# Process Control Systems Technician I

**BARGAINING UNIT:** CIV MANAGEMENT  
**CODE NUMBER:** 1675  
**PAY RANGE CODE:** 18.3 MC  
**REVISION DATE:** 10/26/17

## Nature of Work:

This is supervisory and technical work in the operation and maintenance of the computerized control system used in the operation of the City’s wastewater treatment plants of the Public Works department. Work involves the responsibility for developing and supervising the maintenance of the process control system and the monitoring of the calibration and maintenance of all instrumentation and control devices in the plants. It also involves working with subordinate supervisors to monitor plant efficiency. An employee in this classification works with considerable independence, receiving general guidance from a superior, and supervises subordinate technicians.

## Essential Functions:

(Any one position may not perform all the duties listed, nor do the listed examples include all the duties that may be performed in positions allocated to this class.)

- Analyzes, supervises, and participates in the maintenance of the process control computer database, making additions and upgrades as needed or as directed by a superior.

- Supervises and participates in the maintenance of the data collection system, periodically checking and calibrating or supervising the calibration of all relevant sensors to ensure accuracy of data transmissions.

- Supervises and participates in the maintenance of process control loops and instrumentation feedback systems, checking sensors, circuits, and servo-mechanisms when possible, and contracting for maintenance when necessary.

- Supervises the inspection of the electronic control systems and pneumatic servo-mechanisms.

- Identifies and locates maintenance malfunctions, coordinates the maintenance or repair by the Plant Maintenance division or a contracted vendor, and recommends approval or rejection of the work.

- Informs plant shift supervisors when problems in plant operations occur.

- Oversees the selection and installation of replacements and additions to the process control system and oversees such installations and additions.
Explains procedures of the system to plant personnel.

Assists in the hiring, training, scheduling, assigning, supervision, review, and evaluation of subordinates.

Assists in the budget preparation for the process control systems area of plant operations.

Compiles or oversees the compilation of operational reports to the Environmental Protection Agency (EPA) and reports on the status of plant equipment, making recommendations for preventive maintenance or repairs when needed.

Supervises the maintenance of an inventory of vital instrumentation replacement parts.

Maintains regular job attendance in accordance with a schedule established for the position by the supervisor.

Performs other related duties as assigned or as the situation dictates within the scope of this classification.

**REQUIRED KNOWLEDGE, SKILLS, AND ABILITIES:**

Knowledge of and ability to operate a computer or other technology using standard or customized computer or systems software applications appropriate to the assigned tasks.

Knowledge of electronics as related to process control systems, sensors, servo-mechanisms, and associated transmission equipment.

Knowledge of the methods and techniques involved in preventive maintenance of the database of the control computer.

Knowledge of control system instrumentation operation and maintenance.

Knowledge of ladder logic programming as it pertains to programmable logic controllers.

Ability to learn and adapt to advances in computer and electronics device technology and software.

Ability to apply problem solving techniques to locate, analyze, and solve complex computer equipment or software malfunctions.

Ability to understand and interpret departmental and divisional rules, regulations, procedures, and functions, and to observe them when making decisions.

Ability to establish and maintain effective working relationships with fellow employees and members of the general public.

Ability to plan, organize, supervise, and evaluate the work of a subordinate staff.
Ability to understand oral and written instructions.

Ability to adhere to safety policies, procedures, and guidelines.

Ability to reach, bend, stoop, squat, stand, or walk from 76 to 100% of the time; to lift from 51 to 75% of the time; to push, pull, type, or sit from 26 to 50% of the time; and to climb, balance, kneel, crouch, or crawl up to 25% of the time.

Ability to use up to twenty (20) pounds of force to move objects up to 33% of the time, to use up to ten (10) pounds of force to move objects from 34 to 66% of the time, and to use lesser amounts of force to move objects from 67 to 100% of the time.

EDUCATION AND EXPERIENCE: (The knowledge, skills, and abilities above may be acquired through, but are not limited to, the following combination of education and/or experience.)

Bachelor’s degree in Electrical/Electronic Engineering or a related field

OR

Two (2) years of college level courses in Electrical/Electronic Engineering or a related field

AND

Experience in a related area such as installation and operation of a process control system computer and installation and maintenance of instrumentation and controls.

WORKING CONDITIONS: (The conditions herein are representative of those that must be met by the employee to successfully perform the essential functions of the job. Reasonable accommodations may be made to enable individuals with disabilities to perform the essential job functions.)

Work is performed primarily in an industrial building setting at one of the City’s wastewater treatment plants, indoors and out in all weather conditions, near or with electrical currents and mechanical parts, vibrating machinery, at times in confined spaces or at heights of up to twenty feet, in conditions of fumes, odors, dusts, mists, gases, and at noise levels requiring shouting to be heard.

EQUIPMENT OPERATION: (Any one position may not use all of the tools and equipment listed nor do the listed examples comprise all of the tools and equipment that may be used in positions allocated to this classification.)

Computer Telephone Copier
Printer Test and Calibration Equipment Scanner
Instrumentation Testing Equipment
High Voltage Variable Frequency Drives

Previous Revision Date(s): 6/24/93
9/24/15