

ILLINOIS DEPARTMENT OF CENTRAL MANAGEMENT SERVICES  
CLASS SPECIFICATION

FIRE PROTECTION ENGINEER

POSITION CODE: 15340

Effective: 7-1-13

DISTINGUISHING FEATURES OF WORK:

Under general direction, performs multi-faceted professional fire protection engineering duties concerned with the review, analysis, investigation and determination of code compliance for construction, remodeling, system installation and other projects; offers engineering input and advice related to fire suppression and detection systems, liquid petroleum and liquefied petroleum (LP) gas storage issues and fire code enforcement; responsible for developing engineering studies and reports, interpreting agency policy and regulations, and providing advice and consultation relating to the issuing of variances to existing rules and standards; applies concepts of fluid dynamics, mechanics, thermodynamics, and other engineering sciences; assists executive staff in understanding engineering principles applicable to a variety of fire protection and petroleum storage subjects and projects; exercises a wide latitude of independent judgment in the investigation and development of administrative rules and standards; may provide project leadership.

ILLUSTRATIVE EXAMPLES OF WORK:

1. Responsible for technical assignments such as the development or modification of administrative rules, preparation of reports or analysis of complex and difficult installations and analysis of engineering projects of high difficulty or magnitude.
2. Reviews drawings and specifications for building construction, fire protection system and petroleum storage installations submitted by architects, engineers and contractors; advises agency staff regarding approval or denial of permits or authority for work based on soundness of engineering design features; attends meetings and conferences with submitters regarding plans and specifications.

## FIRE PROTECTION ENGINEER (Continued)

3. Offers technical and engineering guidance regarding enforcement positions in relation to fire and life safety issues and the storage, handling and transportation of petroleum, liquefied petroleum (LP) gas and alternative fuels.
4. Represents the agency on technical committees of national code development organizations and on State and local task forces to study fire protection and petroleum storage issues.
5. Provides training to agency personnel as well as instructional presentations to occupancy owners, local fire and building departments and other state agencies in various forums.
6. Provides testimony at hearings regarding the agency's legislative and administrative rule proposals as well as at appeal hearings and court trials regarding agency code enforcement.
7. Performs other duties as required or assigned which are reasonably within the scope of the duties enumerated above.

## DESIRABLE REQUIREMENTS:

### Education and Experience

Requires knowledge, skill and mental development equivalent to completion of four years of college culminating with a bachelor's degree in fire protection engineering.

Requires possession of Illinois Certificate as a Registered Professional Engineer or the ability to obtain certification as a registered professional engineer within twelve months of employment. Employment will be terminated if certification is not obtained within twelve months.

Requires four years of professional fire protection engineering experience.

## FIRE PROTECTION ENGINEER (Continued)

### Knowledges, Skills and Abilities

Requires thorough knowledge of fire protection engineering theory, principles and practices.

Requires thorough knowledge of design, construction, inspection, testing and maintenance in relation to fire protection systems and petroleum storage sites.

Requires ability to read, interpret and analyze engineering reports, plans, and specifications.

Requires ability to prepare technical engineering plan review letters, records and reports.

Requires ability to perform difficult technical engineering research and development work stressing innovative techniques.

Requires ability to evaluate performance-based design and fire safety evaluation system submittals as methods of determining equivalent safety to prescriptive code requirements.

Requires ability to communicate fire protection engineering theories and designs to nontechnical state agency representatives and to function as a liaison in resolution of needs as determined by affected parties.

Requires ability to instruct personnel of the agency regarding technical, fire protection engineering and fuel storage issues and to speak to large groups or assemblies regarding the same.

Requires ability to establish and advance effective working relationships with staff and associate personnel.

Requires ability to establish and maintain good working relationships with the general public.

In addition to English verbal and written skills, candidates may be required to translate, speak and write a foreign language at a colloquial skill level. Some positions may require manual communication skills.