

PERSONNEL COMMITTEE

12-0316R

RESOLUTION APPROVING PROPOSED AMENDMENTS TO THE SPECIFICATIONS FOR THE CIVIL SERVICE CLASSIFICATION OF WATER LAB CHEMIST.

CITY PROPOSAL:

RESOLVED, that the proposed amendments to the specifications for the civil service classification of water lab chemist, which were approved by the civil service board on June 5, 2012, and which are filed with the city clerk as Public Document No. \_\_\_\_\_, are approved. This classification shall remain subject to the city's collective bargaining agreement with its basic unit employees and compensated at Pay Range 32.

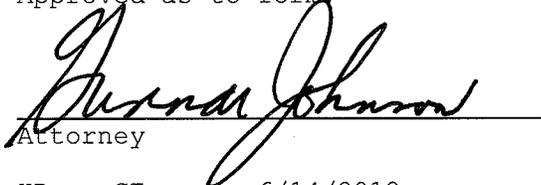
Approved:

  
Department Director

Approved for presentation to council:

  
Chief Administrative Officer

Approved as to form:

  
Attorney

Approved:

  
Auditor

HR CT:ao 6/14/2012

STATEMENT OF PURPOSE: This job description was revised to reflect the changing requirements for water plant laboratories, to update the educational requirements to reflect the changing college majors that lead to this field (such as environmental science), and to require a driver's license as this classification drives a city vehicle to collect water samples. The leadworker language was updated and the job description was placed into our current format. There is no change in the rate of pay, which is Range 32, \$4,044 to \$4,785 per month.

## **WATER LAB CHEMIST**

### **SUMMARY/PURPOSE:**

This position, under the supervision of the Water Plant Supervisor, has primary responsibility for testing and ensuring the quality of the potable water supply provided to citizens of the area through the City's water distribution system. This includes leading others in accomplishing their measurement and testing tasks and in making corrections to settings for chemicals and additives at the water plant.

### **ESSENTIAL DUTIES AND RESPONSIBILITIES (Other duties may be assigned):**

- A. Collect, test, and analyze samples from various locations in a valid manner consistent with good laboratory practice.
- B. Perform method documentation and all necessary QA/proficiency testing and reporting under the Minnesota Department of Health (MDH) Certification Program as a National Environmental Laboratory Accreditation Conference (NELAC) certified bacteria testing lab.
- C. Document all findings for reference and reporting purposes; produce reports.
- D. Maintain compliance with EPA drinking water rules for surface water treatment facilities
- E. Utilize good laboratory practice to prevent cross-contamination and inaccurate results.
- F. Continually update quality manuals, procedures, and equipment to maintain certification under NELAC rules for total coliform and escherichia coliform testing.
- G. In collaboration with supervisor, determine work priorities.
- H. Assign work and coordinate work schedules.
- I. Provide input into decisions regarding the hire and transfer of personnel.
- J. Train team in safe and proper work methods and procedures.
- K. Monitor work for compliance with established methods, guidelines, standards and procedures.
- L. Review work of team members for completeness and quality, and provide feedback as needed.
- M. Provide input to management to aid in decisions related to discipline and grievance resolution.
- N. Provide information and instruction to assigned team verbally and in writing as needed.

### **JOB REQUIREMENTS:**

To perform this job successfully, an individual must be able to perform each essential duty satisfactorily. The requirements listed below are representative of the knowledge, skills and abilities required.

#### **1. Education and Experience Requirements:**

- A. College degree with a major in chemistry or a related field.
- B. Two years of experience in a chemical and/or bacteriologic testing laboratory.

#### **2. License Requirements**

- A. Must possess a valid Minnesota Driver's License or equivalent.

**3. Knowledge Requirements:**

- A. Extensive knowledge of water chemistry.
- B. Extensive knowledge of safe and effective laboratory practice and procedure.
- C. Extensive knowledge of chemistry and bacteriology and related laboratory analysis procedures.
- D. Extensive knowledge of requirements under NELAC for certification as a certified environmental lab by the MDH.
- E. Knowledge of the Safe Water Drinking Act and amendments as they apply to the City of Duluth's surface water treatment facility.
- F. Knowledge of computerized information systems and spreadsheets.
- G. Knowledge of effective supervisory principles and practices.
- H. Knowledge of applicable labor agreements.

**4. Skill Requirements:**

- A. Skill in the safe and recommended use of laboratory equipment to determine the physical, chemical, and bacteriologic components of water.

**5. Ability Requirements:**

- A. Ability to attend work on a regular basis in accordance with a pre-determined schedule.
- B. Ability to perform a variety of laboratory tests, analyses, and sampling duties in the field.
- C. Ability to understand and interpret laboratory test results.
- D. Ability to communicate effectively across multiple media.

**6. Physical Ability Requirements:**

- A. Ability to lift and transport laboratory samples and equipment weighing up to 25 pounds.
- B. Ability to transport oneself to, from, and around various locations within the City of Duluth to collect samples.

Genlst: CT	Class:3123	Union: Basic	Pay: 32	CSB: 20120605
CC:	Res:	EEOC:	EEOF:	WC:

## WATER LAB CHEMIST

### SUMMARY/PURPOSE:

Responsible for collecting, testing and analyzing water and other related samples in order to maintain and/or improve overall water quality.

This position, under the supervision of the Water Plant Supervisor, has primary responsibility for testing and ensuring the quality of the potable water supply provided to citizens of the area through the City's water distribution system. This includes leading others in accomplishing their measurement and testing tasks and in making corrections to settings for chemicals and additives at the water plant.

### ESSENTIAL DUTIES AND RESPONSIBILITIES (Other duties may be assigned):

1. ~~Responsible for collecting, testing and analyzing water and other related samples in order to maintain and/or improve overall water quality and optimize water system operations.~~
  - A. ~~Responsible for collecting, test, and analyze~~ samples from various locations in a valid manner consistent with good laboratory practice.
  - B. Perform method documentation and all necessary QA/proficiency testing and reporting under the Minnesota Department of Health (MDH) Certification Program as a National Environmental Laboratory Accreditation Conference (NELAC) certified bacteria testing lab. Responsible for analyzing samples either collected or provided using laboratory equipment to determine the physical, chemical, and bacteriologic components.
  - C. Record Document all findings for reference and reporting purposes; produce reports.
  - D. Maintain compliance with EPA drinking water rules for surface water treatment facilities. Produce reports as necessary and on a regular basis.
  - E. Utilize good laboratory practice to prevent cross-contamination and inaccurate results.
  - F. Continually update quality manuals, procedures, and equipment to maintain certification under NELAC rules for total coliform and escherichia coliform testing. Maintain a current knowledge of water chemistry, bacteriology, water quality assurance, MDH and EPA certified procedures, and related fields relevant to this work.
  - \* ~~G. Maintain a constant awareness of safe work practices.~~
  - ~~H. Provide information to assist operators in resolving chemical treatment questions.~~
  - ~~I. Recommend changes to water system operations, both within and without the City, to optimize operations based on laboratory analysis conducted.~~
  - G. In collaboration with supervisor, determine work priorities.
  - H. Assign work and coordinate work schedules.
  - I. Provide input into decisions regarding the hire and transfer of personnel.
  - J. Train team in safe and proper work methods and procedures.
  - K. Monitor work for compliance with established methods, guidelines, standards and procedures.
  - L. Review work of team members for completeness and quality, and provide feedback as needed.
  - M. Provide input to management to aid in decisions related to discipline and grievance resolution.
  - N. Provide information and instruction to assigned team verbally and in writing as needed.

~~2. Coordinate the activities of the Water Lab.~~

- ~~\* A. Determine priorities and coordinate schedules of Water Lab personnel.~~
- ~~\* B. Train Water Lab personnel in correct and safe methods and procedures.~~
- ~~\* C. Establish work standards and complete employee evaluations as assigned.~~
- ~~\* D. Monitor work sites to ensure compliance with established methods, guidelines, standards, and procedures.~~
- ~~\* E. Monitor EPA and MDH guidelines and procedures in order to maintain necessary laboratory procedures and checklists.~~
- ~~\* F. Disseminate information to employees through bulletins and other means of communication.~~

~~3. Perform related tasks as necessary.~~

- ~~\* A. Studies and recommends methods of maintaining and/or improving water quality.~~
- ~~\* B. Responsible for diagnosing, maintaining, upgrading, or recommending the replacement of all laboratory equipment and areas, and process control instrumentation.~~
- ~~\* C. Interact with the public and other agencies.~~
- ~~\* D. Respond to customer complaints and questions.~~
- ~~\* E. Consult with Contractors, other utilities, and interested parties on matters dealing with water quality and testing. Direct others in the performance of the above functions.~~
- ~~\* F. Maintain the assigned spaces in a clean, safe, and orderly condition.~~

**JOB REQUIREMENTS:**

To perform this job successfully, an individual must be able to perform each essential duty satisfactorily. The requirements listed below are representative of the knowledge, skills and abilities required.

**1. EDUCATION & EXPERIENCE REQUIREMENTS:**

- A. College degree with a major in chemistry or a related field, biology.

**EXPERIENCE:**

- ~~† B. One year of experience supervising others.~~
- ~~AB. Two years of experience in a chemical and/or bacteriologic testing laboratory.~~

**2. License Requirements**

- A. Must possess a valid Minnesota Driver's License or equivalent.

**3. KNOWLEDGE REQUIREMENTS:**

- ‡ A. Extensive knowledge of water chemistry.
- ‡ B. Extensive knowledge of safe and effective laboratory practice and procedure.
- ‡ C. Extensive knowledge of chemistry and bacteriology and related laboratory analysis procedures.
- ‡ D. Extensive knowledge of requirements under NELAC for certification as a certified environmental lab by the MDH. ~~effective sampling and monitoring procedures.~~
- ~~E. Knowledge of the Safe Water Drinking Act and amendments as they apply to the City of Duluth's surface water treatment facility.~~
- ‡ F. Knowledge of computerized information systems and spreadsheets.
- G. Knowledge of effective supervisory principles and practices.
- H. Knowledge of applicable labor agreements.

**4. SKILL REQUIREMENTS:**

- ‡ A. Skill in the safe and recommended use of laboratory equipment to determine the physical, chemical, and bacteriologic components of water.

**5. ABILITY REQUIREMENTS:**

- ‡ A. Ability to attend work on a regular basis in accordance with a pre-determined schedule.
- ‡ B. Ability to perform a variety of laboratory tests, analyses, and sampling duties in the field.
- ‡ C. Ability to understand and interpret laboratory test results.
- ‡ D. Ability to communicate effectively across multiple media.

**6. PHYSICAL ABILITY REQUIREMENTS:**

- ‡ ~~A~~E. Ability to lift and transport laboratory samples and equipment weighing up to 25 pounds.
- ‡ ~~B~~F. Ability to transport oneself to, from, and around various locations within the City of Duluth to collect samples.
- ~~‡ G. Ability to direct the work activities of others assigned.~~

~~\* Essential functions of the classification.~~

~~‡ Minimum classification requirements necessary on the first day of employment.~~

Genlst: CT	Class:3123	Union: Basic	Pay: 32	CSB:
CC:	Res:	EEOC:	EEOF:	WC: