CITY OF HAYWARD

FIRE PROTECTION ENGINEER

DEFINITION

Fire Protection Engineer is a professional engineer who, through education and experience, possesses the following abilities:

- to understand the engineering problems relating to the safeguarding of life and property from fire and fire-related hazards;
- to apply this knowledge to the identification, evaluation, correction, or prevention of present or potential fire and fire-related panic hazards in a building, groups of buildings, or communities; and
- to 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.

The principal duties that define the position of Fire Protection Engineer are the following:

- to examine, review, and comment on plans to ensure compliance with the California Fire Code, National Fire Protection Association Standards, the Hayward Municipal Code and any other applicable technical codes, standards, laws and regulations;
- to assist the Office of the Fire Marshal in resolving life safety issues especially those that involve fire protection systems, access, egress, general storage, special occupancies and hazards, and the storage and use of hazardous materials; and
- to assist the Fire Marshal with data and analysis in coordinating departmental programs in the areas of fire prevention, fire inspection, plan review and general training of inspectors.

SUPERVISION RECEIVED AND EXERCISED

General supervision and direction is provided by the Fire Marshal.

EXAMPLES OF DUTIES

The primary duty of the Fire Protection Engineer is the examination and review within established timeframes of plans involving the construction or alteration of industrial, commercial, residential, and miscellaneous structures and operations to determine compliance with applicable codes, laws and regulations. The plans may be reviewed upon submittal over the counter, when routed internally, or when discussed in meetings. The Fire Protection Engineer will prepare correction lists, conditions of approval, and/or final comments for the plans reviewed.

EXAMPLES OF DUTIES - continued

In addition, the Fire Protection Engineer performs routine data collection, organization, input and analysis in support of departmental programs such as purchasing, budgeting, planning, training and related areas. Depending upon assignment, the incumbent may also be responsible for assisting in the implementation of fire prevention, fire inspection, emergency management, planning, and training programs. In case of a disaster or other major emergency, the incumbent will be expected to function as a public employee disaster service worker.

To further specify, duties of the Fire Protection Engineer may include, but are not limited to, the following examples:

1. Review plans for fire protection systems such as fire sprinkler systems and fire alarm systems;
2. Review and evaluate plans for occupancies requiring annual Fire Department inspections and permits;
3. Review and evaluate plans for licensed care facilities and other Title 19 (State Fire Marshal) Occupancies;
4. Review and evaluate 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;
5. Review plans over the counter, upon submittal;
6. Review plans presented in scheduled meetings;
7. Review plans in internal routing within established timeframes;
8. Prepare written correction lists, conditions of approval, and/or final comments associated with plan reviews;
9. Review site plans to determine if adequate fire department access and water supply are provided;
10. Render plan review decisions based on operational capabilities of the Fire Department;
11. Conduct field inspections, when necessary;
12. Promptly input comments on plan review and routing in the computer;
13. Prepare plan review correspondence;
14. Issue required permits after plan approval;
15. Perform research and technical evaluation reports on fire code issues;
16. Interpret fire code provisions based on Fire Department Operational Procedures;
17. Review and make recommendations to further develop a written departmental policy related to alternate methods of protection and equivalent levels of protection;

18. Develop written guidelines, forms and informational materials to assist staff and customers with fire permits and the permitting process;
19. Evaluate the fire permit process against available computer technology for modernization and improved efficiencies;
20. Develop or modify programs and policies in support of overall City and departmental goals and service delivery;
21. Respond to general questions and complaints from the public regarding Fire Department programs and policies, fire permits and the fire code;
22. Advice architects, engineers, contractors and building owners on Fire Department requirements and the application of fire and building codes;
23. Conduct in-house training for all Fire Department personnel on the fire and building codes;
24. Participate in meetings when required, such as code assistance, pre-application, or inter-department meetings;
25. Represent the Fire Department in interdepartmental and interagency functions and programs;
26. Provide liaison and technical support to relevant City and State committees and boards;
27. Assist in the development and adoption of the Hayward Fire Code;
28. Participate in the City budget process when required;
29. Maintain accurate and complete records and reports; and
30. Prepare written and oral reports.

QUALIFICATIONS

Knowledge, Abilities and Skills:

A. Knowledge of the principles of fire protection engineering and their application;
B. Knowledge of the California Fire Code, California Building Codes; the Mechanical Code and National Fire Protection Association Standards;
C. Knowledge of and experience in building construction, fire protection systems, hazardous materials, and plan review;
D. Knowledge of fire prevention principles, fire protection systems, and life safety practices and procedures;
E. Knowledge of engineering specifications and hydraulic calculation for sprinkler systems, underground fire service systems, fire flows and water supply systems;
F. Knowledge of codes, laws and regulations related to the use and storage of hazardous materials;
G. Knowledge of modern firefighting procedures and equipment;

Knowledge, Abilities and Skills continued:

H. Basic knowledge of the elements and principles of chemistry;

I. Working knowledge of computers and data storage systems;

J. Knowledge of organization, budget, training and personnel management practices;

K. Understanding of construction materials and methods;

L. Ability to plan and direct the work of others;

M. Ability to develop effective working relationships with subordinates, supervisors, other employees, contract personnel, staff from other agencies and with the public;

N. Ability to plan and coordinate programs within the Fire Prevention Office; and

O. Ability to prepare written reports and budget documents.

EXPERIENCE AND EDUCATION

Experience:

Two years of experience 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 of Science degree in Fire Protection, Industrial, Mechanical, or Civil Engineering, Architecture, or other related fields.

Licenses:

Possession of a license as a California Fire Protection Engineer and a valid Class C California Driver's License at time of appointment.

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 year
640CS09
December 2009
AAP GROUP: 3
FPPC STATUS: Non Designated
FLSA STATUS: Non Exempt