NEW Water Job Description



Section 1 Demographic Information			
Job Title	WWTP Operator-in-Training (OIT)	Division	Operations
Department	Treatment	Reports To (Job Title)	Treatment Manager
Full-Time / Part-Time	Full Time	Part-Time (Hrs per Wk)	
Pay Grade	8	Exempt/Non-exempt	Non-Exempt
Adoption Date (original job description date)	July 12, 2016	Last Revision Date	June 11, 2019
Approved By (generally same as "Reports To")	Treatment Manager	Human Resources Approval Date	September 19, 2019
Director Approved By (Job Title)	Director of Operations		

# SECTION 2 ......JOB SUMMARY

In support of the NEW Water culture of Safety, Respect, Team, and Environment; the wastewater treatment plant (WWTP) OIT is responsible for assisting WWTP Operators in the operation of NEW Water's two wastewater treatment facilities processes and equipment to provide quality customer service, while maintaining effectiveness and efficiency.

The primary role of this position is to develop the skills, knowledge, and experience required to operate all NEW Water treatment processes and their associated equipment at both of NEW Water's wastewater treatment facilities. This position will assist Operator coordination with other departments to troubleshoot process problems as needed. It will support data collection efforts in order to prepare reports for use by NEW Water management and external consultants on the performance of processes and equipment

This position is expected to work rotating 12 hour shifts, including nights, weekends and holidays, in a self-directed work environment without supervision for extended periods.

# SECTION 3.....DESCRIPTION OF ESSENTIAL RESPONSIBILITIES & DUTIES

# Frequency: Daily, Weekly, Biweekly, Monthly, Quarterly, Annually, or As Needed

Description of Duties	Frequency
Key Area: Plant Operation Support	45% of job
Responsible for operating and cleaning all equipment, facilities, and related processes at both treatment facilities.	Daily
Monitors and adjusts process operations to ensure all equipment is operating as designed and at top efficiency.	Daily
Assists Operations, Maintenance, Electrical and Instrumentation (E&I), Field Services, and Utilities staff in troubleshooting equipment and process issues.	Daily
Assist operations staff with starting and stopping generators as necessary to maintain safe operation, allow for repair work and meet changing biogas production and electrical demand variables.	Daily
Assist in controlling and monitoring equipment associated with anaerobic digestion, gas collection/conditioning, generators, and heat recovery to maintain a consistent and efficient operation.	Daily
Assist in adjusting equipment operation for seasonal and process changes by fine-tuning energy recovery systems to balance heat among producers and consumers.	Daily
Assist in monitoring and adjusting generator modes of operation based on peak/non-peak demand changes to reduce natural gas and electricity usage.	Daily
Make adjustments to control high strength waste inventories to vary biogas production during fluctuating utility demands.	Daily
Work with operations staff to monitor usage and ensure efficiency of plant utilities including: natural gas, diesel fuel, and electricity.	Daily
Requests proper maintenance and servicing on machinery in a timely, efficient, and effective manner utilizing a Computerized Maintenance Management System (CMMS).	Daily
Must effectively organize work assignments and perform follow-up inspections to ensure that the facilities are operating efficiently.	Daily



Job Description	The brand of the Green Bay Metropolitan Sewerage District
Aust effectively communicate with internal and external customers while coordinating work activities to determine now changes in the operation will directly and indirectly affect all plant processes.	Daily
Ensures that Operational Control Parameters associated with liquids and solids processes are monitored and controlled at all times.	Daily
Support continuous monitoring and adjustment of operational parameters associated with liquids and solids reatment processes to ensure air and effluent permit compliance.	Daily
Collect, analyze and record process sample results to make informed process control changes.	Daily
Maintain flow controlled composite samplers to ensure representative sampling for permit compliance as well as in nouse data usage.	ר Daily
Responds to hazardous material spills using guidelines from provided Safety Data Sheets.	As Needed
Collect chemical inventories of all on-site hazardous substances utilized by the Treatment Department.	Weekly
Assist in manage initial emergency communication for plant and emergency services through a central control oom. Provide clear and concise communication during facility emergencies.	As Needed
Assists in managing off-site check-ins for employees at remote meter stations, the aquatic water monitoring program sampling boat, while ensuring offsite operational personal are accurately accounted for.	Daily
Assist in monitoring NOAA weather service radio for inclement weather, alerting personal, and coordinating the proper response procedures. When needed, assist in ensuring appropriate procedures that protect employees and assets have been followed.	d Daily
Assist in monitoring video surveillance feeds and simplex systems to ensure the safety and security of both the Green Bay and De Pere facilities	Daily
Key Area: Process Training	35% of job
Develop the skills needed to make informed decisions regarding process changes, plant operation and identify mprovement opportunities.	Daily
Develop skills to monitor biogas collection/conditioning system and ensure hydrogen sulfide, moisture and siloxan emoval to safeguard the biogas generators from malfunction and corrosion.	e Daily
Develop the skills needed to make decisions on start-up and shutdown of plant equipment and process changes.	Daily
Nork closely with the Operations Trainer to complete hands on, classroom, and active demonstrations on process equipment.	B Daily
Review plant Operations and Maintenance (O&M) manuals, process narrative documents, Standard Operating Procedures (SOP's), and intelligent Process and Instrumentation Drawings (P&ID's).	Weekly
Frain, review and complete performance-based measurement assessments in the training program.	Monthly
Develop the knowledge, skills, and abilities within the position to transition onto an operating crew for incinerator operation and control room training.	Daily
Key Area: Coordinating, Scheduling, and Requisitioning	10% of job
Assist in the coordination, scheduling, and receiving of High Strength/Septage wastes at the Green Bay Facility.	Daily
Assist receiving, and unloading of chemicals at both wastewater treatment facilities.	Monthly
Nonitor and assist in the coordination and scheduling of grit/screenings/grease removal.	Monthly
Maintain a flexible schedule and be available to come in on scheduled time off to attend work related activities suc as: committee meetings, trainings, special projects/goals. Coordinate these activities with other treatment staff.	ch Weekly
dentify, requisition, and receive supplies (e.g., small tools, materials, and equipment) needed for normal plant operation and for special projects.	Daily
Respond and communicate operational issues with collection system lift stations to Field Services staff during off nours.	Weekly
Key Area: Safety	10% of job
Ensures that all NEW Water Safety and Security policies are followed.	Daily
Participates in safety and security training as directed by the Treatment Manager.	Monthly
Reports unsafe conditions within the plant and makes recommendations to correct the issue.	As Needed
insures all Treatment staff maintains an awareness of proper safety procedures and applies these in the erformance of their daily tasks.	Daily
Communicates with the Treatment Operators and other NEW Water staff regarding safety hazards.	As Needed
Fakes appropriate action when a safety hazard is identified (e.g., notifies direct supervision and crew members aft	er As Needed



Other:	
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.	As Needed
Follow organizational policies and procedures.	As Needed

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SECTION 4EDUCATION REQUIRED	
Minimum Level of Education	Field(s) of Study
Associate's Degree (or Equivalent)	Wastewater Treatment, Environmental Sciences, or related field of study.
Additional Information Regarding the Required Education:	Completion of the Wisconsin Wastewater Operators State Apprenticeship Program may substitute for the associate's degree. An equivalent combination of education, training, and relevant experience will also be considered.

SECTION 5 EXPERIENCE REQUIRED	
Years of Experience No experience required.	
Other Specific Experience Required or Preferred	Internship in a related field preferred.

SECTION 6	CTION 6Certification / Licensure / Training to Perform Job		
Required Certification/Licensure	Required Upon Hire?	If no, timeframe to obtain?	
Must possess a current and valid motor vehicle operator's license.	Yes		
Forklift operation certification		Two Years	
Sewerage Sludge Incinerator Operator Certification Th		Three Years	
Preferred Certification/Licensure			
WDNR Basic General Wastewater certification (OIT) and all applicable subclasses for the advanced Grade IV level Wastewater Treatment Plant Operator's license as issued by (or acceptable to) the Wisconsin Department of Natural Resources (Including Continued Education Credits required to maintain a valid Wisconsin Wastewater Operator License.)			

Microbiology/Microscopy Training.

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

An understanding of the principles, practices, and methods used in wastewater treatment facility operations. Considerable knowledge An understanding of the methods, practices, tools, and materials used in the operation of pumps, blowers, valves, and related equipment. Good knowledge of preventative maintenance practices applicable to wastewater treatment plant equipment. A basic knowledge in the operation and troubleshooting of mechanical, electrical, and instrumentation equipment used in wastewater treatment plants.

A basic understanding of laboratory testing procedures and how to use the results in correcting operating conditions related to permit compliance. A basic knowledge of sludge processing biology (aerobic and anaerobic) and of the techniques used to correct bacterial upsets to maintain or restore biological process balance. A rudimentary understanding of water and air regulatory programs and their effect on plant operation (EPA Title V, EPA 503, WPDES/NPDES permit, EPA 40 CFR Part 60 Subpart LLLL, and EPA 40 CFR Part 62 LLL).

An understanding knowledge in the confined space entry procedures (OSHA 1910.146), lockout/tag out procedures (Lockout/Tag out OSHA 1910.147), and hazard communication practices related to Safety Data Sheets (Hazard Communication OSHA 1910.1200). Have a basic understanding of the safety precautions regarding the use and handling of a wide range of hazardous substances including: Sodium Hypochlorite, Sodium Bisulfite, Ferric Chloride, Sodium Hydroxide, Magnesium Chloride, Aqueous Ammonia, Methane, Hydrogen Sulfide diesel fuel, raw sewage, and sewage sludge incinerator ash.



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Ability to establish and maintain effective working relationships with staff, including internal and external customers. Ability to communicate effectively both orally and in writing.

Ability to understand operational policies, procedures, and technical problems. Ability to analyze process problems and to use sound judgment to arrive at a safe, effective, and appropriate solution.

Must be able to make intelligent and rapid decisions in a constantly changing work environment while simultaneously monitoring all other processes and duties.

Possess a basic knowledge of mechanical, hydraulic, pneumatic, and electrical principles.

Ability to accurately collect and record data for internal and permit use.

Ability to support management in providing work direction, training, and instruction to department interns, youth apprentices, and/or seasonal employees.

Must have excellent communication skills and work well with others under general oversight and direction received through the treatment manager and/or treatment leaders. Ability to work in a safe manor through a variety of high stress situations such as high flows, inclement weather, and emergency response protocols.

### Section 8 ......Software / Technology Utilized

Microsoft Outlook, Word, Excel, Access, PowerPoint, SharePoint, Rockwell Systems (SCADA), Maximo (CMMS), Maxcom (SDS for chemicals), ExecuTime (Time and Attendance), Stackvision (Continuous Emissions Monitoring System - CEM), Simplex security system, security camera software (EXACQvision), HVAC (Automated logic webCTRL),

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

Computers, copier/scanner, solids microwaves, compound microscope, pH benchtop analyzers, gas composition analyzer, pH/DO/TSS/ORP handheld analyzers, spectrophotometer, plant public address system, TPASS personnel monitor, forklift, motorized carts, hand tools, portable pumps, heated pressure washers and power tools.

This positions develops the skills and abilities to operate 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, process control valves, treated cooling water and service water systems, filtration equipment, gravity thickeners, gravity belt thickeners, dry polymer system, solids dewatering equipment, biogas cleaning equipment, biogas generators, thermal oil heat transfer systems, rotating sludge dryers, digesters, biological odorous air treatment units, nutrient recovery reactors, HVAC, fluid bed incinerator, wet ash handling systems, sand transporters, chemical feed systems, conveyor systems, flow control gates, plant heating boilers, emergency generators, air emissions system monitoring equipment and disinfection equipment.

Section 10Judgments / Decision-Making: Impact		
Description of Duties	Check One	
Job Centered / Work Unit: Decisions made are typically isolated to an individual's job or work unit.		
<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.		
Multiple Departments: <u>Decisions</u> are made on behalf of and impact across multiple departments; or across 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.		

SECTION 11 JUDGMENTS / DECISION-MAKING EXAMPLES			
Frequency: Daily, Weekly, Biweekly, Monthly, Quarterly, Annually, or As Needed			
Example of Decision / Judgment (3-5 examples)	Job Title of Who Reviews (If Anyone)	Frequency	
Maintain safe and efficient plant operation with the ability to transition through staffing changes, increasing workloads, and Call-Ins.	Treatment Manager, Treatment Leaders, Operators	Daily	
Assist in troubleshooting and performing minor maintenance on equipment and coordinate equipment shutdown or rotation.	Treatment Manager, Treatment Leaders, Operators	Daily	
Report and assist in responding to safety related concerns such as plant and personal security, in house emergencies, unsafe working conditions, and health hazards.	Director of Operations Treatment Manager, Health, Security, and Safety Coordinator	As Needed	
Assist in coordinating process changes that directly affect equipment, permit compliance and energy usage.	Treatment Manager, Treatment Leaders, Operators	Daily	

SECTION 12 PROBLEM SOLVING		
Example of Problem (3-5 examples)	Resources Used	
Assist in responding to emergency or high priority situations and adjust work assignments to maintain permit compliance.	SCADA, Interdepartmental Coordination, Analytical Measurement Devices, NOAA Weather, Call In List, Operational Knowledge and Experience.	
Assist with operational issues identified and addressed on daily rounds.	Operational Knowledge and Experience, SCADA, Analytical Measurement Devices, Plant Log, I- tracker, and Maximo	
Assist in recognizing and responding to shock or toxic loads, unplanned power outages, and/or high seasonal loadings.	Communication with Pretreatment Coordinator, samplers, Analytical Measurement Devices, SCADA, and generators.	
Assist in protecting process equipment during cold weather operations.	Ice chippers, fire hoses, and other basic winterization procedures	
Assist in recognizing centrate/filtrate fouling and adjusting thickening and dewatering control parameters to optimize process efficiency.	Visual inspection, in line solids analyzer, Solids microwave	

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

Frequency: Daily, Weekly, Biweekly, Monthly, Quarterly, Annually, or As Needed		
Title/Description of Contact	Purpose of Contact	Frequency
Treatment Department	Offer team encouragement and direction as a self- directed work group.	Daily
Treatment Manager/Leaders	Attend monthly departmental meetings and one on ones to stay informed on organizational, departmental and individual goals/updates.	Monthly
Interdepartmental (all NEW Water Departments)	Plant maintenance, repairs, troubleshooting, equipment rotations, power switches, sample data, monthly plant sampling (MPS), priority pollutant sampling, whole effluent toxicity testing (WET), fixed asset management, plant tours, special projects, construction and upgrade projects, provide informed answers to treatment related questions, rules and regulations.	Daily
Solid Waste Disposal Company	Schedule and coordinate filling and pick-up times of grit and solid waste.	Monthly



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General public, consultants, business representatives, other wastewater professionals, outside vendors, outside contractors.	Answering outside phone calls during off hours, primary contact for emergencies, plant modifications, public education, provide informed answers to treatment related questions, be available to lead plant tours.	Monthly
Chemical Supply Companies	Order and schedule delivery of chemicals.	Weekly
Special Project Teams	Collaborate with internal departments and external contractors and consultants to provide a quality and cost-effective project.	As Needed
Significant Industrial Users	Communicate changes in operation, flows, loadings, pH or shutdowns.	As Needed
Diggers Hotline	Monitor for Non-Emergency and Emergency locates to dispatch appropriate personnel when needed	Daily

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

Employees <u>Directly</u> Supervised			
# Employees	Job Title		
	Employees <u>Indirectly</u> Supervised		
# Employees	Job Title		

SECTION 15......WORK ENVIRONMENT / WORKING CONDITIONS / PHYSICAL REQUIREMENTS Refer to ErgoFactor Job Analysis for this position for details. S:\Safety\Blankenheim Project\Operations\WWTP Operator.pdf.

SECTION 16 ......ADDITIONAL COMMENTS

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.