SANITARY ENGINEER

NATURE OF WORK

This is highly responsible technical and professional sanitary engineering work coordinating water, wastewater, and industrial utility operations including rate setting, directing investigative studies, and implementing programs in wastewater collection, water production, and water and wastewater treatment.

Work involves advising and making decisions on matters relating to all phases of the water and wastewater industry. This includes the wastewater collection system and treatment facilities plus potable water production, treatment and distribution. Work requires professional and technical knowledge in all phases of wastewater collection and treatment and potable water production, treatment and distribution. An employee in this classification is responsible for planning, coordinating, inspecting and preparing reports on all investigative studies in the water and wastewater operations. Supervision is received from the Public Utilities Coordinator with work being reviewed through operating reports and procedures and achievement of stated objectives. Supervision is exercised over subordinate technical employees.

EXAMPLES OF WORK PERFORMED

Plans, organizes, supervises and evaluates the work of subordinate technical employees; reviews and recommends approval or disapproval of all promotions, merit ratings, salary increases or disciplinary actions to the Public Utilities Coordinator; develops and implements safety and training programs.

Coordinates water quality sampling; testing and review of process control information for water and wastewater treatment; regulatory testing and reports; water and wastewater research activities with other agencies to ensure water quality compliance.

Implements Industrial Pretreatment and Water Quality Programs in order to ensure compliance with City ordinances and state and federal laws and regulations; coordinates and exchanges information with private industries and state and federal agencies; conducts technical research into industrial treatment operational problems and recommends solutions; reviews proposed new industries relative to treatment plant loading allocations, water quality management and sludge quality management; writes industrial discharge permits.

Compiles data and statistics for technical and operational reports; approves purchase requisitions and conducts monthly budget review in order to monitor budget expenditures; drafts municipal code modifications.

Manages Information Support Systems through maps and records, including system maps; utility property ownership and management.

Coordinates “One Call” ticket management; hardware and software network support and training; and system modeling.

Supervises, consults with and assists in special projects such as flow studies, smoke testing and hydraulic analyses of wastewater collection and water distribution systems**;** prepares and presents comprehensive engineering reports; prepares project specifications.

Monitors wastes received at the sanitary landfill site; coordinates emergency spills with the State, Fire Inspection and the Health Department; coordinates the handling of special wastes from industry and the general public; supervises the groundwater monitoring program; reviews and advises on courses of action on special waste discharge permits involving both liquid and solid waste management.

Manages utility engineering support including long and short range planning; master planning and CIP preparation coordination and review; subdivision evaluation and development review; water rights; project coordination and management of the CIP and developer projects; construction management cost of service and productivity measures by providing information analysis and reports regarding cost of services provided by Water and Wastewater.

Performs related work as required.

DESIRABLE KNOWLEDGE, ABILITIES AND SKILLS

Thorough knowledge of federal, state and city water standards and regulations.

Thorough knowledge of sanitary engineering principles and practices.

Thorough knowledge of chemistry, bacteriology, and biology as applied to water and wastewater treatment.

Considerable knowledge of the effects of industrial wastes on the wastewater treatment system.

Ability to perform as the owner in capital construction or repair projects.

Ability to apply sanitary engineering principles to problems of wastewater collection and treatment and potable water production treatment and distribution.

Ability to interpret rules, regulations and policies and to make decisions in accordance with established precedent.

Ability to plan, coordinate, assign and evaluate the work of subordinate technical employees.

Ability to maintain accurate records and to prepare technical reports.

Ability to establish and maintain effective working relationships with associates, superiors, subordinates, consultants, federal, state and local agencies, and the general public plus industry representatives.

Ability to communicate effectively both orally and in writing.

DESIRABLE TRAINING AND EXPERIENCE

Graduation from an accredited four year college or university with major course work in civil or sanitary engineering supplemented by a masters' degree in sanitary engineering plus experience in water and wastewater systems.

MINIMUM QUALIFICATIONS

Graduation from an accredited four year college or university with major course work in civil or sanitary engineering plus considerable experience in water and wastewater treatment systems; or any equivalent combination of training and experience which would provide the desirable knowledges, abilities and skills.

NECESSARY SPECIAL REQUIREMENT

Registration as a Professional Engineer by the State of Nebraska.

Approved by: _____ _____
Department Head Personal Director

4/74
Revised: 4/88
Revised: 11/02

PS2036