

## CITY OF MADISON POSITION DESCRIPTION

1. Name of Employee (or "vacant"):  
Vacant  
Work Phone: 266-4667
2. Class Title (i.e. payroll title):  
Waterworks Operator 2
3. Working Title (if any):
4. Name & Class of First-Line Supervisor:  
Joe DeMorett, Water Supply Manager  
Work Phone: 267-4902
5. Department, Division & Section:  
Water Utility, Water Supply Section
6. Work Address:  
119 E. Olin Ave
7. Hours/Week: 80 hrs/pay period (Week 1: 3 – 12 hour days; Week 2: 1 – 8 hour day and 3 – 12 hour days)  
Ability to work 12 hour days, rotating shifts, including both day and night, weekend and holiday hours. Employee must be available by telephone on a regular basis for call-in or overtime work.  
Start time:                      End time:
8. Date of hire in this position:
9. From approximately what date has employee performed the work currently assigned:

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10. Position Summary:

This is journey-level work functioning as the Madison Water Utility's certified operator-in-charge to monitor and control the water supply, transmission and storage systems through a supervisory control and data acquisition (SCADA) system ensuring proper and secure operations. The work is characterized by the application of technical judgment, the broader application of technical expertise and proficiency in the operational and procedural aspects of the work. Positions in this class are responsible for the safe and efficient operation and control of the City's water supply. Work is performed under the general supervision of the Water Supply Manager. The Operator 2 primarily works rotating 12 hour shifts, which vary weekly. Related work is performed as required.

11. Functions and Worker Activities: (Do NOT include duties done on an "Out-of-Class" basis.)

- 50% A. Function as the Madison Water Utility's operator-in-charge as defined by the State of Wisconsin.
1. Monitor and control the water supply, treatment, transmission and storage systems through a supervisory control and data acquisition (SCADA) system. Analyze and act appropriately to control treatment, flow and storage through various transmission and distribution facilities and take other actions as required.
  2. Operate all equipment related to the management of residuals generated from all treatment processes in order to meet production requirements and drinking water quality standards. Determine the level of fluoride from samples taken from the various stations using calibrated analytical equipment. Report the results of the water testing. Inform the Water Supply Manager or On-Call Manager if the chemical levels are outside of predetermined parameters.
  3. Compute chemical doses and adjust chemical feeders (e.g., chlorine, fluoride and sulfuric acid.)
  4. Make decisions that involve the quality and quantity of water treated and delivered. Work with and direct the Utility's flushers as needed.
  5. Detect and correct any problems. Acknowledge and respond to alarms, taking corrective action as required.
  6. Respond effectively to unscheduled shut downs of any of the Utility's facilities. Work closely with the Utility's Maintenance Section when needed.
  7. Oversee the operation of all security procedures utilizing card access and video surveillance systems.
  8. Record and report functions such as daily logs of system operations, laboratory test results, maintenance work performed and unusual operating conditions. Perform calculations such as pumpage, efficiency ratios, etc. Work with computers to maintain database files and reports. Generate work orders. Make periodic inspections and prepare appropriate reports as required. Write reports/memos and create graphs and charts based on the data.
  9. Perform related work as required.
- 10% B. Under general supervision, provide lead direction, training and work review for Water Supply staff.
1. Provide direction to Waterworks Maintenance Workers and Operator 1's.
  2. Review and analyze system data collected by field personnel. Verify accuracy and completeness.
  3. Provide the more complicated and higher-level training to less experienced operators.
  4. Perform related work as required.
- 15% C. Assist in the oversight of the administrative aspects of operating facilities and the water supply system.
1. Complete monthly reports, daily time sheets, inventory records and work orders.
  2. Call in staff as necessary to insure adequate coverage of shifts.
  3. Coordinate review and update of standard operating procedures.
  4. Take regular inventories of chemicals and other supplies used during the operation of facilities.
  5. Order operating supplies and chemicals as needed.
  6. Perform related work as required.
- 10% D. Serve as in-house hands on experts on water supply systems operations.
1. Serve on in-house teams to conduct studies and analyses.
  2. Prepare reports and recommendations designed to optimize operations.
  3. Work with Water Quality and Engineering Sections and meter shop personnel as needed.
  4. Perform related work as required.
- 15% E. Operate Utility's communications center during off hours, weekends, holidays and as needed.
1. Receive calls from customers related to main leaks, service leaks, hydrant problems, frozen pipes, other water supply problems.

2. Receive calls from 911 and public related to sewer backups, flooding, road hazards, etc. Work with City Engineering and Streets as needed.
3. Process emergency locate requests from Diggers Hotline.
4. Work with On-Call Supervisor and dispatch utility personnel as needed.
5. Call in staff for overtime as needed to respond to calls.
6. Communicate with Water Supply Manager and On-Call Manager as dictated by standard operating procedures.
7. Maintain telephone and radio communications with field employees, security forces and others during a twenty-four hours a day, seven days a week operations schedule.
8. Perform related work as required.

12. Primary knowledge, skills and abilities required:

Knowledge of the principles, practices and techniques involved in the operation of potable water supply and SCADA systems. Knowledge of waterworks operation, occupational hazards and necessary safety precautions. Familiarity with pumps, motors, controls, variable speed drives (VFDs), instrumentation and other related equipment associated with well and booster pumping stations. Ability to determine the working condition of equipment, detect defects in operation, and direct appropriate corrective action. Ability to act quickly and calmly and exercise judgment in emergencies. Ability to oversee the work of Waterworks Maintenance Workers and Operator 1's and recognize and rectify problems described. Ability to multi task and maintain alertness at all times of the day or night. Ability to operate a motor vehicle. Ability to effectively use a variety of computer applications including, but not limited to SCADA, GIS, databases, reporting software, work order programs, spreadsheets. Ability to use general office equipment. Ability to perform mathematical calculations including using formulas to record data in tables and in memos. Ability to communicate effectively, both verbally and in writing. Ability to establish and maintain effective working relationships both written and orally with supervisors, coworkers and the general public.

Three years of experience in the operations and/or maintenance of waterworks facilities including at least 18 months as a City of Madison Waterworks Operator 1 or equivalent. Such experience would be normally gained after graduation from high school including at least one year of mathematics. Other combinations of training and/or experience, which can be demonstrated, to result in the possession of the knowledge, skills and abilities necessary to perform duties of the position will also be considered.

13. Special tools and equipment requirements:

Use of computers, radios, colorimeters, spectrophotometers and general office equipment.

14. Required licenses and/or registration:

Possession of and ability to maintain a Wisconsin Water Supply Operator Certification (Subclasses D and G) and other subclasses as may become necessary based on changes in EPA and/or WI DNR requirements and changes/additions to Madison Water Utility facilities.

Possession of a valid Wisconsin Drivers License

15. Physical requirements:

Ability to maintain alertness at all times of day and night

16. Supervision received (level and type):

Work is performed under the general supervision of the Water Supply Manager.

17. Leadership Responsibilities:

- This position:  is responsible for supervisory activities (Supervisory Analysis Form attached).  
 has no leadership responsibility.  
 provides general leadership (please provide detail under Function Statement).

18. Employee Acknowledgment:

- I prepared this form and believe that it accurately describes my position.  
 I have been provided with this description of my assignment by my supervisor.  
 Other comments (see attached).

\_\_\_\_\_  
EMPLOYEE

\_\_\_\_\_  
DATE

19. Supervisor Statement:

- I have prepared this form and believe that it accurately describes this position.  
 I have reviewed this form, as prepared by the employee, and believe that it accurately describes this position.  
 I have reviewed this form, as prepared by the employee, and find that it differs from my assessment of the position. I have discussed these concerns with the employee and provided them with my written comments (which are attached).  
 I do not believe that the document should be used as the official description of this position (i.e., for purposes of official decisions).  
 Other comments (see attached).

\_\_\_\_\_  
SUPERVISOR

\_\_\_\_\_  
DATE

Note: Instructions and additional forms are available from the Human Resources Dept., Room 501, City-County Bldg. or by calling 266-4615.