

Personnel
3-3-14

RESOLUTION

WASTEWATER TREATMENT FACILITY JOB DESCRIPTIONS

WHEREAS, as a result of the City's reorganization in 2011, essential job duties and responsibilities have changed within each department; and

WHEREAS, it is a best practice to ensure all job descriptions are current and up-to-date to accurately reflect essential job duties and responsibilities within each department; and

WHEREAS, the Personnel Committee recommended acceptance of the attached revised job descriptions within the Wastewater Treatment Facility (Electromechanical Technician, Electrician and Mechanic) at a meeting held on Monday, February 10, 2014.

NOW THEREFORE, BE IT RESOLVED BY Mayor Justin M. Nickels and the Common Council of the City of Manitowoc to approve the attached revised job descriptions within the Wastewater Treatment Facility (Electromechanical Technician, Electrician and Mechanic).

Introduced	<u>MAR 3 '2014</u>	_____
Adopted	_____	_____
Approved	_____	_____

Justin M. Nickels, Mayor

This Resolution was drafted by Jeri Johnson, Human Resources Generalist

Job Description

Human Resource Use Only
Position Number:
Step/Grade
Effective Date:

POSITION IDENTIFICATION

Position Title: Electromechanical Technician
Division: Wastewater Treatment Facility
Status: Full Time Non-Exempt
Normal Workweek: Monday – Friday (7 a.m. – 3 p.m.)

SUPERVISORY RELATIONSHIPS

Reports to: Assistant Superintendent and Superintendent
Directly Supervises: No supervisory responsibilities

POSITION PURPOSE

The Electromechanic performs skilled and technical nature required to maintain, repair, or rebuild a variety of specialized equipment used in the wastewater treatment process. Performs physical plant rounds, observes equipment operation, detects anomalies and adjusts and repairs the mechanical and electrical systems of the WWTF. Electromechanic performs both preventative and corrective repairs using a variety of hand tools, power and pneumatic tools, and shop equipment, in order to keep the equipment and machinery running in an efficient and safe manner. Position is also responsible for repairs to the facility buildings and grounds which includes: plumbing, carpentry, masonry, welding, and painting tasks.

ESSENTIAL DUTIES

- Troubleshoots, repairs, and maintains electronics, variable frequency drives, programmable logic controllers, and facility SCADA system.
- Tests, installs, calibrates, and adjusts various sensing devices such as, but not limited to: level and pressure transducers, flow meters, gauges, and temperature sensors.
- Performs physical plant rounds to monitor and inspect all facility equipment including but not limited to: motors, pumps, compressors, HVAC units, boilers, blowers, and hoists ensuring proper lubrication and efficient operation.
- Operates, evaluates, and diagnoses abnormal or irregular equipment operation.
- Performs preventative maintenance work orders that include: change out of lubricants, alignment and adjusting belts, packing, greasing of bearings and lubrication. performs corrective repairs to pneumatic, hydraulic, and electrical devices.
- Dismantles, rebuilds, and reassembles plant equipment such as, but not limited to: valves, process pipelines, centrifugal pumps, drive units and gear boxes.
- Works from sketches, drawings, and blueprints and maintains accurate and up to date equipment repair records and files.
- Orders replacement parts and makes corrective repairs to process equipment, motorized equipment, vehicles, and all other related ancillary utility equipment.
- Regularly confers with supervisors on job priorities, work progress, and equipment and maintenance issues.

- Individual is expected to perform recurring tasks independently with reference to a supervisor when difficult or unusual problems occur.
- Must work effectively individually as well as within a group on large projects. Electro mechanic works with operators, mechanic, electrician, and outside contractors.
- Responds and reports when called upon for emergency equipment repairs or unusual plant problems, which includes nights, weekends, or holidays.

OTHER DUTIES

- Operates all phases of the WWTF equipment and controls.
- Position will assist in snow removal duties and may be assigned grounds keeping duties as needed.
- Leads other staff when working in groups on plant projects and provides direction to employees assigned in the performance of task/work orders.
- Electro mechanic may work with and/or assist other City departments.
- Performs other utility related work as required.

MINIMUM POSITION QUALIFICATIONS

- Education:** High school diploma along with an Associates degree in Electromechanical Technology, Instrumentation Technology, or a minimum of four years experience as a journeyman electrician with significant mechanical maintenance experience or equivalent military service training. Individual may also qualify with an equivalent combination of experience, licensure, or training and education as determined by management.
- Experience:** A minimum four years relevant experience in mechanical maintenance involving machinery, controls, similar to that found at a wastewater treatment facility.
- Certifications/Licenses:** A valid driver's license.
- Other Requirements:** Understands duties and performs work tasks in a safe manner in accordance with the safety programs, policies, and protocol of the WWTF.

KNOWLEDGE, SKILLS, & ABILITIES

Electro mechanic must have considerable skill and knowledge in mechanical maintenance, electronics, and facility operations, as well as, the hazards and safety precautions used in a modern wastewater treatment facility. Individual must have a strong mechanical and electrical aptitude and work effectively as an individual as well as within a group setting. This position must also possess the ability to use hand and power tools, shop equipment, calculator, telephone, hand-held radio units, and able to navigate and use a computer

BACKGROUND CHECKS- Condition of Employment **PHYSICAL DEMANDS**

The work environment characteristics described herein are representative of those an employee encounters while performing the essential functions of the job. Reasonable accommodations may be made to individuals with disabilities to perform the essential functions.

Manual Dexterity: Must be able to use a calculator, computer, hand tools, telephone, hand-held radio units, electrical testing equipment, fax and copy machines, and good eye/hand coordination.

Physical Effort: A great deal of walking is required to physically inspect equipment and the facility including ascending and descending ladders and climbing up and down stairways of three to four levels. The individual is required to bend, crawl, climb, balance, stoop, reach, kneel or crouch. Requires vision and hearing requirements of normal ability, or corrected by glasses and/or hearing aids acceptable. The individual must regularly lift and/or move up to 50 pounds and occasionally lift and/or move up to 100 pounds.

Working Conditions: The individual must be able to withstand all environment conditions within reason. Normal operations and maintenance tasks will demand exposure to the elements at anytime and for extended periods. The employee must be able to use appropriate safety and protective equipment in environments of hot or cold temperatures, excessive noise, vibration, greasy and oily equipment, noxious odors, hazardous chemical locations, confined space conditions, electrical shock situations, and in dealing with wastewater itself. Safety toe shoes are required to be worn when working at the plant.

This position description has been prepared to define the general duties of the position, provide examples of work and to detail the required knowledge, skills and abilities as well as the acceptable experience and training for the position. The description is not intended to limit or modify the right of any supervisor to assign, direct, and control the duties of employees under supervision. The City of Manitowoc retains and reserves any and all rights to change, modify, amend, add to or delete from any portion of this description in its sole judgment.

This job description is not a contract for employment.

The City of Manitowoc is an equal opportunity employer, in compliance with the Americans with Disabilities Act. The City will provide reasonable accommodations to qualified individuals with disabilities and encourages both prospective and current employees to discuss potential accommodations with the employer.

Job Description

Human Resource Use Only
Position Number:
Step/Grade
Effective Date:

POSITION IDENTIFICATION

Position Title: Electrician
Division: Wastewater Treatment Facility
Status: Full time Non-Exempt
Normal Workweek: Monday – Friday (7 a.m. – 3 p.m.)

SUPERVISORY RELATIONSHIPS

Reports to: Assistant Superintendent and Superintendent
Directly Supervises: No supervisory responsibilities

POSITION PURPOSE

The employee performs a variety of a skilled and technical nature, in the electrical systems and repair of electrical equipment and mechanical equipment in the WWTF. Electrician takes a lead role in planning and performing electrical repairs and all electrical issues at the WWTF. This position must be able to read, interpret, and work from schematics, wiring diagrams, ladder logic, and blueprints. In addition to electrical work, an employee spends time in the general maintenance of the WWTF and all of its buildings and associated equipment.

ESSENTIAL DUTIES

- Performs predicative, preventative, and corrective duties in the maintenance, repair and installation of Motor Control Centers (MCC's), instrumentations, Supervisory Control and Data Acquisition (SCADA) systems, and the facility buildings and grounds.
- Installs, troubleshoots, repairs, and maintains instruments and control systems that monitor and control plant equipment.
- Assists in the development, construction, and installation of new electrical systems and repair or replacement of existing electrical equipment including; starters, relays, switches, overloads, and medium voltage (480 volts) distribution and control systems.
- Develops field sketches and updates lighting panels, identifies and labels circuits and breakers, updates record drawings, blueprints, and the schematics of plant electrical systems.
- Performs physical plant rounds to monitor and inspect all facility equipment including: electrical system switchboxes, transformers, control centers, motors, pumps, compressors, HVAC units, boilers, blowers, and buildings and grounds.
- Tracks electrical supplies, selects, and orders electrical supplies and repair parts for corrective repairs to electrical system, process equipment, motorized equipment, and all other related ancillary utility equipment.
- Performs preventative maintenance work orders that include: change out of lubricants, alignment and adjusting belts, packing, greasing of bearings and lubrication of moving parts, and replacing filters, gaskets, and other wear items.

- Regularly confers with supervisors on job priorities, work progress, and electrical and maintenance issues.
- Must work effectively individually as well as within a group on large projects. Electrician works closely with maintenance staff, operators, and outside contractors.
- Performs regular and recurring tasks independently and takes corrective action when difficult or unanticipated problems occur.
- Responds and reports when called upon for emergency equipment repairs or unusual plant problems, which includes nights, weekends, or holidays.

OTHER DUTIES

- Operates all phases of the WWTF equipment and controls.
- Adjusts and/or repairs emergency lighting, grounds lighting, weir washers, and clocks.
- Leads other plant staff when working in groups on electrical or large projects and provides direction to employees assigned in the performance of task/work orders.
- Electrician may work with and/or assist other City departments.
- Performs other utility work as required.

MINIMUM POSITION QUALIFICATIONS

- Education:** High school diploma and certificate as a journeyman electrician with a minimum of 4 years' experience. Candidate may also qualify with an equivalent combination of licensure, experience, military training, or education as determined by management.
- Experience:** A minimum four years relevant electrical work experience preferably in an industrial setting involving machinery and equipment similar to that found at a wastewater treatment facility.
- Certifications/Licenses:** Valid driver's license. A certificate as a journeyman electrician.
- Other Requirements:** Understands duties and performs work tasks in a safe manner in accordance with the safety programs, policies, and protocol of the WWTF facility.

KNOWLEDGE, SKILLS, & ABILITIES

This position must have a strong electrical knowledge and skills, as well as, the hazards and safety precautions used in a modern wastewater treatment facility; must be able to add, subtract, multiply, divide, calculate percentages and apply these skills to the wastewater facility when needed for plant electrical operations; and have the ability to use hand and power tools, calculator, telephone, hand-held radio units, and able to navigate and use a computer

BACKGROUND CHECKS- Condition of Employment

PHYSICAL DEMANDS

The work environment characteristics described herein are representative of those an employee encounters while performing the essential functions of the job. Reasonable accommodations may be made to individuals with disabilities to perform the essential functions.

- Manual Dexterity:** Position requires good hand-eye coordination and manual dexterity necessary for use of a multi meter, megger, programming HMI touch screens, variable frequency drives, hand and power tools, SCADA computers, and operating motorized equipment.
- Physical Effort:** A great deal of walking is required to physically inspect equipment and the facility including ascending and descending ladders and climbing up and down stairways of three to four levels. Will be required to stoop, kneel, bend, crouch, grab, twist, push and pull in performance of daily duties. Requires vision and hearing requirements of normal ability, or corrected by glasses and/or hearing aids. The individual must regularly lift and/or move up to 50 pounds and occasionally lift and/or move up to 100 pounds.
- Working Conditions:** The individual must be able to withstand all environment conditions within reason. Normal electrical and maintenance tasks will demand exposure to the elements at anytime and for extended periods. The employee must be able to use appropriate safety and protective equipment in environments of hot or cold temperatures, excessive noise, vibration, greasy and oily equipment, noxious odors, hazardous chemical locations, confined space conditions, electrical shock situations, and in dealing with wastewater itself. Safety toe shoes and safety glasses are required to be worn when working at the plant. All employees in this are subject to drug and alcohol testing as required by law.

This position description has been prepared to define the general duties of the position, provide examples of work and to detail the required knowledge, skills and abilities as well as the acceptable experience and training for the position. The description is not intended to limit or modify the right of any supervisor to assign, direct, and control the duties of employees under supervision. The City of Manitowoc retains and reserves any and all rights to change, modify, amend, add to or delete from any portion of this description in its sole judgment.

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Job Description

Human Resource Use Only
Position Number:
Step/Grade
Effective Date:

POSITION IDENTIFICATION

Position Title: Mechanic
Division: Wastewater Treatment Facility
Status: Full time Non-Exempt
Normal Workweek: Monday – Friday (7 a.m. – 3:00 p.m.)

SUPERVISORY RELATIONSHIPS

Reports to: Assistant Superintendent and Superintendent

Directly Supervises: No supervisory responsibilities

POSITION PURPOSE

The Mechanic performs work of a skilled and technical nature required to maintain, repair, or rebuild a variety of pumps, valves, and specialized equipment used in the wastewater treatment process. The mechanic performs physical plant rounds, observes equipment operation, detects anomalies and adjusts, repairs, or rebuilds equipment. Mechanic performs both preventative and corrective repairs using a variety of hand tools, power and pneumatic tools, and shop equipment, in order to keep the equipment and machinery running in an efficient and safe manner. Mechanic is also responsible for repairs to the facility buildings and grounds which includes: plumbing, carpentry, masonry, welding, and painting tasks.

ESSENTIAL DUTIES

- Performs physical plant rounds to monitor and inspect all facility equipment including: pumps, compressors, HVAC units, boilers, blowers, hoists, and plant vehicles to ensure proper lubrication and efficient operation.
- Performs preventative maintenance work orders that include: change out of lubricants, alignment and adjusting belts, packing, greasing of bearings and lubrication of moving parts, and replacing filters, gaskets, and other wear items.
- Operates, evaluates, and diagnoses abnormal or irregular equipment operation
- Works from sketches, drawings, and blueprints and maintains accurate and up to date equipment repair records and files.
- Orders replacement parts and makes corrective repairs to process equipment, motorized equipment, vehicles, and all other related ancillary utility equipment.
- Dismantles, rebuilds reassembles and installs plant equipment such as: isolation and plug valves, process pipelines, centrifugal pumps, drive units and gear boxes.
- Regularly confers with supervisors on job priorities, work progress, and equipment and maintenance issues.
- Must work effectively individually as well as within a group on large projects. Mechanic works with operators, electrician, and outside contractors.

- Responds and reports when called upon for emergency equipment repairs or unusual plant problems, which includes nights, weekends, or holidays.

OTHER DUTIES

- Operates all phases of the WWTF equipment and controls.
- Position will assist in snow removal duties and may be assigned grounds keeping duties as needed.
- Leads other staff when working in groups on plant projects and provides direction to employees assigned in the performance of task/work orders.
- Mechanic may work with and/or assist other City departments.
- Performs other utility related work as required.

MINIMUM POSITION QUALIFICATIONS

Education: High school diploma along with an Associates degree in Maintenance mechanics, Electromechanical Technology, or individual may also qualify with an equivalent combination of licensure, experience, military training, or education as determined by management.

Experience: A minimum four years relevant experience in mechanical maintenance involving machinery and equipment similar to that found at a wastewater treatment facility.

Certifications/Licenses: A valid driver's license.

Other Requirements: Understands duties and performs work tasks in a safe manner in accordance with the safety programs, policies, and protocol of the WWTF.

KNOWLEDGE, SKILLS, & ABILITIES

The Mechanic position must have considerable skills, knowledge, and experience in the maintenance and operations, as well as, the hazards and safety precautions used in a modern wastewater treatment facility. The person filling this role must have a strong mechanical aptitude and work effectively as an individual as well as within a group setting and the ability to use hand and power tools, shop equipment, calculator, telephone, hand-held radio units, and able to navigate and use a computer

BACKGROUND CHECKS- Condition of Employment

PHYSICAL DEMANDS

The work environment characteristics described herein are representative of those an employee encounters while performing the essential functions of the job. Reasonable accommodations may be made to individuals with disabilities to perform the essential functions.

Manual Dexterity: Position requires good hand-eye coordination and manual dexterity necessary for use of hand and power tools, programming HMI touch screens, SCADA computers, and operating motorized equipment,

Physical Effort: A great deal of walking is required to physically inspect equipment and the facility including ascending and descending ladders and climbing up and down stairways of three to four levels. Will be required to stoop, kneel, bend, crouch, grab, twist, push and pull in performance of daily duties. Requires vision and hearing requirements of normal ability, or corrected by glasses and/or hearing aids. The individual must regularly lift and/or move up to 50 pounds and occasionally lift and/or move up to 100 pounds.

Working Conditions: The individual must be able to withstand all environment conditions within reason. Normal operations and maintenance tasks will demand exposure to the elements at anytime and for extended periods. The employee must be able to use appropriate safety and protective equipment in environments of hot or cold temperatures, excessive noise, vibration, greasy and oily equipment, noxious odors, hazardous chemical locations, confined space conditions, electrical shock situations, and in dealing with wastewater itself. Safety toe shoes and safety glasses are required to be worn when working at the plant.

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