



Joliet Public Service District

## DEPARTMENT OF HUMAN RESOURCES

### POSITION DESCRIPTION

<b>CLASS TITLE:</b> ELECTRONIC CONTROL SPECIALIST	<b>CLASS CODE:</b> WW53
<b>DEPARTMENT:</b> Wastewater Services	<b>PAY GRADE:</b> 69
<b>REPORTS TO:</b> Assistant Director of Wastewater Services	<b>FLSA:</b> Non-Exempt
<b>SUPERVISES:</b> N/A	<b>REVISED:</b> 11/02/2020 First Draft

#### PURPOSE AND SCOPE:

Under the direct supervision of the Assistant Director of Wastewater Services, The Electrical Controls Specialist performs skilled Electrical/Instrumentation installation, maintenance, troubleshooting, and repair work related to electrical equipment up to 480V and instrumentation equipment used to operate and monitor the Departments wastewater system. This position is designated as **Essential** if 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:

65% Installing, programming, calibrating, and commissioning various electrical/instrumentation devices including variable frequency drives, level transmitters, flow meters, radios, Programmable Logic Controller (PLC) for SCADA and power monitoring equipment; developing electrical and electronic system designs, plans, specifications, wiring schematics, and basic one-line diagrams; assisting in the startup, commissioning, and troubleshooting of the process control system including correcting problems with communications, field process variables, or design engineering; coordinating and acquiring materials and equipment to repair or install at facilities; acting as technical lead on new projects for wastewater facilities and pump stations.

15% Diagnoses causes for malfunction or failure of electronic controls and instruments. Analyzes data collected regarding functions of the Supervisory Control and Data Acquisition (SCADA) network and recommends actions to enhance performance.

10% Install, configure, and commission variable frequency drives, magnetic flow meters; radios; PLC; and solid- state electronics; test and calibrate electronic equipment.

05% Maintains a twenty-four hour on-call status for one week in rotation with other Wastewater Department employees and is available for after-hours emergency calls.

05% Communicates and coordinates work activities with other work units to ensure timely completion of new installation constructions.

100% = Total Essential Functions

**MARGINAL FUNCTIONS:**

- Reports infractions of JIPSD's Use and Rate Resolution.
- Performs other duties as required.

**EQUIPMENT:**

Uses various power tools to repair electronic/electrical controls and instruments, and installs electronic telemetering devices, ultrasonic sensors, sequential controls, alarms, and digital computer interfaces. Tests and calibrates electronic equipment. Uses laptop computer to troubleshoot, document, modify, or correct settings and parameters for relays, Variable Frequency Drive (VFD), radios, PLCs, etc.

**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. Subject to noise and vibration-noise/vibration, either constant or intermittent.

**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, day, or night: 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:**

**HEAVY.** Defined in the Dictionary of Occupational Titles as jobs requiring occasional lifting to 100 lbs., frequent lifts up to 50 lbs., constant lifts up to 20 lbs., and a MET level of between 6.4 to 7.5.

**PHYSICAL JOB DEMANDS:**

	<b>Not Required</b>	<b>Infrequent</b>	<b>Occasional</b>	<b>Frequent</b>	<b>Constant</b>
		<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>
<b>Standing</b>				X	

<b>Walking</b>				X	
<b>Lifting</b>			100#		
<b>Carrying</b>			100#		
<b>Push/Pull</b>			100#		
<b>Climbing</b>			X		
<b>Balancing</b>			X		
<b>Bending</b>			X		
<b>Kneeling</b>			X		
<b>Crawling</b>		X			
<b>Reaching</b>			X		
<b>Handling</b>				X	
<b>Squatting</b>			X		
<b>Sitting</b>			X		

### **KNOWLEDGE, SKILLS AND ABILITIES:**

- Knowledge of standards, practices, and equipment of wastewater system maintenance.
- Ability to abide by JIPSD's Code of Conduct/ Behavioral Standards.
- Knowledge of the safety hazards and proper precautions relating to wastewater system maintenance.
- Ability to perform strenuous physical labor and to exert up to 100 pounds of force.
- Ability to work well with colleagues and the public.
- Ability to follow work assignments without direct supervision.
- Ability to operate equipment used in the maintenance and repair equipment.

### **MINIMUM EDUCATION, TRAINING, AND EXPERIENCE REQUIREMENTS:**

- A four-year electrical apprenticeship; or graduation from an accredited college or university with an Associate degree in Electrical, Electronics, or related field.
- Three to five years of experience as a journey-level Electrician and/ or one to three years of experience in the instrumentation field involving the installation, maintenance, calibration, and repair of electronics solid-state controls, instrumentation, data communications, PLC & Ladder Logic software and related equipment.
- Any combination of training, education, and experience to successfully perform the job.
- Must possess a valid South Carolina Driver's License.
- Should possess the following certifications within one year of appointment to this position:
  - South Carolina Wastewater Collection System Level D certification
  - (Level C certification preferred.)

**Position incumbents must have successfully completed and possess all 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 may result in termination of employment:**

**- NIMS 100PWb**

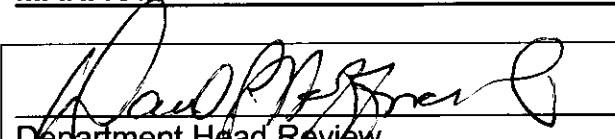
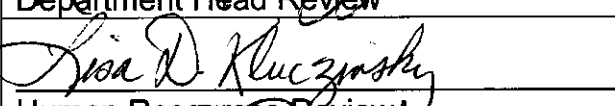
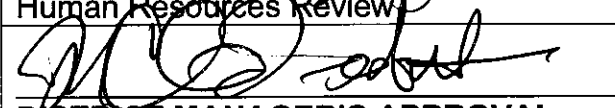
**- NIMS 700**

**- NIMS 800**

**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 employees entering 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 SOGs.
- This is not a contract of employment and should not be relied upon as such.

**MANAGEMENT REVIEW/APPROVAL SIGNATURES:**

 Department Head Review	<u>Nov 3, 2020</u> Date
 Human Resources Review	<u>11/03/2020</u> Date
 <b>DISTRICT MANAGER'S APPROVAL</b>	<u>11/03/2020</u> <b>DATE</b>

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

Employee's Name – Please Print Legibly

\_\_\_\_\_  
Employee'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.