

ILLINOIS DEPARTMENT OF CENTRAL MANAGEMENT SERVICES
CLASS SPECIFICATION

ENVIRONMENTAL ENGINEER I

POSITION CODE: 13751
Effective: 12-1-81

DISTINGUISHING FEATURES OF WORK:

Under immediate supervision of a registered engineer, performs elementary professional engineering duties which are designed to provide orientation in the application of engineering theories and basic principles to environmental engineering work. Some assignments are similar to those performed by nonengineering and supportive employees but are primarily for training purposes and, in some cases, to relieve higher level engineers of routine work. Positions subsumed by this series define the need for formal training as an environmental or sanitary engineer, and demonstrate an application of professional engineering principles and techniques such as engineering plan reviews, evaluation of environmental engineering systems and equipment, development of engineering studies and reports concerning standards, regulations, permitting and analyses of variance from existing standards.

ILLUSTRATIVE EXAMPLES OF WORK:

1. Receives formal and on-the-job instruction and training designed to provide familiarization with the functions and operations of the agency and to provide experience in the practical application of basic environmental engineering system principles, techniques and concepts.
2. Conducts field investigations and office studies in the construction aspects of manufactured housing being regulated under the Illinois Manufactured Housing and Mobile Home Safety Act.
3. Assists in private sewage code revisions and evaluation of new, innovative sewage disposal processes; participates in plan review for new sewage disposal systems.
4. Assists in field investigations and office studies in the development and application of sanitary measures pertaining to the adequacy of the engineering design, construction conformance to approved plans and operation of public swimming pools.

ENVIRONMENTAL ENGINEER I (Continued)

5. Participates and assists in the preparation of engineering reports from municipal officials or others concerning investigations or studies and general sanitary conditions of installation regulated by applicable laws.
6. Attends lectures, demonstrations and short courses on all phases of public health and sanitary engineering.
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 the completion of four years college with a bachelor's degree in engineering and coursework in sanitary, public health or environmental engineering.

Knowledges, Skills and Abilities

Requires elementary knowledge of the basic principles, practices and subject matter of environmental engineering, including the design, construction, and operation of water purification and treatment facilities, sewage systems, waste treatment, swimming pools, and other environmental systems and devices.

Requires elementary knowledge of the chemistry and bacteriology of water, sewage, and liquid waste.

Requires elementary knowledge of epidemiology and the relationship of environmental conditions to the spread of disease and the promotion of health.

Requires ability to prepare limited technical engineering reports and investigative findings.

Requires ability to apply approved methods and techniques in performing engineering investigations and maintaining environmental standards.

Requires ability to make computations and calculations involving the application of engineering methods.

Requires ability to interpret regulations, requirements, and policies of the program.