FIRE ENGINEER JOB DESCRIPTION

SALARY: Salary Range – 72,000-85,000

REPORTS TO: On Duty Fire Captain

FLSA STATUS: Non-Exempt (Sworn Safety)

HOURS: The position generally works a 56-hour work week. This position may be required to work a 40 hour work week in a staff position and may be forced to work overtime as the need arises.

GENERAL RESPONSIBILITIES:

Under the direction of the Fire Captain, the Fire Engineer operates and maintains fire apparatus, equipment, and systems while performing firefighting, emergency medical services, and other emergency response duties. This position is responsible for the safe operation of fire engines, ladder trucks, and specialized apparatus during emergency and non-emergency operations. The Fire Engineer ensures proper apparatus positioning, water supply operations, and equipment deployment while participating in all aspects of emergency response activities. This position requires advanced technical knowledge of fire apparatus systems and the ability to perform complex firefighting and rescue operations.

DISTINGUISHING CHARACTERISTICS:

This is a technical and operational position within the professional fire department requiring specialized knowledge of fire apparatus operation and maintenance. The Fire Engineer has primary responsibility for apparatus operation, pump operations, and equipment systems while also performing as a firefighter during emergency operations. The incumbent must demonstrate proficiency in complex apparatus operations, water supply management, and equipment maintenance while working effectively as part of a fire company team.

ESSENTIAL FUNCTION STATEMENTS--*Essential responsibilities and duties may include, but are not limited to, the following:*

ESSENTIAL FUNCTIONS:

Apparatus Operation:

- Operate fire engines, ladder trucks, and specialized emergency apparatus safely and efficiently
- Drive fire apparatus to emergency scenes using emergency response protocols
- Position apparatus strategically at emergency scenes for optimal operational effectiveness
- Operate pump systems, hydraulic systems, and aerial ladder equipment
- Maintain proper water pressure and flow rates during fire suppression operations
- Coordinate with other apparatus operators for effective emergency scene management

Pump and Water Supply Operations:

- Operate fire pumps and establish water supply for fire suppression operations
- Calculate water flow requirements and manage hydraulic systems
- Establish and maintain water supply from hydrants, static sources, and relay operations
- Monitor pump pressures, flow rates, and system performance during operations
- Coordinate with other engineers to establish effective water supply systems
- Troubleshoot pump and hydraulic system malfunctions during operations

Emergency Response:

- Respond to fire suppression, emergency medical services, and rescue operations
- Perform firefighting duties including hose deployment, ventilation, and search and rescue
- Provide emergency medical care and patient transport as needed
- Participate in hazardous materials response and technical rescue operations
- Follow incident command protocols and work effectively within the command structure
- Assist with scene safety and traffic control during emergency operations

Equipment Maintenance:

- Conduct daily, weekly, and monthly apparatus inspections and testing
- Perform routine maintenance on fire apparatus, pumps, and equipment
- Identify equipment malfunctions and coordinate repair activities
- Maintain detailed maintenance records and inspection reports
- Ensure apparatus and equipment are clean, organized, and mission-ready
- Coordinate with mechanics and vendors for major repairs and service

Training and Development:

- Participate in ongoing training programs for apparatus operation and emergency response
- Maintain required certifications and continuing education
- Assist in training other personnel on apparatus operation and maintenance
- Practice emergency response scenarios and equipment operations
- Stay current with new equipment technologies and operational procedures
- Participate in department training drills and exercises

Station Operations:

- Maintain fire station facilities and grounds
- Assist with daily station operations and housekeeping duties
- Participate in equipment inventory and supply management
- Support company administrative functions as assigned
- Coordinate with other shifts for apparatus and equipment continuity
- Maintain professional appearance and conduct

Fire Prevention:

- Conduct fire prevention inspections as assigned
- Test fire protection systems and equipment during inspections
- Provide technical expertise on fire protection systems and equipment
- Assist with public education and community outreach programs
- Support fire investigation activities when required
- Enforce fire prevention codes and regulations

Communication and Documentation:

- Maintain radio communication during emergency operations
- Prepare apparatus maintenance reports and inspection records
- Document equipment problems and maintenance needs
- Submit reports to supervisors as required
- Maintain apparatus logbooks and operational records
- Coordinate with dispatch and other agencies during emergency operations

Additional Responsibilities:

- Serve as acting company officer when assigned
- Participate in special teams and specialized response activities
- Support department public relations and community events
- Assist with equipment procurement and specification development
- Perform related duties as assigned by supervisors

TYPICAL QUALIFICATIONS

KNOWLEDGE OF:

- Fire apparatus operation, maintenance, and hydraulic systems
- Pump operation principles and water supply management
- Fire suppression tactics, strategies, and equipment
- Emergency medical services and patient care procedures
- Hazardous materials response and safety procedures
- Mechanical systems, engines, and automotive maintenance
- Fire prevention codes and inspection procedures
- Radio communication procedures and protocols
- Traffic laws and emergency vehicle operation
- Safety procedures and occupational hazards
- Computer operation for record keeping and reporting

ABILITY TO:

- Operate complex fire apparatus safely and efficiently under emergency conditions
- Calculate water flow requirements and manage hydraulic systems
- Perform firefighting and emergency medical response duties
- Conduct thorough apparatus inspections and maintenance
- Communicate effectively during emergency operations
- Work effectively as part of a team under stressful conditions
- Follow complex instructions and emergency protocols
- Maintain accurate records and prepare reports
- Learn new equipment technologies and procedures
- Exercise sound judgment during emergency operations
- Provide courteous public service

EDUCATION AND EXPERIENCE:

Any combination equivalent to: High school diploma or equivalent and at least 1 year experience as a driver operator or four years of experience as a professional firefighter and meeting all listed requirements and licenses below.

LICENSES AND OTHER REQUIREMENTS:

- Valid California Class "C" driver's license with acceptable driving record AND California DMV Firefighter Endorsement
- California Fire Service Training and Education System (CFSTES) Fire Apparatus Driver/ Operator pump apparatus.
- Current CPR and First Aid certification required
- Emergency Medical Technician (EMT) certification required
- Hazardous Materials Operations level certification required
- Incident Command System 100, 200, 700, and 800 required.
- Additional certifications as required by the Fire Chief

DESIRABLE LICENSES AND CERTIFICATION:

- CSFM or IFSAC/ProBoard Fire Officer II
- CSFM Driver Operator MWS, Aerial, and Wildland

WORKING CONDITIONS:

PHYSICAL DEMANDS:

- Frequent climbing, crawling, lifting, and carrying of heavy equipment (50+ pounds)
- Manual dexterity to operate complex controls, gauges, and apparatus systems
- Physical stamina for extended emergency operations and strenuous activities
- Ability to work at heights and in confined spaces during emergency operations
- Vision and hearing sufficient to operate apparatus and assess emergency conditions
- Ability to wear heavy protective equipment for extended periods
- Coordination and reflexes necessary for safe apparatus operation
- Physical agility for rapid deployment and emergency response

WORK ENVIRONMENT:

- Indoor and outdoor work environments with varying weather conditions
- Shift work including days, nights, weekends, and holidays (typically 24-hour shifts)
- High-noise environments from apparatus engines, pumps, and emergency equipment
- Exposure to smoke, heat, chemicals, hazardous materials, and emergency conditions
- Driving large apparatus in emergency and non-emergency traffic conditions
- Working around heavy machinery, power tools, and electrical systems
- Potential exposure to communicable diseases and bloodborne pathogens
- High-stress emergency situations requiring quick response and decision-making
- Variable work locations including fire stations, emergency scenes, and community locations

EMPLOYEE BENEFITS:

- **100% City-Paid Health, Dental & Vision (Employee Only)**
  PPO through Anthem Blue Cross; City pays **75% for dependents**
- **Retirement**
  CalPERS: **2.7% @ 57 (PEPRA)** or **3% @ 55 (Classic members)**
- **Paid Time Off**
  14 paid holidays + 3 personal days, plus vacation & sick leave accrual
- **Life Insurance Included**
  $15,000 City-paid policy

SELECTION PROCESS:

Applicants must submit an official City of Avenal Application. Applicants who clearly appear to be most qualified in terms of experience and training will be invited to a job-related panel interview and/or Chief's interview.

A medical evaluation, an intensive background investigation, and drug screening will be conducted prior to employment.

The City of Avenal will require each applicant to provide proof of U.S. citizenship, alien registration or authorization to work in the United States.

Must be 18 years of age at the time of application.

All positions will include a one-year probationary term.

ALL FULL-TIME EMPLOYEES ARE REQUIRED TO HAVE A VALID CONTACT TELEPHONE.
EMPLOYEES SHALL WORK HARMONIOUSLY WITH ALL CITY EMPLOYEES.
EQUAL OPPORTUNITY/AFFIRMATIVE ACTION EMPLOYER.