## **JOB DESCRIPTION**

Coachella Valley Water District

TITLE: HVAC Technician I

Date: December 2018

SECTION: Electrical

**DEPARTMENT:** Facilities and Maintenance

### **REPORTING RELATIONSHIP:**

Reports to: Electrical Supervisor

Supervises the following positions: Not applicable

**DEFINITION**: Under general direction, assist with the operation and maintenance of Heating, Ventilation, Air Conditioning, and Refrigeration equipment. Install, maintain, service, and repair various equipment such as motors, pumps, compressors, valves, piping, duct work, mechanical and direct digital controls, pneumatic devices and other related work as required.

### ESSENTIAL FUNCTIONS:

- 1. Properly evaluates, sizes, orders and installs air conditioning and refrigeration equipment, including equipment with CFC and HCFC refrigerants.
- 2. Maintains, services, repairs and disposes of air conditioning and refrigeration equipment in compliance with Refrigeration Containment regulations.
- 3. Assembles and maintains control devices, solenoids, thermostats, pressure switches, temperature switches and other HVACR related equipment.
- 4. Maintains, troubleshoots and repairs HVACR Equipment, mechanical devices, and Energy Management System (EMS) software.
- 5. Diagnoses and replaces faulty electrical, mechanical, hydraulic, pneumatic and electronic direct digital controls hardware for a variety of HVAC Systems such as pneumatic VAV (variable air volume), VRF (variable refrigerant flow), CRAC (computer room air conditioning), and EMS components.
- 6. Troubleshoots and repairs problems with pumps and motors, including line shaft, centrifugal and submersible pumps, bearings, and shafts.
- 7. Installs and connects power supply wiring and conduit for existing and new equipment.

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#### ESSENTIAL FUNCTIONS (Cont.):

- 8. Maintains, troubleshoots, repairs and tests the performance open loop, closed loop and flow through water systems, including evaporative coolers and condensers, cooling tower, chilled water loops and heated water loops. Adjusts air and water systems and fine tunes louvers and regulates flow control valves in loop piping to balance overall system.
- 9. Tests, monitors and adjusts water system chemical levels to provide proper protection against corrosion and scaling.
- 10. Plans and schedules electrical testing and compliance inspections for HVAC systems and recommends modifications or replacements of sub-standard.
- 11. Reviews system drawings, specifications, and performance data to determine optimized configuration of system components such as motors, pumps, fans, switches, ducts, or pipes, and assists in the development, scheduling, and implementation of required mitigations.
- 12. Adheres to District safety policies and procedures, which include confined space procedures.

#### **MINIMUM QUALIFICATIONS:**

<u>License or Certificates</u>: Valid California Operators license issued by the State Department of Motor Vehicles. Department of Motor Vehicles driving record may influence employment or classification. Valid United States Environmental Protection Agency Refrigerant Containment Type IV Universal technician certification.

Experience: Minimum of five years in installation and repairs on industrial, residential and commercial refrigeration units.

Knowledge of:

-Electrical theory, practices, tools and equipment.
-Mechanical theory, practices tools, and equipment.
-Principles and practices of refrigerant selection, containment and retrofit.
-Water testing and treatment used in air conditioning and refrigeration equipment.
-Principles and practices for the maintenance and repair of air conditioning systems in Industrial, Commercial and residential applications.
-Electrical & Mechanical codes and related ordinance and regulations.
-Principles and practices for the installation, maintenance and repair of pumps, motors, and appurtenances.
-Safe working practices, including confined space requirements.

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#### MINIMUM QUALIFICATIONS (Cont.):

<u>ABILITIES</u>: -Analyze, diagnose, troubleshoot, inspect, install, maintain, and repair a variety of electrical and mechanical equipment under minimal supervision. -Effectively develop, schedule, and plan jobs in the most cost effective manner.

-Maintain accurate logs, records, reports, safety procedures, and charts. -Read and understand drawings, diagrams, and schematics of electrical and mechanical equipment.

-Work safely around energized electrical and mechanical equipment. Follow written and oral directions, and communicate and work collaboratively with others.

- Provide technical support and work direction to others.

-Use hand and power tools in a safe manner.

#### PHYSICAL REQUIREMENTS:

- 1. Drive District vehicle to job sites including over rough terrain. Uses a two-way radio for communication.
- 2. Works in extreme weather conditions including heat and rain. Will work in areas containing dust, fumes and exhaust.
- 3. Climbs ladders and works at heights up to 100 feet.
- 4. May work in potential confined spaces. Must have the ability to wear and use appropriate safety equipment including a Self-Contained Breathing Apparatus (SCBA).
- 5. Will work nights, weekends, holidays, overtime, and stand-by when required.
- 6. Lift and carry objects in excess of 50 pounds.

See Human Resources for physical assessment form