

CITY OF ARCADIA

FIRE ENGINEER

DEFINITION

Under general supervision, to respond to alarm and other emergency calls to protect life and property; to drive, operate, and maintain fire equipment and apparatus; and to participate in fire prevention programs, inspections, station maintenance, and training activities.

SUPERVISION EXERCISED

Exercises no supervision.

EXAMPLES OF IMPORTANT AND ESSENTIAL DUTIES

Respond to alarms and assist in the suppression of structural, residential, commercial, industrial, chemical, petroleum, and vehicle fires; perform fire control activities and utilize strategies in the areas of victim rescue, entry, exposure tactics, ventilation, fire containment and extinguishment, and salvage work; lay and connect hoses and various fire apparatus, equipment, tools, and devices; hold nozzles and direct water streams; raise and climb ladders; ventilate burning structures; make forcible entries and evacuate occupants.

Drive fire-pumping apparatus to alarms; operate a pumping engine engaged in boosting water pressure from street mains or draft through hose lines to nozzles; use hydraulic theory and mathematics to calculate correct pump pressure to ensure required water pressure at the nozzles.

Oversee the use of and operate a variety of apparatus, equipment, tools, devices, and vehicles including lifting, hoisting, spreading, and pulling equipment, foam and additive proportions, fuel and oil pumps, building heating and cooling systems, cutting, boring and sawing tools, lighting, lifting and air moving equipment, appliances, elevators, fire protection and escape systems, radio equipment and meters, all types of portable fire extinguishers, pike poles, hand lines, salvage covers, forcible entry tools, emergency medical equipment and other rescue equipment.

Place department vehicles in appropriate position at the scene of a fire or in other emergencies calling for ladders or special equipment; perform rescue and lifesaving work through the use of ladders and resuscitation equipment; estimate heights and adjust equipment to ensure proper and safe operation.

Conduct fire prevention inspections of dwellings, public assemblies, and commercial, industrial, and governmental buildings, and other public establishments to ensure compliance with codes and regulations pertaining to fire safety; identify common, special, structural, and panic hazards and recommend pre-fire planning; issue orders to comply with codes; inspect and test fire protection systems; examine the storage, handling, and use of flammable and combustible liquids and other hazardous materials; make recommendations regarding correction of hazards.

Respond to miscellaneous emergencies including victim rescues, hazardous materials incidents, flooding, and natural disasters; respond to non-emergency situations.

Conduct daily inspections of condition and readiness of equipment and document findings on appropriate department forms; clean, wash, and service equipment; inspect, test, and maintain equipment and pump motors including nozzles, appliances, fittings, hydrants, fire extinguishers, hand and power tools, ropes, emergency lighting equipment, generators, rescue and first aid and related equipment; flow-test hydrants.

Assist in the investigation of fires; collect and preserve evidence; secure fire scene and control traffic.

Respond to complaints and requests for information from the public; engage in public information activities; conduct station tours.

Assist in the maintenance of the fire station and grounds; maintain inventories of apparatus, equipment, and supplies; recommend purchase of fire fighting equipment, physical fitness apparatus, and station appliances.

Respond to and assist the public in a wide variety of emergency calls involving illness and urgent situations and emergency medical incidents; analyze patient needs and administer first aid until relieved by proper medical personnel; apply techniques for the control of bleeding; lift, carry, and transport victims; utilize immobilization techniques to stabilize patient.

Perform cleaning, salvage, and overhaul work following fire; prepare apparatus and equipment for further alarms.

Participate in fire drills; attend continuing and advanced training sessions which include fire fighting techniques, emergency medical care, and the proper use of all equipment and related tools.

Assist in training employees in routines of fire suppression, equipment operation, maintenance, and other assigned training.

Perform a variety of administrative duties including maintaining proper records and documentation on all job related activities, functions, apparatus, and equipment, preparing reports, forms, recommendations, and other required administrative procedures.

Assume charge of an engine company in the absence of the Fire Captain.

Perform the full range of fire fighting duties.

OTHER JOB RELATED DUTIES

Perform related duties and responsibilities as assigned.

JOB RELATED AND ESSENTIAL QUALIFICATIONS

Knowledge of:

Principles, practices, and procedures used in modern fire fighting.

Purposes, uses, and operating characteristics of a variety of apparatus, equipment, tools, devices, and vehicles used in fire fighting, rescue, and medical assistance operations.

Fire prevention, suppression, and victim rescue tactics and strategies.

Fire hazards and related prevention and abatement methods.

Principles of mechanics, hydraulics, and mathematics as related to fire fighting and engineering duties.

Hazardous materials, chemical chain reactions, and fire behavior.

Procedures, methods, and techniques of emergency medical services including basic first aid and CPR.

Local geography including the location of water mains, hydrants, major fire hazards of the City, and City streets.

Occupational hazards and standard safety practices necessary in the area of fire prevention and suppression and victim rescue.

Modern office practices, methods, and computer equipment.

Principles and procedures of record keeping.

Pertinent Federal, State, and local laws, codes, and regulations.

Safe driving principles and practices.

Skill to:

Operate a variety of fire fighting and emergency response equipment safely and effectively including communications equipment.

Operate basic modern office equipment.

Operate a motor vehicle safely.

Ability to:

Respond to fires and alarms and effectively perform fire suppression and rescue work.

Perform field calculations of hydraulics for the proper and effective operations of equipment at emergency scenes and to provide effective stream flows from fire pumps.

Conduct fire inspections and perform code enforcement work.

Participate in preliminary fact-finding inspections and investigations including evidence gathering and preservation.

Observe and record findings during inspections.

Read and interpret blueprints and site maps.

Read, understand, and apply technical fire fighting materials and concepts.

Demonstrate physical endurance, agility, strength, and stamina in the performance of hazardous tasks under emergency conditions; think and act quickly in emergencies.

Perform at required EMS, technical rope rescue, and hazardous material operation levels.

Understand and follow oral and written directions promptly and accurately.

Exercise good judgment, flexibility, creativity, and sensitivity in response to changing situations and needs.

Communicate clearly and concisely, both orally and in writing.

Establish, maintain, and foster positive and harmonious working relationships with those contacted in the course of work.

Minimum Qualifications:

Experience:

Three years of paid firefighting experience with a Fire Department or two years of firefighting experience with the Arcadia Fire Department and appropriate training, license and/or certificates as listed in the class specification.

Training:

Equivalent to the completion of the twelfth grade supplemented by appropriate education.

License or Certificate:

Possession of Hazardous Materials Awareness and Operations certificates.

AFD Truck Tiller and Tractor certification.

Completion of California State Fire Marshal (CSFM) Driver Operator 1A and 1B or equivalent.

Possession of CPR certification issued by the American Red Cross or the American Heart Association.

National Incident Management System (NIMS) IS 700.

Information Command System (ICS) 100 and 200.

Possession of an appropriate, valid driver's license.

Special Requirements:

Essential duties require the following physical skills and work environment:

Ability to sit, stand, walk, run, kneel, crouch, stoop, squat, crawl, twist, climb, and lift 125 lbs.; exposure to cold, fire, heat, smoke, noise, outdoors, vibration, confining work space, chemicals, communicable diseases, biohazard materials, explosive materials, mechanical hazards, and electrical hazards; ability to travel to different sites and locations; availability for shift work, on-call, and stand-by.

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