CITY OF GRAND HAVEN
JOB DESCRIPTION

WATER TREATMENT OPERATOR II
RECOMMENDED: WATER TREATMENT OPERATOR

Supervised By: Water Plant Supervisor
Supervises: No supervisory responsibilities
FLSA: Non-Exempt

Position Summary:
Under the supervision of the Water Plant Supervisor, operates and maintains the City’s water treatment plant to provide safe drinking water to residents and other system customers. Performs various general and semi-skilled maintenance and repair activities related to City’s water treatment plant and infrastructure. Completes a full range of activities related to process control operations and lab analysis including testing, quality control, and records maintenance.

Essential Job Functions:
An employee in this position may be called upon to do any or all of the following essential functions. These examples do not include all of the duties which the employee may be expected to perform. To perform this job successfully, an individual must be able to perform each essential function satisfactorily.

1. Performs operational and lab related tasks at the City’s water treatment plant. Completes a full range of activities related to process control operations and lab analysis to ensure a safe supply of potable water for human consumption, industrial use, and fire suppression.

2. Performs various general and semi-skilled maintenance and repair activities related the City’s water treatment plant, infrastructure, and other related areas. Conducts regular inspections, completes repairs, and records preventative maintenance and repair activities according to established procedures.

3. Operates chemical and other pumps, motors, compressors, generators, and other specialized equipment. Changes charts, inspects tanks, washes filter beds, and completes other related activities. Monitors and analyzes the SCADA system to diagnose potential issues. Observes malfunctions and takes corrective action according to established protocol.

4. Analyzes source, process and finished water quality, including testing for PH, alkalinity, calcium, magnesium, turbidity, fluoride, chlorine and chlorine dioxide concentrations, and total dissolved solids. Performs bacteriological testing to confirm the presence or absence of fecal and total coliform as well as heterotrophic plate counts. Makes necessary adjustments based on interpretation of analysis.

5. Prepares chemical reagents and bacteriological reagents used to perform analysis of water samples used in conjunction with specialized laboratory test equipment. Tests equipment and performs equipment calibrations and quality assurance checks on prepared medias.

6. Completes testing at critical processing points, obtains samples, evaluates test results and initiates changes in the treatment processes to meet required standards in accordance with established procedures.
7. Performs routine laboratory work, collects samples, and completes lab tests. Cleans sampling and lab equipment and completes routine maintenance, calibration, troubleshooting, and standard repairs on lab and sampling equipment.

8. Maintains lab facilities, equipment, and supplies. Inventories, orders, and stores chemicals and other supplies used in the lab. Maintains complete records of water treatment activities. Generates reports as required or requested.

9. Completes timesheets and maintains daily work logs of projects completed and the equipment, vehicles and materials used. Completes other paperwork as assigned.

10. May be assigned to serve as the Maintenance Relief Operator. Performs a variety semi-skilled and skilled maintenance and repair activities related the City’s water treatment plant, infrastructure, and other related areas including plumbing, electrical, carpentry, welding, and other related maintenance activities.

11. Performs general maintenance and special projects related to grounds keeping, snow and ice removal, equipment installations and cleaning, custodial activities, and other projects as assigned.

12. Assists in training new employees as assigned and may assist in water distribution activities as needed.

13. Adheres to all applicable safety procedures while operating equipment, handling chemicals or hazardous waste or working in dangerous situations. Participates in safety training, attends safety meetings and participates in other meetings or committees as directed.

14. Responds to public inquiries constructively, refers complaints or complex issues to Water Plant Supervisor and represents the department in a positive manner. Receives and responds to non-emergency calls for the City.

15. Attends training programs and seminars to obtain continuing education credits necessary to maintain the appropriate licensing required by the City’s water plant.

16. Responds to plant emergency situations. May be required to work outside of normal business hours in the event of an emergency.

17. Performs other related work as required.

**Required Knowledge, Skills, Abilities and Minimum Qualifications:**

The requirements listed below are representative of the knowledge, skills, abilities and minimum qualifications necessary to perform the essential functions of the position. Reasonable accommodations may be made to enable individuals with disabilities to perform the job.

- A high school diploma or equivalent is required. Additional education and/or training in a related field preferred.

- Previous experience in water system operations and maintenance or related field preferred.

- Ability to obtain State of Michigan DEQ F-4 within 6 months of hire and remain certified throughout employment.
• Knowledge of the sampling and testing methods and procedures used in water system operations and a basic knowledge of current public health guidelines, government regulations, and professional standards for water treatment.

• Knowledge of the safety issues, regulations, and procedures utilized in water plant operations.

• Knowledge of tools and materials used in the maintenance, repair, and construction of municipal water treatment equipment and facilities.

• Skill in the operation of basic water treatment plant equipment, including manipulating valves, chemical feeds, and related water system devices.

• Skill in performing preventive maintenance, and repairs on plant equipment, machinery, buildings, and facilities.

• Skill in the use of office equipment and technology, including computers and a variety of related software, and the ability to master new technologies.

• Ability to perform safety and sensitive tasks, complete preventative maintenance and repairs, and operate tools and equipment effectively and with attention to detail.

• Ability to read and interpret drawings and specifications and solve mechanical, operational, or analytical problems related to plant operations.

• Ability to accurately log and record information, perform mathematical computations, and complete and maintain accurate reports and records.

• Ability to communicate effectively and present ideas and concepts orally and in writing.

• Ability to work independently and work alone during the evening shift, and complete assigned work in a timely manner.

• Ability to establish effective working relationships and use good judgment, initiative and resourcefulness when dealing with employees, City officials, professional contacts, community leaders, the media, and the public.

• Ability to multi-task, problem-solve, and work effectively under stress, within deadlines and changes in work priorities.

• Ability to work outside of normal business hours, travel to other locations, and respond to emergencies on a 24-hour basis.

**Physical Demands and Work Environment:**
The physical demands and work environment characteristics described here are representative of those an employee encounters while performing the essential duties of the job. Reasonable accommodations may be made to enable individuals with disabilities to perform essential functions.

While performing the duties of this job, the employee regularly works in a wastewater treatment plant and its laboratory or in the field completing hands-on operations and maintenance work. The employee is exposed to moving mechanical parts, adverse weather conditions, risk of electrical shock, vibration, fumes or airborne particles, and toxic or caustic chemicals. The employee is regularly exposed to sewage odors, damp pits, grease and oil from machinery, and
paint fumes. The employee must occasionally lift and/or move items of moderate to heavy weight.

While performing the duties of this job, the employee may be exposed to treacherous terrain, requiring the employee to traverse uneven ground, climb up or crawl down to access the site, and may be exposed to fumes, dust, chemicals or other hazardous materials, loud machinery and equipment, and other dangers associated with maintenance activities or plant operations. An employee in this position must have the strength, stamina and physical coordination needed to gain access to the work sites described above, observe and inspect work in progress, and operate power tools and equipment. The noise level in the work environment ranges from low to loud.