



Office of Human Resources
Fire Protection Engineer - CE0409
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General Statement of Duties

Reviews and approves life safety system use and fire code provisions for new and existing buildings and provides technical expertise in fire suppression, prevention, and life safety system use.

Distinguishing Characteristics

This class reviews and approves life safety system use and fire code provisions. This class is distinguished from the Engineer/Architect Supervisor class that performs professional and supervisory work over professional, licensed engineers and architects, develops, implements, and evaluates engineering plans, work processes, systems, and procedures to achieve annual goals and objectives, and makes budgetary and resource allocation decisions.

Essential Duties

Responds to Fire Dispatch (Emergency 911) calls for active hazardous response scenes and provides engineering and hazardous materials support and advice to the incident commander on engineering issues to ensure safety of emergency responders and the public.

Performs emergency response and field investigations for fires, explosions, arson, hazardous materials spills, and other life-safety incidents.

Enforces engineering codes through the issuance of corrective notices and court summons.

Evaluates system tests for smoke control and fire pump performance.

Analyzes, evaluates, and recommends approval, modification, or denial of plans for fire protection plans and life safety systems in new or existing buildings utilizing the applicable specifications, standards, and codes.

Reviews plans and processes regarding hazardous chemicals and/or materials to ensure proper fire safety provisions are included.

Evaluates the effectiveness of existing methods, policies, procedures, and proposed local and national model code modifications and issues and recommends revisions or new methods, policies, and procedures.

Develops training programs related to model codes, methods, policies, procedures, and national design standards and provides instruction to department personnel.

Participates in inspections of existing and new buildings to ensure compliance with applicable codes, federal, state, and local laws, and other national standards.

Assists in the investigation of fires where possible structural, mechanical, electrical, fire alarm, fire extinguishing, or other fire safety system failures are suspected.

Provides resource information and building and fire code requirements to developers, owners, contractors, and city agencies concerning the use of fire safety systems.

Provides technical assistance and guidance to department personnel regarding fire protection and fire resistive materials in accordance with the applicable codes.

Assists in the development of fire protection and life safety ordinances, provides technical information, and makes recommendations.

Performs other duties as assigned.

Any one position may not include all of the duties listed. However, the allocation of positions will be determined by the amount of time spent in performing the essential duties listed above.

Competencies

Decision Making - Specifies goals and obstacles to achieving those goals, generates alternatives, considers risks, and evaluates and chooses the best alternative in order to make a determination, draw conclusions, or solve a problem.

Influencing/Negotiating – Persuades others to accept recommendations, cooperate, or change their behavior; works with others toward an agreement; negotiates to find mutually acceptable solutions.

Interpersonal Skills - Shows understanding, friendliness, courtesy, tact, empathy, cooperation, concern, and politeness to others and relates well to different people from varied backgrounds and different situations.

Oral Communication - Expresses information to individuals or groups effectively; taking into account the audience and nature of the information; makes clear and convincing oral presentations; listens to others, attends to nonverbal cues and responds appropriately.

Problem Solving – Identifies problems; determines accuracy and relevance of information; uses sound judgment to generate and evaluate alternatives, and makes recommendations.

Written Communication - Composes, reviews, edits, and issues written materials for diverse audiences and communicates purpose in a succinct and organized manner appropriate for context, time, and place.

Knowledge & Skills

Knowledge of the concepts, principles, theories, and methods to identify, control mitigate, and eliminate safety hazards in the design and use of facilities, equipment, operations, and work processes.

Knowledge of the concepts, principles, and theories of fire management including the characteristics, behavior, and ecology of fire, methodologies, strategies, and equipment used in prescribed fires, fire detection, prevention, and suppression strategies and integration of fire with natural resource management.

Level of Supervision Exercised

Performs no supervisory duties.

Education Requirement

Bachelor's Degree in Engineering or related field.

Experience Requirement

Two (2) years of professional experience in fire protection and life safety evaluation, design, engineering, or installation.

Education & Experience Equivalency

None

Licensure & Certification

Registration as a Professional Engineer (PE) by the Colorado State Board of Registration for Professional Engineers at the time of application.

Registration as a Professional Engineer by another state will be accepted in lieu of this requirement, provided the applicant is registered by the State of Colorado by completion of the probationary period.

Licenses and certifications must be kept current as a condition of employment.

Working Environment

Pressure due to multiple calls and inquiries.

Subject to may interruptions.

Requires the ability to function in personal protective equipment (PPE).

Level of Physical Demand

1-Sedentary (0-10 lbs.)

Physical Demands

(Physical Demands are a general guide and specific positions will vary based on working conditions, locations, and agency/department needs.):

Accommodation: Ability to bring objects into focus.

Balancing: Maintaining equilibrium.

Carrying: Transporting or moving an object.

Depth Perception: Ability to judge distances and space relationships.

Eye/Hand/Foot Coordination: Performing work through using two or more body parts or other devices.

Feeling: Perceiving attributes of objects by means of skin receptors, communication, or otherwise.

Field of Vision: Ability to sharply detect or perceive objects peripherally.

Handling: Seizing, holding, grasping, through use of hands, fingers, or other means.

Hearing: Perceiving and comprehending the nature and direction of sounds.

Lifting: Moving objects weighing no more than 10 pounds from one level to another.

Reaching: Extending the hands and arms or other device in any direction.

Sitting: Remaining in a stationary position.

Standing: Remaining in a stationary position.

Stooping: Positioning oneself low to the ground.

Talking: Communicating ideas or exchanging information.

Vision Far Acuity: Ability to perceive or detect objects clearly at 20 feet or more.

Vision Near Acuity: Ability to perceive or detect objects at 20 inches or less.

Walking: Ability to move or traverse from one location to another.

Background Check Requirement

Criminal Check

Education Check

Employment Verification

Licensure/Certification Check

By position, Motor Vehicle Record

Assessment Requirement

None

Probation Period

Six (6) months.

Class Detail

Pay Grade: E-817

FLSA Code: Y

Established Date: 9/21/2018

Established By: LS

Revised Date:

Revised By:

Class History: