

CLASS SPECIFICATION
Environmental Technician II

FLSA Status: Covered
Union Representation: Professional and Technical Employees (PTE)

GENERAL PURPOSE

Under general supervision, monitors, plans, coordinates and implements industrial waste discharge elimination or recycling projects, surface water, stormwater, flow monitoring, and industrial wastewater monitoring projects; processes and issues environmental permits; inspects, investigates, monitors and assesses facilities for environmental concerns and non-compliance; participates on a watershed management team; maintains records and collects data; and performs related duties as assigned.

DISTINGUISHING CHARACTERISTICS

Environmental Technician II is responsible for planning and coordinating various groundwater, surface water, stormwater, flow monitoring and industrial wastewater monitoring; drinking water, watershed protection and enhancement, habitat restoration, industrial waste discharge elimination and/or recycling projects. Incumbents may be expected to process, issue, administer and maintain environmental permits and investigate, monitor and assess industries for environmental concerns and non-compliance with state and federal regulations, and participate in comprehensive watershed planning efforts.

Environmental Technician II is distinguished from Environmental Specialist in that incumbents in the latter class have greater responsibilities for project management including development of time lines, schedules and budgets. Environmental Specialist applies professional level scientific knowledge to perform advanced environmental analysis, activities, and projects.

ESSENTIAL DUTIES AND RESPONSIBILITIES

Any one position in this class may not perform all the duties listed below, nor do the listed examples of duties include all similar and related duties that may be assigned to this class.

1. Designs, plans, monitors, coordinates and implements, industrial waste discharge elimination and recycling projects; prepares management plans including all phases of preparation, implementation and maintenance; meets with watershed managers and staff to ensure coordination between bureau projects and overall bureau goals for watershed health; meets with project engineers to develop pre-construction design of facilities to accommodate environmental monitoring equipment and procedures.
2. Draws plans, maps and charts; develops and writes specifications for contracts and materials to ensure conformance to pretreatment regulations; assists in preparing RFPs and conducting interviews to select contractors; writes and edits standard operating procedures and best management practice manuals; reviews plans for conformance to regulations and standards; responds to program non-compliance and provides resolution through established procedures.

3. Implements finalized projects; manages machinery, machine operators and contract labor to prepare, construct, plan and maintain projects; facilitates and inspects contractor and volunteer work to ensure timely completion and high-quality work; directs the activities of technical, seasonal and contract labor in implementing projects; approves payments to contractors; resolves problems regarding contract performance and billing issues; surveys work sites for safety hazards; assists contractors with the disposition of debris.
4. Performs independent and joint site inspections for environmental investigations to ensure regulatory compliance; conducts industrial waste surveys of new industrial sources to identify environmental concerns, establish proper classification, determine permit requirements and update industrial database; documents field sites and conditions using field notes, digital photography and map and diagram drawing; uses information from field surveys to identify issues and pollutant sources to be addressed, develop work scope, schedules and methods for the conduct of data collection from samples.
5. Develops and manages industrial waste discharge permits for major type facilities; administers National Pollutant Discharge Elimination System (NPDES) permits as required by state and federal regulations; researches and determines which facilities must obtain NPDES and process applications; determines industrial user wastewater discharge permit fees; collects delinquent revenues accrued against an industrial user; monitors and permits septage haulers discharging to treatment plants to ensure compliance with treatment plant discharge limits.
6. Reviews proposals for treating industrial waste and assists in the resolution of industrial waste problems; reviews and evaluates complex building, plumbing and facility plans, industrial processes and regulatory documents; works with industries to achieve compliance with water-quality regulations; reviews and recommends changes to facility control plans; monitors contractor compliance with waste disposal requirements for sewer construction.
7. Meets with representatives of industrial plants and commercial sewer and water users to explain sewer or water rates and charges, City codes, regulations, policies and procedures; calculates usage and usage history related to consumption, maintenance or meter readings for water and sewer accounts.
8. Collects field water, soil, biosolids, and stormwater monitoring samples; analyzes laboratory data; gathers, evaluates and interprets data for sources of pollution to determine ambient conditions, trending and cause-and-effect relationships between pollutants and impacts; updates and organizes field sampling binders.
9. Initiates and monitors the environmental enforcement process of City, state and federal requirements based on detailed inspections and review of processes; protects City sewer collection and surface water systems from illegal or prohibited discharges; reviews proposals for treating industrial waste; assists in developing sound solutions to industrial waste disposal problems; monitors industry compliance with state, federal and local regulations and issues related permits.
10. Responds to environmental incidents and resolves or stabilizes problem through field investigation techniques and notifies complainant of outcome; takes appropriate enforcement action in response to

industry violations and resolves non-compliance through established procedures; participates in groups to establish enforcement capabilities for unauthorized or illegal discharges; identifies and eliminates illicit discharges to separate storm sewer system; meets with industrial dischargers and permit managers to discuss violations; responds to after-hour calls regarding spills and complaints.

11. Provides for recovery of costs incurred by the City due to sewer obstructions by determining source of discharges causing obstructions, issuing violations, requiring compliance measures to prevent recurrence of obstructions and issuing notices requiring payment of costs by responsible parties.
12. Performs database management; develops data management systems for section use in generating monitoring result reports; collects, analyzes and summarizes monitoring data; documents technical and legal determinations; enters water-quality and watershed data; manages bureau and City files; collects global positioning satellite data; installs, make adjustments to and performs upgrades to section database programs and data collection devices; performs records research for building plans and plumbing records.
13. Prepares and reviews technical reports that analyze and interpret water quality data; researches and assembles quantitative data concerning the quality of water; writes and maintains spill reports; prepares portions of annual bio-solids management plan and annual reports submitted to DEQ and EPA; prepares official records documenting bio-solids activities to establish compliance; responds to EPA and DEQ audits; contributes to the City's defense against outside lawsuits on environmental matters.
14. As member of inter-jurisdictional team, contributes to the development of plans to protect water quality and habitat and reduce flood damage in specific, environmentally sensitive areas; oversees development of hydrologic models and stormwater management plans; identifies current watershed conditions; researches past planning efforts; identifies management alternatives; contributes to creation of public involvement strategies
15. Researches professional literature, consults with other agencies and professionals to collect data and analyze possible environmental impacts; researches pollution prevention best management practices for specific areas/sectors; researches restoration and land-acquisition needs.
16. Through independent onsite inspections of City facilities, assesses conditions, collects field data, takes measurements, notes potential or developing problems and maintenance needs; makes recommendations and carries out other duties related to the field visit.
17. Operates CAD software to create, update and maintain electronic drawings and maps of water, sewer, stormwater, transportation, streets, street systems and other easements, infrastructures and facilities, including plans, detailed drawings, site plans, cross sections and/or drawings for alterations to buildings, utilities or structures.
18. Prepares, designs, produces and interprets a variety of maps and other graphic representations displaying layers and attribute data from the database using cartographic techniques to represent spatial data; develops and maintains data layers, using GIS tools, CAD tools and relational databases; enters attribute data pertaining to specific features into a relational database; incorporates maps,

charts, spreadsheet data and text into reports. Interprets aerial photos and maintains digital aerial photo databases.

19. Codes and digitizes maps and geographical feature data into various GIS layers and performs quality control checks of own and others' work to ensure database integrity.
20. Designs, creates, plans, maintains and updates maps, drawings, plans, spreadsheets, data files and documentation for a wide variety of purposes; responds to emergency mapping and information requests.
21. Performs flow monitoring of surface water, sanitary and storm sewage in confined and hazardous spaces; performs flow data evaluations and assessments.
22. May work closely with a Watershed Manager and other technical outreach staff to develop and organize programs and plans for protection, enhancement and restoration of water quality and watershed habitat.
23. Develops watershed plans and assessments of watershed health; creates and administers programs to improve overall watershed health; reviews development proposals for impact on watershed health; plans and implements programs that promote sustainable patterns of urbanization.
24. Provides technical expertise to other bureau staff, City staff and the public to solve environmental or natural resource problems.

OTHER DUTIES

1. Researches and develops recycling programs; researches recycling advances and applies to present programs; performs recycling inspections; facilitates the disposition of hard to recycle materials from generators to businesses who need it for raw materials.
2. Maintains, downloads, calibrates and deploys monitoring equipment in long-term water-quality monitoring projects.
3. Provides information, investigative assistance and testimony in court to law enforcement agencies in environmental crime cases.
4. Updates equipment checklists; contacts instrumentation manufacturer representatives for technical advice; drives, navigates and operates a variety of utility vehicles and boats.
5. Prepares and presents informational materials including maps, fact sheets, articles and mailers to educate the public about the project.

MINIMUM QUALIFICATIONS

Knowledge of:

1. Technical processes of environmental protection, enhancement and control, and management of natural resources.
2. Practices and techniques of physical and biological sciences and land use planning related to water quality and habitat protection.
3. Federal and state laws and regulations relating to environmental programs; local, state and federal regulations affecting riparian protection, fish/wildlife habitat protection and stormwater volume control of local waterways; municipal regulating codes pertaining to sewers, industrial waste control and recycling programs.
4. City operating policies and departmental work procedures and quality standards.
5. City laboratory and storage procedures and the means and techniques for collecting, storing and disposing of field samples.
6. Groundwater protection practices and procedures.
7. Geographic information system concepts, practices and techniques, including computer mapping and attribute data conversion, transfer, manipulation and analysis; GIS software, tools and applications; relational database concepts and practices.
8. CAD software and hardware drafting media.
9. Terminology, methods and techniques used in engineering maps and records.
10. Data-gathering and research methods.
11. Word processing, spreadsheet and database software.
12. Standard office practices and procedures including manual and electronic file development and maintenance; methods and procedures for archiving and retrieving technical documents, maps and drawings.

Ability to:

1. Conduct field investigations and inspections.
2. Collect field data and samples and analyze and make recommendations regarding environmental data and sampling results.
3. Monitor discharges and enforce federal and state laws.

4. Utilize a variety of GIS software, computer-aided drafting, graphics and other applications to carry out assigned responsibilities.
5. Operate a computer using a variety of programs, including GIS mapping.
6. Maintain technical files both electronic and manual.
7. Follow safety precautions when working at field sites.
8. Utilize specialized engineering, drafting, measuring, surveying, or electronic tools, materials and equipment.
9. Read and interpret various kinds of maps, architectural and engineering drawings, construction plans, blueprints and other technical materials, such as specifications, engineering manuals, surveying tables, computer manuals, trade journals, equipment instruction manuals, engineering code provisions, state and federal guidelines.
10. Read and interpret field and laboratory notes.
11. Learn and apply City, state or federal codes and regulations.
12. Clearly present technical information in oral, written, graphic or other forms; negotiate agreements with contractors and the public.
13. Perform detailed work thoroughly, neatly, accurately and efficiently.
14. Work/interact with the public and explain technical concepts/processes; respond to inquiries about watershed health and land use issues.
15. Establish and maintain effective working relationships bureau management and staff, contractors and others encountered in the course of work.
16. Recognize and resolve discrepancies in attribute data.
17. Perform special analyses and create data queries using a variety of data-querying tools.
18. Work in rough terrain, manholes and sewers, performing very physical and strenuous work under hazardous working conditions, significant traffic risk and exposure to unknown chemicals.

Training and Experience:

A typical way of obtaining the knowledge, skills and abilities outlined above is graduation from high school, trade school or vocational school, or G.E.D. equivalent, supplemented by college-level courses in chemistry, biology, forestry, hydrology and other environmental sciences; and three years of progressively responsible environmental resource, protection, enhancement and control experience; or an equivalent combination of training and experience.

Licenses; Certificates; Special Requirements:

A valid state driver's license may be required for certain assignments.

40-Hour Hazardous Waste training may be required for certain assignments.

Confined Space Entry, Boat Safety, and Traffic Control and Flagging Training may be required for certain assignments.

Some assignment may require additional certifications.

PHYSICAL AND MENTAL DEMANDS

Persons with disabilities may be able to perform the essential duties of this class with reasonable accommodation. Reasonable accommodation will be evaluated on an individual basis and depends, in part, on the specific requirements for the job, the limitations related to disability and the ability of the hiring bureau to accommodate the limitation.

Class History:

Adopted: 10-29-93 Engineering Technician II (3108) – Environmental specialty created.

Revised: 07-01-01 Spec revised as part of the COPPEA Classification and Compensation study. Environmental Technician II (6052) class created from the following COPPEA classes:

3108 Technician III (Environmental specialty)

Revised: 08-01-06 Spec history updated to reflect pre-2001 COPPEA Study history. Spec formatting modified.

Revised: 08-07-06 Revised FLSA status from “Non-exempt” to “Covered.”

June 2009 - Change Job Class number from 6052 to 30000338, due to system change.

July 2017 – Updated union name from COPPEA to PTE

August 2018 – Update certifications