

FIRE ENGINEER

DEFINITION

To drive and operate apparatus and equipment in support of firefighting, rescue, or other emergency and non-emergency incidents; to perform fire suppression, rescue, and basic life support activities; to participate in fire prevention duties including training and education; and to perform mechanical maintenance on apparatus and equipment; and to assist in maintenance and care of stations and grounds.

SUPERVISION RECEIVED AND EXERCISED

Receives general supervision from an assigned Fire Captain.

EXAMPLES OF ESSENTIAL DUTIES – Duties may include, but are not limited to, the following:

Confirm location of alarm call, determine and drive safe routes utilizing the appropriate response code for emergency conditions and non-emergency incidents; deploy staff, ensuring gear and clothing available on trucks and engines are appropriate to nature of the alarm.

Operate pumping equipment at site and continually assess and regulate flow of various suppression appliances and equipment; determine appropriate pressures and volumes while adjusting to changing conditions.

Select and pull appropriate sized hoses; locate and direct firefighting staff to hydrants and other fire suppression materials; operate specialized equipment including aerial and ladder apparatus at incident scene.

Secure and stabilize incident scene as necessary.

Inspect, maintain and perform minor repair work on a variety of vehicles, equipment, tools, and fire apparatus; identify the need for major repairs and refer to appropriate vendor; maintain records of all maintenance work performed and needed.

Maintain and replenish routine and emergency supplies and materials on all fire apparatus and vehicles.

Perform the duties of a Firefighter EMT when pump is not being used at an incident or as otherwise appropriate.

Participate in drills and other training activities; participate in station cleaning and maintenance work.

Maintain appropriate records, logs, and files; prepare required reports; assist in maintaining clean and orderly conditions in and around fire station.

Build and maintain positive working relationships with co-workers, other City employees and the public using principles of good customer service.

Perform related duties as assigned.

MINIMUM QUALIFICATIONS

Knowledge of:

Effective operation of apparatus and motors, including mechanical systems such as chassis, brakes, and pumps.

Principles of mechanics, hydraulics, and mathematics as applied to operation and maintenance of apparatus.

Techniques for safely driving apparatus and equipment in emergency situations.

Suppression materials appropriate to a variety of incident requirements.

City geography, streets and water distribution system.

Principles, practices, procedures, and use of firefighting and emergency apparatus, equipment, tools, devices, and facilities.

Current medical principles, practices and procedures related to basic emergency patient treatment.

Ability to:

Drive and operate a full range of apparatus and equipment used in firefighting, rescue, or other emergency and non-emergency incidents.

On a continuous basis, know and understand all aspects of the job and observe safety rules; remember how to locate and operate equipment; intermittently analyze work papers, reports and special projects; remember various rules and procedures.

On a continuous basis, sit at a desk or in a vehicle for long periods of time; walk and stand during emergency situations, including on uneven and slippery surfaces; intermittently twist to reach equipment surrounding desk; perform grasping and fine

manipulation; use telephone, and write or use a keyboard to communicate through written means; wear firefighter clothing and carry equipment; lift or carry weight of 110 pounds; climb ladders and work from elevated positions.

Perform rapid field calculations related to hydraulics needed for the appropriate and effective operation of equipment at emergency scenes.

Demonstrate required mechanical skills in the operation of firefighting apparatus; demonstrate physical aptitude needed in the performance of firefighting and rescue activities.

Provide basic emergency medical treatment in accordance with established protocols. Work assigned shift schedules, be available for call back.

Work unusual and prolonged work schedules during emergencies, seasonally-caused circumstances in varying weather and temperature conditions.

Communicate clearly and concisely, both orally and in writing.

Establish and maintain effective working relationships with those contacted in the course of work.

Experience and Training

Experience:

Two years of full time paid experience as a Firefighter, Firefighter Paramedic, Driver/Operator or Fire Engineer.

AND

Training:

Equivalent to the completion of the twelfth (12th) grade, GED, or higher level degree, preferably with coursework in fire science and/or emergency medical technician - paramedic services.

License and Certificate

Possession of accredited Driver Operator IA and IB certification as issued by the California State Fire Marshal by date of appointment.

Possession of a valid California Class A, B or C driver's license with a Firefighter endorsement by date of appointment.

Possession of a California Firefighter I Certificate as issued by the California State Fire Marshal.

Possession of an Emergency Medical Technician I or Paramedic license and ability to obtain accreditation through local emergency medical services agency.

EMPLOYEES MUST BE TOBACCO FREE AND CANNOT USE TOBACCO PRODUCTS ON OR OFF DUTY

02-19-20

02-13-19

03-28-16

12-19-13

10-02-12

08-25-12

08-01-06

01-01-06

01-14-04

04-02-98

08-09-94

Fire Engineer

10-01-88

Fire Engineer - EMT II

04-12-84

07-01-79

01-10-78

10-30-73

04-01-69

65

Fire Engineer

64

Fireman Engineer