

Job Title: Predictive Maintenance Tech I

Job Status: Full-Time

Department: Water Treatment & Compliance

Job Grade: 500

Reports To: Water Treatment & Compliance Manager

Work Setting: On-Site

Pay Status: Non-Exempt

Date Created/Updated: 3/19/2024

Location: Surface Water Treatment Plant

Position Summary

The Predictive Maintenance Tech I is an entry-level position that focuses on achieving competency through learning and understanding a variety of technical work and practices related to the maintenance, repair, and replacement of electrical and mechanical equipment utilized in New Braunfels Utilities' water and wastewater systems.

Essential Duties & Responsibilities

ELECTRICAL MAINTENANCE

- Assist with the installation and repair of electrical equipment including motors, generators, air compressors, refrigerant systems, variable frequency drives and motor controls
- Learn principles and practices associated with NEC, NFPA, OSHA, NLSC, electrical codes work methods with tools and operation of high and low voltages and emergency equipment
- Maintain tools, parts, equipment and materials required and inventory for assigned projects

MECHANICAL MAINTENANCE

- Assist with maintaining standard operating procedures for machinery and equipment
- Assist with repair of plant machinery and equipment with hoists, jacks, hand tools, welding equipment dial indicators, laser alignment, bearing pullers, and a number of other tools
- Perform beginner level diagnostic tests to resolve routine problems
- Learn to dismantle, construct, fabricate and assemble various components of facilities and industrial machinery or equipment
- Lubricate pumps and motors on regularly scheduled frequency
- Update and complete work orders in CMMS system

INSTRUMENTATION AND CONTROLS MAINTENANCE

- Assist Instrumentation & Controls Team with instrumentation maintenance, troubleshooting, calibration, programming and field instrumentation, chemical analysis systems, communications network systems, chemical feed and detection systems

RELIABILITY CENTERED MAINTENANCE

- Learn to use condition assessment equipment including vibration analysis, infrared thermography, motor circuit analysis, oil analysis and precision laser alignment

GENERAL RESPONSIBILITIES

- Maintain regular attendance; leave schedule should be managed so as to not interfere with ability to accomplish tasks, including special projects and assignments with deadlines
- Adhere to NBU safety guidelines and practices at all times and in all situations
- Maintain a clean and safe work area, office, field site and vehicle as applicable
- Develop & maintain effective customer service skills for communications with co-workers, customers and

the public in general

- Maintain strict confidentiality of business, employee and customer information in written and oral communications and safeguard sensitive documents
- Adhere to NBU policies and procedures
- Exemplifies NBU Core Values of Integrity, Stewardship, Team, Culture and Safety
- Participate in and support initiatives to reach annual NBU Performance Measures

Formal Education and Work Experience Requirements

Degree/Diploma Obtained: High School Diploma/GED

Field of Study: [Click or tap here to enter text.](#)

Work Experience Time Frame: No Experience Required

Other: [Click or tap here to enter text.](#)

Certification and Licensures Requirements

- A valid Texas Driver's License is required to operate a company vehicle

Other Minimum Qualifications

- High school diploma or GED required.
- Experience in Water/Wastewater Systems is recommended.
- Must reside within a thirty minute response time of the NBU Service Center as measured by an internet mapping tool.

Knowledge of Computer Software

	No Knowledge	Beginner	Intermediate	Expert
ArcGIS	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
AutoCAD	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Crystal Reports	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Microsoft Access	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Microsoft Excel	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Microsoft Word	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Microsoft Publisher	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Microsoft PowerPoint	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Other Software Knowledge

Vibration Analysis Software, IR Thermography Software, Motor Circuit Analysis Software, Telemetry Programming Software, PLC Programming Software, CMMS, Oil Analysis Software, Laser Alignment Software

Experience with Machines, Tools, Equipment and Other Work Aids

Welding Equipment, Bearing Pullers, Bearing Heaters, Multimeters, Discharge Sticks, Meggers, Offline Motor Testing equipment, Vibration Data Collectors, IR Thermography Cameras, Hoists, Jacks, Laser Alignment, Dial Indicators, Torch, Micrometers, Electrical and Mechanical hand tools, Power Tools, Crimping Tools, Ladders, Flow Meters, Fiber Optics, Computer

Physical Demands

Standing: Constantly

Making Presentations

Observing Work Sites

Observing Work Duties

Communication with Co-Workers

Fine Dexterity: Frequently

- Computer Keyboard
- Telephone Keypad
- Calculator
- Calibrating Equipment

Walking: Frequently

- To Other Departments/Office/Office Equipment
- Around Worksite

Lifting: Occasionally

- Supplies
- Equipment
- Files

Carrying: Frequently

- Supplies
- Equipment
- Files

Sitting: Occasionally

- Desk Work
- Meetings
- Driving

Reaching: Occasionally

- For Supplies
- For Files

Handling: Occasionally

- Paperwork
- Monies

Kneeling: Occasionally

- Filing in Lower Drawers
- Retrieving Items from Lower Shelves/Ground

Pushing/Pulling: Occasionally

- File Drawers
- Equipment
- Table and Chairs
- Hose

Climbing: Occasionally

- Stairs

Other: Click or tap here to enter text.

- Ladder
- Step Stool
- Onto Equipment

Vision: Constantly

- Reading
- Computer Screen
- Driving
- Observing Worksite

Foot Controls: Rarely

- Driving
- Operating Heavy Equipment
- Dictaphone

Balancing: Occasionally

- On Ladder
- On Equipment
- On Step Stool

Bending: Frequently

- Filing in Lower Drawers
- Retrieving Items from Lower Shelves/Ground
- Making Repairs

Crouching: Occasionally

- Filing in Lower Drawers
- Retrieving Items from Lower Shelves/Ground

Crawling: Rarely

- Under Equipment
- Inside Attics/Pipes/Ditches

Hearing: Constantly

- Communication Via Telephone/Radio/To Co-Workers/Public
- Listening to Equipment

Twisting: Occasionally

- From Computer to Telephone
- Getting Inside Vehicle

Talking: Frequently

- Communication Via Telephone/Radio/To-Co-Workers/Public

Environmental Factors

	Never	Seasonally	Several Times Per Year	Several Times Per Month	Several Times Per Week	Daily
Extreme Temperature (Heat, cold, extreme temp. change)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Wetness and/or humidity (bodily discomfort from moisture)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Respiratory Hazards (Fumes, gases, chemicals, dust, and dirt)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Noise and Vibration (sufficient to cause hearing loss)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Physical Hazards (High voltage, dangerous machinery, aggressive Customers)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Health and Safety Conditions

	Never (Never Occurs)	Rarely (Less than 1 hour per week)	Occasionally (1/3 or more of the time)	Frequently (From 1/3 to 2/3 of the time)	Constantly (2/3 or more of the time)
Mechanical Hazards	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Chemical Hazards	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Electrical Hazards	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Fire Hazards	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Explosives	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Communicable Diseases	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Physical Danger or Abuse	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Other: Confined Space Entry

Primary Work Environment: Shop

Other: Outdoors/Field

Overall Strength Demands

- Sedentary - Exerting up to 10 pounds occasionally or negligible weight frequently, mostly sitting
- Light - Exerting up to 20 pounds occasionally, 10 pounds frequently, walking or standing often
- Medium - Exerting 20 - 50 pounds occasionally, 10 - 25 pounds frequently, or 10 pounds constantly
- Heavy - Exerting 50 - 100 pounds occasionally, 25 - 50 pounds frequently, or 10 - 20 pounds constantly
- Very Heavy - Exerting 50 pounds constantly

Non-Physical Demands

	Never	Rarely	Occasionally	Frequently	Constantly
Time Pressure	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Emergency Situations	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Frequent Change of Task	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Irregular Schedule/Overtime	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Performing Multiple Tasks Simultaneously	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Working Closely with Others as Part of a Team	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Tedious or Exacting Work	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Noisy/Distracting Environment	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Other: Click or tap here to enter text.

Employee Statement of Understanding

THIS JOB DESCRIPTION DOES NOT CONSTITUTE AN EMPLOYEE AGREEMENT BETWEEN NEW BRAUNFELS

UTILITIES (NBU) AND THE EMPLOYEE. Nothing in this position description restricts NBU's ability to assign, reassign or eliminate duties and responsibilities of this job at any time.

I HAVE READ AND RECEIVED A COPY OF THIS JOB DESCRIPTION.

Employee's Signature

Employee's Printed Name

Date