

## COMPETENCY MODEL FOR FIRE PROTECTION ENGINEERING ASSOCIATE (7978)

The following competencies have been identified as those that best separate superior from satisfactory job performance in the class of **FIRE PROTECTION ENGINEERING ASSOCIATE**. (Numbers refers to the order of the competencies in the Competency Bank.)

- 1. Reading Comprehension
- 3. Judgment and Decision Making
- 11. Initiative
- 16. Objectivity
- 35. Teamwork
- 39. Tact
- 47. Written Communication
- 58. Industry Knowledge

On the following pages are descriptions of each competency, including a definition, the level of the competency required for the class (*italicized*, **bolded**, and underlined), examples of behavioral indicators, and satisfactory and superior performance levels.

**1. READING COMPREHENSION** – Comprehends and correctly applies information presented in written form. Makes correct inferences; draws accurate conclusions.

Level of Competency Required by Job:

Level 1: Concrete, specific job-related information (work orders; instructions; material/equipment labels)

**Level 2: General information related to field of work and assignments; (articles in trade publications; technical/instructional manuals; memos; letters; e-mails; reports)**

Level 3: Abstract/complex information (highly technical articles/ reports in specialized area; legal or other regulatory material)

Examples of Behavioral Indicators:

- Follows written instructions correctly.
- Learns information presented in writing.
- Identifies relevant written information.
- Interprets written legal regulatory material accurately.

Performance Levels:

Satisfactory

Reads instructions correctly. Learns from manual and other printed material.

Superior

Learns from manual and may answer others' questions. Explains information presented in written form to others.

**3. JUDGMENT AND DECISION MAKING** – Accurately assesses situations, seeks new information if necessary, and applies all available information to reach sound conclusions/formulate effective response.

Level of Competency Required by Job:

Level 1: Training and guidelines needed to respond to immediate situations within very specific function are provided (or supervisor available to assist).

**Level 2: General information and guidance to assist in responding to a variety of situations across a range of circumstances are provided.**

Level 3: Little guidance available for responding to a wide range of complex situations with far-reaching and/or enduring consequences.

Examples of Behavioral Indicators:

- Effectively responds to atypical situations.
- Asks questions or otherwise obtains additional relevant information to make a decision.
- Formulates a decision and necessary actions based on available facts.
- Correctly infers appropriate response based on information provided and existing policies, personal experience, and/or consultation with others.
- Discusses conclusions/possible responses with others before taking action as necessary.
- Considers impact of decisions on all affected parties.

Performance Levels:

Satisfactory

Correctly assesses routine and unusual situations and reaches appropriate conclusions for actions needed. Obtains additional information and/or consults with others as necessary.

Superior

Evaluates new situations accurately to establish an appropriate response or plan of action. Recognizes the impact on all affected parties, as well as the possible ramifications and/or repercussions of setting a precedent.

## 11. INITIATIVE – Generates activity that facilitates accomplishment of work.

### Level of Competency Required by Job:

Level 1: Offer to help co-workers and/or recognize things to do that facilitate work group accomplishment.

**Level 2: *Identify new tasks/projects to be undertaken and assist others with accomplishment of their work.***

Level 3: Determine additional work necessary to improve the function and productivity of the organization or its services to citizens or other customers.

### Examples of Behavioral Indicators:

- Makes suggestions for improvement in work quality or quantity.
- Finds work to do when own work is slow rather than allow diminished personal productivity.
- Expands scope of work/responsibility in appropriate directions.
- Anticipates upcoming events in order to prepare for them.

### Performance Levels:

#### Satisfactory

Generates goal directed activity rather than waiting to be told what to do. Anticipates what is likely to occur in order to be able to prepare; recognizes that preparation for (and clean-up after) a job is part of doing the job.

#### Superior

Actively pursues additional tasks/responsibilities that will facilitate effectiveness. Makes extensive preparations for upcoming events or expected changes.

**16. OBJECTIVITY** – Demonstrates fairness and equity toward others; understands different perspectives; states sides of a conflict non-evaluatively; uses facts and logic.

Level of Competency Required by Job:

**Level 1: Respond to the situation at hand and its specific circumstances as opposed to being influenced by previous encounters, stereotypes, or biases.**

Level 2: Appropriately aligns self/organizational interest with objectives to benefit the overall organization and/or citizenry.

Level 3: Appropriately aligns self/organizational interest with the “common good” (citizens, other public sector agencies, elected officials).

Examples of Behavioral Indicators:

- Notes facts and circumstances specific to the situation.
- Formulates plans for action based on the totality of factual information.
- Gives full attention to each task/issue within areas of responsibility
- Clearly demonstrates the benefits of actions to the overall organization, citizens, and/or the “common good.”
- Does not take positions or promote actions/causes that reflect blatant self interest.

Performance Levels:

Satisfactory

Focuses on and reacts to all facts and information available for each situation/issue. Disregards personal preferences or biases in appraisal of situation/issue and response to it.

Superior

Strives to serve the “common good.” Responds in a manner contrary to self-interest when appropriate.

**35. TEAMWORK** – Interacts effectively with others to achieve mutual objectives; readily offers assistance to others to facilitate their goal accomplishment.

Level of Competency Required by Job:

Level 1: Work effectively as a member of a work unit or project team. Readily offer assistance to others when they have too much work or have too little.

**Level 2: Work effectively as a team member in which different people have different roles/responsibilities and perspectives. Identify points for collaboration with co-workers; readily offer and request assistance.**

Level 3: Work effectively as a part of an interdependent team (your work gets done only if the work of the whole team is done; evaluation of team performance is more relevant than individual performance).

Examples of Behavioral Indicators:

- Discusses work-related matters with co-workers.
- Offers and requests assistance readily.
- Offers and is receptive to suggestions.
- Identifies problems with workflow that will prevent team from accomplishing its goals.
- Provides constructive criticism and feedback to team members to improve overall functioning of team.
- Assigns credit to team for accomplishments.

Performance Levels:

Satisfactory

Cooperates with co-workers and fulfills responsibilities as a member of a project team. Maintains a focus on common objectives and offers and requests assistance readily.

Superior

Sees the team as a whole; acknowledges that performance of the team is what in reality is evaluated by others. If anyone fails, everyone on the team fails.

**39. TACT** – Considerate and pleasant in interactions with others, even in situations that involve controversy, disagreement, or represent other emotional strain.

Level of Competency Required by Job:

Level 1: Pleasant in interpersonal interactions with co-workers and/or members of the public when cooperating to accomplish a goal or to provide service.

**Level 2: Courteous and considerate in interactions with a wide variety of others during times of controversy or conflict or in the face of negative reaction.**

Level 3: Diplomatic when addressing sensitive matters with the media, elected/appointed officials, and/or a large public audience. Remain considerate and sensitive in times of crisis.

Examples of Behavioral Indicators:

- Listens actively; conveys understanding.
- Displays sensitivity of others' circumstances and viewpoints.
- Displays empathy by smiling, nodding, etc. when appropriate to do so.
- Recognizes others' points of view when communicating information.
- Expresses information in a manner that does not offend individuals with differing points of view.
- Conveys even a negative message with positive tone and words to the extent possible.
- Anticipates audience reaction to negative or controversial information to be provided.
- Recognizes when to defer to those of higher status or for other reason.

Performance Levels:

Satisfactory

Courteous and considerate in interactions with others. Provides information in as positive a manner as possible.

Superior

Accommodates the needs/desires of others in interactions with them to the extent possible. Maintains a positive approach in the face of adversity or criticism.

## 47. WRITTEN COMMUNICATION – Communicates effectively in writing.

### Level of Competency Required by Job:

Level 1: Write notes/e-mails. Completes forms with some open-ended responses (sentences).

**Level 2: Write letters, articles/reports, and/or detailed descriptions of activities/occurrences.**

Level 3: Write lengthy reports, instruction manuals, in-depth analyses/reviews of complex issues and/or articles for publication. Reviews the written work of others.

### Examples of Behavioral Indicators:

- Writing includes the necessary information to convey the intended message.
- Sufficiently few errors in spelling, punctuation, grammar to not interfere with the intended message or distract the reader.
- Little editing or re-writing needed to produce a final product.
- Composes materials efficiently.
- Information is presented in a well organized manner.
- Tone and degree of formality are appropriate to the purpose and audience.

### Performance Levels:

#### Satisfactory

Writes material that clearly communicates the necessary information; needs little editing.

#### Superior

Precisely uses words and organizes information in a way that enhances presentation of the message. Virtually no editing needed.



**58. INDUSTRY KNOWLEDGE** – Knows sources of information (publications, websites, professional associations), college programs, consultants, vendors, and peers within field of endeavor; accesses them when needed.

Level of Competency Required by Job:

Level 1: Can locate job-related information from external sources when necessary.

**Level 2: Read job-related publications and know/may be a member of professional associations. Some familiarity with college programs, consultants, vendors, and/or others in the field.**

Level 3: Subscribe to job-related publications and is a member of professional association(s). Know many college programs, consultants, and vendors, and has a well-developed network of peers within the field.

Examples of Behavioral Indicators:

- Reads/subscribes to job-related publications.
- Knows consultants/vendors in the field including their products/services and reputation.
- Attends conferences or other job-related training/presentations.
- Makes presentations to professional associations.
- Has contacts on college faculties to call upon if needed.

Performance Levels:

Satisfactory

Aware of external resources available in the field. Can locate and obtain materials and/or locate and contact professional associations, consultants, vendors, or peers if necessary.

Superior

Knows many external resources in field, including publications, educational programs, consultants, and vendors. Has a well-established network of peers. Belongs to professional associations and attends conferences or other training sessions. Provides research results and/or benchmarking data to the field.

## **Industry Knowledge Areas**

1. Knowledge of state and local Fire Code provisions and regulations sufficient to effectively and clearly explain and interpret such codes and regulations to members of the public, departmental employees, and building trade technical professionals.
2. Knowledge of the National Fire Protection Association (NFPA) Codes and Standards, including but not limited to NFPA 13 regarding the standards for the installation of sprinkler systems and NFPA 30 regarding flammable and combustible liquid codes, in order to check building plans, investigate possible Fire Code violations, and ensure compliance with Fire Code regulations.
3. Knowledge of the American Petroleum Institute standards regarding flammable liquids and tanks adopted by the City Fire Code sufficient to perform fire plan checks, investigate possible Fire Code violations, and discuss Fire Code regulations conformance.
4. Knowledge of the application of science and engineering principles, such as fluid dynamics, thermodynamics, chemistry, and electronic circuitry, sufficient to verify appropriate designs of fire protection systems.
5. Knowledge of fire protection engineering principles and practices, including the dynamics and characteristics of fire and its products of combustion, such as fire behavior, means of egress and fire detection, control, and suppression, in order to reduce the risk of injury and property damage due to fires.
6. Knowledge of the design, installation, and use of manual and automatic fire extinguishing devices and systems, such as water based sprinklers, sufficient to evaluate the efficacy and degree of Fire Code compliance of life-saving devices in building plans.
7. Knowledge of building construction for fire rated assemblies, such as fire walls, fire partitions, smoke barriers, and fire barriers, sufficient to ensure Fire Code provisions and regulations involving means of egress and proper fire-rated building components are complied with.
8. Knowledge of the design, installation, and maintenance of fire detection devices, such as pull stations, smoke detectors, and heat detectors, sufficient to evaluate the efficacy and degree of Fire Code compliance of life-saving devices in buildings.