

CLASS TITLE: **Filtration Engineer II**

CHARACTERISTICS OF THE CLASS: Under immediate supervision, the class performs entry level professional engineering work in connection with the operation, instrumentation and maintenance of water purification equipment and facilities; and performs related duties as required.

ESSENTIAL DUTIES: Operates and maintains purification and chemical feeding equipment; investigates equipment breakdowns and makes recommendations to prevent their recurrence; observes instruments registering purification plant processes and conditions and records relevant data on operations logs; receives reports from the control laboratory regarding analyses of water samples, records data and compares data with instrument panel gauge data to ensure water quality standards are maintained; calculates actual dosage rates of water purification chemicals and monitors residuals to ensure compliance with City or other governmental standards; repairs and replaces malfunctioning instruments and controls on purification equipment; assists in conducting specifications tests on new and refurbished equipment; assists in calibrating and maintaining recording, regulating and treatment devices on purification equipment; completes daily control logs detailing plant activity, treatment changes, equipment readings and problems; reports operating conditions to supervisor on a periodic basis and when adjustments are required.

RELATED DUTIES: Maintains records of inspections, permits, work orders, correspondence and related documentation.

MINIMUM QUALIFICATIONS:

Training and Experience. Graduation from an accredited college or university with a Bachelor's degree in Chemical or Civil Engineering or a directly related field of engineering.

Knowledge, Abilities and Skill. Some knowledge of modern chemical engineering principles and practices. Some knowledge of filtration plant monitoring and measuring equipment and instruments. Some knowledge of water treatment operations.

Ability to apply basic chemical engineering theory. Ability to read and interpret filtration equipment instrument panels. Ability to calibrate and maintain recording and regulating equipment. Ability to prepare statistical calculations and computations.

Some skill in the application of modern principles and practices of chemical engineering. Some skill in maintaining filtration equipment. Some skill in advanced technical math. Good oral and written

communication skills.

Code: **5528**
Operation and Construction Service
Engineering, Designing and Structural Group
Chemical Engineering Series

CLASS TITLE: **Filtration Engineer II (Cont'd)**

Physical Requirements. Ability to access filtration equipment and instruments on multiple levels.

Working Conditions. Inside: General office environment. Outside: Occasional exposure to inclement weather and extreme temperatures.

Equipment. Filtration monitoring and measuring instruments. Standard office equipment including personal computers.

NOTE: While the list of essential duties is intended to be as inclusive as possible, there may be other duties which are essential to particular positions within the class.

May, 2002
City of Chicago
Department of Personnel