

City of Salem
CLASS SPECIFICATION

CLASS TITLE: WTP Electrician 1
DEPARTMENT: Public Works
REPORTS TO: Instrumentation and Electrical
Supervisor

CLASS CODE: 0538
FLSA: N
DATE: 10/14/2003

Job Summary:

Responsible for Willow Lake's electrical and instrumentation systems, which includes preventive and predictive maintenance, replacements and upgrades. Work is performed at a level consistent with licensing requirements by the State of Oregon for General Journey Electrician or Limited Journey Manufacturing Plant Electrician.

Essential Job Functions (All functions may not be performed by all incumbents.)
1. Assists in developing daily work plans to identify the work and the technician who will complete the work, and submits plan to Operations daily.
2. Coordinates the work with Operations and Maintenance sections for tentative shut downs of equipment for electrical or instrumentation work.
3. Receives work orders from lead or supervisory staff from requests entered in the Computer Maintenance Management System. Completes work based upon priorities assigned by supervisor or project lead.
4. May assist in administering an electrical testing contract of all complex electrical systems, including but not limited to, Motor Control Centers, Generator Controls, Protect Electrical Systems, medium volume distribution systems cables, power switch cubes, transformers and 480 volt Switchboards. Plans, schedules and coordinates the testing process.
5. Develops procedures with supervisor, electrical and instrumentation technicians, coordinates work with Operational, Lab, Biogro, Administrative and maintenance staff, and submits work for review and revising before implementing work.
6. Reviews the inspection report with supervisor and submits work orders for changes as needed.
7. Coordinates all new and as built documentation of electrical and instrumentation drawings in the format of Auto CAD.
8. Completes all State of Oregon mandated electrical training for all licensed electrical personnel at Willow Lake possessing an electrical license.
9. Inputs equipment data, project management requirements and procedures into the Computer Maintenance Management System for new and existing equipment.
10. Coordinates and schedules electrical work which includes Portland General Electric.
11. May participate in the review of plant construction and modifications, coordinates schedules for peer electricians and instrumentation technicians to review submittals, and submits detailed reports on the recommendations and comments made by peer electricians and technicians.
12. Maintains and reviews operating and crew records and prepares reports. Maintains computerized records of equipment installation and repairs, forecasts maintenance repairs, and recommends equipment replacement. Coordinates maintenance activities with the Operations Section.
13. Participates in the development and implementation of new control system enhancements or modifications to the Foxboro Distributive Control System.

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14. Provides training to Operations and Maintenance staff on new instrumentation and control systems and documents training.

Important Job Functions

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| 1. Attends meetings and various training seminars and conferences as required. |
| 2. Reviews and tests new instrumentation, electrical control equipment and systems for future use. |
| 3. Performs other duties as required by supervision. |

MATERIAL AND EQUIPMENT USED:

- Desktop and hand held computer
- Forklift, Bobcat, trucks, electric carts, and other motor vehicles
- Volt meter, amp meter, Megger, instrument test equipment, calibrators, power tools, hand tools, band saw, drill press, etc.
- Pumps, motors, generators, compressors, and other types of portable equipment
- Calculator
- Miscellaneous office automation equipment, i.e. fax, phone, copier, etc.

MINIMUM QUALIFICATIONS REQUIRED:

Education and Experience:

Associates degree from an accredited college or university in wastewater technology, mechanical engineering, electrical, instrumentation or related field; and three (3) to five (5) years of experience in a related field; or, any combination of education, experience and training that provides the required knowledge and abilities to perform the essential functions of the class.

License(s) and Certification(s):

- State of Oregon Class C Drivers License
- State of Oregon General Electrician or Limited Journey Manufacturing Plant Electrician

KNOWLEDGE AND ABILITIES:

Knowledge of:

- Electrical, instrumentation and electronic systems used in wastewater treatment plants.
- Maintenance, adjustment, repair and construction of mechanical, electrical, instrumentation and electronic systems.
- Methods, materials and tools used in the repair, maintenance and adjustment of electrical, electronic, instrumentation, and computerized monitoring and control systems.
- Occupational hazards and proper safety precautions.
- Operations and use of testing equipment and controls installed for the proper functionality of a control system.
- Contemporary office practices and procedures and basic office software products.

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- Office management and record maintenance procedures.
- General accounting procedures.

Ability to:

- Complete electrical maintenance projects consistent with regulations and departmental project timeframes.
- Read and interpret control and systems diagrams.
- Use modern electrical, electronic and instrumentation diagnostic instruments.
- Communicate effectively verbally and in writing to a wide range of individuals.
- Use various software packages.
- Lead staff.
- Comprehend and apply concepts for enhancement and efficiency of department and general operations.
- Establish and maintain effective working relationships with individuals, coworkers and other agencies.
- Perform accounting computations and procedures.

Physically able to:

- Sit, keyboard, write, hear and speak for extended periods.
- Stand frequently for extended periods.
- Bend, kneel, stoop or climb.
- Working around hazardous machinery, electrical hazards and wet surroundings.
- Work at heights and in a hazardous atmosphere.
- Lift up to 50 pounds.

The above statements are intended to describe the general nature and level of work being performed by employees assigned this classification. They are not to be construed as an exhaustive list of all job duties or roles performed by personnel so classified. It is as well intended to be compliant with the Americans with Disabilities Act.