

**COMPETENCY MODEL FOR
SENIOR ENVIRONMENTAL ENGINEER
CLASS CODE 7874**

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

- 3. Judgment and Decision Making
- 17. Innovation
- 20. Job Knowledge
- 28. Supervision
- 30. Fiscal Management
- 35. Teamwork
- 45. Oral Communication
- 47. Written Communication

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.

- 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.

17. INNOVATION – Seeks out and/or develops drastically different work products or ways of doing work in order to improve services and/or increase productivity.

Level of Competency Required by Job:

Level 1: Identify different means of doing work or suggest changes in work product that significantly improve productivity, work product, or service provided.

Level 2: Re-engineer processes and practices to increase efficiency and/or productivity and/or to improve work product or service.

Level 3: Re-conceptualize purpose of function and/or how to achieve it in a way that improves efficiency and effectiveness.

Examples of Behavioral Indicators:

- Notes inefficiencies/unnecessary steps in work processes for elimination.
- Suggests different, more expedient means of doing work.
- Conducts thorough review of work practices to identify possible points of increased efficiency in work flow and/or product/service quality.
- Identifies opportunities to increase breadth or depth of impact.
- Determines/implements novel means of accomplishing work.
- Reconfigures existing resources to improve work flow, work product, or service.

Performance Levels:

Satisfactory

Maintains constant awareness of ways to improve quantity and quality of work. Identifies and is willing to suggest changes no matter how radical a departure from current practice.

Superior

Deliberately seeks out or develops new and improved ways of doing work and/or alteration of/addition to current work product or service to vastly improve organizational performance and the “bottom line.”

20. JOB KNOWLEDGE – Knows information required to perform a specific job. Includes both widely available courses of study (for example, chemistry, human resources management, graphic arts) and City-specific information (parking regulation and ticketing practices; purchasing procedures; provisions of the City Charter).

Level of Competency Required by Job:

Level 1: Knowledge is concrete, factual, and/or procedural and may be defined by the organization. Situations in which it is applied are quite consistent.

Level 2: Knowledge is substantive and may be defined by an external trade, field, or profession. Situations in which it is applied vary and, as such, require breadth and depth of understanding.

Level 3: Knowledge is abstract, conceptual, and/or complex and may be supported by a well-defined academic discipline or authoritative sources (e.g., laws, ordinances, government guidelines/regulations/codes). Situations in which it is applied may vary greatly or be novel.

Examples of Behavioral Indicators:

- Performs work correctly/avoids technical (job content related) errors.
- Answers technical questions about work accurately.
- Asks few technical questions about the performance of routine work activities.
- Offers advice (“coaching”) to new employees regarding their work.
- Develops training programs for other employees.
- Sought out as a source of information by others.

Performance Levels:

Satisfactory

Sufficient job knowledge to perform work correctly independently. Answers technical questions about work correctly.

Superior

Expertise in technical job information sufficient to serve as a resource to others. May develop training manuals/ programs and/or give internal and/or external presentations related to work.

Job Knowledge Areas

1. Knowledge of Federal, State, and local codes, regulations, and rules related to the collection, treatment, disposal and reuse of liquid and solid wastes, environmental protection, utility pipelines, oil and gas fields, and other petroleum infrastructures sufficient to ensure compliance, apply discharge standards, prepare environmental reports, and understand the effects of changes to such codes, regulations and rules.
2. Knowledge of construction methods and design parameters related to the assessment, inspection, and construction of new facilities and/or the alteration of existing facilities including design procedures for the collection and treatment of wastewater and/or stormwater.
3. Knowledge of the procedures, materials, and equipment used for the collection, treatment, disposal, and/or reuse of waste, and their application in recycling programs related to wastewater, stormwater, solid resources, food, and/or industrial waste sufficient to determine the appropriate procedures, materials, and equipment for a given project and evaluate new equipment and techniques for use.
4. Knowledge of chemistry, biochemistry, and microbiology principles sufficient to understand the operation of wastewater and other waste treatment processes, interpret results of laboratory analyses, and identify and/or suggest solutions to special problems such as treatment of stormwater or waste containing heavy metal ions, odor control, effects of pesticide and herbicide use on wastewater treatment and water supplies, or causes of underground pollution.
5. Knowledge of hydraulics and hydrology principles sufficient to conduct master planning, identify system needs and improvements in existing facilities, and/or check design calculations.
6. Knowledge of the methods used to monitor and evaluate industrial waste, stormwater pollution, and/or environmental pollution and the applicable codes, regulations, and rules governing acceptable levels of water, air, and soil pollutants sufficient to determine the environmental impact of industrial waste, stormwater pollution, and/or environmental pollution and ensure compliance when planning, organizing, and coordinating the work of personnel engaged in such work.
7. Knowledge of the methods used to safely and properly collect, handle, separate, and/or process recyclable materials in domestic and industrial waste, as well as the cost and economic benefits of recycling and the available markets for salable materials sufficient to determine and adhere to the most optimal recycling practices, and aid in conserving resources and reducing pollution and material waste.

28. SUPERVISION – Ability to assume direct responsibility for all aspects of the performance of a work group, which requires knowledge and/or ability in the areas of:

- Planning and goal setting
- Creating a safe and positive work environment
- Establishing standards and training employees
- Motivating employees and teambuilding
- Performance Management (assigning, monitoring, facilitating, reviewing and evaluating work, and providing feedback)
- Supporting and developing employees through delegation and participation
- Taking disciplinary action including progressive discipline
- Provisions of employees' MOU's and handling grievances
- Legal requirements including EEO, ADA, FLSA, FMLA, and Workers' Compensation provisions
- Civil Service Commission Rules and Policies related to the management of employees
- Administrative Code provisions related to the management of employees
- Budget processes sufficient to request and justify expenditures in a correct and timely manner

Level of Competency Required by Job:

Level 1: Supervises small workgroup of employees performing the same or highly related work.

Level 2: Supervises a larger workgroup of employees performing various types of work.

Level 3: Supervises employees including provision of coaching and advice to subordinate supervisors.

Examples of Behavioral Indicators:

- Plans, assigns, and monitors work progress.
- Trains employees to do work.
- Evaluates work and gives positive and negative feedback.
- Displays knowledge of legal requirements including applicable Federal and State laws, Administrative Code provisions, Civil Service Commission Rules and Policies, and MOU provisions.

Performance Levels:

Satisfactory

Proficiency in supervision sufficient to supervise a workgroup in terms of task orientation, interpersonal concerns, and personnel administration.

Superior

Proficiency in supervision sufficient to serve as a resource to others and/or represent department position in a public forum.

30. FISCAL MANAGEMENT – Develops and justifies budget proposals in a way that garners support; monitors expenditures for compliance; systematically adjusts expenditures when warranted.

Level of Competency Required by Job:

Level 1: Identify equipment and services with demonstrable cost-effectiveness for improving operations and prepare detailed budget requests that provide ample justification for purchase. Ensure money is spent for intended purpose.

Level 2: Identify staffing needs, needs for equipment and services, and other expenditures that are necessary to fulfill the mission of a function or segment of the organization. Provide ample, compelling justification. Ensures that money is spent for intended or highly related purpose.

Level 3: Consider the mission of the entire organization and current priorities in determining which budget proposals to submit. Provide compelling arguments for the proposals submitted that include reference to proposals omitted. Use money for intended purpose unless priorities or other circumstances change.

Examples of Behavioral Indicators:

- Identifies expenditures that will be cost-effective in their contribution to accomplishing work.
- Conducts research to determine the best available option for purchase.
- Tailors justification for budget request to the specific need and current circumstances.
- Uses money for its intended purpose.
- Makes adjustments to expenditures in accordance with price increases, changing priorities, and City policy.

Performance Levels:

Satisfactory

Recognizes the critical role of the budget process in City functioning. Knows the budget cycle and makes timely submissions for all desired expenditures.

Superior

Provides convincing justifications that reflect essential organizational functions, demonstration of cost-effectiveness, and consideration of current political/economic/social climate.

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.

45. ORAL COMMUNICATION – Communicates orally in a clear, concise, and effective manner.

Level of Competency Required by Job:

Level 1: Exchange specific, job-related information orally with others in the immediate work environment or via telephone and/or radio.

Level 2: Obtain/provide/present general and/or job-specific information orally to a variety of others in various situations.

Level 3: Obtain/provide/present a diverse array of information orally at varying levels of complexity to a wide range of others across many different situations and circumstances.

Examples of Behavioral Indicators:

- Audience clearly understands the intended message.
- Rarely must repeat information in response to questions.
- Refrains from use of unnecessary words, phrases, or jargon.
- Provides a level of detail appropriate to the situation (avoids too much or too little detail).
- Speaks at a level appropriate to the audience in terms of terminology, sentence structure, and simplicity/complexity of ideas expressed.
- Uses words with precision (vocabulary) to convey exact information.

Performance Levels:

Satisfactory

Speaks clearly and audibly, providing the appropriate information and level of detail. Typically conveys the message on the first attempt. Answers questions accurately and directly.

Superior

Speech is direct and to the point. Speaks convincingly and with authority when appropriate. Maintains sensitivity to the audience while providing thorough information with the appropriate level of detail through the use of precise language.

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.