



Code: 2074
Family: Technical Engineering
Service: Health and Welfare
Group: Inspectional
Series: Energy and Environmental Protection

CLASS TITLE: ENVIRONMENTAL ENGINEER I

CHARACTERISTICS OF THE CLASS

Under immediate supervision, performs entry-level professional environmental engineering work, enforcing federal, state, and municipal environmental protection laws, and performs related duties as required

ESSENTIAL DUTIES

- Conducts environmental surveys of industrial and waste disposal sites for compliance with environmental protection laws
- Collects samples of suspect materials and submits them for laboratory analysis
- Characterizes toxicity levels of samples according to established guidelines
- Responds to consumer complaints regarding air pollution and takes corrective action as required
- Identifies compliance violations and issues citations
- Discusses violations found and provides technical assistance and advice to businesses in correcting non-compliance issues
- Conducts follow-up inspections to ensure violations are corrected
- Assists in the review of permit applications (e.g., construction, demolition debris) and plans for the installation of industrial processing equipment and control devices to ensure compliance with environmental protection laws and regulations
- Performs engineering calculations to determine the emission rates of various pollutants and adjustments needed to ensure emission rates are at acceptable levels under the law
- Prepares site evaluation reports summarizing findings of environmental inspections and assessments
- Provides technical assistance to City departments and the private sector regarding environmental protection standards and guidelines
- Works with private contractors and technical staff at field emergencies and environmental violation incidents, as required
- Testifies in court as an expert witness on environmental issues
- Maintains and calibrates equipment and instrumentation

NOTE: *The list of essential duties is not intended to be inclusive; there may be other duties that are essential to particular positions within the class.*

MINIMUM QUALIFICATIONS

Education, Training, and Experience

- Graduation from an accredited college or university with a Bachelor's degree in Environmental Engineering or a directly related field, or an equivalent combination of education, training, and experience provided that the minimum degree requirement is met

Licensure, Certification, or Other Qualifications

- A valid State of Illinois driver's license is required.

WORKING CONDITIONS

- General office environment
- Exposure to outdoor weather conditions
- Some exposure to industrial fumes and hazardous chemicals

EQUIPMENT

- Standard office equipment (e.g., telephone, printer, photocopier, fax machine, calculator)
- Computers and peripheral equipment (e.g., personal computer, computer terminals, hand-held computer, scanner)
- Personal protective equipment (e.g., hard hat, shoes, glasses, gloves)
- Scientific calculators
- Testing and monitoring equipment (e.g., Geiger meters)

PHYSICAL REQUIREMENTS

- Ability to walk and stand for extended or continuous periods of time

KNOWLEDGE, SKILLS, ABILITIES, AND OTHER WORK REQUIREMENTS

Knowledge

Some knowledge of:

- *environmental hazards and related abatement methods
- *environmental inspection, research, and analysis methods and techniques
- applicable safety principles, methods, practices, and procedures
- *applicable environmental engineering methods, theories, principles, and procedures
- applicable federal, state, and local laws, regulations, and guidelines

Knowledge of applicable City and department policies, procedures, rules and regulations

Skills

- ACTIVE LEARNING - Understand the implications of new information for both current and future problem-solving and decision-making
- ACTIVE LISTENING - Give full attention to what other people are saying, taking time to understand the points being made, ask questions as appropriate, and not interrupt at inappropriate times
- CRITICAL THINKING - Use logic and reasoning to identify the strengths and weaknesses of alternative solutions, conclusions, or approaches to problems
- MATHEMATICS - Use mathematics to solve problems

Abilities

- COMPREHEND ORAL INFORMATION - Listen to and understand information and ideas presented through spoken words and sentences
- SPEAK - Communicate information and ideas in speaking so others will understand
- COMPREHEND WRITTEN INFORMATION - Read and understand information and ideas presented in writing

- WRITE - Communicate information and ideas in writing so others will understand
- REASON MATHEMATICALLY - Choose the right mathematical methods or formulas to solve a problem
- RECOGNIZE PROBLEMS - Tell when something is wrong or is likely to go wrong
- REACH CONCLUSIONS - Combine pieces of information to form general rules or conclusions (includes finding a relationship among seemingly unrelated events)

Other Work Requirements

- INITIATIVE - Demonstrate willingness to take on job challenges
 - DEPENDABILITY - Demonstrate reliability, responsibility, and dependability and fulfill obligations
 - ATTENTION TO DETAIL - Pay careful attention to detail and thoroughness in completing work tasks
 - ANALYTICAL THINKING – Analyze information and use logic to address work or job issues and problems
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All employees of the City of Chicago must demonstrate commitment to and compliance with applicable state and federal laws, and City ordinances and rules; the City's Ethics standards; and other City policies and procedures.

The City of Chicago will consider equivalent foreign degrees, accreditations, and credentials in evaluating qualifications.

* May be required at entry.

City of Chicago
Department of Human Resources
June, 2009
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