

CITY OF MARSHALL

Job Description

POSITION TITLE: WWTF Laboratory Specialist	DATE: March 2015 2020
DIVISION: Public Works	FLSA STATUS: Non-exempt
ACCOUNTABLE TO: WWTF Superintendent	UNION STATUS: AFSCME
	HAY POINTS: 281

SUMMARY OF POSITION

Conduct complex laboratory analyses of samples obtained in order to: monitor the effectiveness of the treatment plant process; meet Environmental Protection Agency (EPA), Minnesota Pollution Control Agency (MPCA), and Minnesota Department of Health (MDH) requirements; determine industrial surcharges; and ~~on occasion~~ provide testing for other cities as a contract laboratory.

ESSENTIAL DUTIES AND RESPONSIBILITIES

1. Perform facility process control analyses to monitor efficiencies of the treatment process.
2. Compile, report, and interpret all data for the Superintendent's review and determination of operational control procedures. Enter lab data into computer database.
3. Develop, document, record and maintain laboratory QA/QC Program to meet EPA ~~and~~ MPCA ~~and MDH~~ regulatory requirements. Maintain ~~MDH~~ MPCA Certification of Laboratory.
4. Coordinate and collect samples of sewage from treatment plant, industries and receiving waters according to standards required by EPA and MPCA.
5. Consult with the superintendent to evaluate data to determine wasting rates, pumping times, return flow rates, and sampling requirements as necessary to obtain optimum wastewater treatment.
6. Perform analysis on industrial discharge effluent to determine surcharges for industries.
7. Prepare chemical reagents and bacteriological media for use in conducting laboratory analysis on samples. Recommend the purchase of laboratory supplies and equipment.
8. Direct and train Plant Operator I's, Plant Operator II's, and Maintenance Operators in laboratory procedures and sampling.
9. Maintain a safe and clean work environment in the laboratory. Adjust laboratory equipment and recommend major repair or replacement of laboratory equipment, as needed.
10. Perform all duties in conformance with appropriate safety and security standards.
11. Attendance is an essential function of this position.
12. Perform other duties as assigned.

The duties listed above are intended only as illustrations of the various types of work that may be performed. The omission of specific statements of duties does not exclude them from the position if the work is similar, related or a logical assignment to the position.

MINIMUM QUALIFICATIONS

- A. High School Diploma or General Education Degree (GED).
- B. ~~Valid Laboratory Analyst Certification or two~~ one (2- 1) year experience in a ~~wastewater~~ laboratory conducting technical level examinations of materials ~~or equivalent~~.
- C. Class ~~E~~ D Wastewater Treatment Facility Operator (per MPCA) or ability to obtain certificate within ~~six (6) months~~ two (2) years of employment.
- D. Valid Minnesota Class D Driver's License.

DESIRABLE QUALIFICATIONS

- A. Post-secondary education in chemistry, biology, microbiology or related field.
- B. Strong organizational skills.
- C. ~~Valid Laboratory Analyst Certification~~.
- D. ~~Familiarity with Wastewater testing of CBOD5, TSS, Phosphorus, Ammonia, Fecal Coliform, TVS, Chloride, and pH.~~

ESSENTIAL KNOWLEDGE, SKILLS, AND ABILITIES

- Knowledge of standard wastewater laboratory operating procedures and practices.
- Knowledge of chemicals, reagents, and related materials used in the chemical examination of substances.

- Knowledge of the chemical and biological examinations conducted in the wastewater treatment facility.
- Knowledge of proper safety practices in a laboratory setting.
- Skill in the use of laboratory equipment and chemicals.
- Ability to develop and maintain a QA/QC Program.
- Ability to collect water and wastewater samples.
- Ability to conduct analysis of samples and analyze results obtained.
- Ability to communicate effectively orally and in writing.
- Ability to use complex mathematical formulas for data interpretation.
- Ability to operate computers, including word processing, database and spreadsheet software.

SUPERVISION EXERCISED

NA

SUPERVISION RECEIVED

This position reports directly to and receives general supervision by the Superintendent. In the absence of the Superintendent, supervision and work direction are provided by the General supervision by the Superintendent ~~or Assistant Superintendent.~~

PUBLIC CONTACTS

Frequent contact with the Public Works Department, local industries, contract lab customers, and the general public. Occasional contacts with Marshall Municipal Utilities, MPCA, MDH, and MN Wastewater Operations Association.

PHYSICAL REQUIREMENTS AND WORK ENVIRONMENT

The physical demands and work environment characteristics described here are representative of those an employee encounters and must be met by an employee to successfully perform the essential functions of this job.

Reasonable accommodations may be made to enable individuals with disabilities to perform the essential functions.

Performing the duties of this job require the use of equipment including but not limited to: a balance, drying oven, auto clave, oxygen meter, pH meter, muffle furnace, centrifuge, ISE meter, ampermetric titrator, incubators, magnetic stirrers, UV analyzer, electric control panels, spectrophotometer, personal computer and other basic office equipment.

This position has daily contact with sewage samples and hazardous chemicals and fumes.

This position typically works Monday through Friday ~~6 8~~ a.m. until ~~2:30~~ 4:30 p.m.

See attached Physical Requirements and Working Conditions form.

NON-DISCRIMINATION POLICY/EEO POLICY

The City of Marshall provides equal employment opportunity in accordance with applicable state and federal laws, directives, and regulations. The City will not discriminate against any employee or applicant for employment on the basis of any class protected by state or federal law.