**Job Title:** Maintenance Technician/Plant Operator

**Reports To:** Operations Manager

FLSA Status: Non-exempt

**Date:** July 21, 2015 Maintenance Technician/Plant Operator



# **Job Summary:**

Under the general supervision of the Operations Manager, repairs, maintains, troubleshoots and performs preventive and predictive maintenance and emergency maintenance on all equipment as assigned. Installs new mechanical and electrical equipment and performs other related duties as assigned.

# **Essential Duties and Responsibilities:**

The following statements are illustrative of the essential functions of the job and do not include other nonessential or peripheral duties that may be required. The organization retains the right to modify or change the duties or essential functions of the job at any time.

- Cleans, maintains, repairs, and overhauls water and wastewater plant, pumping, treatment and all
  other associated mechanical equipment.
- Participates in the on-call rotation, responds to alarms after hours and weekends as required.
- · Maintains, calibrates, and repairs chemical feeders and associated equipment;
- Informs the maintenance supervisor or other authority of plant maintenance and operating problems;
- Assists in developing and implementing preventive and predictive maintenance tasks for all
  wastewater treatment and pumping equipment. Maintains and repairs pumps, other rotating
  machinery, valves, and other equipment as assigned. Performs predictive maintenance such as
  vibration analysis and laser alignment as well as preventative maintenance including lubrication and
  changing oils and fluids.
- Maintains and repairs tools.
- Assists in determining new equipment, needed repairs, inventory and replacement parts necessary to
  perform maintenance and repairs; research vendors to locate necessary items determine
  compatibility and obtain competitive prices as directed by Supervisor; maintain adequate supplies and
  equipment.
- Inspects mechanical equipment installed by contractors to ensure safe and satisfactory functioning.
- Assists with preparing, interpreting, and maintaining required reports, manuals and records as
  directed by Supervisor. Maintains instruction manuals, shop drawings, O & M manuals and other
  documentation pertaining to wastewater treatment and pumping equipment. Provides written
  information required to update manuals, drawings, or other records. Prepares required reports, daily
  logs, time sheets and work orders.
- Repairs and maintains all heating, ventilating, and air conditioning systems of all facilities.
- Installs diagnoses, and repairs new and existing mechanical systems, electrical systems, plumbing systems and equipment per written instructions, blueprints, or technical drawings.

- Performs preventive, predictive, normal and emergency maintenance and inspections on all Facilities equipment.
- Assures proper safety techniques and equipment is used to promote and ensure a safe job site.
   Maintains a safe, clean and orderly work area.
- Provides background information and determines necessary material, and time required for various jobs.
- Demonstrates continuous effort to improve operations, decrease turnaround times, streamline work processes, and work cooperatively and jointly to provide quality seamless customer service.
- Coordinates assigned services and activities with other Utility staff, coordinates between management staff and operations staff, prioritizes work requests and work orders.

## Other Duties and Responsibilities:

Performs other related duties and special projects as assigned.

## **Experience and Training:**

**Minimum Education:** High School Diploma or G.E.D. Post High School certificates or college credit hours in Industrial Mechanical Maintenance is preferred. A welding certificate is preferred.

**Job Requirements:** Valid Colorado Driver's License. Valid Colorado Class A CDL with tanker and air brake endorsements or ability to obtain within six months of hire. Must maintain all licenses. Ability to respond to emergency situations. Within one year must attain, and thereafter maintain, State of Colorado "D" Certification in wastewater treatment plant operations and a Class two Collection Operator Certification.

**Work Experience in Positions Similar or Related to This Job:** Must have a minimum of 3-5 years' experience in industrial equipment maintenance or with industrial electronics / controls equipment. Familiarity with high horsepower electric motors (480V), large capacity pumps, and hydraulic systems or PLC programming, telemetry equipment, and motor control circuitry preferred. Experience in class A or B water or wastewater treatment plant preferred.

#### Knowledge, Skills, and Abilities:

- Ability to communicate effectively in English, both verbally and in writing.
- Proficient mathematical skills.
- Produce written documents with clearly organized thoughts using proper English sentence construction, punctuation and grammar.
- Communicate orally with co-workers, manufacturer's representatives, public utility employees or the public in a face-to-face one-to-one setting or on the telephone.
- Work safely without presenting a direct threat to self or others.
- Proficient use of computer systems / mathematics.
- Proficient analytical / decision making skills and problem solving skills.

- Proficient planning / organizing skills.
- Proficient electrical and plumbing skills.
- Basic heating, ventilation, and air-conditioning (HVAC).
- Basic welding and cutting.
- · Proficient mechanical skills.
- · Proficient knowledge of mechanical systems.
- Basic electrical knowledge up to 480 volt, 3 phase and motor control knowledge
- Ability to trouble-shoot basic relay control circuits and associated motor starters.
- Ability to read and understand schematics.
- Skills in the use of test instruments.
- Knowledge of pipe fittings and valves
- Ability to read and understand blueprints and technical drawings.
- Ability to review, understand engineering specifications and plans for new equipment and facilities.
- Knowledge of OSHA regulations regarding machinery safety systems.
- Knowledge of rotating machinery including pumps, drives, gears, bearings, seals, alignment procedures, and fluid machines.
- Knowledge of low voltage control systems.
- Ability to trouble shoot electrical circuits.
- Basic motor control including 4-20 mA electronic control circuits.
- Ability to troubleshoot basic relay control circuits and associated motor starters.
- Knowledge of oxygen / acetylene brazing and cutting.
- Knowledge of electric arc welding.
- Knowledge of power and hand tools.
- Knowledge of laser alignment techniques.
- Knowledge on safe operation of skid steer, overhead cranes, and rubber tire loader.
- Ability to use maintenance management software.
- · Ability to use word processing.
- Ability to convert units of measure.

- Ability to calculate volumes, areas, and other spatial quantities.
- Ability to solve geometric problems such as area, volume and slope.
- Ability to unload chemicals and load / unload heavy equipment form trucks.
- Knowledge of the metric system and conversion to / from.
- Knowledge of SCADA interface hardware.
- Ability to read and understand ladder logic.
- Ability to operate self-propelled mowers, weed eaters, chain saws, etc.

## **Reporting Relationships:**

This Position Reports to: Operations Manager

This Position has Supervisory Responsibility for: None.

#### **Equipment Used:**

Pickup trucks, various tools, rake, shovel, lawn mower, weed eater, hand and power tools, mechanic hand tools, volt-ohm meter, megger, end loader, backhoe, dump truck, vacuum and sewer jet truck, bobcat utility vehicle, computer, printer, copier, telephone, two-way radio, calculator, fax machine, and various other instruments and tools associated with this particular job discipline.

### **Physical Requirements:**

The physical demands described are representative of those that must be met by an employee to successfully perform the essential duties and responsibilities of this job. Reasonable accommodations may be made to enable qualified individuals with disabilities to perform the essential duties and responsibilities.

- Ability to lift, carry 50 lbs., push and pull up to 100 lbs.
- Ability to distinguish objects in low and bright light using visual capacity including peripheral vision, depth perception, color vision and far and near acuity in order to observe all elements of an operational zone and document information/results.
- Frequently walks, stands, balances, climbs, crawls, grasps, squats, bends, kneels and reaches above and below shoulder heights, twists, feels, pulls, and endures repetitive motions.
- Ability to use hands in order to operate various pieces of equipment and vehicles using hand-eye coordination in handling and manipulating objects, tools, controls and equipment.

#### **Environmental Requirements:**

Work is typically performed inside with potential exposure to all possible weather elements, dust and airborne particles. Work is sometimes performed in confined areas. There is potential exposure to sewer gas, water, chemicals, water-borne illness, dangerous, toxic or caustic chemicals, poor lighting and ventilation, high voltage and unsanitary conditions. The noise level in the work environment is moderately loud.

#### **General Terms Applicable to this Position:**

**A. Employed At Will.** This job position is at-will, meaning that either the employee or the District may terminate the employment relationship at any time, with or without cause or prior notice.

- **B. Not a Contract.** This job description is not a contract of employment and is subject to change by the District at any time without prior notice to employee.
- **C. Duties Not Inclusive.** The duties listed above are examples of essential functions of the job position but are not all-inclusive. The District may require the employee to perform additional duties not listed and may modify the duties listed.
- **D. Handbook.** The Employee Handbook contains important guidelines regarding employment with the District that apply to employee. Employee is responsible for reading and abiding by the Employee Handbook guidelines, which Handbook may be modified from time to time by the District.
- **E. Reliability.** This position requires that the person be reliable in terms of attendance. This is essential to performing the job satisfactorily.

COMMENTS:	
Employee's Signature	Date
Supervisor's Signature	 Date