

SENIOR CHEMIST - 218

DEFINITION OF WORK

Under regular supervision, performs responsible professional work involving the chemical, physical and bacteriological analysis of water, sewage, industrial wastes and by-products of water or sewage treatment processes or supervises Industrial Waste Control Program; does related work as required.

EXAMPLES OF WORK

Assists in the direction and supervision of the laboratory staff; plans and assigns daily work schedule for chemists and lab technicians; develops sampling and analyzes procedures; is capable of performing laboratory tests to determine dissolved oxygen, toxicity, nutrients, chemical oxygen demand, chlorine residual, grease, detergents sulfide, coliform, settleable and suspended solids and alkalinity; is capable of performing the more difficult and specialized laboratory tests; collects, organizes and collates; interprets and transcribes laboratory data to permanent records; prepares routine and special reports; participates in staff training; advises supervisors on data analysis findings; prepares graphic demonstrations of data for review; performs routine mechanical maintenance on equipment or refers to proper party for repair; meets with industry officials to obtain compliance with duly established standards; keeps data trends on wastewater treatment processes and advises superiors on the efficiency of plant processes; administers the City's Industrial Waste Control Program.

EMPLOYMENT STANDARDS

Education and Experience: Any combination of education and experience equivalent to a bachelor's degree with major course work in chemistry or biology and considerable laboratory experience in the field of wastewater chemistry; considerable experience in treating domestic and industrial wastewaters and experience in interpreting analytical data from wastewater analysis.

Knowledge, Skills and Abilities: General knowledge of the principles of organic and inorganic chemistry including qualitative and quantitative analysis; general knowledge of modern chemical laboratory procedures, techniques and equipment and skill in their use; general knowledge of elementary physics, physical chemistry and biochemistry; ability to prepare clear and accurate scientific reports including suitable graphic representation; ability to work effectively with others on a professional level; general knowledge of federal pre-treatment guidelines; ability to use all the sampling and monitoring equipment used by IWC; ability to interact effectively with co-workers and the public.

