JOB DESCRIPTION

Coachella Valley Water District

DATE: May 2005

TITLE: Mechanical Technologist II

SECTION: Electrical/Mechanical

DEPARTMENT: Trades & Support

REPORTING RELATIONSHIP:

Reports to: Supervisor Electrical/Mechanical

Supervises the following positions: not applicable

DEFINITION: This is the intermediate level position in the Mechanical Technologist job series. Under general supervision, employees in this position perform maintenance on the mechanical and electrical equipment in operation at the District’s reclamation plants, pumping stations, and related facilities, and performs related work as assigned.

ESSENTIAL FUNCTIONS:

1. 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; diesel and/or gas engines.

2. From work orders, drawings, specifications, schematics, sketches, verbal and written instructions, performs complex mechanical maintenance, repairs, fabrication, and rebuilding of shop, field, and plant equipment used in wastewater plants and pump stations.

3. Performs regularly scheduled maintenance, inspection, and repair tasks on communicating and grinding devices; overhauls equipment such as cutters, bearings, chains, mechanical seals, gear reducers; performs close tolerance checking and testing.

4. Maintains, installs, inspects and repairs a variety of pumps, such as centrifugal, positive displacement, and screw; services, lubricates, adjusts, chemical feed and processing equipment; determines excess wear and pump efficiencies; and follows preventive and predictive maintenance practices.

5. Performs horizontal and vertical welding, fabricating, silver soldering, hard facing, and blazing using acetylene, arc, mig, and tig welder on most ferrous and nonferrous metals; makes specialized cuts and complex angles using a band saw; and performs blacksmithing and parts fabrication.

6. Maintains, installs, inspects, and repairs piping systems of PVC, black and cast iron, stainless steel, and copper tubing; installs, removes, and repairs larger pipe 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.
JOB DESCRIPTION

Mechanical Technologist II – Page 2

ESSENTIAL FUNCTIONS (Cont.)

7. Performs basic to complex maintenance, inspection, and repair or overhauling tasks on drive components, such as right angle drive gears, reduction drives, variable speed, and belt chain drives.

8. Overhauls, maintains, installs, adjusts, inspects, and repairs a variety of hydraulic, and pneumatic systems and compressors.

9. Properly uses and cares for hand and power tools such as grinders, saws, jacks, hydraulic presses and 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.

10. Follows proper safety practices, precautions, and procedures, such as confined space entry, storing, handling, and transporting gases, using correct lockout and tagout procedures.

11. Plans tasks, keeps records of work performed and makes estimates of labor and material necessary for the performance of the work.

MINIMUM QUALIFICATIONS:

License or Certificates: Valid California Operators license issued by the State Department of Motor Vehicles. Department of Motor Vehicles driving record may influence employment or classification.

AND

Within 18 months of position appointment, must obtain a Mechanical Technologist Grade II certification from the California Water Environment Association.

Special Requirement: Must be able to tolerate the District’s immunization program.

Failure to comply with these requirements may influence employment or classification.

Training and Experience: Possession of a Mechanical Technologist Grade II certification from the California Water Environment Association; or a combination of three years at the level of Mechanical Technologist I and one year experience in a mechanical and/or electrical background; or a minimum of four years of experience in a mechanical and/or electrical maintenance field.
JOB DESCRIPTION

Mechanical Technologist II – Page 3

MINIMUM QUALIFICATIONS (Cont.):

Knowledge of:
- Principles and practices of reclamation plant operations.
- Safe practices as mandated by the California Division of Industrial Safety and Cal OSHA.
- Mechanical equipment and electrical devices.
- Tools, including power tools, and the proper use of those tools.
- District policies, procedures, and safety procedures.

Ability to:
- Train other employees.
- Read and interpret maintenance procedures from manuals provided.
- Read and understand simple blueprints of mechanical and electrical equipment.
- Work under adverse conditions.
- Be available to work standby, overtime, and shift work when required.
- Work cooperatively with others.

PHYSICAL REQUIREMENTS:

1. Drive District vehicle to job sites including over rough terrain. Uses a two-way radio to communicate.

2. Works in extreme weather conditions including heat and rain. Will work in areas containing dust, fumes, exhaust.

3. Climbs ladders and work at heights up to 100 feet.

4. May work in potential confined spaces. Must have the ability wear and use appropriate safety equipment including a Self Contained Breathing Apparatus (SCBA).

5. Will work nights, weekends, holidays, and overtime when required.

6. Lift and carry objects in excess of fifty pounds.

See Human Resources for physical assessment form.