

**NEW Water  
Job Description**



Salary Range: \$25.97 - \$36.66  
Hiring Range: \$25.97 - \$30.52

SECTION 1 ..... DEMOGRAPHIC INFORMATION			
<b>Job Title</b>	Maintenance Mechanic	<b>Division</b>	Operations
<b>Department</b>	Maintenance	<b>Reports To (Job Title)</b>	Mechanical Team Leader
<b>Full-Time / Part-Time</b>	Full Time	<b>Part-Time (Hrs per Wk)</b>	
<b>Pay Grade</b>	9	<b>Exempt/Non-exempt</b>	Non-exempt
<b>Adoption Date (original job description date)</b>	July 26, 2005	<b>Last Revision Date</b>	June 12, 2017
<b>Approved By (generally same as "Reports To")</b>	Mechanical Team Leader	<b>Human Resources Approval Date</b>	July 31, 2017
<b>Director Approved By (Job Title)</b>	Director of Operations		

SECTION 2 ..... JOB SUMMARY
<p>Responsible for performing a wide range of complex, predictive, preventive, and emergency maintenance and repair activities on equipment located in NEW Water's wastewater treatment facilities and collection system. Responsible for inspecting, troubleshooting, installing, repairing, lubricating, fabricating, and adjusting critical equipment. Must maintain facility permit requirements using a wide array of specialized equipment and highly developed skills.</p> <p>Work direction is received through the Mechanical Team Leader and performed under general direction. Work is reviewed for quality, thoroughness, adherence to schematic drawings or design concepts, installation efficiency, and timeliness by the Mechanical Team Leader or the Maintenance Manager. Work effectiveness is monitored through the observation of results and reports generated by the Computerized Maintenance Management System (CMMS). This position is responsible for documenting the resolution of tasks in the CMMS and updating any schematics or drawings associated with the task. This position is responsible for providing quality service to internal and external customers to ensure that NEW Water is fulfilling all regulatory and environmental compliance obligations.</p>

SECTION 3.....DESCRIPTION OF ESSENTIAL RESPONSIBILITIES & DUTIES	
<b>Frequency:</b> Daily, Weekly, Biweekly, Monthly, Quarterly, Annually, or As Needed	
Description of Duties	Frequency
<b>Key Area: Ensuring Operation and Reliability of Equipment</b>	<b>50% of Work</b>
Performs preventive maintenance, lubrication, adjustment, alignment, balancing, routine and emergency repairs on NEW Water's equipment including: pumps, compressors, valves, filtering and screening equipment, motors and mag-couplings, incinerators, boilers, HVAC systems, flow control devices, motorized vehicles, boats and other apparatuses, throughout the plant and at remote locations.	Daily
Uses machine shop, welding, pipefitting, media blasting, and painting equipment to fabricate new parts, tools, and rebuild existing equipment to improve the operation of NEW Water's machinery.	Weekly
Performs preventive and predictive maintenance tasks to ensure equipment is running as efficiently and effectively as designed.	Weekly
Recommends improvements and changes to facilities and equipment to improve reliability, safety or performance.	As Needed
Identifies and gathers replacement parts, supplies, tools, materials, and supporting equipment.	Daily
Focuses on the timely completion and high quality of work, including job site and tool clean-up.	Daily
Maintains NEW Water's fleet of vehicles by using diagnostics tools to find problems. Perform maintenance on vehicles which includes oil changes, brake jobs, tire rotation and lubrication. Replace worn out or broken parts on vehicles.	Weekly
Uses the proper procedures to isolate and demolish equipment and piping where potential hazards may be present. Understands piping and flow diagrams in order to verify where system isolation and lock out can be safely made. Able to design and install new piping using pipe cutting and grooving equipment to tie in a piping project or install a new line.	Quarterly
<b>Key Area: Troubleshooting Equipment Problems</b>	<b>20% of Work</b>

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Performs failure analysis on mechanical equipment by observing its operation, formulating a logical troubleshooting approach, and utilizing precision measuring devices such as ultrasound, vibration analysis, or infrared to determine equipment problems.	Daily
Researches CMMS history to identify maintenance problems encountered while performing the duties.	Daily
Makes recommendations regarding needed improvements to equipment and facilities.	Weekly
<b>Key Area: Documentation, Training, Evaluations, and Special Projects</b>	<b>20% of Work</b>
Uses the CMMS to document time and material needed on the job. Writes a detailed description of what the problem was and what was done to repair the problem.	Daily
Recommends updates to and/or revises mechanical systems diagrams and blueprints.	As Needed
Attends special training to improve existing skills or obtain certification as needed. Participates in training on new plant processes and systems.	Monthly
Provides training, mentoring, and assistance to others. Seeks assistance, identifies training needs, and actively pursues training opportunities that are available.	As Needed
Integrates mechanical design and maintenance considerations into plant construction and renovation projects.	As Needed
Participates in the design review and construction coordination for facility projects.	As Needed
Serves as a project lead for special construction projects.	Quarterly
Works closely with contractors to explain and oversee plant repair and improvement projects	Quarterly
<b>Key Area: Safety</b>	<b>10% of job</b>
Ensures that all NEW Water safety and security policies are followed.	Daily
Participates in safety and security training as guided by the Health, Safety and Security Coordinator.	As Needed
Reports unsafe conditions within the plants and makes recommendations to correct the issue.	As Needed
Communicates with the Maintenance staff and other NEW Water staff regarding safety hazards.	As Needed
Takes appropriate action when a safety hazard is identified (i.e. notifies direct supervisor and staff after properly identifying and mitigating the hazard).	As needed
Assist the Health, Safety and Security Coordinator in maintaining, reviewing, and updating group and individual lockout/tagout procedures.	As Needed
<b>Other:</b>	
Perform other job related duties as assigned.	As Needed
Promote and enhance environmental, health, and safety compliance within the work environment and actively engage in improvement efforts.	Daily
Follow organizational policies and procedures.	Daily

SECTION 4 ..... EDUCATION REQUIRED	
Minimum Level of Education	Field(s) of Study
Completion of a State Apprenticeship Program	Mechanical Maintenance or related field
<b>Additional Information Regarding the Required Education:</b>	Successful completion of a general mechanical aptitude test.

SECTION 5 ..... EXPERIENCE REQUIRED	
<b>Years of Experience</b>	2 – 3 Years
<b>Other Specific Experience Required or Preferred</b>	An equivalent combination of education, training, and relevant experience will also be considered.

SECTION 6 ..... CERTIFICATION / LICENSURE / TRAINING TO PERFORM JOB		
Required Certification/Licensure	Required Upon Hire?	If no, timeframe to obtain?
Current and valid Wisconsin motor vehicle operator's license.	Yes	
Certified in confined area entry procedures, CPR, and First Aid.		Six months

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Training in forklift operation, respiratory protection, lockout/tagout, and fire extinguisher operation.	One Year
<b>Preferred Certification/Licensure</b>	
Refrigeration Recovery certified.	
State of Wisconsin Back-Flow Preventer inspection and repair certificate.	

**SECTION 7 ..... ADDITIONAL KNOWLEDGE, SKILLS, AND ABILITIES**

Considerable knowledge of methods and techniques involved in the operation, installation, maintenance, and repair of stationary and mobile mechanical equipment used in a wastewater treatment facility, collection system, or other industrial settings. Considerable knowledge of the design, operation, and maintenance of a wide variety of pumps, compressors, valves, and conveyance equipment. Knowledge of the maintenance and operation of high and low pressure boilers, heating, ventilation, air conditioning systems, and associated auxiliary equipment. Knowledge of mechanical, hydraulic, pneumatic, and basic electric principles.

Considerable knowledge of permit-required confined spaces (OSHA 1910.146), respiratory protection (OSHA 1910.134), and lockout/tag out (OSHA 1910.147).

Considerable ability to diagnose and troubleshoot mechanical equipment problems, to use sound judgment in arriving at an effective and appropriate solution, and to take proper corrective action. Highly skilled in the safe use of hand and power tools, media blasting and painting, lubrication, hoisting, rigging, machine shop, fabricating, and welding equipment.

Ability to read and interpret service manuals. Ability to read, interpret, and make revisions to mechanical system diagrams and blueprints. Ability to understand elementary electrical and process schematic drawings. A thorough understanding of safe work practices, hazard recognition, and the proper use of safety and personal protective equipment.

Good oral and written communication skills, basic computer and mathematics skills. Ability to keep accurate records and prepare routine reports from such records. Ability to work independently or as part of a team and be able to establish and maintain effective working relationships with internal and external customers.

Must have a general understanding of what NEW Water's regulatory permits and the factors that affect permit compliance.

Must have the ability to work independently, safely, and maintain a safe work environment.

Must be self-motivated and be able to work with little or no supervision.

**SECTION 8 ..... SOFTWARE / TECHNOLOGY UTILIZED**

Microsoft Outlook, Word, Excel, SharePoint, Maximo (CMMS) Maxcom (SDS for chemicals), Omnitrend (Vibration Analysis Software), Mikron (Thermal Imaging Software), SDT (Ultrasonic Data Management Software), ExecuTime (Time and Attendance), Internet.

**SECTION 9 ..... EQUIPMENT / MACHINERY UTILIZED**

Computers, forklift, motorized carts, aerial lifts, cranes, hand tools and power tools.

Operations of maintenance equipment including: welders, milling machines, lathes, surface grinder, band saws, cutoff saws, refrigerant recovery pumps. Maintenance of all plant equipment including: Pumps, screening equipment, samplers, air monitoring sensors and equipment, grit removal systems, clarifiers, scum removal equipment, aeration basins, air compressors, mixing equipment, on-line analyzers and monitors, valves (manual, electric, pneumatic), treated cooling water and service water systems, sand filtration equipment, gravity thickeners, gravity belt thickeners, dry polymer system, belt filter presses, HVAC, multiple hearth incinerators, chemical feed systems, conveyor systems, flow control gates, plant heating boilers, emergency generators, air emissions system, and disinfection equipment. PPE, SCBA and respirators, fall protection.

**SECTION 10 ..... JUDGMENTS / DECISION-MAKING: IMPACT**

Description of Duties	Check One
<b>Job Centered / Work Unit:</b> <u>Decisions made</u> are typically isolated to an individual's job or work unit.	<input checked="" type="checkbox"/>
<b>Department-Wide:</b> <u>Decisions made</u> may impact across work units, and involve a significant function of the department. Supervision or management is typically—but not always—a component of the job.	<input type="checkbox"/>
<b>Multiple Departments:</b> <u>Decisions</u> are made on behalf of and impact across multiple departments; or across	<input type="checkbox"/>

several sections of a significantly large department.	
<b>Entire Organization:</b> <u>Decisions</u> are made on behalf of and affect the entire organization including, but not limited to: employees, customers, vendors, governing body, etc.	<input type="checkbox"/>

**SECTION 11 ..... JUDGMENTS / DECISION-MAKING EXAMPLES**

<b>Frequency:</b> Daily, Weekly, Biweekly, Monthly, Quarterly, Annually, or As Needed		
Example of Decision / Judgment (3-5 examples)	Job Title of Who Reviews (If Anyone)	Frequency
Shutting down of equipment for troubleshooting, making repairs, or for scheduled maintenance. Determining length of time for repairs and if parts are available.	Inventory, Treatment Leader, Mechanical Team Leader	Daily
Recognize hazards in the work place and work to get a corrective solution.	Health, Safety and Security Coordinator	As Needed
Emergency call in repairs determining means to repair and deciding if assistance is needed to correct the issue.	Mechanical Team Leader, Treatment Leader	As Needed
Diagnose and repairing a wide range of equipment and coming up with the appropriate means of repair.	Mechanical Team Leader, Treatment Leader	Daily

**SECTION 12..... PROBLEM SOLVING**

Example of Problem (3-5 examples)	Resources Used
React to emergency or high priority mechanical situations and adjust work assignments to accomplish work goals.	Input from Operations, Mechanical or Utility Teams and the Mechanical Team Lead.
Develop, update info database for any new or existing equipment, and revise forms, spreadsheets, S.O.P.'s for equipment and procedures.	O&M Manuals, project P&ID's, Excel, Word, CMMS, Asset Reliability Coordinator
Investigate, plan and implement special projects relating to mechanical or facility changes.	Input from Engineers, Asset Reliability Coordinator, and Mechanical Team Lead.
Interact with all departments concerning requested work, follow up or reoccurring jobs that need clarification or correction.	Planner/Scheduler, Mechanical Team Lead, and with internal customers.
Research parts compatibility with installation and design needs.	Inventory Control Specialist, Mechanical team Lead, Asset Reliability Coordinator
Troubleshoot and repair mechanical equipment breakdowns and failures.	CMMS, Asset Reliability Coordinator, Operations

**SECTION 13 ..... WORKING RELATIONSHIPS / INTERACTIONS / CONTACTS**

<b>Frequency:</b> Daily, Weekly, Biweekly, Monthly, Quarterly, Annually, or As Needed		
Title/Description of Contact	Purpose of Contact	Frequency
Mechanical Team Lead	Plan, schedule, assist and monitor daily activities. Review job priority and workload.	Daily
Maintenance Manager	Discuss, review, and obtain guidance to daily and long term issues. Supply input on evaluations and goal development.	Monthly
Planner/Scheduler	Discuss and coordinate the repair of district equipment.	Daily
Treatment Leaders	Discuss operational needs to assist in problem resolution.	Daily
Operations, Field Services, Lab, and Administrative personal	Discuss / Clarify work order requests or other maintenance concerns. Review equipment availability and safety isolation.	Weekly
Health, Safety, and Security Coordinator	Work on LOTO program and to resolve safety issues that arise during day to day operations.	As Needed
Inventory Control Specialist	Parts availability / parts inventory	Daily
E/I Technician	Electrical support	Weekly

<b>SECTION 14 .....SUPERVISION / MANAGEMENT AUTHORITY</b>			
Action	Yes	No	Provides Input
Screen / Interview Applicants	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Hire / Promote Employees	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Provide Written / Verbal Warnings	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Suspend Employees	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Terminate Employees	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Prepare Work Schedules	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Project Management	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Provide Work Direction	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Evaluate Performance	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Coach Employees	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Train Employees	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Approve Overtime	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Approve Time Off	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Develop / Implement Policies	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Evaluate and Approve Exceptions to Policies	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Classification / Compensation Changes	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

<b>Employees <u>D</u>irectly Supervised</b>	
# Employees	Job Title
<b>Employees <u>I</u>ndirectly Supervised</b>	
# Employees	Job Title

<b>SECTION 15.....WORK ENVIRONMENT / WORKING CONDITIONS / PHYSICAL REQUIREMENTS</b>
Refer to ErgoFactor Job Analysis for this position for details. <a href="S:\Safety\Blankenheim Project\Operations\Maintenance Mechanic.pdf">S:\Safety\Blankenheim Project\Operations\Maintenance Mechanic.pdf</a>

<b>SECTION 16 .....ADDITIONAL COMMENTS</b>

**THIS JOB DESCRIPTION IS INTENDED TO IDENTIFY ESSENTIAL DUTIES AND ALSO ILLUSTRATES OTHER TYPES OF DUTIES THAT MAY BE ASSIGNED TO ITS INCUMBENTS. IT SHOULD NOT BE INTERPRETED AS DESCRIBING ALL OF THE DUTIES THAT WILL BE REQUIRED OF EMPLOYEES OR BE USED TO LIMIT THE NATURE AND EXTENT OF ASSIGNMENTS THAT AN INDIVIDUAL IS REQUIRED TO PERFORM.**

**JOB DESCRIPTIONS ARE SUBJECT TO REVISION AT ANY TIME AT THE DISCRETION OF MANAGEMENT.**