

Job Description Questionnaire

The purpose of the Job Description Questionnaire (JDQ) is to provide the information necessary to evaluate jobs for salary placement, classify jobs for various legal requirements, and to compile appropriate job descriptions.

Please read this JDQ carefully before answering any of the questions and then complete it as accurately, completely, and briefly as possible. While it is not necessary to describe each duty in great detail, it is important to provide sufficient information so the job can be accurately evaluated and classified. Keep in mind that *the purpose of the JDQ is to collect information about the job and is not designed to evaluate employee performance.*

Consider the typical responsibilities of the job; even those that might only occur cyclically (e.g. annually, quarterly, etc.). The responses should be based on duties and responsibilities that are part of the job under typical conditions, not special projects or temporary assignments. Further, unless specifically directed by management, describe the job as it is today, not as you believe it should be or what it might be in the future.

SECTION 1		DEMOGRAPHIC INFORMATION	
Employee Name		Employer Name	City of Watertown
Job Title	Water Operator I	Work Location	800 Hoffmann Drive
Department	Public Works - Water Department	Division	Water Utility
Full-Time / Part-Time	Full-Time	Part-Time (Hrs per Wk)	
Supervisor Name	Peter Hartz	Supervisor Title	Water Systems Manager

SECTION 2

DESCRIPTION OF ESSENTIAL DUTIES & RESPONSIBILITIES

Identify the essential duties / responsibilities of your job, which should be the most important aspects of the job. This section is focused on WHAT is done rather than HOW it is done. Use wording that will provide as clear an understanding as possible for someone not familiar with your work. Avoid terminology or acronyms that are not widely known outside of your line of work. Please list those duties that you feel are most important at the top of the list, and list the estimated percentage of the total annual time that each item takes. (*Remember, as a rule-of-thumb, that 10% equates to roughly 200 hours of a work year.*) To the extent possible, try to identify those duties and responsibilities that account for as close to 100% of your work time as possible. While catch-all categories are acceptable (e.g. misc. duties, other duties as assigned, etc.), those sections will likely NOT be evaluated.

Frequency Codes: Daily [D] / Weekly [W] / Bi-Weekly [B] / Monthly [M] / Quarterly [Q] / Annually [A] / As Needed [N]

Primary Duties	Frequency	% of Annual Total Time
Act as the water operator I	D	100
On call 24/7/365 days a year includes holidays and weekends for emergencies in a rotating shift with co-workers.	D / N	
Perform a variety of manual, monitoring, testing, and reporting functions. Identification of problems and implementing solutions before they adversely impact the quality of water produced by making operational adjustments for maintaining well and booster pumps to provide adequate pressure and proper levels in water storage in reservoirs and elevated tanks; use the SCADA (supervisory, control and data acquisition) system to achieve the proper control over the above parameters.	D	35
Responsible for all work orders and upkeep of the maintenance of the building, grounds, and communication equipment in use at 9 well sites, 3 raw reservoir sites, 1 booster pumping station, 4 elevated storage tanks, 3 water treatment facilities and various other facilities through the city.	D	35
Responsible for development, assessment and completion of the required maintenance which involves plumbing, electrical, and carpentry to control the heating, ventilation & cooling (HVAC) equipment associated with the buildings and operations and maintenance to provide reliable safe drinking water to the City of Watertown.	D	15
Back-up sampler to the operations foreman to collect drinking water samples required by the DNR including bacteriological, organics, synthetic organics, volatile organics, inorganics, metals, nitrates, lead, and copper when required on a daily, weekly, Bi-weekly, monthly, quarterly, semi-annual, and annual basis.	D, W,B,M, Q, A	2
Determines correct residuals of chlorine, sodium hydroxide, and fluoride by testing daily grab samples in the laboratory; adjust chlorine, sodium hydroxide, and fluoride feed equipment as deemed necessary; assist in meeting the monitoring requirements given by the DNR and other agencies to keep the system in compliance.	N	2
Input daily equipment runs times, water volumes, and chemical use needed to create reports required for the Wisconsin Department of Natural Resources (DNR).	D	2
Programs and troubleshoots SCADA and onsite PLC's (programmable logic controllers) for problems and reload programs if necessary, desktop computers, tablets, and GIS mapping database to locate valves, hydrants, services, and mains from written directions.	D	2

Assists the Operations Foreman in coordination of pumping adjustments for annual flushing and maintenance of fire hydrants in water system located throughout entire city.	A	2
Up to date knowledge of technology used including use of a laptop computer to interface remotely with the SCADA program and onsite PLC's (programmable logic controllers) to troubleshoot problems and reload programs, desktop computers, tablets, and GIS mapping database to locate valves, hydrants, services, and mains from written directions.	D	2
Responsible for providing technical guidance and assist in training new employees/coworkers in the Water Department for plant operations and maintenance records.	D / N	2
Setup and maintain safe construction work zones and direct traffic.	N	1
Knowledge of pipe material types required for use with pumps and conditional requirements based on water corrosivity, chemicals, soils and geology.	N	1
Provide on site assistance to the water distribution team when needed for repairs to watermains, hydrants, valves, curb stops or other water leak emergencies.	N	1

SECTION 3

TOOLS AND TECHNOLOGY

Identify any software, technology, equipment or machinery utilized on a regular basis in order to perform the functions of the job:

This position exercises considerable independence of judgment for the Watertown Water Utility day to day operations of the treatment plants and source water pumping system components (drinking water wells) that are in use to ensure the safe and efficient operation of the facilities for safe drinking water supply in accordance with State and Federal standards.

Employee must have considerable knowledge of various types of pumps, motors and automatic valves, their operation, maintenance and repair; ability to gain knowledge of, and implement SCADA program procedures necessary for day to day water system operation; considerable knowledge of occupational hazards and safety precautions; working knowledge of motors and motor starters; ability to troubleshoot minor mechanical and electrical problems and repair the same, carry out oral and written instructions, keep accurate records and make reports, notice strange or out of character things or people and situations around high security areas such as water reservoirs, towers, tanks and vessels, and report any of the above to proper authorities. Heavy construction equipment such as service trucks, dump trucks, backhoe, hydro-vacuum machine, water pumps, various hydraulic tools, and machinery. Computer knowledge and understanding of input/export of data into Geographical Informational Systems, tablet computer, desktop computer, Microsoft word & excel, smart phone use, two-way radio language, engineering blueprint interpretation, complex water system mapping interpretation which includes elevations and pressure readings. Electronic water leak correlation equipment and data interpretation.

SECTION 4

JUDGMENTS / DECISION-MAKING

Identify at least five of the most typical judgments/decisions that you make in performing your job as well as the solutions to these problems. Please also describe the resource, input or guidance others provide in arriving at your decision and who reviews, if anyone.

Typical Problems/Challenges	Possible Solution(s) to Problem/Challenge	Resources Available and/or Used	Job Title of Who Reviews
Locating water leaks / water main breaks	Identifying where the leak is before excavation. Determining who is responsible to repair leak if found on private property.	Pumpage records, Leak locator, listening microphone, and tools	Manager / Assistant Manager
Pumping or System Failure for unknown reason	Frequent Monitoring of the SCADA system, check power supply and trouble shoot alarms.	Alarm interface system linked to equipment and computer	Manager / Assistant Manager
Working with general public	Communication of requirement to enter premise to take a water sample or answer questions regarding water quality complaint.	People skills	Manager / Assistant Manager
Correct well pump, water filtration equipment and chemical feed run times and intervals due to equipment problems.	Purchase parts, scheduled outside contractors for electrical or plumbing repairs.	Known contractors, co-workers, people skills.	Manager / Assistant Manager
Water system pressure loss due to tank level or well failure problem.	Determine cause by being alert to and aware of the operating conditions of various equipment such as pumps, motors, chemical feeders, instruments, valves, etc. to keep adequate water in the pipes.	People skills / communication with co-workers / electronic devices	Manager / Assistant Manager

SECTION 5			WORKING RELATIONSHIPS / INTERACTIONS / CONTACTS
Please identify your typical work relationships with other persons inside or outside of your own organization.			
Title of Individuals With Whom You Typically Interact	Describe the Interaction	Why Was It Necessary?	
City of Watertown Street Dept. & Maintenance Personnel	Verbal in person and over phone or CB radio.	Notify and/or work with this division on necessary repairs to water main repairs affected by storm and sanitary system work in progress.	
Engineering & GIS	Verbal in person and over phone or CB radio.	Work with technicians on pipe elevations, curb & gutter and sidewalk grades, water curb stops, distribution valves and hydrant record data, ArcGIS record information.	
Contractors, electricians, plumbers	Verbal in person and over phone or CB radio.	To coordinate projects in progress or concerns and issues with pumps, controls, and equipment.	
State regulatory agencies (WDNR)	Verbal in person and over phone or CB radio.	Communication on sampling and reporting requirements for the safe drinking water act and mandatory reports for the wells or treatment plants.	

General public	Verbal in person and over phone or CB radio.	Notification of disruption to water service during a well or plant process scheduled utility repair.
Water Billing Clerk / Personnel	Verbal in person and over phone or CB radio.	Prepare and assist annual inventory
Outside support laboratories	Verbal, in person, over the phone, or email.	Coordinate delivery and shipping bottle orders for sampling events – some are very time sensitive.

SECTION 6		SUPERVISION / MANAGEMENT	
Please indicate the type of responsibility you have as it pertains to leading others.			
Area of Action / Responsibility	Yes	No	Provides Input
Screen / Interview Applicants		X	
Hire / Promote Employees		X	
Provide Written/Verbal Warnings (on the active job site safety concern or violation)	X		
Suspend Employees			X
Terminate Employees		X	
Prepare Work Schedules For Others	X		
Project Management	X		
Provide Work Direction For Others	X		
Evaluate Performance Of Others			X
Counsel Employees		X	
Train Employees (As Part Of The Normal Duties Of The Job)	X		
Approve Overtime		X	
Approve Time Off Request For Others		X	
Develop / Implement Policies	X		
Do you <u>directly</u> supervise any employees?			X
Job Title	# of FTEs		
Summer helper if the budget supports	FT during the summer		

SECTION 7**WORK ENVIRONMENT / PHYSICAL REQUIREMENTS**

Please indicate the amount of time typically spent in the following categories.

Physical Requirements	[Place an "X" in the appropriate cells]			
	N/A	Rarely	Occasionally	Frequently
Carrying/Lifting 10 - 40 Pounds				X
Carrying/Lifting > 40 Pounds				X
Sitting		X		
Standing / Walking / Climbing				X
Squatting/Crouching/Kneeling/Bending				X
Pushing / Pulling / Reaching Above Shoulder				X
Work Environment	N/A	Rarely	Occasionally	Frequently
Indoor/Office Work Environment		X		
Noise >85dB (e.g. mower, heavy traffic, milling machine, etc.)				X
Extreme Hot/Cold Temperatures (>90 degrees / <40 degrees)				X
Outdoor Weather Conditions				X
Hazardous Fumes or Odors / Toxic Chemicals (water treatment chemicals and associated equipment)				X
Confined Spaces (as identified by OSHA)			X	
Close Proximity to Moving Machinery / Equipment				X
Bodily Fluids / Communicable Diseases (exposed sanitary sewer mains and laterals are common in repair trenches)			X	
Working Alongside Moving Traffic on Roads				X
Electrical Hazards				X

SECTION 8

ADDITIONAL EMPLOYEE COMMENTS

Please identify any other information that would help someone else understand your job more clearly:

Physical Demands: Lifting approximately 100 lbs. occasionally, with frequent lifting and/or carrying of objects weighing up to 50 lbs. Stooping, kneeling, crouching, crawling, reaching, handling, feeling, working with fingers, seeing, and walking or standing to a significant degree. Employee must have stamina and able to maintain physical exertion for long periods of time. Specific vision abilities required by this job include close vision, distance vision, color vision, peripheral vision, depth perception, and the ability to adjust focus. Requires the ability to recognize and identify similarities or differences between characteristics of colors, shapes, sounds, odors and textures associated with job-related objects, materials and tasks.

Environmental Adaptability: Tasks may risk exposure to adverse environmental conditions, such as dirt, dust, pollen, odors, wetness, fumes, temperature and noise extremes, machinery, vibrations, electric currents, traffic hazards, toxic/poisonous agents, disease or pathogenic substances.

Judgment and Situational Reasoning Ability: Ability to exercise independent judgment to apply facts and principals for developing approaches and techniques to proper resolution. Requires the ability to exercise the judgment, decisiveness and creativity required in situations involving the direction, control and planning of an entire program or multiple programs.

- Knowledge of plumbing and electrical control systems.
- Knowledge of sophisticated computerized pump controllers and remote operational systems.
- Ability to take written directions, or computer GIS data, and correlate to site setting to find main and service valves
- Long and unusual working hours in extreme weather conditions and working while fatigued.
- On call 24/7 when in rotation on the schedule shared with co-workers.
- Common sense
- Very detail orientated
- Ability to work under extreme conditions with accuracy.

The Water Operator provides the critical physical labor needed daily to maintain and supply all the controls and equipment necessary for a reliable safe drinking water and fire protection supply of water. This position uses a mixed trade skill set with plumbing and electrical as well as general carpentry and heavy equipment operations needed for reliable operations of 9 high capacity drinking water wells, 3 drinking water treatments plants, and 5 water storage structures that are critical for the 120 miles of water main, 1,380 hydrants, 2,555 valves and 7,658 customer services. This employee displays a high level of workmanship and pride in supplying safe drinking water and adequate storage of water for other uses without interruptions and inconveniences to the business, industry and citizens of the City of Watertown all day every day – 365 days a year / 24 hours a day / 7 days a week. The high quality service provided means people and business establishments can carry on “as is” and don’t truly appreciate or even recognize that this employee exists – there are many hardships involved in the daily life of this employee and because of the great job it is often ignored in many aspects. One major concern is keeping a qualified individual in this job position is when communities in our greater metro area and around the state pay more for the same job in their community. It is critical that we staff this position with a high-quality skilled employee who wants to stay around long term.

TO BE COMPLETED BY THE EMPLOYEE'S SUPERVISOR

SECTION 9		SUPERVISOR INFORMATION	
Supervisor Name	Peter A. Hartz	Supervisor Title	Water Utility Manager

SECTION 10		EDUCATION <u>REQUIRED</u> FOR HIRE
	Level of Education (Select one with an "X")	Field(s) of Study
	Less than High School Education	n/a
	High School Education (or Equivalent)	X
	One Year Certificate (or Equivalent)	X
	Associate's Degree (or Equivalent)	X
	Bachelor's Degree	
	Master's Degree	
	Professional Degree (Law, Medicine, etc.)	
	PhD w/ Dissertation	
	Other: Wisconsin DNR licenses: groundwater, distribution, & iron removal. Wisconsin Department of Safety and Professional Services: Cross Connection Control Device Tester certification	X
Provide Any Additional Information Regarding the Required Education (e.g. preferred vs. required, specific coursework, etc.):		
Continuing education is required per Wisconsin Administrative Code(s) NR 114.10, NR 114.12, NR 114.13, NR 114.23, & NR 114.28.		

SECTION 11					TOTAL EXPERIENCE REQUIRED UPON HIRE		
[Place an "X" in the appropriate cells]							
No Experience	< 2 yr.	2 to 3 yrs.	4 to 5 yrs.	6 to 7 yrs.	8 to 9 yrs.	10 to 11 yrs.	≥ 12 yrs.
			X				

Describe Specific Experience Required for Hiring (e.g. 5 total years of customer service experience 2 of which were in a supervisory capacity):

Two years of supervisory experience with additional electrical controls and associated equipment desired.

SECTION 12

CERTIFICATION / LICENSURE / TRAINING TO PERFORM JOB

List Required Certification/Licensure/Training	How Attained/Provided	Required Upon Hire?	May Obtain After Hire?
Wisconsin Department of Natural Resources (WDNR) Water Groundwater certification	Written Exam / WDNR	No	Yes within one year.
Wisconsin Department of Natural Resources (WDNR) Water Distribution certification	Written Exam / WDNR	No	Yes within one year.
Wisconsin Department of Natural Resources (WDNR) Water Iron Removal certification	Written Exam / WDNR	No	Yes within one year.
Wisconsin Department of Safety and Professional Services – Cross Connection Tester Registration	Wisconsin State approved 40 – hour training course	No	Yes within one year.
Continuing education – 18 hours – every three years	State approved training classes	NA	NA
Previous experience with water plant operations preferred.	On-the Job real life work	No	Yes

Describe any current practices as it relates to licensure or certification (e.g. extra pay for certification, employer payment for obtaining or renewing, etc.):

Employer pays for exam and continuing education which is required.

SECTION 13

SUPERVISOR'S COMMENTS / CORRECTIONS / ADDITIONS

In lieu of altering an employee's JDQ, please provide any corrections, clarifications, or additional information in the space provided below.

JDQ Section	Comment / Clarification / Addition
	This job as a water operator I is a combination of a water supply intermediate operator, and water maintenance supervisor & worker combined, and now would assist with similar jobs in the wastewater department. Those duties include the following new assets which include; considerable knowledge of mechanical equipment used in a wastewater treatment plant, knowledge of chemical and biological processes taking place in a wastewater treatment plant, considerable ability to operate SCADA computer and related software and interpret operating feedback data and to regulate equipment controls to produce the required results, considerable ability to identify equipment malfunctions and to report and/or correct such malfunctions, considerable knowledge of work hazards and safe work practices and the ability to consistently apply that knowledge in the performance of the work, ability to safely and effectively operate a variety of plant related equipment and vehicles, considerable ability to read, understand and apply work related equipment O&M and laboratory manuals, Ability to efficiently clean and maintain equipment and work areas in accordance with established standards and schedules, Ability to perform confined space entry work and wear SCBA equipment may also be

	<p>necessary. The wastewater operator I needs to use and interpret technical manuals, sewer distribution maps, mechanical drawings, architectural drawings, and electrical drawings. To have a working knowledge to operate welding equipment (mig, torch, stick, tig, plasma), collection system equipment (jet/vac, rodder, TV inspection), wastewater process equipment (pumps, boilers, blowers, screens, clarifiers, mixers, centrifuge, UV disinfection), Electrical (Programmable logic control (PLC's), variable frequency drives (VFD's), relay logic), vehicles (minivan to heavy trucks) and heavy equipment, generators, and portable engine driven pumps. To have the knowledge to use computers and human interfaces to retrieve and enter data in software and equipment i.e. standard office software, plant SCADA (supervisory control and data acquisition), lift station SCADA, Fiix asset management, Metasys HVAC (heating, ventilation, air conditioning) control, PLC's, VFD's, and manufacturer's specific control panels. To have the ability and the knowledge to analyze data, to perform lab analysis, to do mathematical problems and to utilize the results using standardized methods and apply them to plant processes. <u>Maintenance responsibilities include:</u> Complete all scheduled and unscheduled maintenance and repairs of the process equipment (pumps, compressors, conveyance, hydraulic, pneumatic, boiler, centrifuges, ultraviolet disinfection, clarifiers etc.) fleet vehicles (pickup trucks, crane truck, sewer jet/vac truck, television truck, skid steer), generators, portable pumps, tools (power and hand), supporting special equipment (overhead cranes, trailers, rodding machine, welder, HVAC system, confined space entry equipment), all electrical power distribution and instrumentation control systems and in place, and all buildings and grounds at the wastewater treatment plant complex, which also includes the pumps and controls for the 18 sanitary sewer collection system lift stations. Performs welding (mig, torch, stick, tig, plasma), pipe fitting, tool & die work (lathe, milling, drilling), and metal fabrication utilizing dies, presses, and rollers. Training of co-workers and other staff for the above listed responsibilities.</p>

TO BE COMPLETED BY ADMINISTRATIVE DESIGNEE

SECTION 14		SUPERVISOR INFORMATION	
Administrative Designee Name	Administrative Designee Title		

SECTION 15		ADMINISTRATIVE COMMENTS / CORRECTIONS / ADDITIONS
In lieu of altering an employee's JDQ, please provide any corrections, clarifications, or additional information in the space provided below.		
JDQ Section	Comment / Clarification / Addition	
