

**MT. PLEASANT WATERWORKS
JOB DESCRIPTION, JANUARY 1999**

**POSITION TITLE: WATER PLANT OPERATOR II
UTILITIES DIVISION**

GENERAL DESCRIPTION OF DUTIES

Under general supervision, the purpose of the position is to serve as a member of a self-directed work team responsible for providing consistent high quality potable water, utilizing reverse osmosis technology. Employees in this classification perform technical work. Position is responsible for independently managing a water distribution system that incorporates aquifer storage and recovery and supplemental surface water, while operating and maintaining four reverse osmosis plants and all ancillary equipment. Performs related work as required. Reports to the Water and Wastewater Operations Supervisor.

SPECIFIC DUTIES AND RESPONSIBILITIES

EXAMPLES OF ESSENTIAL FUNCTIONS

Monitors the operations of the reverse osmosis plants and related water system; records plant operational information, including flow rates, pressures, raw water quality parameters, finished water quality parameters, tank levels, etc.

Maintains control of the entire water distribution system that incorporates supplemental surface water.

Utilizes various water quality testing equipment in order to strictly monitor and maintain parameters set forth and enforced by the Environmental Protection Agency and the South Carolina Department of Health and Environmental Control under the auspices of the Primary Safe Drinking Water Act; performs tests to maintain control of pH, conductivities, chloramine residuals, turbidity, silt density indices, alkalinity, total hardness, electrical signaling, and Langlier saturation indices.

Verifies that all phases of treatment are effectively being performed and makes any adjustments as necessary; takes remedial action on water quality discrepancies; reports any discrepancies to team members.

Calculates proper chemical dosages for various pre- and post-treatment chemicals; performs tests and calculates a chemical feed rate on each chemical injection system to insure the correct dosage is being administered.

Completes a variety of daily, weekly, monthly, quarterly, and yearly preventive maintenance procedures and checks to ensure that all specified equipment is operating properly and remains in good working order.

WATER PLANT OPERATOR II

Monitors and maintains all chemical feed systems including pumps, piping, flow meters, flow controllers, and chemical injectors.

Performs chemical cleaning of the reverse osmosis membranes as necessary or as scheduled in accordance with engineering and manufacturer's guidelines.

Maintains equipment as it relates to the Computerized Maintenance Management System (CMMS).

Prepares work requests or discrepancy reports for any problems or deficiency discovered during any phase of the preventive maintenance procedures.

Trains and oversees work of new employees; provides guidance to ensure duties and responsibilities are carried out in accordance with Standard Operating Procedures.

MARGINAL FUNCTIONS

While the following tasks are necessary for the work of the unit, they are not an essential part of the purpose of this position and may also be performed by other unit members.

Loads, unloads, and transports various chemicals at the plant.

Maintains plant buildings and grounds in adjunct with landscaping company; inspects and maintains ground storage tanks.

Operates excavation equipment and other machinery, including backhoes, forklifts, and trenchers.

Performs related duties as required.

MINIMUM TRAINING AND EXPERIENCE

High School diploma or GED and Vocational/Technical training with emphasis in water system operations; supplemented by three (3) to five (5) years previous experience and/or training involving the operation and maintenance of water systems; or an equivalent combination of education, training, and experience. Possession of Environmental Certification Water - Level B. Completion of Reverse Osmosis Fundamental training. Must possess and maintain a valid South Carolina Driver's License.

DESIRED QUALIFICATIONS

Confined Space Entry Certification
Hazardous Materials Technician Certification - Level B.
Complete required WEU's per training calendar year

WATER PLANT OPERATOR II**PERFORMANCE APTITUDES**

Data Utilization: Requires the ability to review, classify, categorize, prioritize, and/or analyze data and/or information. Includes exercising discretion in determining data classification, and in referencing such analysis to established standards for the purpose of recognizing actual or probable interactive effects and relationships.

Human Interaction: Requires the ability to provide guidance, assistance, and/or interpretation to others on how to apply procedures and standards to specific situations.

Equipment, Machinery, Tools, and Materials Utilization: Requires the ability to operate and control the actions of equipment, machinery, tools and/or materials requiring complex and rapid adjustments.

Verbal Aptitude: Requires the ability to utilize a variety of advisory data and information, such as plant maintenance manuals, geological maps, Emergency Preparedness Manual, Safety Manual, employee guidelines, computer program manuals, parts catalogs, Operations Manual, OSHA Manual CFR 29 1910, and material safety data sheets.

Mathematical Aptitude: Requires the ability to calculate decimals and percentages; ability to perform mathematical operations with fractions; ability to compute discount, interest, profit and loss, ratio and proportion; ability to calculate surface areas, volumes, weights, and measures.

Functional Reasoning: Requires ability to apply principles of rational systems. Ability to interpret instructions furnished in written, oral, diagrammatic, or schedule form. Ability to exercise independent judgment to adopt or modify methods and standards to meet variations in assigned objectives.

Situational Reasoning: Requires the ability to exercise the judgment, decisiveness and creativity required in situations involving evaluation of information against measurable or verifiable criteria.

ADA COMPLIANCE

Physical Ability: Tasks involve the regular and, at times, sustained performance of moderately physically demanding work, typically involving some combination of climbing and balancing, stooping, kneeling, crouching, and crawling, and that may involve the lifting, carrying, pushing, and/or pulling of moderately heavy objects and materials of a minimum of 40 pounds.

Dexterity: Requires the ability to perform semi-skilled coordinated movements.

Sensory Requirements: Some tasks require the ability to perceive and discriminate colors or shades of colors, sounds, taste, odors, temperature, anticipatory perception, and depth. Some tasks require visual perception and discrimination.

Environmental Factors: Tasks may risk exposure to adverse environmental conditions, such as dirt, dust, pollen, odors, wetness, humidity, fumes, temperature and noise extremes, machinery, vibrations, electric currents, toxic agents, disease, or pathogenic substances.

WATER PLANT OPERATOR II

PERFORMANCE INDICATORS

The work performance of non-supervisory personnel of Mt. Pleasant Waterworks is routinely evaluated according to the performance criteria outlined herein:

Knowledge of Work: Has considerable knowledge of the methods, procedures and policies of Mt. Pleasant Waterworks as such pertains to the performance of the essential duties of Water Plant Operator II. Has considerable knowledge of principles and practices of water treatment and pumping station operation and maintenance. Has considerable knowledge of the laws, ordinances, standards, and regulations pertaining to the essential duties and responsibilities of the position. Has working knowledge of the organization of the department, and of related departments and agencies. Clearly understands the occupational hazards and safety precautions required to perform the essential functions of the work. Has working knowledge of terminology and related professional languages used within the department as such pertains to work responsibilities. Knows how to maintain cooperative and effective relationships with intra- and interdepartmental personnel, as well as any external entities with whom position interacts.

Quality of Work: Maintains high standards of accuracy in performing duties and responsibilities. Exercises immediate remedial action to correct any quality deficiencies that occur in areas of responsibility. Maintains quality communication and interaction with intra- and interdepartmental personnel, and any external entities with whom position interacts.

Quantity of Work: Performs described Essential Functions and related assignments efficiently and effectively in a manner to produce a quantity of work which consistently meets established standards and expectations.

Dependability: Assumes responsibility for completion of assigned functions. Completes assigned work within established deadlines in accordance with directives, policies, standards, and prescribed procedures. Maintains accountability for assigned responsibilities in the technical, human and conceptual areas.

Attendance: Attends and remains at work regularly and adheres to policies and procedures regarding absenteeism and tardiness. Provides sufficient notice to upper management with respect to vacation time and leave requests.

Initiative and Enthusiasm: Exhibits an enthusiastic, self-reliant and self-starting approach to meet job responsibilities and accountabilities. Strives to anticipate work to be accomplished, and initiates appropriate and acceptable action for the completion of work with a minimum of supervision and instruction.

Judgment: Exercises analytical judgment in areas of responsibility. Identifies issues or situations as they occur and specifies decision objectives. Identifies or assists in identification of alternative solutions to issues or situations. Implements decisions in accordance with prescribed and effective policies and procedures and with a minimum of errors. Seeks expert or experienced advisement where appropriate, and researches issues, situations, and alternatives prior to exercising judgment.

WATER PLANT OPERATOR II

Cooperation: Accepts supervisory and managerial instruction and direction, and strives to meet the goals and objectives of same. Questions such instruction and direction when clarification of results or consequences is justified, i.e., poor communications, variance with established policies and procedures, etc.. Offers suggestions and recommendations to encourage and improve cooperation both intra- and interdepartmentally.

Relationships with Others: Shares knowledge with managers, supervisors and co-workers for mutual benefit. Contributes to maintaining high morale among all employees. Develops and maintains cooperative and courteous relationships both intra- and interdepartmentally, and with external entities with whom position interacts. Tactfully and effectively handles requests, suggestions, and complaints in order to establish and maintain good will. Emphasizes the importance of maintaining a positive image.

Coordination of Work: Plans and organizes daily work routine. Establishes priorities for the completion of work in accordance with sound time-management methodology. Avoids duplication of effort. Estimates expected time of completion for work elements, and establishes a personal schedule accordingly. Attends required meetings, planning sessions and discussions on time. Implements work activity in accordance with priorities and estimated schedules.

Safety and Housekeeping: Adheres to all established safety and housekeeping standards, to include regulatory entities. Ensures such standards are not violated.

Employee's Signature

Supervisor's Signature

Date

Date

Mt. Pleasant Waterworks is an Equal Opportunity Employer. In compliance with the Americans with Disabilities Act, Mt. Pleasant Waterworks will provide reasonable accommodations to qualified individuals with disabilities and encourages both prospective and current employees to discuss potential accommodations with the employer.

**MOUNT PLEASANT WATER WORKS
JOB DESCRIPTION, AUGUST, 2002**

**JOB TITLE: WATER QUALITY OPERATOR
WATER DEPARTMENT
UTILITY DIVISION**

GENERAL STATEMENT OF JOB

Under general supervision, the purpose of this position is to operate and maintain water quality and integrity in the water distribution system. Employees in this classification perform semi-skilled and skilled maintenance and repair work. Position is responsible for monitoring water quality throughout the distribution system (Cl₂, NTU); maintaining hydrants, valves, and backflow devices; planning and performing fire tests; handling customer complaints; flushing water mains and laterals; and preparing records of maintenance activities. Performs related work as required. Reports to the Water Quality Foreman.

SPECIFIC DUTIES AND RESPONSIBILITIES

ESSENTIAL JOB FUNCTIONS

Maintains water quality standards throughout the Distribution System; Performs routine testing of turbidity and chlorine residuals; identifying areas in need of corrective action, monitoring and documenting the flushing, blow-off and cleaning throughout the system; receives, graphs and responds to water quality complaints.

Performs perpetual maintenance of valves and hydrants; performs the preventive maintenance and repair of all hydrants and valves in the system; ensures they are accessible and in proper working order; records information on valves and hydrants.

Repairs, replaces and maintains valves and hydrants; maintains records for hydrants and valves as required.

Plans and performs fire flow tests for Engineering in accordance with AWWA guidelines.

Maps, plans, and implements unidirectional flushing of water system.

Analyzes system problems derived from flow tests, customer complaints and produces appropriate solutions. Handles taste, odor, and colored water complaints; assists lab personnel with water quality complaints.

Locates valves, mains, services and leaks in the field using electronic and mechanical detection equipment to assist MPW crews, contractors, engineering services, etc.

Obtains water samples as needed for lab purposes.

Inspects and tests backflow devices for new services.

Ensures customer compliance with the organizations backflow prevention requirements; maintains backflow device data; records and updates related information; prepares related correspondence and forwards to customers for notification and compliance; conducts customer inspections; reviews

WATER QUALITY OPERATOR

1480

questionnaires and construction plans; makes on-site inspections of new and existing establishments to determine if backflow installations, testing or repairs are needed.

Receives, prepares or completes various forms, reports, correspondence, i.e., water quality reports, complaints/response forms, work orders, hydrant flow reports, water turbidity and chlorine residual testing reports, construction plans, backflow testing agreements or other documentation; reviews, completes, processes, forwards or retains as appropriate.

Communicates with supervisor, employees, other departments, customers, engineers, inspectors, contractors, and other individuals as needed to coordinate work activities, review status of work, exchange information, and resolve problems.

Provides information for monthly, quarterly and yearly reports.

"On-Call" approximately every three weeks for a seven day period.

ADDITIONAL JOB FUNCTIONS

Performs other related duties as required.

MINIMUM TRAINING AND EXPERIENCE

High school diploma or equivalent with any equivalent combination of education, training, and experience that provides the requisite knowledge, skills, and abilities for this job. Must possess certification as a Backflow Tester by SC DHEC within 1 year, and must pass the B level Water Distribution exam with 1 year of hire date. Must possess and maintain a valid SC Driver's License.

DESIRED QUALIFICATIONS

Water Treatment – Level C

Complete required WEU's per training calendar year

MINIMUM QUALIFICATIONS OR STANDARDS REQUIRED TO PERFORM ESSENTIAL JOB FUNCTIONS

PHYSICAL REQUIREMENTS: Must be physically able to operate a variety of tools and equipment, such as a pressure differential test gauge, mechanics tools, turbidity meter, chlorine test kit, metal detector, probe rod, excavator, jackhammer, valve turning machine and related equipment as well as basic office equipment. Tasks require the ability to exert moderate, though not constant physical effort, typically involving some combination of climbing and balancing, stooping, kneeling, crouching and crawling and which may involve some lifting, carrying, pushing and/or pulling of objects and materials of moderate weight (50-100 pounds).

DATA CONCEPTION: Requires the ability to evaluate, audit, deduce, and/or assess data using established criteria. Includes exercising discretion in determining actual or probable consequences and in referencing such evaluation to identify and select alternatives.

INTERPERSONAL COMMUNICATION: Requires the ability to apply principles of persuasion and/or influence over others in coordinating activities of a project, program or designated area of responsibility.

LANGUAGE ABILITY: Requires the ability to read a variety of reports, informational and technical documentation, directions, instructions, and methods and procedures. Requires the ability to write reports with proper format, punctuation, spelling and grammar, using all parts of speech. Requires the

ability to speak with and before others with poise, voice control, and confidence using correct English and well-modulated voice.

INTELLIGENCE: Requires the ability to exercise judgment, decisiveness and creativity in situations involving evaluation of information against measurable or verifiable criteria.

VERBAL APTITUDE: Requires the ability to utilize a wide variety of reference, descriptive, and/or advisory data and information.

NUMERICAL APTITUDE: Requires the ability to perform addition, subtraction, multiplication, and division. May include counting, recording of counts, and basic measuring.

FORM/SPATIAL APTITUDE: Requires the ability to inspect items for proper length, width, and shape, visually with job-related equipment.

MOTOR COORDINATION: Requires the ability to coordinate hands and eyes in using job-related office equipment.

MANUAL DEXTERITY: Requires the ability to handle a variety of items, job-related equipment, control knobs, switches, etc. Must have the ability to use one hand for twisting or turning motion while coordinating other hand with different activities. Must have minimal levels of eye/hand/foot coordination.

COLOR DISCRIMINATION: May require the ability to differentiate colors and shades of color.

INTERPERSONAL TEMPERAMENT: Requires the ability to deal with people beyond giving and receiving instructions. Must be adaptable to performing under minimal stress when confronted with an emergency.

PHYSICAL COMMUNICATION: Requires the ability to talk and/or hear (talking - expressing or exchanging ideas by means of spoken words; hearing - perceiving nature of sounds by ear).

PERFORMANCE INDICATORS

Knowledge of Job: Has working knowledge of the policies, procedures, and activities of Mount Pleasant Waterworks as they pertain to the performance of duties relating to the position of Water Quality Operator. Has knowledge of principles, practices, and methods associated with the operation, treatment, repair and maintenance of water distribution systems. Has knowledge of and proficiency in operation of related water quality equipment. Has knowledge of the methods associated with understanding and interpreting as-builts, system maps, and hydraulic flows. Applies a working knowledge of backflow testing, repair and installations. Has knowledge of the terminology, principles, and methods utilized within the department. Knows how to keep abreast of any changes in policy, procedures, and methods, as they pertain to departmental operations and activities. Has the ability to comprehend, interpret, and apply regulations, procedures, and related information. Is able to effectively communicate and interact with supervisors, members of the general public, and all other groups involved in the activities of the department. Is able to use independent judgment and work with little direct supervision as situations warrant. Has the mathematical ability to handle required calculations. Is able to read, understand, and interpret reports and related materials.

Quality of Work: Maintains high standards of accuracy in exercising duties and responsibilities. Exercises immediate remedial action to correct any quality deficiencies that occur in areas of responsibility. Maintains high quality communication and interacts with all departments/divisions, co-workers, and the general public.

Quantity of Work: Maintains effective and efficient output of all duties and responsibilities as described under "Specific Duties and Responsibilities."

Dependability: Assumes responsibility for doing assigned work and meeting deadlines. Completes assigned work on or before deadlines in accordance with directives, policies, standards, and prescribed procedures. Accepts accountability for meeting assigned responsibilities in the technical, human, and conceptual areas.

Attendance: Attends work regularly and adheres to policies and procedures regarding absences and tardiness. Provides adequate notice to higher management with respect to vacation time and time-off requests.

Initiative and Enthusiasm: Maintains an enthusiastic, self-reliant, and self-starting approach to meet job responsibilities and accountabilities. Strives to anticipate work to be done and initiates proper and acceptable direction for completion of work with a minimum of supervision and instruction.

Judgment: Exercises analytical judgment in areas of responsibility. Identifies problems or situations as they occur and specifies decision objectives. Identifies or assists in identifying alternative solutions to problems or situations. Implements decisions in accordance with prescribed and effective policies and procedures and with a minimum of errors. Seeks expert or experienced advice and researches problems, situations, and alternatives before exercising judgment.

Cooperation: Accepts supervisory instruction and direction and strives to meet the goals and objectives of same. Questions such instruction and direction when clarification of results or consequences are justified, i.e., poor communications, variance with policy or procedures, etc. Offers suggestions and recommendations to encourage and improve cooperation between all staff persons and departments.

Relationships with Others: Shares knowledge with supervisors and staff for mutual and organizational benefit. Contributes to maintaining high morale among all employees. Develops and maintains cooperative and courteous relationships with department employees, staffers, managers in other departments, representatives from organizations, and the general public so as to maintain good will toward the organization and project a good image. Tactfully and effectively handles requests, suggestions, and complaints from other departments and persons in order to maintain good will within the organization. Interacts effectively with fellow employees, supervisor, professionals, and the general public.

Coordination of Work: Plans and organizes daily work routine. Establishes priorities for the completion of work in accordance with sound time-management methodology. Avoids duplication of effort. Estimates expected time of completion of elements of work and establishes a personal schedule accordingly. Attends meetings, planning sessions, and discussions on time. Implements work activity in accordance with priorities and estimated schedules. Maintains a calendar for meetings, deadlines and events.

Safety and Housekeeping: Adheres to all safety and housekeeping standards established by the organization and various regulatory agencies. Sees that the standards are not violated. Maintains a clean and orderly workplace.

Employee's Signature

Supervisor's Signature

Date

Date

Mt. Pleasant Waterworks is an Equal Opportunity Employer. In compliance with the Americans with Disabilities Act, Mt. Pleasant Waterworks will provide reasonable accommodations to qualified individuals with disabilities and encourages both prospective and current employees to discuss potential accommodations with the employer.