

**JOB DESCRIPTION
CITY OF SPRINGFIELD**

**HUMAN RESOURCES DEPARTMENT
EMPLOYMENT AND
COMPENSATION DIVISION**

Job Title Plant Electrician
Sch.& Grade CTL-12
Class Code GB10
FLSA Status Non-Exempt
Bargain Unit Elig. SEIU
Occupational Group Craftworker

PRIMARY PURPOSE:

To perform skilled work in the diagnosis, troubleshooting, repair and maintenance of specialized and complex equipment, electrical control systems and electrical power systems used in wastewater treatment plants including tertiary treatment units and lift stations.

SUPERVISION:

Under the general supervision of the Wastewater Plant Maintenance Supervisor.

DESCRIPTION OF WORK:

ESSENTIAL FUNCTIONS:

1. Analyzes, troubleshoots, and performs diagnosis for problems with equipment, electrical controls, and electrical power systems in a pure oxygen activated sludge treatment plant.
2. Repairs low voltage (110 volt), medium voltage (4160 volt) and high voltage (13,200 volt) power distribution systems including motor starters, metering circuits, panelboards, transformers, cabling systems, and switchgear.
3. Reads and interprets technical repair manuals, operating guides, schematics, wiring diagrams, shop drawings, and codebooks.
4. Serves as lead worker in a crew of two or more plant personnel, overseeing work assignments, giving technical advice, and completing work reports.
5. Performs basic mathematical calculations, including minor algebra, to calculate electrical loads, power factors, horsepower, etc.
6. Drives vehicles to various work site locations at the North and South Treatment Plants and lift stations to diagnose and evaluate repairs.
7. Prepares and maintains records, reports, parts lists, and work orders.
8. Operates diagnostic test equipment and interprets results.
9. Utilizes a variety of tools associated with electrical distribution systems.
10. Determines when to repair or replace equipment.

IMPORTANT FUNCTIONS:

1. Performs data entry as it pertains to record keeping.
2. Cleans tools and maintains a neat and orderly work area.

Performs related work as required.

QUALIFICATIONS REQUIRED:

Any combination of education, training, and experience providing the following knowledge, skills, and abilities:

Knowledge

Electrical theory to troubleshoot and repair electrical controls and electrical power distribution systems; complex procedures pertinent to equipment and power distribution and wiring repair; math, including basic algebra, as it relates to 3 phase power systems troubleshooting and repair; test equipment and procedures used in maintenance of process equipment and power distribution systems equipment.

Abilities

Effectively detect and repair defects in the operation of plant electrical equipment and power distribution system equipment in a manner consistent with safety principles and the National Electric Code; utilize and maintain tools and test equipment used in the electrical trades; follow oral and written instructions; deal effectively and courteously with associates and the general public; read and understand technical manuals, electrical code, manufacture guidelines, shop drawings, etc.; communicate effectively both verbally and in writing; present an overall professional image; prepare clear and comprehensive reports; effectively welcome and embrace differences among employees and citizens; performs effectively as a member of the team in carrying out the City’s stated mission and philosophy; perform the essential functions of the job without posing a direct threat to the health and safety of others.

Experience, Education, and Training

Typically requires a minimum of three years of experience in maintenance, construction, repair and servicing of complex industrial and manufacturing power distribution systems, wiring systems, and motor starters and controls.

Physical Requirements

Must be able to: hold and grip objects; bend, squat, kneel, climb, crawl, and reach overhead; work in awkward positions; twist and turn torso; push and pull up to 50 pounds; distinguish primary colors. Subject to periods of prolonged standing.

Working Environment

Both indoor and outdoor environments; susceptible to a variety of extreme weather conditions; subject to constant and extreme noise, working in cramped spaces, as well as a variety of mechanical, electrical, chemical, toxic waste, and other safety hazards associated with treatment plant facilities; possible exposure to disease and strong odors as related to wastewater treatment operations.

Licensing/Certification

Must possess and maintain a Journeyman Electrician’s License. Must possess a valid Missouri Motor Vehicle Operator’s License. Must obtain and maintain a valid Missouri Class “D” Wastewater Operator’s Certificate within probationary period.

Miscellaneous Requirements

Subject to occasional emergency call-in.

Last Revision:	February 14, 2012	GENERAL ORDINANCE NO. 4527
Comments:	Updated Abilities	Date: July 10, 1995

I have read the foregoing job description in its entirety and understand its contents. I can perform the essential functions outlined with or without reasonable accommodation under the Americans with Disabilities Act.

Signed: _____ **Date:** _____