

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 Watertown
Job Title	Wastewater Operator I	Work Location	800 Hoffmann Drive Watertown, Wisconsin
Department	Public Works - Wastewater Department	Division	Wastewater 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
Participates in the 24-hours a day/7-days a week/365-days a year emergency on call schedule including holidays, & weekends with co-workers; with pay and a City issued mobile phone.	D / N	
<u>Plant operation responsibilities include:</u> Controlling, monitoring, and operating the plant equipment with hands on for all process equipment in each of the following areas: Raw pumping station, preliminary treatment, primary treatment, biological activated sludge basins (live organisms), secondary treatment, final clarification, effluent disinfection, anaerobic digestion, sludge handling/processing, centrifuge and dewatering, polymer mixing system, and other chemical addition systems (pumps, compressors, conveyance, hydraulic, pneumatic, boiler, centrifuges, ultraviolet disinfection, clarifiers etc.); also includes an understanding of operations for the 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). An understanding of how to run all electrical power distribution and instrumentation control systems and in place at all buildings and grounds at the wastewater treatment plant complex, which includes the pumps and controls for the 18 sanitary sewer collection system lift stations.	D	35
<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.	D	35
<u>Laboratory and Process Control - Testing:</u> Perform wastewater sampling collection in the following areas: Influent Flow, Primary Effluent Flow, aeration basin (activated sludge), final effluent flow, other in plant processes and industrial discharges to the sanitary sewer. Perform process related lab tests in accordance with established procedures as needed.	D	5

Tests include MLSS, suspended solids, dissolved oxygen, pH testing, nitrate testing, mixed liquor (organic mass), return activated sludge concentrations, waste activated sludge concentrations, sludge volume index (SVI), biosolids cake and centrate solids, and microscopic evaluation of the living organism concentrations and species present.		
<u>Safety training review:</u> keep up to date and review and provides recommend improvements to the wastewater utility safety program. This includes electronic and paper copies of work performed for the following: The Control of Hazardous Energy (lock out tag out) (175 total Hazard Energy procedures), bloodborne pathogens, confined space entry, electrical safety, emergency action & fire prevention, excavation, hazard communication, hearing conservation, safety data sheets (chemicals on-site), and personal protective equipment.	Q	5
<u>Back-up responsibilities:</u> Is the primary back-up person when needed for scheduling time off requests, the secondary back-up operation of the customized sanitary sewer camera equipment and truck, sewer high pressure jetter and hydro-vac truck, sewer rodder machine, and electronic locating equipment.	N	5
<u>Supervisory Control and Data Acquisition (SCADA):</u> Monitoring the main plant during and after normal business hours with the on-call system via tablet or cell phone. Storm events cause massive increases in flow and change plant conditions and sanitary station levels so the SCADA computer is used to investigate alarm conditions in the plant to ensure that corrective actions are taken in a timely manner; often immediately based on level of emergency.	D /N	5
<u>Asset management responsibilities include:</u> Review, and update to operational and maintenance (O&M) manuals for all equipment, development (creation of), closure of all work orders and procedures for equipment including electronic and paper record keeping of all jobs (scheduled, in-progress, completed), which includes electronic input into the asset management program Fiix.	W	2.5
<u>Plant Process Equipment Records:</u> Performs routine lift station operational checks, programming, cleaning, and maintenance work. Review, update and keeper of operational logs used for scheduled and unscheduled maintenance requests for all equipment including electronic and paper record keeping of all jobs (scheduled, in-progress, completed), which includes electronic input into the asset management program Fiix.	W	2.5

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:

Computer knowledge and understanding of input/export of data into tablet computer, desktop computer, Microsoft word & excel, smart phone use, two-way radio language, engineering blueprint interpretation, complex sewer facilities mapping interpretation which includes elevations and flow pattern readings. Fiix asset management software system in use for all work orders and maintenance records. Electrical control systems in place that are a critical component to maintain the wastewater plant process equipment – there are too many different electrical components (old and obsolete and new) to list. Up to date knowledge of all software programs in use and the ever changing technology used for plant operations including computers, tablets, CB radios, software programs, supervisory control and data acquisition operating systems in place, GIS mapping database, and much more that can't adequately be listed.

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
Determination of how and when to change plant process parameters or select plant equipment to place in or take out of operation to keep plant performance optimized / maximized.	Research and understand the organic organisms living in the activated sludge basin by microscopic evaluation. Ability to evaluate laboratory testing results	Equipment operation environmental conditions internet searches, networking with other wastewater people.	Wastewater Operations Foreman
Determination of preventative maintenance procedures and schedules for plant equipment maintenance and or replacement.	Research and understand the equipment life cycles to schedule proactively instead of reactively.	Asset management software system.	Maintenance & Facilities Foreman
Adjusting set points and controls of the process equipment (levels, timers, pump speed, process intervals, equipment rotations)	Research and understanding of the plant process and equipment cycles needed to adjust as needed in real time.	Equipment operation and control manuals, visual, smell, hearing, lab testing results, on the job experience	Wastewater Operations Foreman
Ability to apply situational reasoning when problems arise unexpectedly without any explanation or reasonable cause that may affect the permit discharge limits.	Exercise judgment, decisiveness and creativity in situations involving the evaluation of information and sensory criteria.	On the job experience, common sense, co-workers, human brain	Assistant Manager / Manager
Treatment plant or other process system failure or equipment or electrical problem.	Respond to site and review problem to determine if it is electrical or equipment related. Attempt corrective action if able or call in outside support or help.	People skills / communication with co-workers / electronic devices, on-the job experience.	Maintenance & Facilities Foreman

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?
Plant maintenance foremen and/or operators	Verbal in person and over phone or CB radio.	To communicate a need for equipment or process issues that arise daily that may need to be addressed with a work order – some may be emergencies.
Relief plant operator (formerly the buildings and grounds worker)	Verbal in person and over phone or CB radio.	To coordinate back-up plant operations or jobs needing completion or assistance performing daily duties.
Wastewater Collections crew	Verbal in person and over phone	To communicate issues with equipment or collections operations that affect

leader	or CB radio.	this person's daily duties.
Laboratory manager	Verbal in person and over phone or CB radio.	To communicate issues that may affect plant performance or scheduling of daily duties.
Manager and Assistant Manager	Verbal in person and over phone or CB radio.	To communicate status of equipment and staffing assignments or issues in buildings and process conditions so as to keep everyone in the loop on status of all needed to continue peak plant performance for discharge permit.
City Watertown Streets Dept. & Maintenance Personnel	Verbal in person and over phone or CB radio.	Notify and/or work with this division on necessary for extreme weather events to obtain support and emergency pumps and controls.
Engineering & GIS	Verbal in person and over phone or CB radio.	Work with technicians on plant process needs or modifications, or corrections to plans or equipment.
Contractors	Verbal in person and over phone or CB radio.	Provide support and assistance when private contractor is working on repairs or installation of equipment or has problem with any sewer facility matter of importance.
Plumbers	Verbal in person and over phone or CB radio.	Communication for issues in the facilities where needed to correct problems.
General public	Verbal in person and over phone or CB radio.	Notification of problems with treated wastewater discharged to the receiving waters of the State.
Water Billing Clerk / Personnel	Verbal in person and over phone or CB radio.	Prepare and assist annual inventory

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		

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				X
Confined Spaces (as identified by OSHA)			X	

Close Proximity to Moving Machinery / Equipment				X
Bodily Fluids / Communicable Diseases (this person is exposed to raw sanitary sewer wastewater on a daily basis as part of this job)				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:	
<p>This position is a hands on job with a unique skill set hard to find. Responsible for all technical, skilled, and manual work needed for the maintenance of the pumps, equipment and controls in use for the wastewater plant. The maintenance requirements are critical to the City to obtain peak performance and readiness so that the city complies with state issued permits and protects citizens from any dangers from failures to our wastewater treatment plant discharge and systems. The Wastewater Operator I oversees the carries out all maintenance requirements for the plant operations and collection system pumps and controls. This employee displays a high level of workmanship and pride in minimizing interruptions and inconveniences to the business, industry, and citizens of the City Watertown by optimized plant performance to meet the state and federal discharge standards.</p> <p>This position understands all how to operate the plant process equipment, and structural parts of the plant (run, adjust, modify, fix equipment, interpret lab results). The degree of accountability to have a peak optimized wastewater treatment plant / procedures and timely/ appropriate repairs to equipment has a direct impact on our plant effluent, permit, and public health. May need to perform welding (mig, torch, stick, tig, plasma), pipe fitting, tool & die work (lathe, milling, drilling), and metal fabrication utilizing dies, presses, and rollers. Must train co-workers and other staff for the above listed responsibilities. The responsibility of this position to achieve this is carried out under general direction of the Wastewater Maintenance and Facilities Foreman.</p> <p>This position has a widely varied workload involving many multifaceted and substantial variables, requiring analytical ability and inductive thinking in adapting policies, techniques, and methods to fit unusual and complex situations. The work environment has several unpleasant elements that are regularly present and objectionable. It contains exposure to work situations that could result in incapacitating accidents or periodic exposure to situations involving hazards that could result in total disability, critical illness, or loss of life. 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.</p>	

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 specialized process equipment and controls only used for wastewater treatment purposes.
- Knowledge of electrical and plumbing codes and equipment and materials in use to treat wastewater.
- Ability to provide first line supervision, ability to persuade, convince and train others. Ability to advise and interpret how to apply policies procedures and standards to specific situations.
- Ability to utilize descriptive data and information such as inventory records and reports, repair orders and documentation, equipment requisitions, pumps and other equipment manuals.
- Long and unusual working hours in extreme weather conditions and working while fatigued.
- Rotating on call 24/7/365 with crew and other staff in Wastewater Dept.
- Common sense / detail orientated.
- Ability to work under extreme conditions with accuracy.
- Mathematic ability to add, subtract, multiply, divide, calculate percentages, fractions, and decimals.

TO BE COMPLETED BY THE EMPLOYEE'S SUPERVISOR

SECTION 9		SUPERVISOR INFORMATION	
Supervisor Name	Peter A. Hartz	Supervisor Title	Water Systems 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:	X
Provide Any Additional Information Regarding the Required Education (e.g. preferred vs. required, specific coursework, etc.):		
Training required - electrical repair and print reading, NFPA 70E arc flash, confined space entry, welding and fabrication, computer, mechanical repair, wastewater operations, and wastewater lab analysis Licenses required - Class "B" Commercial Driver License with endorsements is required CPR/first aid, and forklift operator. Wisconsin Department of Natural Resources wastewater operator certifications are desired or may be required at the discretion of the manager.		

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):							
<p>Recommended requirements include: Graduation from a two-year specialized training program in wastewater maintenance and treatment including laboratory procedures and an internship at a wastewater treatment facility or equivalent training and experience. Must possess a valid Wisconsin Driver's License. Five years of equipment and controls maintenance experience, or closely related job in the utilities field preferred and/or required. That is further defined as follows: 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 necessary.</p>							

SECTION 12		CERTIFICATION / LICENSURE / TRAINING TO PERFORM JOB	
List Required Certification/Licensure/Training	How Attained/Provided	Required Upon Hire?	May Obtain After Hire?
Wisconsin Commercial Driver's License	Wisconsin DOT written and road test	No	Yes (6 months)
Confined Space Entry certificate	OSHA approved in person training	No	Yes (6 months)
Electrical repair training / arc flash training	OSHA approved in person training	No	Yes (1 year)
Forklift operator certification	OSHA approved in person training	No	Yes (1 year)
First Aid and CPR certification	OSHA approved in person training	No	Yes (1 year)
Advanced Wastewater Operator Certification Subclasses: A1, B, C, P, D, and SS	Written exam, experience, and education	No	Yes
Continuing education – 24 hours – every three years	State approved training classes	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.):			
<p>According to Wisconsin State Statutes §281.17 - Water quality and quantity; specific regulations, and Wisconsin Administrative Codes NR 114; Certification Requirements for Waterworks, Wastewater Treatment Plant, Septage Servicing And Water System Operators. This code lists the required grades for the operation of wastewater treatment plant in NR 114.13 - Operator-in-charge designation, NR 114.28 – Definitions (manager not to be operator-in-charge), NR 114.22 - Certificate renewals, and NR 114.23 - Continuing education and training requirements. This pertains to the Wastewater Maintenance and Facilities Foreman certification grade requirement. Employer pays for exam and continuing education which is required per Wisconsin Administrative Code(s) NR 114.10, NR 114.12, NR 114.13, NR 114.23, & NR 114.28.</p>			

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	
	<p>This job as a wastewater operator I is a combination of a wastewater intermediate operator, and wastewater maintenance worker combined, and now would assist with similar jobs in the water department. Those duties include the following new assets which include; 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. 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. 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.</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	
