

**FIRE ENGINEER**

*Class specifications are intended to present a descriptive list of the range of duties performed by employees in the class. Specifications are **not** intended to reflect all duties performed within the job.*

**SUMMARY DESCRIPTION**

Under general supervision, performs various duties to protect life, property, and the environment including to respond to emergency medical, fire, rescue, and hazardous materials alarms and public service calls; drives, operates, and maintains firefighting, emergency medical, and associated vehicles, apparatus, and equipment; performs the full range of fire suppression duties; provides basic life support emergency medical assistance; conducts fire prevention inspection and public education programs including fire safety inspections of buildings; and conducts and participates in firefighting, fire prevention, public education, disaster preparedness, and related training activities.

**REPRESENTATIVE DUTIES**

*The following duties are typical for this classification. Incumbents may not perform all of the listed duties and/or may be required to perform additional or different duties from those set forth below to address business needs and changing business practices.*

1. Respond to fire, emergency medical, rescue, and hazardous material alarms and emergency calls to protect life, property, and environment; perform tasks to suppress or control fires, limit damage, and reduce injury and death caused by fires, accidents, or other calamities; respond to non-emergency calls for service as necessary.
2. Assist in all phases of fire suppression; place fire hoses; set ladders; ventilate and enter burning structures to extinguish fires and rescue victims; operate pneumatic and auxiliary equipment such as generators and pumps.
3. Drive, operate, and maintain all firefighting and suppression apparatus and specialized equipment and vehicles under emergency and non-emergency conditions; regulate water pressure; calculate and monitor hydraulic conditions; direct engine hook-up; operate aerial ladder trucks; maneuver and extend retracting ladder.
4. Perform tasks that support the activities of emergency medical services (EMS) workers in providing emergency medical care; perform emergency medical tasks in patient care and administers basic life support at the EMT level to victims of injury or illness.
5. Inspect vehicles, equipment, and apparatus for proper operating conditions; assist with annual equipment testing; perform routine and minor repairs and maintenance; identify needs for major repairs; maintain records of maintenance work performed.
6. Assist with the cleaning and reloading of all equipment, tools, and apparatus upon completion of fire or emergency response activities; repair and maintain air packs.
7. Prepare, submit, and maintain reports on incidents, apparatus maintenance, and inventory.
8. Assist in the investigation of fire scenes to determine causes; preserve evidence and provides observations to investigators.
9. Maintain skill levels, new equipment and procedure familiarization, and certifications that are relevant and/or required for assigned responsibilities; participate in drills and training exercises, classes, and activities including but not limited to those related to fire suppression, fire prevention, emergency medical service, hazardous material response, technical rescue, extrication, physical fitness, and other related areas.

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10. Participate in public relations, fire/safety education activities, and fire prevention activities including station tours, fire safety/fire suppression education away from the station, school education programs, group activities, fire drills, courtesy walk through visits, and phone inquiries.
11. Present classes and other training to various groups including other employees, volunteers, and members of the general public in subjects related to fire service.
12. Participate in fire and life safety inspections; perform routine inspections of commercial, industrial, residential, and other buildings; perform fire sprinkler, alarm, and hydrant flow tests; identify fire and life safety hazards; provide suggestions for correction; schedule re-inspections for verification of correction; submit reports as needed.
13. Perform general maintenance work in the upkeep of fire station facilities and equipment; clean living quarters, kitchen, bathrooms, and other areas of the fire station.
14. Perform special projects as assigned; assist in developing plans for special assignments such as emergency preparedness, hazardous communications, training programs, firefighting, hazardous materials, and emergency aid activities.
15. Perform related duties as required.

**QUALIFICATIONS**

*The following generally describes the knowledge and ability required to enter the job and/or be learned within a short period of time in order to successfully perform the assigned duties.*

**Knowledge of:**

- Fire science theory, principles, and practices and their application to a wide variety of emergency service operations including fire suppression, fire prevention, and fire investigation.
- Principles, practices, and procedures used in modern firefighting and in the protection of lives and property.
- Operating characteristics, uses, and maintenance requirements of pump engines, fire apparatus, and other firefighting and emergency medical apparatus and equipment.
- Mechanical and hydraulic principles of fire apparatus.
- Methods and techniques of basic life support and rescue.
- Principles and practices of disaster preparedness, response, and recovery.
- Hazardous materials and chemical spill response techniques.
- Mechanical, chemical, and related characteristics of a wide variety of flammable and explosive materials and objects.
- Principles of combustion and cause of fire.
- Principles of building construction and fire protection systems.
- Geography and street layout of the City and surrounding area.
- City water system, fire hydrant locations, fire sprinkler/standpipe systems, and preventive maintenance of said systems.
- Current safety practices as they relate to equipment and procedures involved in the fire service.
- Pertinent federal, state, and local laws, codes, and regulations.
- Methods and techniques of public relations.
- Mathematical concepts and principles.
- Basic record keeping principles and practices.
- Basic office procedures and methods; a basic working knowledge of computers is desirable.
- Radio procedures.

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**Ability to:**

- Perform a variety of fire suppression, fire prevention, emergency medical response, and technical rescue activities.
- Take command of the fire station, fire scene or other emergency situations in the absence of superior officers.
- Render emergency medical care as necessary.
- Drive, operate, and maintain fire suppression, emergency medical, and associated vehicles, apparatus, and equipment safely in varying traffic and weather conditions observing legal and defensive driving practices.
- Inspect, troubleshoot, and repair a variety of fire suppression, emergency medical, and associated vehicles, apparatus, and equipment.
- Perform field calculations of hydraulics for the proper and effective operation of equipment at emergency scenes.
- Properly place vehicles and equipment at emergency scenes for most effective operation.
- Demonstrate mechanical aptitude as required in the operation of firefighting equipment.
- Deal effectively with upset or emotional persons or patients.
- Retain presence of mind and act quickly and calmly in emergency situations.
- Analyze emergency situations and develop appropriate courses of action.
- Interpret and apply applicable federal, state, and local policies, laws, and regulations.
- Perform fire inspections and determine cause and origin of fires.
- Prepare and present public information and educational programs.
- Respond to requests and inquiries from the general public.
- Complete and prepare a variety of forms and reports.
- Work varied shifts, on weekends, or during holidays.
- Demonstrate physical endurance, agility, strength, and stamina in the performance of hazardous tasks under emergency conditions.
- Observe and follow safe firefighting, EMS, and other work practices.
- Understand and follow oral and written directions promptly and accurately.
- Operate modern office equipment and computers including applicable software applications.
- Deal politely and effectively with the public.
- Communicate clearly and concisely, both orally and in writing.
- Establish and maintain effective working relationships with those contacted in the course of work.

**Education and Experience Guidelines** - *Any combination of education and experience that would likely provide the required knowledge and abilities is qualifying. A typical way to obtain the knowledge and abilities would be:*

**Education/Training:**

Equivalent to completion of the twelfth grade supplemented by specialized training in fire science, fire apparatus operation, hydraulics, emergency medical techniques, mechanics, or a related field.

**Experience:**

Three years of firefighter experience.

**License or Certificate (all certification must be issued in the State of California):**

- Possession of a valid California Class C Driver License with F endorsement or a valid California Class A or B Commercial Driver License with appropriate vehicle endorsements.
- Possession of Driver Operator 1A & 1B certification.
- Possession of Firefighter I certification or completion of an accredited Fire Academy.
- Possession of appropriate, valid EMT or EMT-P and CPR/AED certifications.

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Possession of Hazardous Materials First Responder Operations certification.

Possession of all currently required NMIS certifications for this position: IS 100, IS 200, IS 700

**PHYSICAL DEMANDS AND WORKING ENVIRONMENT**

*The conditions herein are representative of those that must be met by an employee to successfully perform the essential functions of this job. Reasonable accommodations may be made to enable individuals with disabilities to perform the essential job functions.*

**Environment:** Reactive emergency, natural or man-made disaster, and routine fire prevention environments with travel from site to site; the employee regularly works near moving mechanical parts and in areas of limited and restricted entry and exit; regularly exposed to outside weather conditions and wet and/or humid conditions; occasionally works in high, precarious places; exposed to fumes or airborne particles, toxic or caustic chemicals, extreme cold, extreme heat, and vibration; risk of electrical shock, radiation, drowning, and asphyxiation; the noise level in the work environment is usually moderate; however, the noise level is occasionally very loud when responding to emergency calls and when working at a fire or other emergency incident; must work nights, weekends, holidays, and on various shift configuration that will include 24 hour shifts of duty; subject to call back at any time.

**Physical:** Primary functions require sufficient physical ability to work in a emergency response setting; walk, stand, sit, or run for prolonged periods of time; occasionally stoop, bend, kneel, crouch, reach, and twist; occasionally climb and balance; regularly push, pull, lift, and/or carry light to moderate weights; frequently lift and/or move moderate to heavy weights; occasionally lift and/or more heavy weights; perform arduous and prolonged tasks under adverse and dynamic conditions; operate fire suppression and medical response equipment, apparatus, and tools; requires a sense of touch, finger dexterity, and gripping with hands and fingers; ability to speak and hear to exchange information; ability to operate a vehicle to travel to various locations.

**Vision:** See within the normal range of vision with or without correction; specific vision abilities required by this job include close vision, distance vision, color vision, peripheral vision, depth perception, and ability to adjust focus.

**Hearing:** Hear in the normal audio range with or without correction.

Bargaining Group: Ceres Professional Firefighters Local 3636  
FLSA Status: Non-Exempt

September 2010 (Rev. March 2019)

\*Management has the right to add or change these duties of the position at any time.