

CITY OF PHILADELPHIA PERSONNEL DEPARTMENT

3B60

GRADUATE ENVIRONMENTAL ENGINEER

GENERAL DEFINITION

This is beginning level environmental engineering work. Employees in this class perform assignments of limited but increasing scope and complexity which are intended to develop the knowledge and abilities of the engineer. Work is performed under the supervision of a higher level engineer. Assignments require evaluative thinking and are carried out in accordance with standard engineering practices and general work instruction. Completed work is used as a basis by others to further engineering projects. Work is performed under the supervision of a technical supervisor.

TYPICAL EXAMPLES OF WORK (ILLUSTRATIVE ONLY)

- Investigates industrial waste discharge into sewers or open waters; studies waste elimination procedures; investigates customer complaints concerning water distribution; collects water samples and reviews results of their analyses; using guidelines, suggests remedies for water impurity problems; writes reports findings; assists higher level engineer in research projects; assists in the operation of a water or wastewater treatment plant.
 - Investigates industrial hygiene or air pollution problems; reads background material; sets up equipment to study environmental hazards, monitor pollutants and take samples; analyzes samples; writes reports of findings and recommendations for smaller projects or an assigned phase of large projects; may testify at legal proceedings.
 - Attends training sessions; reads textbooks, manuals and previous records and reports of departmental divisions concerned.
 - Prepares periodic reports of field conditions and work progress.
 - Compiles a variety of technical data relative to the completion of assigned projects.
 - Participates in projects involving the use of computer for engineering applications.
 - Gains experience and proficiency toward the full performance level.
 - Performs related work as required.
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REQUIRED KNOWLEDGE, SKILLS AND ABILITIES

KNOWLEDGE OF:

- principles, practices and techniques applied to environmental engineering.
- engineering mathematics and mathematical tables used in engineering work.

ABILITY TO:

- make engineering computations.
- make sketches and engineering drawings.
- interpret and check design details, estimates, engineering plans and specifications for accuracy of engineering details.
- express ideas effectively, both orally and in writing.
- establish and maintain effective working relationships with associates, contractors and the general public.

MINIMUM ACCEPTABLE TRAINING AND EXPERIENCE

(The following statement represents the minimum training and experience standards which will be used to admit or reject applicants for tests. Applications submitted by candidates for this class will be reviewed based on training and experience requirements as approved on 12/80.)

Completion of a bachelor's degree program at an accredited college or university with major course work in environmental, civil or chemical engineering.

Or any equivalent combination of education that has included completion of a bachelor's degree program in an acceptable area of engineering as an educational minimum.

PHYSICAL AND MEDICAL REQUIREMENTS

- Ability to physically perform the duties and to work in the environmental conditions required of a position in this class.

LICENSES, REGISTRATIONS AND/OR CERTIFICATES

- Possession of a valid proper class motor vehicle operator's license as issued by the Commonwealth of Pennsylvania prior to appointment and during tenure of employment as a Graduate Environmental Engineer if required by work assignment.

PAY RANGE: EP15

Class Established: 12/80

Latest Spec. Revision:

CSC: 10/04, **Ad Board:** 01/05

CN/sb

END OF JOB CLASS SPECIFICATION - 3B60