REGIONAL WATER RESOURCE AGENCY
JOB DESCRIPTION

Job Title: Maintenance Technician
Department: Operations
Division: Process Operations
Reports to: Process Maintenance Supervisor
FLSA Status: Non-Exempt
Pay Level: 16, 18, and 19
Revised Date: February, 2021
Physical and Environmental Requirements: Very Heavy
Respirator Required: Yes
Supervisory Responsibilities: No
Work Hours (*typically)*: 7:00am – 3:30pm, M-F
On-call Status: 24 hours a day, 7 days a week (as scheduled)
Uniforms: Required

JOB SUMMARY:

Employees in this class perform a wide variety of skilled and semi-skilled tasks such as maintenance, repair and operation of pumps, electric motors, automated control systems, programmable logic and related equipment in wastewater treatment plants and wastewater collection systems. Maintenance Technicians identify, troubleshoot, document, and report mechanical and/or electrical deficiencies as assigned. Technicians often proceed on their own initiative to make necessary repairs. Technicians are expected to continually develop and expand knowledge and technical proficiencies through cross-training and on-the-job experience. Technicians utilize basic to advanced electrical, electronic and mechanical skills to work towards greater responsibility and autonomy in their day to day tasks in accordance with Divisional needs and priorities. Maintenance Technicians work under the general supervision of the Process Maintenance and Technical Support Crew Leaders, Process Maintenance Supervisor and Process Operations Manager.

PRIMARY DUTIES AND RESPONSIBILITIES:

- Performs major and minor overhauls of treatment plant and lift station equipment
- Performs minor maintenance on RWRA portable equipment and fleet
- Removes, repairs and/or replace major assemblies and damaged parts
- Removes and repairs pumps ranging in HP from 1HP to 300 HP
- Removes, repairs, and/or replaces electric and gas motors up to 300 HP in size
- Inspects, cleans, and lubricates pumps, motors and other related equipment
- Records daily activities for entry into the maintenance database
- Performs general housekeeping at facilities and in vehicles
- Analyzes, troubleshoots, and repairs various types of mechanical and electrical equipment, using operation and maintenance manuals, laptops, and the internet
- Operates 23 ton crane truck and attachments/accessories (Bos'n chair, man basket), utility type tool trucks with portable crane, and scissor lift
- Operates overhead crane from ½ ton capacity to 3 ton capacity
- Operates stationary generators from 600KW to 1100KW
- Connects and operates generators ranging in HP from 2.5KW to 400KW
- Enters confined spaces and follows confined space guidelines, as needed

- Repairs and/or replaces components, such as heater coils, fuses, breakers, contacts, lighting, wiring, or starters in control panel boxes, following all electrical standards and arc flash procedures
- Troubleshoots using the following tools: Analog VOM, Clamp Ammeter, Megger, Signal Generator, Surveillance Monitor, Oscilloscope, and Digital Multimeter
- Troubleshoots HVAC systems' controls
- Repairs or replaces SCADA components, such as relays, PLCs, and visual display units
- Troubleshoots maintenance issues associated with installed PLC automation systems
- Assists with the specification of hardware related to new installations
- Serves as support for terminal services technicians
- Makes recommendations regarding system improvements
- Reviews proposed installations and makes recommendations
- Troubleshoots, repairs, replaces, and configures Variable Frequency Drives
- Performs electrical construction, including wire and conduit installation and repairs
- Analyzes, troubleshoots, and repairs from documents in electronic form, blue prints, and operator and maintenance manuals of various types of electrical and mechanical equipment
- Performs installation and maintenance of electronic, computer, and fiber-optic cable control systems
- Installs, troubleshoots, and repairs video surveillance equipment
- Installs, troubleshoots, repairs, and calibrates Flow, Level, pH and Dissolved Oxygen sensors
- Assists Field Operations division as needed

ADDITIONAL DUTIES MAY ALSO INCLUDE:

- Operates tools in Maintenance Shop, such as welders, lathes, mills, drill press, and related shop equipment
- Receives training in programming, troubleshooting and resolution of Supervisory Control and Data Acquisition (SCADA) programming problems and improvements.
- Provides field start-up support for replacement PLCs, VFDs, and other configurable instrumentation or power devices (Includes programming of PLC Logic, set-up of configurable devices, etc…).
- Implements and maintains logic standardization

- Duties and responsibilities may be changed and/or additionally assigned by Management at any time

EDUCATION:

- **Progression Level 1:** High School Diploma or General Educational Development (GED) Credential required, one to two years training or certificate from a technical school in a job related skill preferred, or a combination of education and experience.
- **Progression Level 2:** Fifteen years in classification with demonstrated, independent and adept ability to perform any task listed in the job description and excellent individual troubleshooting skills and RWRA system knowledge; or state or professional license or certificate in an approved job related field, such as an electrical license (Journeyman), Industrial Maintenance Technician (2 year diploma/certificate from a technical school), Machine Tool Technician (Associate's degree in Applied Science), Combination Welder (2 year diploma) is required.
- **Progression Level 3:** Master level license or certificate (such as Master Electrician or Master Mechanic) is required.

EXPERIENCE AND ABILITIES:

- **Progression Level 1:** Minimum of one year demonstrated troubleshooting experience in mechanical and electrical maintenance is required.
- **Progression Level 2:** Two to three years of demonstrated, independent and adept troubleshooting experience in mechanical and electrical maintenance is required in combination with PL2 education requirements. Continuous capability and satisfactory performance of all Maintenance Technician job duties and responsibilities is required to maintain PL2 status. PL1 Maintenance Technicians shall be eligible to re-attain PL2 status a maximum of one time during employment should status criteria fail to be maintained.
- **Progression Level 3:** Two to three years of demonstrated, independent and adept technical skill, autonomy and leadership in a Maintenance role. High-level troubleshooting experience in mechanical and electrical maintenance; demonstrated experience in Rockwell Automation PLC Ladder Logic programming and/or WonderwareInTouch programming and possession of in-depth familiarity and knowledge of RWRA equipment, facilities, and processes are all required in combination with PL3 education requirements. Continuous capability and satisfactory performance of all Maintenance Technician job duties and responsibilities is required to maintain PL3 status. PL1 and/or PL2 Maintenance Technicians shall be eligible to re-attain PL3 status a maximum of one time during employment should status criteria fail to be maintained.

MINIMUM QUALIFICATIONS:

Must be 18 years of age or older. Must pass the drug and alcohol test and background check. Must meet and maintain minimum physical requirements for the job as set forth by the organization's physician.

LANGUAGE SKILLS:

Ability to read and interpret documents such as safety rules, operating and maintenance instructions and procedure manuals in written or electronic versions.

MATHEMATICAL SKILLS:

Ability to calculate figures and amounts such as proportion, percentage, area, circumference and volume. Ability to apply concepts of basic algebra and geometry.

REASONING ABILITY:

Ability to solve practical problems and deal with a variety of concrete variables in situations where limited precedence exists by developing creative solutions. Ability to interpret a variety of instructions furnished in written, oral, diagram, electronic, or schedule form.

CERTIFICATES, LICENSES, REGISTRATIONS:

Must have a valid driver's license prior to employment. During the first six months to one year of employment, employee in this classification must be able to obtain a Commercial Driver's License (CDL) with a class B endorsement on their driver's license.

COMMENTS:

All employees of the Regional Water Resource Agency (RWRA) must adhere to the applicable provisions of the RWRA Employee Handbook, RWRA Drug & Alcohol Policy, and any other

local, state, or federal regulations that apply. RWRA is a drug-free workplace; therefore, all employees are subject to drug and alcohol testing.

ACKNOWLEDGMENT:
I acknowledge that I have read the job description and requirements for the Maintenance Technician position, and I certify that I can perform these functions.

_____ _____

Employee Signature Date

SUMMARY OF STANDARD WORK REQUIREMENTS
NEEDED TO PERFORM ESSENTIAL JOB DUTIES

Job Title: **Maintenance Technician**
Job Class: Very Heavy (>100 lbs)

A. POSITIONAL DEMANDS

		Never (0%)	Occasional (1-33%)	Frequent (34-66%)	Constant (67-100%)
1.	Standing				X
2.	Walking			X	
3.	Sitting		X		
4.	Balancing		X		
5.	**Climbing:**				
a.	Stairs		X		
b.	Ladders		X		
6.	**Reaching:**				
a.	Forward		X		
b.	Overhead		X		
7.	Stooping		X		
8.	Crouching		X		
9.	Kneeling		X		
10.	Crawling		X		
11.	Feeling				X
12.	**Grasping:**				
a.	Simple Hand				X
b.	Firm Hand		X		
13.	Fingering		X		
14.	Object Handling			X	
15.	Operating Controls		X		

B. PHYSCIAL DEMANDS

1.	**Lift:**				
a.	Up to 10 pounds			X	
b.	11 to 20 pounds		X		
c.	21 to 35 pounds		X		
d.	36 to 50 pounds	X			
e.	51 to 75 pounds		X		
f.	76 to 100 pounds	X			
g.	Over 100 pounds	X			
2.	**Carry:**				
a.	Up to 10 pounds			X	
b.	11 to 20 pounds		X		
c.	21 to 35 pounds		X		
d.	36 to 50 pounds	X			
e.	51 to 75 pounds		X		
f.	76 to 100 pounds	X			
g.	Over 100 pounds	X			
3.	**Push:**				
a.	Up to 10 pounds		X		
b.	11 to 20 pounds		X		
c.	21 to 35 pounds		X		
d.	36 to 50 pounds		X		
e.	51 to 75 pounds	X			
f.	76 to 100 pounds	X			
g.	Over 100 pounds		X		

		Never (0%)	Occasional (1-33%)	Frequent (34-66%)	Constant (67-100%)
4.	**Pull:**				
a.	Up to 10 pounds		X		
b.	11 to 20 pounds	X			
c.	21 to 35 pounds		X		
d.	36 to 50 pounds	X			
e.	51 to 75 pounds		X		
f.	76 to 100 pounds	X			
g.	Over 100 pounds	X			

C. SENSORY REQUIREMENTS

1.	**Vision:**				
a.	Far			X	
b.	Near			X	
2.	Depth Perception			X	
3.	Color Discrimination			X	
4.	Field Vision			X	
5.	Accommodation			X	
6.	**Perception:**				
a.	Spatial			X	
b.	Form			X	
7.	Feeling			X	
8.	Speaking			X	
9.	Hearing			X	

D. WORK ENVIRONMENT (Exposures)

1.	Inside Environment		X		
2.	Weather Conditions				X
3.	Temperature				X
4.	Cold		X		
5.	Heat		X		
6.	Wet/Humidity		X		
7.	Biological Agents			X	
8.	Human Body Fluids			X	
9.	Chemicals		X		
10.	Hazardous Materials		X		
11.	Floor Surface				X
12.	Lighting				X
13.	Vibration		X		
14.	Unprotected Heights		X		
15.	Confined/Cluttered		X		
16.	Moving Equipment		X		
17.	Fumes/Airborne Particles		X		
18.	Hazards		X		