

PERALTA COMMUNITY COLLEGE DISTRICT – REVISED 11/19/01

**JOB SPECIFICATION
(Local 39 Bargaining Unit)**

ENGINEER SERIES

Utility Engineer

Stationary Engineer

**Assistant Chief Stationary Engineer
(Formerly Senior Stationary Engineer)**

Chief Stationary Engineer

CLASS PURPOSE

This class series specification describes those classes that perform a variety of building operations and maintenance functions. Performs related work as required.

DISTINGUISHING CHARACTERISTICS

These classes differ from other labor and trade classes in that emphasis is on the operation, repair, and maintenance of buildings and allied equipment.

UTILITY ENGINEER: Under supervision, the Utility Engineer performs semi-skilled work in maintaining and repairing building related fixtures. This class differs from Stationary Engineer in skill level, with the latter performing more difficult duties requiring journey level skills. Incumbents of this class perform semi-skilled work involving minor repair and maintenance of building systems, including plumbing, electrical fixtures, carpentry, door and window hardware, painting plus pool operation and cleaning responsibilities.

STATIONARY ENGINEER: Under general supervision, the Stationary Engineer performs journey level work in operating, maintaining, and repairing heating ventilation, air conditioning, plumbing, pool equipment, electrical, door hardware and lock, keying systems. Maintains and repairs other allied building equipment. This class differs from the Senior Stationary Engineer in that the latter supervises the former.

ASSISTANT CHIEF STATIONARY ENGINEER: Under general direction, the Assistant Chief Stationary Engineer supervises and coordinates building maintenance and plant operations. This class differs from Chief Stationary Engineer in that the latter is responsible for overall planning and supervision of building operations and maintenance and inspecting the work of Stationary and Utility Engineers and supervises the former. An incumbent of this class is

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responsible for scheduling, assigning and inspecting the work of Stationary and Utility Engineers and is responsible for the ordering of tools, spare parts and machinery.

CHIEF STATIONARY ENGINEER: Under general direction, the Chief Stationary Engineer performs supervisory and training work in planning the maintenance, operation, repair and servicing of the heating, ventilation, air conditioning, electrical, plumbing, key/lock and general maintenance for buildings.

ESSENTIAL AND MARGINAL JOB FUNCTIONS

Note: Anyone position may not include all the duties, nor do the examples cover all duties which may be performed.

UTILITY ENGINEER

Essential Job Functions:

- Assembles and repairs furniture.
- Performs minor carpentry.
- Removes and installs window glass.
- Prepares and paints surfaces.
- Applies finishing to various surfaces.
- Performs minor door hardware repairs.
- Performs minor emergency repairs/adjustments to mechanical equipment such as replacing broken pipes, cleaning plugged drains, and replacing faucets, washers and gaskets.
- Addresses minor electrical problems and reports findings to supervisor.
- Maintains chemical balance of water in swimming pool,
- Assists the Stationary Engineer in performing maintenance work as required
- Performs related duties as assigned.

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STATIONARY ENGINEER

Essential Job Functions:

- Performs all of the essential functions of the Utility Engineer as needed.
- Inspects, adjusts, repairs, installs, services, tests, and maintains lighting, power, and communication/control systems, transformers, motors, appliances, transformers, controls (up to 480 volts), including data sensing and transmission cabling that may involve pneumatics and instruments, and direct digital controls.
- Operates high and low pressure boilers, tests water and adds chemicals.
- Wires new and altered buildings.
- Assembles, tests, and installs lighting fixtures.
- Inspects, adjusts, repairs, tests, and services heating and air conditioning unit heaters, chillers and compressors. Activities may include adding refrigerant and oil, and replacing valves, fans, gaskets, filters and belts.
- Lubricates equipment.
- Uses various testing devices to locate trouble and makes necessary adjustments.
- Installs switches, gauges, thermostats, valves, tubing, and other parts as needed.
- Inspects, services, and repairs kitchen and refrigeration equipment.
- Checks elevator functions.
- Inspects and repairs fire and sprinkler alarm system(s), electric clock system, lighting control system, security access systems and emergency telephone system(s).
- Maintains locks and door hardware as required.
- Re-keys and records key system revisions.
- Operates and maintains diesel-powered equipment.
- Performs welding and brazing.
- Occasionally orders parts under the direction of the Assistant Chief Stationary Engineer.
- Updates equipment and maintenance logs.
- Maintains and installs fiber optic and other data cable systems.

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- May maintain and repair parking ticket machines, as needed.
- Reads and interprets blueprints.

ASSISTANT CHIEF STATIONARY ENGINEER

Essential Job Functions:

- Performs all of the essential functions of the Stationary and Utility Engineers.
- Under the direction of the Chief Stationary Engineer, plans, supervises, coordinates, schedules, and assigns the work to subordinate personnel.
- Monitors and maintains the Energy Management System (EMS) as needed.
- Monitors and supervises performance of subordinate personnel.
- Assists the Chief Stationary Engineer in training personnel.
- Maintains a log of all operating machinery, as needed.
- Assures all work is performed in a safe manner.
- Supervises the checking, operating and maintenance of building mechanical systems.
- Trains subordinates in the use and operation of District systems, including, but not limited to, EM (Energy Management), FA (Fire Alarm), card access, door lock key, work orders/PM (Periodic Maintenance), and emergency phones.
- Orders tools, spare parts and machinery necessary for efficient support of the department mission.
- Reads and interprets blueprints.
- Operates a variety of modern office equipment including personal computers utilizing various software applications (i.e., Microsoft Word, Excel, Computer Aided Drafting (CAD), etc.); the mainframe computer, Internet and e-mail.
- Works with outside contractors as required.
- Effectively work with campus senior management within framework of Physical Plant Department procedures.
- Assists Chief Stationary Engineer in scheduling and prioritizing work orders and PM (Periodic Maintenance) activities as directed.

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CHIEF STATIONARY ENGINEER

Essential Job Functions:

- Performs all of the essential functions of the Assistant Chief Stationary Engineer as needed.
- Monitors the quality of building operations and maintenance and evaluates the performance of staff through periodic inspections and on-site supervision.
- Assures proper operation of all District computer-based systems, including but not limited to, EM (Energy Management), FA (Fire Alarm), card access, door lock key, work orders/periodic maintenance, and emergency phones.
- Responsible for supervising and overseeing the scheduling of building operations, maintenance operations, and issuing work orders.
- Prioritizes work orders and sets-up periodic maintenance activities
- Establishes and adjusts personnel assignments.
- Maintains updated central log of all operating machinery.
- Maintains files related to repairs, maintenance, and lubrication of all machinery for District buildings.
- Performs periodic campus inspections of machinery and equipment.
- Orders tools, spare parts, and machinery necessary for efficient support of the department mission.
- Assists Director in design strategies and schematics.
- Reads and interprets blueprints.
- Maintains updated central log of Material Safety Data Sheets (MSDS).
- Operates a variety of modern office equipment including personal computers utilizing various software applications (i.e., Microsoft Word, Excel, Computer Aided Drafting (CAD), etc.; the mainframe computer, Internet and e-mail.
- Provides input on capital deferred maintenance, facility upgrades and hazardous waste removal projects.

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CHIEF STATIONARY ENGINEER

Essential Job Functions (Continued):

- Works, as directed, with Architects/Engineers and recommends changes and/or modifications of existing building equipment and systems and inspects the installation of new equipment during the project final inspection phase and warranty period to verify equipment operation.
- Is responsible for and providing training to staff subordinates and apprentices on how to safely operate and maintain buildings and related equipment.
- Conducts campus building maintenance inspections on a periodic basis.
- Assists Director as required.

DESIRABLE QUALIFICATIONS

Knowledge of:

UTILITY ENGINEER

- General knowledge of applicable laws regulating the safe operating and repair practices for building mechanical systems including building codes, construction standards, environmental agency requirements and life safety standards.
- Basic operations, tools, and terms used in building operations and maintenance.
- Possession of or ability to obtain current Certified Pool Operator's License.
- Possession of any or all of the following certificates:
 - Blood Borne Pathogen Training
 - Certificate Lead Paint Awareness Certificate

ALL LEVELS OF STATIONARY ENGINEER

- General knowledge of applicable laws regulating the safe operating and repair practices for building mechanical systems including building codes, construction standards, environmental agency requirements and life safety standards.
- Principles governing the safe operation and maintenance of building mechanical, life safety and locking systems.

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- Boiler systems and heating, lighting, ventilating, air conditioning, electrical refrigeration, and other mechanical equipment, and the methods, tools, materials and equipment used in the operation, maintenance and repair of such equipment.
- Applicable laws regulating the safe operating and repair practices for building mechanical systems including building codes, construction standards, environmental agency requirements and life safety standards.
- Possession of any or all of the following certificates:
 - Blood Borne Pathogen Training Certificate
 - Indoor Air Quality Certificate
 - Basic Hazardous Materials Awareness Certificate
 - Lead Paint Awareness Certificate

ASSISTANT CHIEF STATIONARY ENGINEER

- Principles of training and supervision.
- Providing assistance to maintenance staff on specific jobs to facilitate their training.

CHIEF STATIONARY ENGINEER

- Principles of training and supervision.
- Preparing data upon request on energy utilization and making recommendations regarding ways and means to conserve energy.
- Providing assistance to maintenance staff on specific jobs to facilitate their training.

Ability to:

ALL LEVELS

- Work efficiently under pressure.
- Understand and carry out oral and written instructions.
- Establish and maintain effective and cooperative working relationships with those contacted in the course of work.
- Respond to emergency callbacks on matters affecting maintenance and safety.
- Perform a wide variety of building maintenance tasks.
- Support and complement the educational mission of the District.

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Ability to:

ALL LEVELS-CONTINUED

- Follow recommended procedures and techniques to safely perform duties.
- Keep abreast of current technologies in areas of assignment.

ALL LEVELS OF STATIONARY ENGINEER

- Operate, inspect, repair and service a variety of heating, air conditioning and related equipment.
- Estimate the scope of each work assignment and determine the necessary tools and materials to complete the assignment.
- Ability to use one's own initiative to solve building mechanical systems problems.
- Work from sketched drawings, blueprints and oral instructions.
- Use tools skillfully and safely.
- Operate a variety of modern office equipment including personal computers utilizing various software applications (i.e., Microsoft Word, Excel, Computer Aided Drafting (CAD), etc.); the mainframe computer, Internet and e-mail
- Use computer to input/update work orders.

ASSISTANT CHIEF STATIONARY ENGINEER

- Confer with appropriate District and college representatives to ensure coordination and cooperation required in the performance of routine repairs and construction activities.
- Schedule and assign work including the determination of staff equipment and supplies needed.
- Assign, supervise and review work of subordinates.
- Maintain inventory and control of equipment and parts.

CHIEF STATIONARY ENGINEER

- Plan, organize, and supervise staff engaged in the operation, repair, and servicing of heating, air conditioning, electrical, mechanical, life safety and locking systems.

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- Inspect, layout, and review the work of maintenance personnel.
- Demonstrate principles of supervision, leadership and the enforcement of safer operational conditions.
- Estimate the cost of work assignments and determine the necessary tools and materials to complete assignments.
- Work effectively with prescribed budget and staffing allocations.
- Assist in the preparation of maintenance and repair budgets, maintain staff evaluations, and maintain industrial safety programs.
- Assist in the preparation and implementation of Capital Outlay, Deferred Maintenance and Hazardous Materials Removal Programs.
- Maintain inventory control of equipment and parts.
- Conduct performance evaluations of subordinate employees.

TRAINING

UTILITY ENGINEER

- One (1) year of experience in semi-skilled building maintenance or related work; or any combination of training and/or experience that could likely provide the desired knowledge and abilities.
- Understanding of, sensitivity to, and respect for the diverse academic, socioeconomic cultural, disability and ethnic backgrounds of community college students.

STATIONARY ENGINEER

- Four (4) years of verifiable journey-level experience in the repair and servicing of heating and air conditioning equipment; or completion of a State approved Stationary Engineer Apprenticeship Program; or any combination of qualifying training and/or experience that could likely provide the desired knowledge, skills and abilities to perform the duties of the position.
- Understanding of, sensitivity to, and respect for the diverse academic, socioeconomic, cultural, disability and ethnic backgrounds of community college students.

ASSISTANT CHIEF STATIONARY ENGINEER

- Five (5) years of verifiable journey level experience in the repair and servicing of heating

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and air conditioning equipment; or completion of a State approved Stationary Engineer Apprenticeship Program and one (1) year of verifiable journey level experience in the repair and servicing of heating and air conditioning equipment; or any combination of qualifying training and/or experience that could likely provide the desired knowledge, skills and abilities to perform the duties of the position.

- Understanding of, sensitivity to, and respect for the diverse academic, socioeconomic, cultural, disability and ethnic backgrounds of community college students.

CHIEF STATIONARY ENGINEER

- Six (6) years of verifiable journey level experience in the maintenance and operation of major mechanical systems and related equipment in a large commercial, industrial, or governmental building or institution, including at least one (1) year in a lead or supervisory capacity; or completion of a State approved Stationary Engineer Apprenticeship Program and two (2) years of verifiable journey level experience in the maintenance and operation of major mechanical systems and related equipment in a large commercial, industrial, or governmental building or institution, including at least one (1) year in a lead or supervisory capacity; or any combination of qualifying training and/or experience that could likely provide the desired knowledge, skills and abilities to perform the duties of the position.
- Understanding of, sensitivity to, and respect for the diverse academic, socioeconomic, cultural, disability and ethnic backgrounds of community college students.

LICENSE

ALL LEVELS

- Must have a current valid California Department of Motor Vehicle's Driver's License and be insurable under Peralta Community College District's current automobile insurance policy.
- Possession of the current valid Universal Technician Certificate as required by 40 CFR Part 82, Subpart F is required for the Stationary Engineer, Assistant Chief Stationary Engineer, and Chief Stationary Engineer.
- Note: Possession of the current valid Universal Technician Certificate is a condition of employment for the Stationary Engineer and Assistant Chief Stationary Engineer that must be met to obtain permanent status.
- Note: Possession of the current valid Universal Technician Certificate is a condition of initial employment for the Chief Stationary Engineer.

ENVIRONMENTAL DEMANDS

- Occasional work performed in dry and humid conditions.

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- Frequent use of motor vehicle on public highways.
- Frequent work performed in extreme cold, heat, wet conditions.
- Frequent work performed alone or with people in confined work spaces, at elevated heights, and with noise.
- Frequent use of motor vehicle on campus property.
- Frequent use of moving equipment and supplies.
- Frequent use of vibrating equipment.

MENTAL REQUIREMENTS

- Must be able to communicate in English (speaking, writing and reading) at a level to safely and effectively perform the essential functions of positions in the Engineer Series.

PHYSICAL REQUIREMENTS

- Frequent sitting, squatting, running, throwing, crawling, and climbing of stairs.
- Occasional lifting, carrying, pushing, and pulling up to 50 lbs.
- Occasional work at a rapid pace.
- Frequent walking, stooping, kneeling, and climbing of ladders.
- Frequent body twisting and reaching.
- Frequent use of balance.
- Constant standing.
- Frequent use of tactile, audio, and visual acuity.
- Frequent use of oral communication.
- Occasional use of written communication.
- Constant use of manual dexterity.

PROTECTIVE EQUIPMENT

- Frequent use of protective wear for the eyes, ears, head, arms, face, hands, and fingers.

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Rev: 10/00

Rev: 7/03/01

Rev: 11/19/01

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