Wastewater Treatment Plant Mechanic** is a journey level class responsible for a wide variety of plant maintenance and repair duties, and incumbents are expected to perform the full scope of assigned duties. This classification is distinguished from the Wastewater Treatment Plant Operator series by consistently performing duties related to plant maintenance as opposed to operations.

SUPERVISION RECEIVED/EXERCISED:

Receives general supervision from the Wastewater Treatment Plant Manager. May exercise functional and technical supervision over other plant personnel as it relates to equipment maintenance, repair and heavy equipment operation.

ESSENTIAL FUNCTIONS: *(include but are not limited to the following)*

- Inspects, locates and diagnoses mechanical defects on the City wastewater treatment facilities, equipment and systems; operates vehicles and other equipment, including back hoes, tractors, road graders and similar equipment.
- Repairs, overhauls and/or replaces motors and pumps, including bearings, valves, seals and sleeves; repairs and replaces drive chain mechanisms and sprockets; builds pump mounts and brackets, performing welding, drilling, fabricating, milling and tapping work; sets valve clearances; performs heavy equipment maintenance.
- Acts as mechanical system reference and guide for operations personnel. Provides lead direction to plant personnel in performing repair and maintenance duties. May assist in the training of lower level personnel.
- Cleans and adjusts chlorination and de-chlorination equipment and piping.
- Makes a variety of facility inspections and determines extent of necessary repairs.

WASTEWATER TREATMENT PLANT MECHANIC

Page 2

- Performs routine electrical repairs.
- Creates preventative maintenance schedule; performs regularly scheduled preventative maintenance and/or supervises preventative maintenance performed by operators; documents preventative maintenance appropriately.
- Plans and schedules maintenance and repair projects for all plant facilities; provides direction to plant and equipment operators on maintenance and repair tasks.
- Maintains time and materials records for work orders and projects.
- Orders and maintains inventory of requisite parts and supplies.
- Welds and fabricates parts and equipment as needed.
- Makes emergency repairs as needed.
- Tests equipment after repairs.
- Prepares and updates reports including records and logs.
- Establishes positive working relationships with representatives of community organizations, state/local agencies and associations, City management and staff and the public.

WORKING CONDITIONS:

Position requires sitting, standing, walking on level and slippery surfaces, reaching, twisting, turning, kneeling, bending, stooping, squatting, crouching, climbing, grasping and making repetitive hand movement in the performance of daily duties. The position also requires both near and far vision when inspecting work and performing maintenance on assigned equipment. The need to lift, carry and push tools, equipment and supplies weighing 50 pounds or more is also required. Additionally, the incumbent in this position works in all conditions including wet, hot and cold. The incumbent may use cleaning and lubricating chemicals which may expose the employee to fumes, dust and air contaminants. The nature of the work also requires the incumbent to climb ladders and work in confined space.

QUALIFICATIONS: *(The following are minimal qualifications necessary for entry into the classification)*

Education and/or Experience:

Any combination of education and experience that has provided the knowledge, skills and abilities necessary for a **Wastewater Treatment Plant Mechanic**. A typical way of obtaining the required qualifications is to possess the equivalent of two years of experience in the repair and maintenance of large pumps, lift stations, or similar mechanical equipment or the performance of related work, and a high school diploma or equivalent.

License/Certificate:

Possession of, or the ability to obtain, a valid class C California driver's license. Possession of a Valid California Water Pollution Control Association Mechanical Technologist certification is desirable but not required.

KNOWLEDGE/ABILITIES/SKILLS: *(The following are a representative sample of the KAS's necessary to perform essential duties of the position)*

Knowledge of:

Principles and practices of wastewater treatment plant operations; repair, maintenance and adjustment procedures for wastewater treatment plant equipment; Federal, State and local laws governing wastewater and industrial waste monitoring and control; practices, methods, tools and materials of the mechanical, electrical and welding trades; operation of pumps, motors and related wastewater equipment and machinery; occupational hazards and standard safety practices; methods and techniques for basic report preparation and writing; methods and techniques for record keeping; methods and techniques of training personnel.

Ability to:

Plan, organize and carry out maintenance of a wastewater plant; inspect wastewater facilities, systems and equipment; accurately diagnose mechanical defects and problems; skillfully use a variety of hand and power tools in the maintenance and repair of wastewater facilities and associated equipment; perform skilled testing, adjustment, repair and overhaul work on wastewater facilities, pumps and lift stations; read and interpret plant schematics and shop and repair manuals; apply technical knowledge of mechanical and electrical trade work; estimate time and materials for repair jobs; operate light and heavy equipment in a safe manner; maintain accurate records and prepare comprehensive reports; perform plant maintenance assignments; establish and maintain cooperative working relationships.

Skill to:

Safely and effectively operate the tools and equipment used in wastewater plant maintenance and repairs.

Adopted 7/18/12