

CITY OF HELENA



Position Title: WW Laboratory Tech/Operator

Department: Wastewater

Position #: 31351

Grade: *130-140

EEO Category: (08) Service Maintenance

FLSA: Non-exempt

EEO Function: (13) Sanitation & Sewage

Work Comp Code: 9410

*May participate in Water/Wastewater Advancement policy. Grade placement will be dependent on certifications acquired.

DEFINITION

Under direction, to perform all operational and permit laboratory-testing procedures necessary for operations and permit compliance at the City of Helena Wastewater Facility; and to perform related work as required.

Under direction to perform a variety of duties involved in the operations, process, control, minor maintenance, and sludge dewatering at the wastewater treatment plant facility.

SUPERVISION RECEIVED

Supervised by Wastewater Treatment Plan Supervisor

SUPERVISION EXERCISED

None

EXAMPLES OF IMPORTANT AND ESSENTIAL DUTIES

Perform a variety of routine chemical and biological tests and analyses on wastewater samples to ensure governmental and process control requirements are met; perform B.O.D., unseeded, seeded, soluble, nitrification, and carbonaceous, suspended solids, temperature, microscopic examinations, nitrate ammonia, TKN, COD, phosphorus, volatile acids, alkalinity, boiler water, fecal coliform, methane analysis, turbidity, total solids, and other related tests.

Prepare, calibrate, standardize and operate a variety of laboratory and operations equipment and instruments including latchet analyzer, balances, centrifuge, chlorine titration, dissolved oxygen meter, spectrophotometer, distiller, Turbidimeter, water baths, vacuum pump, gas analyzer, and other related equipment.

Calculate and record laboratory test results; assemble data and maintain records and files; maintain logs of tests and results; prepare necessary reports.

Provide or coordinate staff training for plant operations concerning the lab testing; inspect and verify work in progress and completed work of assigned employees for accuracy, proper work methods and techniques, and compliance with applicable standards and specifications; work with employees to correct deficiencies.

Supervise the use and operation of laboratory tools and equipment; ensure that tools and equipment are safely operated, maintained, and secured when not in use; schedule the service, repair, and replacement of tools and equipment.

Participate in the preparation and administration of the assigned budget; submit budget recommendations; prepare and submit requisitions for supplies, materials, and parts; monitor expenditures.

May perform lab functions as required to support the Industrial Pretreatment Program, if needed.

Assist in routine, preventive, and emergency maintenance on mechanical equipment.

Important & Essential Duties cont.:

Operate all equipment within the complex secondary wastewater facility involved in a variety of duties including but not limited to rag and grit collection and removal, primary clarifiers operation and maintenance, secondary pump station, bioreactors basin operation and maintenance, secondary clarifier operation and maintenance, Ultra violet disinfection operation and maintenance, two-stage anaerobic digester operation and maintenance, gravity belt thickener operation, belt filter press operation and maintenance, engine generator operation, sludge pumping operation and maintenance, flow measurement, MPDES required sampling, sampling equipment maintenance, non-potable water pump station operation and maintenance, and receiving stream monitoring.

Perform manual labor and plant cleanup daily.

Assist in preparation of accurate daily operation records; perform mathematical computations related to plant control.

Adjust operational parameters to maintain plant performance in accordance with plant objectives determined by the Wastewater Treatment Plant Supervisor.

Maintain effective written and oral communication and working relationships with superiors, supervisors, employees, and other personnel involved in City's operations.

Conduct the biosolids monitoring program including a scheduled work plan for taking samples and analysis.

Perform wastewater tests from samples outside the City as needed.

Maintain, clean and care for laboratory facility, equipment and material; perform minor servicing and maintenance work on laboratory and process control equipment.

Perform the full range of duties in the assigned area of work.

Train and instruct lower level staff.

Participate in the organization and conduction of Process Control and Safety meetings.

Prepare and present technical papers.

Provide plant tours and information to the general public.

Respond to alarm conditions.

OTHER JOB RELATED DUTIES

Perform other duties as assigned.

SAFETY RELATED DUTIES:

Abide by the City of Helena and department/division work practices established for specific job assignments and occupations.

Report occupational injuries, illnesses and near misses immediately to their supervisor. Follow supervisor instructions for obtaining first aid and/or medical attention. Participate in accident investigations as requested by the supervisor.

Participate fully in safety training. Suggest improvements in safety training requirements or programs to the supervisor or the safety committee.

Identify unsafe work conditions and unsafe practices. Correct hazards or report them to the supervisor or safety committee as appropriate.

JOB RELATED AND ESSENTIAL QUALIFICATIONS

Knowledge of:

Procedures of wastewater sampling.

Techniques, materials, and equipment used in the examination of wastewater.

Principles of chemistry and microbiology.

Procedures and materials used in routine analyses of wastewater samples.

Operational characteristics and maintenance needs of instrumentation and laboratory equipment.

Principles and procedures of record keeping.

Principles of mathematics and statistics.

Modern office procedure, methods and computer equipment.

Occupational hazards and standard safety practices necessary in the area of work.

Principles of supervision and training.

Pertinent Federal, State, and local laws, codes, and regulations.

Principles and procedures of record keeping and reporting.

Skill to:

Operate the full range of laboratory tools and equipment, in a safe and effective manner.

Operate modern office equipment including computer equipment.

Learn to operate and maintain treatment plant equipment and facilities.

Operate a motor vehicle safely.

Perform manual labor for extended periods of time in all types of weather.

Ability to:

Learn operational characteristics of specialized wastewater treatment equipment and disposal systems.

Learn materials, methods, and practices used in the operation of wastewater treatment facilities and equipment.

Learn to read meters and gauges correctly.

Learn policies and operating routines of the wastewater treatment facilities.

Learn the fundamentals of laboratory analysis, interpretation, and calculations.

Learn occupational hazards and standard safety precautions necessary in wastewater treatment plant operations.

Learn pertinent Federal, State, and local laws, codes, and regulations.

Learn to make independent technical decisions to maintain proper treatment process.

Learn to diagnose operating problems and take effective courses of action.

Make routine repairs and adjustments to motors, pumps and other equipment.

Prepare and maintain accurate and complete records.

Perform accurate mathematical calculations.

Act quickly and competently.

Understand and follow oral and written instructions.

Communicate clearly and concisely, both orally and in writing.

Establish, maintain, and foster positive and harmonious working relationships with those contacted in the course of work.

Ability to cont.:

Work on-call, stand-by, shift work, and emergency call out.

Physical Demands/Work Environment:

Ability to sit, stand, walk, kneel, crouch, stoop, squat, crawl, twist, climb, push, pull, lift 50 lbs., distinguish color, and wear protective apparel; exposure to cold, heat, noise, outdoors, vibration, confining work space, chemicals, explosive materials, mechanical hazards, electrical hazards, toxic substances, foul odors, wastewater, sludge, effluents, bacteria, viruses, and traffic hazards; ability to travel to different sites and locations.

Experience and Training Guidelines:

Any combination equivalent to experience and training that would provide the required knowledge, skills, and abilities would be qualifying. A typical way to obtain the knowledge, skills, and abilities would be:

Experience:

Four years of combined education and experience in a Water/Wastewater Treatment Laboratory.

Operator I- One year of combined education and operations, process control, and minor maintenance experience at a wastewater treatment facility. Must also be Montana fully certified class one (1) wastewater treatment plant operator.

Operator II-III- Meet qualifications and requirements of City of Helena advancement policy.

Training:

Operator I- Equivalent to the completion of the twelfth grade.

Operator II & III- Meet qualifications and requirements of City of Helena advancement policy.

License or Certificate:

Must possess a valid drivers license with acceptable driving record at the time of hire and have the ability to obtain a valid MT drivers license within six months of hire.

Possession of, or ability to obtain within six months of hire, valid MT commercial driver's license with tanker endorsement, if position requires sludge hauling for disposal.

Possession of a Class I Wastewater Plant Operator Certificate issued by the State of Montana.

Special Requirements:

Subject to pre-employment as well as random, reasonable suspicion, post accident and follow-up drug and alcohol testing as per the City of Helena substance abuse policy.

After reading this job description, as of this date would you require any accommodation to perform these duties?

YES or NO (circle one)

Employee's Signature: _____

Date: _____

Effective Date: July, 2002

Updated: December, 2009