ASSISTANT SANITARY ENGINEER

NATURE OF WORK

This is responsible technical and professional sanitary engineering work assisting in the coordination of water, wastewater, solid waste and industrial utility operations including rate setting, managing and directing investigative studies, and implementing programs in solid waste systems, wastewater collection, water production and distribution, and water and wastewater collection, pumping and treatment systems.

Work involves assisting with matters related 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 assisting in planning, coordinating, inspecting and preparing reports on all investigative studies in the water and wastewater operations. Supervision is received from the an administrative superior 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

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; develops, coordinates, conducts and implements safety and training programs.

Assists in the planning, directing and coordination of 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.

Assists in planning, directing and supervising the implementation of Industrial Pretreatment 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 bio-solids quality management; writes and reviews industrial discharge permits.

Assists Sanitary Engineer in preparing annual budget documentation and presentation to management.

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

Assists with the management of the Information Support Systems and local area network (LAN) through maps and records, including system maps; utility property ownership and management; computer hardware; software; and computer network systems.

Assists with coordination of “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 and water distribution pressure studies, smoke testing of sanitary sewers and hydraulic analyses of wastewater collection and water distribution systems; reviews, prepares and presents comprehensive engineering reports; reviews and prepares project specifications.

Assists with the management of 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 program, CIP construction projects and developer projects; construction management cost of service and productivity measures by providing information analysis and reports regarding cost of services provided by Water, Wastewater and Solid Waste.

Performs related work as required.

DESIRABLE KNOWLEDGE, ABILITIES AND SKILLS

Considerable knowledge of federal, state and local regulations and standards governing water, surface water and groundwater quality; wastewater; and solid waste operations.

Considerable knowledge of environmental and sanitary engineering principles and practices.

Considerable knowledge of chemistry, bacteriology and biology as applied to water supply and treatment, wastewater collection and treatment, and surface waters.

Considerable working knowledge of computer word processing, spreadsheet usage, database design, statistical and graphic arts used in support of various engineering management and modeling efforts.

Knowledge of the effects of industrial wastes on the wastewater collection and treatment system.

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

Ability to apply environmental/sanitary engineering principles to problems of wastewater collection pumping and treatment, and potable water production treatment, pumping and distribution systems; surface water treatment systems; and solid waste systems.

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, environmental, chemical, mechanical or sanitary engineering supplemented by a Masters' degree in civil, environmental, chemical, mechanical or sanitary engineering plus considerable experience in water, wastewater and solid waste systems.

MINIMUM QUALIFICATIONS

Graduation from an accredited four year college or university with major course work in civil, environmental, chemical, mechanical or sanitary engineering plus experience in water, wastewater, pumping, distribution, collection and treatment systems or solid waste operations; or any equivalent combination of training and experience which provides the desirable knowledge, abilities and skills.

NECESSARY SPECIAL REQUIREMENT

Registration as an E.I.T. (Engineer In Training) within six months of appointment or registration as a Professional Engineer by the State of Nebraska. If registered in another state, must obtain Nebraska registration within one year of appointment.

Approved by: _____ _____

Department Head Personnel Director

05/2003

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