

ILLINOIS DEPARTMENT OF CENTRAL MANAGEMENT SERVICES  
CLASS SPECIFICATION

ENVIRONMENTAL PROTECTION GEOLOGIST SERIES

<u>CLASS TITLE</u>	<u>POSITION CODE</u>
ENVIRONMENTAL PROTECTION GEOLOGIST I	13801
ENVIRONMENTAL PROTECTION GEOLOGIST II	13802
ENVIRONMENTAL PROTECTION GEOLOGIST III	13803

Effective: 12-16-99

SERIES DISCUSSION:

This series has been designed to make provision for the utilization of positions incorporating duties of a geologic nature. The series contains three levels, and furnishes a career ladder for incumbents with a background in geology.

The main thrust of the series will be to lend a much needed factor of geologic expertise to the Environmental Protection Agency's programs exemplified by Land Pollution Control, Water Pollution Control, etc. Positions resulting from the creation of this series will provide geologic support, input, and/or direction to the various agency endeavors at hand. The initial intention is not to create a pure organizational entity composed of geologists, but rather to utilize these classes to create positions throughout the organization in areas requiring support and/or direction of a geologic nature. Therefore, it is quite conceivable that lower level geologists might be supervised by engineers or sanitarians, and higher level geologists could be functioning as the supervisor of a section or unit composed of engineers, geologists, etc.

The initial use of the series will be concentrated in the Land Pollution Program. However, use of the series in other areas such as the Bureau of Water Program, etc., is not precluded because activities of the various divisions often times require support of a geologic nature, and have wide-range geologic ramifications.

ENVIRONMENTAL PROTECTION GEOLOGIST I

POSITION CODE: 13801

**DISTINGUISHING FEATURES OF WORK:**

Under immediate supervision, performs beginning level duties relative to geologic investigations, and with primary emphasis on training and professional development; observes and participates in field investigations with other geologists, engineers, and scientists concerning projects related to the Land and Water Programs, etc.; assists in the review of geologic data to determine groundwater pollution, and potential, rate and extent of contamination.

**ILLUSTRATIVE EXAMPLES OF WORK:**

1. Participates in an in-service, on-the-job training program designed to enhance professional expertise in the area of geologic investigations as related to land pollution, hydrogeologic evaluation, groundwater pollution, etc., and their effect on other environmental factors.
2. Observes and participates in field investigations and other surveillance activities concerning refuse disposal projects, groundwater pollution control projects, etc.; assists in the review of geologic data relative to the various projects; accepts and completes assignments of increasing difficulty for the purpose of gaining experience, and developing working skills, maintains close contact with supervisory personnel concerning working problems.
3. Attends and participates in staff meetings, conferences, etc., in order to gain professional knowledges and abilities which will provide enhanced professional potential.
4. Assists other geologists, scientists, and engineers in such field functions as soil borings, well logs, well installations, etc.
5. Performs other duties as required or assigned which are reasonably within the scope of those enumerated above.

**DESIRABLE REQUIREMENTS:**

Education and Experience

Requires knowledge, skill, and mental development equivalent to completion of four years college with a degree in geology, including at least one course in groundwater geology, hydrology, hydrogeology, soil physics, and/or soil chemistry.

Requires no previous experience.

Knowledges, Skills and Abilities

Requires elementary knowledge of natural geologic processes (methods), procedures, and techniques.

Requires ability to prepare comprehensive written and oral reports.

Requires ability to understand and follow oral and written instructions.

Requires ability to profit from training received in the area of geologic investigations.

ENVIRONMENTAL PROTECTION GEOLOGIST II

POSITION CODE: 13802

**DISTINGUISHING FEATURES OF WORK:**

Under general supervision, performs functions of a technical and geologic nature ranging from routine to moderately complex and relative to such endeavors as the investigation of land and groundwater related projects; reviews geologic data acquired in investigations, and assists higher level geologists in drawing conclusions that ultimately lead to recommendations for approval or denial of projects, pollution control standards, and variances relative to the assigned project be it in Land, and/or Water program areas, etc.; functions as a member of a team of geologists, engineers, and scientists charged with the execution of investigations relative to any one of the agency's different program areas.

**ILLUSTRATIVE EXAMPLES OF WORK:**

1. Functions as a member of a team composed of geologists, engineers, and scientists involved in field investigations and other surveillance activities relative to land pollution, water pollution, etc., and their resultant effect on other environmental factors.
2. Develops technical reports incorporating geologic data obtained in field investigations from Federal, state, local or private contractor(s); makes observations and recommendations on the more routine and clear-cut projects.
3. Works in conjunction with higher-level geologists, engineers, and scientists on the more complex multiproblem projects; assists higher-level geologists in drawing conclusions that ultimately lead to recommendations relative to the approval or disapproval of new sites or major revisions of existing sites, new or revised standards, variances, source water protection (pollution), etc.
4. In conjunction with other section personnel, performs such specialized functions as soil borings, well installations, well logging, etc.
5. Participates in the interpretation and evaluation of geologic and physical data.
6. Assists in the preparation of technical data to be utilized in court cases; serves as a witness in court cases when called upon.
7. Performs other duties as required or assigned which are reasonably within the scope of those enumerated above.

## ENVIRONMENTAL PROTECTION GEOLOGIST II (Continued)

### Education and Experience

Requires knowledge, skill, and mental development equivalent to completion of four years college with a degree in geology, including courses in groundwater geology, hydrology, soil physics, and/or soil chemistry.

Requires one year of professional experience as an Environmental Protection Geologist I or one year as an Environmental Protection Specialist I with geological science experience.

- OR -

A master's degree in geology with an emphasis on groundwater geology, soil physics, soil chemistry, and/or hydrology.

### DESIRABLE REQUIREMENTS:

#### Knowledges, Skills and Abilities

Requires working knowledge of natural geologic processes (methods), procedures, and techniques.

Requires skill in the use and application of geologic instruments and laboratory testing equipment.

Requires ability to gather geologic data in field investigations and surveys.

Requires ability to work in conjunction with other professionals on a team involved in the execution of field investigations and surveys of refuse disposal projects, groundwater pollution control projects, source water protection projects, etc.

ENVIRONMENTAL PROTECTION GEOLOGIST III

POSITION CODE: 13803

**DISTINGUISHING FEATURES OF WORK:**

Under direction, performs complex geologic functions relative to such endeavors as the review of projects and proposed sites for such projects as water and land programs; makes recommendations to supervisor concerning approval or denial of projects, pollution control standards, variances, etc., relative to such projects, and based on conclusions arrived at through investigations, functions as a leader of a team of engineers, geologists, and other scientists.

**ILLUSTRATIVE EXAMPLES OF WORK:**

1. Renders complex evaluations relative to geologic and hydrogeologic factors involved in decisions as to design, construction, and location of projects and/or source water protection needs.
2. Prepares technical, highly specialized reports of agency activities relating to geologic and hydrogeologic studies and surveys.
3. Interprets and evaluates geologic, hydrogeologic, physical, and chemical data; makes recommendations for action based on conclusions drawn from such data.
4. Reviews information for new sites or for major revisions of existing sites with regard to geologic and hydrogeologic data accumulated in review; recommends approval or denial of projects, standards, variances and source water protection needs.
5. Functions as a leader of a team involved in investigations and other surveillance activities relative to agency programs, or a team member performing as a specialist concerning geologic and hydrogeologic factors as related to such investigations.
6. Acts as a consultant to section staff on geologic and hydrogeologic factors and how they relate to agency programs.
7. Prepares technical documentation to be utilized in the prosecution of offenders of the existing statutes and standards; serves as a witness in court cases.
8. Performs other duties as required or assigned which are reasonably within the scope of those enumerated above.

## ENVIRONMENTAL PROTECTION GEOLOGIST III (Continued)

### DESIRABLE REQUIREMENTS:

#### Education and Experience

Requires knowledge, skill, and mental development equivalent to completion of four years college with a degree in geology.

Requires one year professional experience as an Environmental Protection Geologist II or one year as an Environmental Protection Specialist II with geological science experience.

#### Knowledges, Skills and Abilities

Requires extensive knowledge of groundwater geologic and hydrogeologic methods, procedures, and techniques.

Requires ability to function as a lead worker (project coordinator) of a team of professionals engaged in geologic and hydrogeologic surveys and investigations.

Requires ability to evaluate and analyze geologic and hydrogeologic data and to make recommendations from conclusions.

Requires skill in the use and application of geologic instruments and laboratory testing equipment.

Requires ability to advise and cooperate with private and local organizations and stake holders.