City of Bellingham
Classification Specification

CLASS TITLE	**Plants Maintenance Technician in Training/ Plants Maintenance Technician I, II, III**
DEPARTMENT	**Public Works - Operations**
UNION:	**1937**
SG:	**107/109/111/113**
CS:	**Yes**
FLSA:	**Y**
EE04/SOC CODE:	**SC/49-9043**

NATURE OF WORK:

The Plants Maintenance Technician series performs progressively responsible multi-discipline preventive, corrective, rebuild, upgrade, and special project maintenance for complex plant process systems, equipment, and facilities at the water and wastewater treatment plants, pumping stations, lift stations, reservoirs, and other facilities. Examples of duties include performing troubleshooting, preventive, corrective, and special project maintenance on industrial electrical, electronic, electrical generating and distribution, electronic process control instrumentation, distributed control systems, programmable logic controllers (PLC), remote telemetry units, HVAC, mechanical pumping equipment, high horsepower motors, compressors, heavy industrial process machinery, piping, and pneumatic and hydraulic systems.

DISTINGUISHING CHARACTERISTICS:

The Plants Maintenance Technician-in-Training is an entry-level position in the Plants Maintenance Technician Series designed to begin the training and gain the experience necessary to become a fully qualified Plants Maintenance Technician III. The Plants Maintenance Technician in Training is distinguished from the Plants Maintenance Technician I, II, and III positions by the performance of more basic and routine tasks and duties assigned within this series and by a greater level of supervision required in the performance of assigned duties. The Plants Maintenance Technician in Training is typically used as a training position, employees in this position may have only limited or no directly related work experience. The Plants Maintenance Technician-in Training position requires continuous advancement in job knowledge and skills. An individual in this position will move to Plants Maintenance Technician I in a non-competitive promotion upon satisfactorily completing all experience, training, and education requirements of the Plants Maintenance Technician I classification.

The Plants Maintenance Technician I is distinguished from the Plants Maintenance Technician in Training by the greater level of experience and independence in performing job duties. The Plants Maintenance Technician I position is designed to continue the training and experience necessary to become a fully qualified Plants Maintenance Technician III. Individuals at this level receive instruction or assistance as new or unusual situations arise and are fully aware of operating procedures and polices within the Public Works Department. The Plants Maintenance Technician I requires continuous advancement in job knowledge and skills. The Plants Maintenance Technician I position requires continuous advancement in job knowledge and skills. An individual in this position will move to Plants Maintenance Technician II in a non-competitive promotion upon satisfactorily completing all experience, training, and education requirements of the Plants Maintenance Technician II job position. (A person with the requisite experience and training may be hired in at the Plants Maintenance Technician I level).

The Plants Maintenance Technician II is distinguished from the Plants Maintenance Technician I by the more advanced skill required and increased responsibility to perform multi-discipline diagnostic, preventive, corrective, rebuild, upgrade, and special project maintenance tasks in all technical skill areas with limited assistance or instruction. The Plants Maintenance II position is designed to continue the training necessary to become a fully qualified Maintenance Technician III. The Plants Maintenance Technician II position requires continuous advancement in job knowledge and skills. The Plants Maintenance Technician II may act as lead worker and assist in training positions lower in this classification. An individual in this position will move to Plants Maintenance Technician III in a non-competitive promotion upon satisfactorily completing all experience, training, and education requirements of the Plants Maintenance Technician III job position. (A person with the requisite experience and training may be hired in at the Plants Maintenance Technician II level).

The Plants Maintenance Technician III position is distinguished by the higher level of skilled work and experience necessary to independently perform multi-discipline diagnostic, preventive, corrective, rebuild, upgrade, and special project maintenance tasks in all technical skill areas including but not limited to electrical, electronics, mechanical, pneumatics, and hydraulic systems. The Plants Maintenance Technician III is distinguished from the Maintenance Specialist classification by the Maintenance Specialist's level of expertise and experience, primary responsibility for specialty projects, and for the Maintenance Specialists work planning, and work distribution. The Plants Maintenance Technician III may act as lead worker and assist in training positions lower in this classification. Advancement to Maintenance Specialist occurs through a competitive promotional process. (A person with the requisite experience and training may be hired in at the Plants Maintenance Technician III level).

SUPERVISORY RELATIONSHIPS:

Reports to the Maintenance Supervisor. Works independently at plant and remote work sites under general supervision. Receives work assignments, training, and guidance from Maintenance Specialists. May serve as lead worker and assist in training positions lower in this Classification, seasonal extra laborers and extra help personnel as assigned.

ESSENTIAL FUNCTIONS:

Depending on level of experience

1. Initiates and performs corrective electrical/electronic maintenance troubleshooting, replacing, adjusting, and rebuilding electrical, electronic, process control instrumentation, distributed control systems, programmable logic controllers (PLC), remote telemetry units, or related systems.

2. Initiates and performs corrective mechanical maintenance troubleshooting, replacing, adjusting, and rebuilding defective machinery, parts and associated systems. Installs new machinery or related components.

3. Performs diagnostic and fault analysis on electric, electronic, mechanical, process control, pneumatic, pumping, hydraulic, and other systems.

4. Plans and performs projects for equipment, instrument, and system upgrade or replacement; conducts project research, planning, designs, working with engineering, vendor or contractor liaison, fabrications, testing, and installations.

5. Performs preventive maintenance such as inspection, cleaning, lubrication, checking tolerances, and exercising pumps, motors, compressors, instrumentation, telemetering,

and metering equipment; also does new installation reviews and inspections, quality control, and punch lists, etc.

6. Inspects buildings, grounds and equipment regularly and as needed at the water and wastewater treatment plants, pumping stations, lift stations, reservoirs, and other facilities. Makes necessary repairs and/or modifications as needed and/or reports damage to supervisor.

7. Performs waste treatment plant service (for example: cleans floors, clarifiers, incinerators and grounds; and maintains protective coatings of facilities) and cleans water and wastewater treatment equipment (for example: reservoirs, pump stations, pumps, wet wells, dry wells, lift stations).

8. Participates in meetings, informal training, communications, and related activities.

9. Performs maintenance management system computerized data entry, work order, and report functions to log, chart, plan, and report complete and accurate records of work performed.

10. May work weekend, holiday, or emergency shifts independently with and without supervision.

ADDITIONAL WORK PERFORMED:

1. Performs duties such as routine equipment checks or maintaining buildings and remote facilities.

2. Performs other duties within the scope of the classification and the classes below.

PERFORMANCE REQUIREMENTS (KNOWLEDGE, SKILLS, AND ABILITIES):

Knowledge of:
- Working knowledge of and technical skill to perform multi-discipline trouble shooting, fault analysis, preventive and corrective electro-mechanical maintenance on programmable logic controllers (PLC), remote telemetry units, pumps, motors, hydraulic and pneumatic systems and instrumentation.
- Working knowledge of the City's water production, water distribution, wastewater collection, and wastewater treatment operations, laboratory, and management systems.
- Understanding of the functional nature of industrial plant continuous process control systems, machines, and instruments and ability to visualize the relationship of parts, systems, and controls.

Skill in:
- The use of common electronic and electrical tools such as digital volt-ohm meters, ammeters, oscilloscopes, and mechanical hand and machine tools.
- The use computer applications required performing the job: word processing e-mail, basic data entry and database search tasks.

Ability to:
- Work independently in carrying out assigned tasks.
- Read, research, and follow technical manuals, blueprints, drawings, and to keep up on Maintenance Technician skills and knowledge.

- Add, subtract, multiply, divide and work effectively with quantitative methods applicable to an industrial process plant such as algebra to convert feet and head to water pressure or do trigonometric calculations to figure area sizes.
- Use a variety of hand, power, test, and electronic tools and equipment.
- Safely work with and around toxic wastes and hazardous chemicals, to follow established policies and safety guidelines, and to be able to independently recognize and secure safety, hazard, and cross connection situations.
- Concentrate while performing routine repetitive tasks.
- Communicate orally in English, to spell and write legibly on forms and other documents.
- Accept "on call" status for equipment failures and 24-hour emergency call out.
- Maintain consistent and punctual attendance.
- Ability and willingness to demonstrate the Public Service Competencies of Service Orientation, Results Orientation and Teamwork and Cooperation.
- Physical ability to perform the essential functions of the job including:
  - Ability to perform heavy physical work including the ability to routinely lift and carry 60 lbs. and occasionally lift and carry 100 lbs;
  - Ability to work at heights to 100' and in confined spaces;
  - Correctable vision suitable for working on small parts, distinguishing between color coded electronic parts and viewing a computer terminal;
  - Adequate hearing to effectively hear telephone and radio conversations;
  - Sufficient manual and finger dexterity to work with hand tools and small parts.

WORKING ENVIRONMENT:

The Plants Maintenance Technician's work is performed both indoors and outdoors in all weather conditions in an industrial plant environment at the water and wastewater plants, pump stations and other facilities of the water distribution and sewage collection systems. The work is in a high-risk environment which requires special safety precautions, e.g., working around high speed, high horsepower, and high voltage rotating equipment; with irritant chemicals; and with exposure to raw sewage. Employees may be required to use protective clothing such as coveralls, rain gear, masks, boots, goggles, gloves, shields, respirator, or other equipment. The person in this position independently lifts and handles a variety of moderately heavy components and may be required to work weekends, Saturdays, holidays, or emergency shifts.

EXPERIENCE AND TRAINING REQUIREMENTS:

Plants Maintenance Technician-in-Training

- Requires high school diploma or equivalent AND
- One year of experience or related training in the operation and/or maintenance of electrical and mechanical equipment.
- Must successfully complete 9 CEU's of City-approved maintenance classes within 4 years of hire.

Plants Maintenance Technician I

- Requires high school diploma or equivalent AND
- Successful completion of two years post-secondary education/training in the full-range of industrial related mechanical maintenance, hydraulics, pneumatics, electrical, electronics, process control instrumentation, or closely related vocational areas. Structured coursework may be completed through programs at military training centers, community college, technical or trade school, apprenticeship, or other City-approved institutions.
  OR
- Two years technical maintenance experience with fault analysis, preventative and corrective maintenance in a continuous process industrial environment such as

wastewater collection and treatment, pulp and paper or refinery. Experience must reflect independent work in one or more of the following disciplines: electrician, process control technician, electronics technician, machinist, millwright, industrial plant maintenance mechanic, and pipe fitter/plumber.
AND
- 9 CEU's of City-approved maintenance classes.

Plants Maintenance Technician II
- Requires high school diploma or equivalent AND
- Successful completion of two years post-secondary education/training in the full-range of industrial related mechanical maintenance, hydraulics, pneumatics, electrical, electronics, process control instrumentation, or closely related vocational areas. Structured coursework may be completed through programs at military training centers, community college, technical or trade school, apprenticeship, or other City-approved institutions.
AND
- Two years technical maintenance experience with fault analysis, preventative and corrective maintenance in a continuous process industrial environment such as wastewater collection and treatment, pulp and paper or refinery. Experience must reflect independent work in one or more of the following disciplines: electrician, process control technician, electronics technician, machinist, millwright, industrial plant maintenance mechanic, and pipe fitter/plumber.
OR
- Four years technical maintenance experience with fault analysis, preventative and corrective maintenance in a continuous process industrial environment such as wastewater collection and treatment, pulp and paper or refinery. Experience must reflect independent work in one or more of the following disciplines: electrician, process control technician, electronics technician, machinist, millwright, industrial plant maintenance mechanic, and pipe fitter/plumber.
AND
- 13 CEU's of City-approved maintenance classes.

Plants Maintenance Technician III
- Requires high school diploma or equivalent AND
- Successful completion of two years post-secondary education/training in the full-range of industrial related mechanical maintenance, hydraulics, pneumatics, electrical, electronics, process control instrumentation, or closely related vocational areas. Structured coursework may be completed through programs at military training centers, community college, technical or trade school, apprenticeship, or other City-approved institutions.
AND
- Four years technical maintenance experience with fault analysis, preventative and corrective maintenance in a continuous process industrial environment such as wastewater collection and treatment, pulp and paper or refinery. Experience must reflect independent work in one or more of the following disciplines: electrician, process control technician, electronics technician, machinist, millwright, industrial plant maintenance mechanic, and pipe fitter/plumber.
OR
- Six years technical maintenance experience with fault analysis, preventative and corrective maintenance in a continuous process industrial environment such as wastewater collection and treatment, pulp and paper or refinery. Experience must reflect independent work in one or more of the following disciplines: electrician, process control technician, electronics technician, machinist, millwright, industrial plant maintenance mechanic, and pipe fitter/plumber.
AND
- 18 CEU's of City-approved maintenance classes.

NECESSARY SPECIAL REQUIREMENTS:

- Ability to obtain and maintain a valid Washington State driver's license during length of employment.
- Must obtain and maintain First Aid Card within one year of employment.
- Must obtain and maintain Fork Lift Operator's card within one year of employment.
- Must be able to report for emergency call-out within twenty (20) minute response time. Holiday, emergency, and weekend work may be required.
- Employment contingent upon passing a criminal conviction and local background check.

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COMMISSION ADOPTION: December 13, 2023