

CITY OF HAYWARD

SENIOR FIRE PROTECTION ENGINEER

DEFINITION

To plan, organize and coordinate a variety of professional fire protection engineering activities including the examination, review, and comment on plans and specifications to ensure compliance with the California Fire Code, National Fire Protection Association Standards, the Hayward Municipal Code and any other applicable codes, standards, laws and regulations; to assist the Office of the Fire Marshal in resolving life safety issues involving fire protection systems, access, egress, general storage, special occupancies and hazards, and the storage and use of hazardous materials; to assist with coordinating departmental programs in the areas of fire prevention, fire inspection, plan review and general training of inspectors; and to provide technical and functional supervision to staff.

DISTINGUISHING CHARACTERISTICS

The Senior Fire Protection Engineer is the advanced journey level in the Fire Protection Engineer class series. Positions at this level are distinguished from other classes within the series by the level of responsibility assumed, complexity of duties assigned, independence of action taken, by the amount of time spent performing the duties, and by the nature of the public contact made. Employees perform the most difficult and responsible types of duties assigned to classes within this series and provide technical and functional supervision to professional and technical personnel.

SUPERVISION RECEIVED AND EXERCISED

Receives general direction from the Fire Marshal.

Exercises technical and functional supervision over assigned personnel.

ESSENTIAL DUTIES:

Duties may include, but are not limited to the following:

Plans, prioritizes, and reviews the work of personnel assigned to provide a variety of professional fire protection activities.

Develops schedules and methods to accomplish assignments ensuring work is completed in a timely and efficient manner.

Participates in the selection of staff; provides or coordinates staff training; works with employees to correct deficiencies; implements discipline procedures.

Participates in evaluating the activities of staff, recommending improvements and modifications.

ESSENTIAL DUTIES (continued):

Examines, reviews and comments on the more complex plans and specifications, within established timeframes, involving the construction or alteration of industrial, commercial, residential, and miscellaneous structures and operations to determine compliance with applicable codes, laws and regulations.

Evaluates engineering, sprinkler, architectural, mechanical, electrical, and plumbing plans, designs, and specifications, construction materials to ensure compliance with applicable codes, ordinances, and standards.

Applies complex fire protection engineering principles in the identification and mitigation of fire, life and property safety hazards, risk evaluation and management.

Evaluates and communicates performance-based analysis to determine whether proposed fire protection is acceptable with regard to the intent of codes, standards, and ordinances.

Verifies the implementation of performance-based designs via construction documents and field observations; evaluates conditions necessary to ensure that performance-based designs will function effectively over the life of the building; correctly document methods of mathematical modeling; evaluates fire design scenarios; and draw logical conclusions.

Serves as technical resource and support to Fire Department staff, other city departments, architects, engineering, developers and building owners as it relates to fire related building code interpretation.

Conducts special studies regarding fire hazards, fire protection systems and other related fire protection services and makes recommendations for improving the City's fire protection services.

Reviews and evaluates plans for industrial and commercial buildings, structures, tanks, piping, equipment and operations using or storing hazardous materials to determine if the storage, use and disposal are in accordance with State and federal laws and regulations, City ordinances and other applicable codes and standards.

Conducts in-house training for all Fire Department personnel on the fire and building codes.

Conducts field inspections, when necessary.

Issues required permits after plan approval.

Performs research and technical evaluation reports on fire code issues.

Interprets fire code provisions based on Fire Department Operational Procedures.

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ESSENTIAL DUTIES (continued):

Reviews and makes recommendations regarding departmental policy related to alternate methods of protection and equivalent levels of protection.

Develops written guidelines, forms and informational materials to assist staff and customers with fire permits and the permitting process.

Evaluates the fire permit process against available computer technology for modernization and improved efficiencies.

Develops or modifies programs and policies in support of overall City and departmental goals and service delivery.

Responds to general questions and complaints from the public regarding Fire Department programs and policies, fire permits and the fire code.

Conducts in-house training for all Fire Department personnel on the fire and building codes.

Represents the Fire Department in interdepartmental and interagency functions and programs.

Assists in the development and adoption of the Hayward Fire Code.

Prepares written and oral reports; maintains accurate and complete records.

Represents function on committees, outside organizations, and at staff subcommittees as necessary; coordinates fire protection activities with other divisions and outside agencies.

Represents the City with dignity, integrity, and the spirit of cooperation in all relations with staff and the public.

Fosters an environment that embraces diversity, equity, inclusion and collaboration.

Be an integral team player, which involves flexibility, cooperation, tolerance and communication.

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

Performs related duties as assigned.

JOB RELATED AND ESSENTIAL QUALIFICATIONS

Knowledge of:

Principles and practices of technical and functional supervision.

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Knowledge of (continued):

Advanced principles of fire protection engineering, structural fire protection and their application.

Pertinent laws, regulations and codes including California Fire Code, California Building Codes, Mechanical Code, National Fire Protection Association Standards. And those pertaining to the storage of hazardous materials.

Building construction, fire protection systems, hazardous materials, and plan review.

Fire prevention principles, fire protection systems, and life safety practices and procedures.

Engineering specifications and hydraulic calculation for sprinkler systems, underground fire service systems, fire flows and water supply systems.

Modern firefighting procedures and equipment.

Elements and principles of chemistry.

Construction materials and methods.

Methods and practices of performance-based analysis.

Modern office management practices and methods; computer equipment and software.

English usage, grammar, spelling, vocabulary, and punctuation.

Principles and practices of work safety.

Ability to:

Plan, organize and coordinate the performance of fire protection engineering activities.

Evaluate performance-based analysis to determine whether proposed fire protection is acceptable with regards to the intent of codes, standards, and ordinances.

Effectively recommend the arrangement and use of fire-resistant building materials and fire detection and extinguishing systems, devices, and apparatus in order to protect life and property.

Prepare written reports and budget documents.

Operate modern office equipment including computer equipment and specialized software applications programs.

Ability to (continued):

Use tact, initiative, prudence, and independent judgment within general policy and legal guidelines.

Organize and prioritize a variety of projects and multiple tasks in an effective and timely manner; organize own work, set priorities, and meet critical time deadlines.

Communicate clearly and concisely, both orally and in writing.

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

EXPERIENCE AND EDUCATION

Any combination of experience and training that would likely provide the required knowledge and ability is qualifying. A typical way to obtain the knowledge and abilities would be:

Experience: Two (2) years of responsible professional experience performing duties similar to that of a Fire Protection Engineer which included examining and reviewing plans related to building construction, fire protection systems, design and application of processes, "High Piled Stock Combustible" storage, and the storage and use of hazardous materials.

Education: Equivalent to a Bachelor's Degree from an accredited college or university with major course work in Fire Protection, Industrial, Mechanical, or Civil Engineering, Architecture, or other related fields.

Licenses: Possession of a valid Class C California Driver's License at time of appointment. Possession of a license as a Registered Fire Protection Engineer in the State of California.

SPECIAL REQUIREMENTS

Essential duties may require some physical abilities in an office and field environment including sitting for prolonged periods of time; standing, walking, reaching, bending and safely lifting and moving equipment and materials weighing up to 35 pounds. Inspections can occur on even or uneven terrain and at elevation/heights or below grade. Essential functions must be performed with or without reasonable accommodation.

PROBATIONARY PERIOD: One (1) Year
T515

Created May 2023

EEO CODE: 2

FPPC STATUS: Designated

FLSA STATUS: Exempt