

## **FIRE ENGINEER**

### **DEFINITION**

Under general supervision, drives, operates and maintains firefighting apparatus and equipment; suppresses fires; responds to medical emergencies, hazardous conditions situations, and other types of emergency and public service incidents; performs fire safety and code enforcement inspections; performs other duties as required.

### **SUPERVISION RECEIVED AND EXERCISED**

This classification receives direct or general supervision from assigned fire captain, administrative and/or management staff.

### **ESSENTIAL JOB FUNCTIONS** (Illustrative Only)

- Responds to fire, medical, and other emergencies.
- Renders basic life support medical skills.
- Takes appropriate action to protect life provide for incident stabilization, property conservation and protect the environment using a proper risk assessment.
- Connects and lays hose lines; enters burning area, including structures, grass and brush fires, with hose lines, foam and other extinguishing agents.
- Assists in operation of nozzles and directing water streams.
- Operates a variety of auxiliary firefighting equipment.
- Assists in educating the public in emergency preparedness measures.
- Participates in code enforcement/fire prevention measures.
- Performs residential and commercial building inspections.
- Maintains current knowledge of firefighting, rescue, and emergency medical service procedures.
- Participates in pre-fire planning.
- Maintains and services fire vehicles and equipment.
- Safely and efficiently operates fire apparatus.
- Selects routes to be taken to emergency incidents and maneuvers fire apparatus at the scene to achieve the most efficient operation.
- Cleans and maintains fire stations.
- Maintains good physical condition.
- Performs other tasks as required.

### **QUALIFICATIONS**

#### **Knowledge of:**

- Principles and practices of hydraulics as applied to fire suppression.
- Knowledge of principles, practices, methods and procedures of ladder truck operation and modern firefighting. Includes prevention, inspection, emergency response, rescue medical aid, maintenance and operation of firefighting equipment and apparatus.
- Basic organization and function of public agencies, including the role of an elected City Council.
- Federal, State, and City codes, regulations, policies, agreements, technical processes, and procedures related to City and departmental activities.

- City geography, including street names and numbers, and the location of fire hydrants.
- The operation and maintenance of heavy-duty aerial ladders and trucks.
- Applicable laws, rules and regulations, including those governing the operation of emergency vehicles.
- Standard office administrative practices and procedures, including the use of standard office equipment.
- Business letter writing, techniques for preparing informational materials and the standard format for reports, correspondence, and other written materials.
- English usage, spelling, grammar, and punctuation.
- Computer applications related to the work, including word processing, database, and spreadsheet applications.
- Records management principles and practices.
- Principles and practices of management and supervision.
- Occupational safety and health rules and regulations.
- Techniques for providing a high level of customer service to the public, representatives of other agencies, and City staff, in person and over the telephone.

**Skill in:**

- Operating and maintaining firefighting equipment and apparatus.
- Rendering emergency medical care at the Emergency Medical Technician 1 level.
- Maintaining sound judgment, remaining calm, and making decisions in emergency situations.
- Compiling information from varied sources and preparing accurate records and reports.
- Composing correspondence, informational materials and reports independently or from brief instructions.
- Making accurate arithmetic and statistical calculations.
- Using English effectively to communicate in person, over the telephone and in writing.
- Using initiative and independent judgment within established policy and procedural guidelines.
- Organizing own work, initiating processes, coordinating projects, setting priorities, meeting critical deadlines, and following up on assignments with a minimum of direction.
- Taking a proactive approach to customer service issues.
- Data entry into standard computer formats and producing correspondence and reports with speed and accuracy sufficient to perform assigned work.
- Establishing and maintaining effective working relationships with those contacted in the course of the work.

**Education and Experience:**

High school graduation or equivalent.

Minimum 18 months of broad and increasingly responsible experience as a paid, full-time firefighter.

Successful completion of the Paso Robles Fire and Emergency Services Engineer Task Book or one year paid, full-time prior experience in the rank of Fire Engineer or Acting Engineer.

**Licenses and Certifications:**

- State Firefighter I Certificate
- Valid California or National Registry Emergency Medical Technician I Certificate
- At a minimum, possess a valid California Class C Driver's License with Firefighter Endorsement

- State Driver/Operator 1A and 1B Certificates or State Fire Training course equivalency

Within 90 days of appointment must attain:

- San Luis Obispo County Emergency Medical Services Agency requirements for expanded Emergency Medical Technician skills.

### **Working Conditions:**

Incumbents in this classification work 24-hour shift assignments, including weekends and holidays, and may be required to work overtime with little or no notice. Due to the varied and unpredictable nature of the work, incumbents may also be required to work under the following conditions:

During a shift, Fire Engineers are subject to unpredictable interruptions of sleep periods during which they must function effectively, including directing the work of others in emergency situations. While performing many emergency-related duties, a Fire Engineer is required to lift, carry and/or drag objects such as a hose line or smoke ejector weighing up to 80 pounds, wear special protective clothing weighing up to 100 pounds, and wear a self-contained breathing apparatus weighing up to 80 pounds for short or long distances and often in combination. While performing emergency aid, a Fire Engineer may lift and carry victims weighing up to 160 pounds, which requires use of the stomach and lower back muscles to support the body. Incumbents are exposed to a variety of weather conditions and are required to tolerate very hot and very cold temperatures. When responding to emergencies, incumbents also are exposed to other elements, including smoke, heat, flames, hazardous chemicals, and blood and other bodily fluids. In these situations, they must be able to ensure personal compliance with safety standards; stand, sit or walk for extended periods of time, unable to rest at will; use explosive strength, as in sprinting or jumping; walk over rough, uneven or rocky surfaces; use arms above shoulder level; bend or stoop repeatedly or continually over time; and use common hand tools, such as hammers, saws, and screw drivers.

Incumbents are required to have the ability to hear a variety of warning devices, and alarms, gas leaks, and/or calls for help. Some rescue duties require the operation of mechanical rescue equipment and the monitoring of proper safety techniques in the use of such equipment. The tools used by a Fire Engineer require precise arm-hand positioning and movements, such as when operating a chain saw or using emergency medical rescue equipment. The operation of firefighting equipment often requires the coordinated movement of more than one limb simultaneously. Emergency situations may require incumbents to work in small, cramped, crawl spaces, areas where vision is limited, and/or at heights, including on roof tops and/or ladders. A Fire Engineer must be able to distinguish among colors, including colors of smoke and flame, color coded equipment, hazardous materials identification placards, and wires, in order to identify or respond to potentially dangerous situations.

In daily activities at a station assignment, incumbents operate office equipment requiring repetitive arm/hand movements, as when they enter data into a terminal, personal computer or keyboard device. In order to keep abreast of developments in their field, incumbents must be able to learn in a classroom setting, and through observation and oral instruction in an on-the-job training setting.

Incumbents may be assigned to the Hazardous Materials Response Team, and when so assigned, are required to wear a totally encapsulated suit for up to one hour, collect samples and secure leaks of unknown substances, work with heavy tools, and perform chemical tests to identify unknown substances.

**Physical Demands:**

Must possess mobility to work in an emergency incident setting and use power and hand tools and equipment; mobility to function at various field sites; physical stamina to perform work at an emergency incident, work on uneven terrain and lift and carry equipment and materials weighing over 100 pounds; vision to read printed materials and a computer screen; and hearing and speech to communicate in person, over the telephone and a two-way radio. Classification may be exposed to inclement weather conditions, fumes, odors, dust, and potentially toxic chemicals and conditions.

**Other Requirements:**

Attendance at off-hours meetings may be requested to facilitate continuity of department operations. Response to off-hour emergencies may be required under California Government Code Section 3100-3109 (Public Employee Disaster Service Worker Status).

This class description does not constitute an employment agreement between the employer and employee and is subject to change by the employer as the needs of the employer and requirements of the class change.