

## **LEAD WATER CHEMIST MILWAUKEE WATER WORKS**

**PURPOSE:** This position is responsible for leading a team of water process chemists into their new primary function of fully utilizing on-line instrumentation, quality control procedures and preventive maintenance approaches to document that water quality information is valid and verifiable. Once that new function is solidly in place, the position will direct the activities of the process chemists.

### **ESSENTIAL FUNCTIONS:**

- ◆ Provide oversight, management and direction of the on-line instrumentation program to ensure that data from these instruments will be of high quality and reliability.
- ◆ Work with Chemists, Operators, instrumentation staff, preventive maintenance staff and instrument manufacturers to identify instruments and their operating principle.
- ◆ Write Standard Operating Procedure for instrument calibration, verification and routine maintenance.
- ◆ Make recommendations for preventive maintenance activities and schedules.
- ◆ Evaluate instrument performance (and resulting data quality) using statistical techniques.
- ◆ Ensure validity of “reference” data by developing and implementing quality assurance program for laboratory benchtop instruments and documenting analyst competence through the use of known standards, duplicates, blind samples and other accepted quality control techniques.
- ◆ Utilize computer data storage, databases and data manipulation tools to the maximum extent possible to facilitate the usefulness and accessibility of the benchtop and on-line data.
- ◆ Supervise and direct Water Process Chemists in their tasks. Review their work, reports, summaries and data recording. Ensure their work is done in a timely, logical and easily retrievable fashion. Provide training as needed.
- ◆ Facilitate the transition of Operations staff to perform and interpret laboratory analyses of grab samples to verify results of continuous monitoring instruments, such as chlorine, particle counts, turbidity, fluoride, pH, ozone and jar tests. Assist with training, develop operator-friendly procedures and laboratory environment..
- ◆ Utilize knowledge of water treatment process and water quality information from continuous monitoring instrumentation to assist water plant operations staff in fine-tuning and optimizing specific components of the treatment process such as filter operation, coagulant dosage, chlorine residuals, CT targets for ozone and chlorine and others as identified by staff.
- ◆ Perform administrative tasks such as preparing reports for submission to the Department of Natural Resources, responding to need for data analysis, ordering chemicals and laboratory supplies, authorizing payment for received goods. Participate and actively contribute in regular meetings of the Water Quality and Plants Sections. Promote workplace safety.
- ◆ Perform other duties as assigned.

### **REQUIREMENTS:**

1. Bachelor's Degree in Chemistry, Microbiology or closely related field from a college or university accredited by an agency recognized by the Council for Higher Education Accreditation, U.S. Department of Education or a foreign equivalent and three years of experience performing chemical analyses in an environmental laboratory.

OR

Associate's Degree in Chemistry, Microbiology, Water and Wastewater Technology or closely related field from an accredited college and five years of experience performing chemical analyses in an environmental laboratory.

**NOTE:** Equivalent combinations of training and experience may also be considered.

2. Must have or obtain a Wisconsin Surface Water Treatment Operator Grade S-1 certificate within six months of hire.
3. Must have the physical ability to be SCBA certified to use all job-related self-contained breathing apparatuses at time of appointment and throughout employment.
4. Proficiency with software such as Word and Excel, including data graphing.
5. The physical ability to differentiate and quantify colors and odors.
6. Residency in the City of Milwaukee within six months of appointment and throughout employment.
7. Valid driver's license at time of appointment and throughout employment.
8. Laboratory or operational experience in a surface water purification plant is highly desirable.

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