



DEPARTMENT OF HUMAN RESOURCES

POSITION DESCRIPTION

CLASS TITLE: ELECTRICIAN	CLASS CODE: WW21
DEPARTMENT: Wastewater Services	PAY GRADE: 69
REPORTS TO: Assistant Director of Wastewater Services	FLSA: Non-Exempt
SUPERVISES: Lead VAC Truck Technician, Lead Wastewater Technician, Wastewater Technicians	REVISED: 08/16/2018

PURPOSE AND SCOPE:

Under general supervision of the Deputy Director of Wastewater Services. Performs skilled work in the maintenance, repair and/or replacement of wastewater lift station electrical motors, panels, equipment, and associated components. Position will require employee to supervise one or more helpers and be responsible for such work in terms of quality and production. This position is designated as Essential in the event JIPSD’s Emergency Operation Plan is activated. This position is subject to being assigned “on-call” status as needed to accommodate the needs of JIPSD.

ESSENTIAL FUNCTIONS:

% Time (Total of Essential Functions Must Equal 100%)

- 20% Performs scheduled and emergency maintenance on lift station electrical motors, panels, equipment, and associated components. Repair and/or replace lift station SCADA components and units. Operate and maintain electrical equipment in accordance with manufacturer instructions.
- 20% Diagnose lift station electrical problems and be able to instigate proper repair procedures. Uses a variety of electronic testing equipment to ensure accurate diagnosis of problems encountered.
- 20% Maintains accurate records on each lift station, completes assigned work orders, generated work orders and material requisitions as needed. Work with inspectors and associated pump, motor, panel and component representatives.
- 20% Understand, create and/or follow schematic diagrams as needed to correctly depict electrical wiring installations. Calibrate and adjust level systems and electronic flow meters.
- 20% Receive and diagnose computer generated SCADA reports on status of individual stations and lift station systems in general. PLC programming preferred.

100% = Total Essential Functions

MARGINAL FUNCTIONS:

- Maintains computer files related to tracking information and work hours.
- Updates and insures the accuracy of sewer as-builts.
- Maintains departmental vehicles and equipment.
- Enforces the District’s Use and Rate Resolution.
- Performs other duties as required.

EQUIPMENT:

TV truck and equipment, VAC Truck, light duty truck, backhoe, dump truck, trailer, jack hammer, pumps, hand tools, back brace/support brooms, brushes, shovels, power blower, buckets, protective clothing, solvents, sewer cleaner, filters, hoses, hard-hat, safety glasses, chain saw, gas powered generator, air compressor, blueprints, gages, rubber boots and gloves, steel toe boots, ear plugs, barricades, radio transmitter, receiver and computer.

WORKING CONDITIONS:

Working outside most often; inside as required. Subject to wet and humid conditions, contact with water or other liquids and atmospheric conditions with moisture content sufficiently high to cause bodily discomfort. Subject to atmospheric conditions - one or more of the following conditions may affect the respiratory system or the skin; FUMES, ODORS, DUSTS, MISTS, GASES, or POOR VENTILATION.

HAZARDS:

Conditions or situations in which there is risk of danger to life, health, or bodily injury. Includes a variety of physical hazards and conditions, such as performing tasks in inclement weather, proximity to moving mechanical parts, electrical shock, gas line explosions, exposure to toxic chemicals and biological agents, combustible gases, insects and snakes.

PHYSICAL DEMANDS CATEGORY:

MEDIUM. Defined in the Dictionary of Occupational Titles as jobs requiring occasional lifting up to 50 lbs., frequent lifts up to 25 lbs., constant lifts up to 10 lbs., and a MET level of between 3.6 to 6.3.

PHYSICAL JOB DEMANDS:

	Not Required	Infrequent	Occasional	Frequent	Constant
		<i>Not on Daily basis</i>	<i>0-33% of shift, 1-100 repetitions</i>	<i>33-66% of shift, 100-500 repetitions</i>	<i>67-100% of shift, 500+ repetitions</i>
Standing			X	X	
Walking			X	X	
Lifting			50#		
Carrying			20#		
Push/Pull			20#		
Climbing				X	
Balancing				X	
Bending				X	
Kneeling				X	
Crawling			X		
Reaching				X	
Handling				X	
Squatting				X	
Sitting			X		

KNOWLEDGE, SKILLS AND ABILITIES:

- Knowledge of occupational safety rules and practices as they relate to confined spaces and electrical equipment.
- Skills necessary to perform trade in a variety of working conditions including confined spaces.
- Skill in the safe operation of associated mechanical, electrical and electronic equipment as it relates to the installation, repair and maintenance of lift station pumps, motors, electrical panels, associated components and structural wiring. This equipment may include but not limited to hydraulic and/or manually operated hoist, portable power tools, volt/amp meters, portable 50 kw/100 kw generators and various electronic diagnostic equipment.
- Knowledge of principles, scope and function of different types of lift stations utilized by JIPSD.
- Knowledge and ability to adequately respond to and troubleshoot emergency lift station problems as they may arise.
- Knowledge, ability and skill to break down and rebuild various lift station motors, electrical panels and other associated electrical equipment as it pertains to lift stations.
- Ability to deal with the public and fellow employees in a professional and effective manner.
- Knowledge of principles and skilled in the practices of the industrial electrical trade.
- Knowledge of methods, tools, and materials in the repair and maintenance of lift station electrical systems.
- Knowledge of local and national electrical codes.
- Ability to program PLCs preferred and the ability to learn PLC programming within 6 months of hire.
- Ability and skill to diagnose electrical problems and determine the time and materials required to effect repair.
- Ability to interpret electrical schematic diagrams.
- Ability to direct the work activities of other lift station personnel.
- Ability to diagnose and work with computer generated lift station status reports and computer control systems.
- Ability to read and comprehend work orders, equipment/tool manuals, safety manuals, computer screen, computer print outs, and other printed and/or written material as it relates to the job.
- Ability to understand and comprehend area maps as they relate to lift stations, sewer mains, and sewage treatment facilities. Also understand and comprehend pump and/or motor diagrams.
- Ability to identify and comprehend colors as they relate to traffic and/or road signs, safety equipment, utility markings, electrical wiring, motors/panel/pump diagrams, and other utility related materials.
- Ability to hear and understand instructions and directions given in the English language and spoken in a normal tone of voice with someone face-to-face and over two-way radio. Hear verbal warnings and basic instructions given by co-workers while working in noisy environments, confined spaces or in the immediate vicinity of heavy equipment, and/or lift station pumps/motors that are in operations.
- Ability to write up work orders, material requisitions, vehicle service forms, and brief explanations that relate to job task and/or problems in a legible and understandable manner.
- Ability to type instructions on computer key board and use touch tone telephone dialing keys in an efficient manner.
- Ability to use a variety of manually operated and/or electric/pneumatic powered hand-held tools.
- Ability to lift and carry (up to 100 yds.) items weighing up to 75 lbs. Also carry such items over uneven terrain and load/unload such items from vehicle. Lift overhead, items weighing up to 30 lbs.
- Ability to lift and carry items which are considered hard to grasp and or hold onto. Hold items

weighing up to 20 lbs. for extended periods. Walk over and around cluttered work areas and uneven surfaces. Climb up and down ladders and/or steps. Set up and work from ladders and scaffolding. Work while standing on uneven and/or wet surfaces.

- Ability to work in confined spaces.
- Ability and willingness to work in confined spaces that have toxic atmospheres while wearing life line connected safety harness and/or self-contained breathing apparatus.
- Ability to work in and around raw sewage while wearing protective gear.
- Ability to work during night and/or early morning hours or for extended periods when required.
- Ability to work and perform manual labor for extended periods in all weather conditions.
- Ability to perform periodic heavy labor as required.
- Ability to maintain a professional attitude while working in close proximity with others in confined spaces and/or under situations of duress.
- Ability to participate in weekly rotating "after hours" call out duty that requires prompt response on a 24 hour bases including weekends and holidays. During such times a responsible decision making is required within the guidelines of established procedures.
- Ability to handle and work around liquid degreasers and other such solvents.
- Must earn "d" level wastewater certification within the first year of employment.

MINIMUM EDUCATION, TRAINING, AND EXPERIENCE REQUIREMENTS:

- Minimum five (5) years electrical experience in the installation, repair and maintenance of pump motors and other associated lift station equipment.
- Must be able to adequately perform periodic heavy manual labor under adverse conditions.
- Must have dependable safety and work record.
- Must have valid State of South Carolina Driver's license or have a valid out-of-state license with the ability to obtain the South Carolina within 30 days of employment.
- High School diploma or G.E.D. certificate is required. Wastewater Collection C certification is preferred.
- Employee will be required to participate in rotational call duty scheduled for after-hours emergencies.
- **Position incumbents must have successfully completed and possess all of the following specific certifications within eighteen (18) months of the above revised date – or within eighteen (18) months of appointment to this position title. Failure to do so will result in termination of employment:**
 - NIMS 100PWb
 - NIMS 700
 - NIMS 800
 - NIMS 200

NOTES:

- The listing of the essential functions in this class specification is representative, not exhaustive. It is not necessarily a detailed description of all work responsibilities, and it does not give exclusive title to every function described.
- The indicated percentages of time are intended to be a meaningful representation but may vary.
- All associates entering into this position title on or after the Revised Date above will be required to possess the position requirements as specified on this document.
- Job performance must conform to all JIPSD policies/procedures and Wastewater Department SOG's.
- This is not a contract of employment and should not be relied upon as such.

MANAGEMENT REVIEW/APPROVAL SIGNATURES:

_____	_____
Department Head Review	Date
_____	_____
Human Resources Review	Date
_____	_____
ADMINISTRATOR'S APPROVAL	DATE

I certify that I have received a copy of this Position Description:

Associate's Name – Please Print Legibly

Associate's Signature

Date

James Island Public Service District is an Equal Opportunity Employer and Provider, An At-Will Employer, and a Drug-Free Workplace. We Participate in E-Verify.