

**CLASS TITLE: PLANT ENGINEER**

**BASIC FUNCTION:**

Under the direction of an assigned supervisor, perform a variety of complex, technical duties related to plant engineering maintenance and repair; provide lead direction to staff involved in plant engineering maintenance and service work.

**REPRESENTATIVE DUTIES:**

Maintain and repair boilers and boiler controls; treat boiler water; maintain and repair refrigeration systems. *E*

Maintain and repair air control systems for air conditioning and heating; troubleshoot electrical control systems; remove and replace air control system filters. *E*

Provide lead direction and training to plant engineer staff; perform the most complex repair duties. *E*

Maintain and repair electrical and lighting systems, indoor and outdoor; repair and replace electrical parts in motors, generators, light fixtures, pumps, controllers, switches, plugs, lighting ballasts and related equipment. *E*

Maintain and repair pneumatic and electrical thermostats and controls; maintain water cooling towers and related pumps, pump motors and couplings; assure proper operation of the energy management system including related software. *E*

Maintain and repair food service refrigerators, stoves, ovens, steamers, ice machines and hot water heaters. *E*

Maintain and repair pumps, valves, air compressors, hot water heaters, air regulators and driers. *E*

Install, maintain and repair plumbing systems including drinking fountains, sinks, drains and toilets; maintain and repair sewer, gas and water lines. *E*

Repair and install clock system; monitor campus electrical distribution centers. *E*

Compile bids for repair and replacement of large-scale jobs. *E*

Maintain and repair swimming pool equipment including filters, pumps and chlorinators. *E*

Perform asbestos removal and encapsulation. *E*

Perform preventative maintenance on HVAC and electrical equipment. *E*

Purchase supplies and materials as needed to maintain facilities.

Perform related duties as assigned.

**KNOWLEDGE AND ABILITIES:**

**KNOWLEDGE OF:**

Methods, practices, equipment and tools used in the repair and maintenance of plumbing, air conditioning, heating, water treatment and swimming pool systems.

Principles and practices of plumbing, air conditioning, heating, water treatment and swimming pool systems.

Methods of asbestos recognition and removal.

Record-keeping techniques.

Operation of a computer terminal and specified software.

Principles of training and providing work direction to others.

Basic math.

Safe work practices.

Operation of Energy Management Systems.

**ABILITY TO:**

Perform complex service and repair work of various types of electrical and plant equipment.

Use and care for tools and equipment used in maintaining and repairing plant equipment.

Read and interpret blueprints, schematics, sketches and drawings.

Maintain records related to work performed.

Operate a computer terminal and various specified software programs.

Train and provide work direction to assigned staff.

Communicate effectively both orally and in writing.

Establish and maintain cooperative and effective working relationships with others.

**EDUCATION AND EXPERIENCE:**

Any combination equivalent to: graduation from high school supplemented by specialized training in plumbing, heating, air conditioning, refrigeration and water treatment technology and three years of journey-level plant engineering experience.

**LICENSES AND OTHER REQUIREMENTS:**

Possession of, or ability to obtain, a valid California driver's license.

Possession of, or ability to obtain, an EPA 608 Refrigerant and Recovery Certificate.

Satisfactory completion of pre-employment physical assessment.

Satisfactory completion of pre-employment drug testing.

## WORKING CONDITIONS:

### ENVIRONMENT:

Indoor and outdoor environment.

### PHYSICAL DEMANDS:

Incorporated within one or more of the previously mentioned essential functions of this job description are essential physical requirements. The chart below indicates the percentage of time spent on each of the following essential physical requirements.

- |    |                               |    |                                      |
|----|-------------------------------|----|--------------------------------------|
| 1. | Seldom = Less than 25 percent | 3. | Often = 51-75 percent                |
| 2. | Occasional = 25-50 percent    | 4. | Very Frequent = 76 percent and above |
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| <u>4</u> | a. | Ability to stand for extended periods of time.   |
| <u>4</u> | b. | Ability to see for purposes of reading printed matter and operating a vehicle and maintenance equipment. |
| <u>3</u> | c. | Ability to hear and understand speech at normal levels.  |
| <u>3</u> | d. | Ability to communicate so others will be able to clearly understand a normal conversation.               |
| <u>4</u> | e. | Ability to bend and twist, sit, stoop, kneel, push, pull and crawl.                                      |
| <u>3</u> | f. | Ability to lift <u>75</u> lbs.   |
| <u>3</u> | g. | Ability to carry <u>75</u> lbs.  |
| <u>4</u> | h. | Ability to reach in all directions.  |
| <u>2</u> | i. | Ability to work at heights.  |
| <u>2</u> | j. | Ability to ascend and descend a ladder.  |
| <u>3</u> | k. | Ability to work in the elements (extreme temperatures).  |

### HAZARDS:

Working on ladders.

*This job description is intended to describe the general nature and level of work being performed. It is not intended to be construed as an exhaustive list of all responsibilities, duties and skills required of individuals so classified.*