

SACRAMENTO CITY UNIFIED SCHOOL DISTRICT
Position Description

TITLE:	Engineer	CLASSIFICATION:	Classified Non-Management (SEIU/Operations Support)
SERIES:	None	FLSA:	Non-Exempt
JOB CLASS CODE:	0826	WORK YEAR:	12 Months
DEPARTMENT:	Facilities Maintenance	SALARY:	Flat Rate Salary Schedule C2
REPORTS TO:	Assigned Supervisor	BOARD APPROVAL:	01-01-65
		BOARD REVISION:	04-27-87
		HR REVISION:	06-21-12

BASIC FUNCTION:

Perform skilled maintenance work; operate and maintain heating, ventilating, air conditioning (HVAC), power, refrigeration, water treatment, and other mechanical systems, including the operation of boiler rooms and low-pressure boiler systems.

REPRESENTATIVE DUTIES: (Incumbents may perform any combination of the essential functions shown below [E]. This position description is not intended to be an exhaustive list of all duties, knowledge, or abilities associated with this classification, but is intended to accurately reflect the principle job elements.)

Operate and maintain all boilers, heaters, pumps, appurtenances, and lines used in distribution of steam and heated or processed water. **E**

Operate and maintain refrigeration compressors, condensers, evaporators, traps, transfer pumps, expansion valves, stop valves, and float valves together with refrigeration lines and devices used to control temperatures, pumps handling brines or other secondary refrigeration liquids, as well as all valves and lines used in the systems. **E**

Operate, maintain, and repair air compressors, along with distribution lines and all valves and devices for air pneumatic control, all gas lines including all valves and control devices, water filters, softeners, piping, and pumps used in conjunction with water distribution and swimming pools. **E**

Operate and repair all types of motors and engines used to power pumps, compressors, and fans. **E**

Inspect hot water boilers, HVAC systems, and related systems, and assure proper equipment operation; maintain boilers and heating systems, HVAC systems, and mechanical systems; read, interpret, and work from blueprints, sketches, shop drawings, and diagrams. **E**

Administer water treatment program to control corrosion and scaling; test water quality, and use chemical treatment to maintain water quality. **E**

Clean and organize equipment rooms to maintain a safe environment; provide training and expertise on HVAC equipment to site personnel. **E**

Perform preventive maintenance to school HVAC to include fan belts, lubrication, replacement of indoor/outdoor filters, clean coils to extend life if equipment and provide a healthy environment; perform repairs to duct work, and construct filter racks. **E**

Prepare and maintain a variety of routine records and reports for preventive maintenance, materials used, water treatment, etc.; assure work completed and in progress comply with applicable laws, rules, and regulations. **E**

Operate and maintain a variety of specialized hand and power tools and equipment to include pipe wrenches, electric drills, drill presses, pipe threaders; voltmeters, amp meters; pressure gauges; use electric or acetylene welding equipment and cutting torches to make minor repairs; drive a district vehicle to conduct work; lift and carry heavy objects. **E**

Work with school improvement initiatives that close student achievement gaps between racial, ethnic, and economic groups by working with all of the diverse communities. **E**

Perform related duties as assigned.

TRAINING, EDUCATION, AND EXPERIENCE:

Any combination equivalent to: graduation from high school, and four years of experience as a maintenance engineer.

LICENSES AND OTHER REQUIREMENTS:

Hold a valid California Class C driver's license, and provide proof of insurance; employee entrance evaluation (lifting test); attend asbestos awareness class within six months of employment. Hold a Mechanical Engineering Technology (MET) Certificate or equivalent.

KNOWLEDGE AND ABILITIES:

KNOWLEDGE OF:

Boilers, chillers, HVAC, and other mechanical systems.
Low-water feeders, circulating pumps, and boiler controls.
Applicable refrigeration cycle and operation.
Refrigerant application.
Water supply systems and water treatment program.
Methods, materials, tools, and equipment used in preventive maintenance.
Codes, policies, regulations, and guidelines pertaining to the industry.
Basic record-keeping techniques.
Safe working methods and procedures.
Technical aspects of field of specialty.
Health and safety regulations.

ABILITY TO:

Perform the basic function of the position.
Operate and maintain equipment, pumps, and HVAC, boiler, and mechanical systems.
Service chillers and various HVAC equipment.
Perform minor maintenance and repair of plumbing and electrical equipment related to HVAC equipment.
Work from blueprints, sketches, shop drawings, and diagrams.
Work with sheet metal and make filter racks.
Maintain records, and prepare complete and concise reports.
Understand and follow oral and written directions.
Establish cooperative working relationships with others.
Work independently with minimal supervision.
Operate a vehicle, observing legal and defensive driving practices.
Lift and carry heavy objects according to safety regulations.
Work efficiently to meet schedules and timelines.
Work with school improvement initiatives that close student achievement gaps between racial, ethnic, and economic groups by working with all of the diverse communities.
Operate and maintain specialized tools of the trade.
Meet state and district standards of professional conduct as outlined in Board Policy.

WORKING CONDITIONS:**SAMPLE ENVIRONMENT:**

Indoor and outdoor environment; drive a vehicle to conduct work; subject to adverse weather conditions, extreme heat and cold, dust, and dirt; work from heights, and confined or cramped spaces; noise from equipment operation.

SAMPLE PHYSICAL ABILITIES:

Walk, crouch, and stand for extended periods of time; work from ladders, scaffolding, and lifts; bend at the waist; reach overhead, above the shoulders, and horizontally; hear to speak and exchange information; dexterity of hands and fingers to operate specialized tools and equipment; lift and carry heavy objects.

SAMPLE HAZARDS:

Work in a cramped or restrictive work area and from heights; exposure to vapors, chemicals, fiberglass, fumes, and exhaust from furnaces; guard against burns, gas fires, electric shock, flying debris, moving parts from equipment; potential exposure to asbestos.