

**ESSENTIAL DUTIES**

**Plant Maintenance Grade I**

101. Interprets and works from basic drawings, designs, schematics, sketches, and written and verbal instructions; performs basic maintenance, repairs, fabrication, and rebuilding of shop, field and plant equipment used in water and/or wastewater treatment facilities, pump stations, and collection systems.
102. Lubricates, adjusts, and maintains shop, field, and plant equipment, including inspection, cleaning, and repairing wet wells, pipelines, pumps, compressors, valves, chemical feed, and processing equipment.
103. Performs basic preventive and corrective maintenance by isolating power, grounding wires, troubleshooting problems, making repairs, restoring power and checking for proper operation.
104. Performs basic electrical and instrumentation circuit installation for additions or modifications by bending and installing conduit, pulling wire, wiring in circuits as shown on blueprint and testing system for proper installation.
105. Assists in the installation of, inspection, and repair of a variety of pumps, such as centrifugal, positive displacement, and screw; services, lubricates, adjusts, and maintains pumps; removes and installs packing and most seals.
106. Using basic welding skills to perform horizontal welding and fabricating with acetylene and arc welders; heats and cuts materials; and fabricates simple projects.
107. Maintains, installs, inspects, and repairs piping systems of galvanized, pvc, stainless steel, and copper tubing; identifies types of piping, fittings, and basic valves; cuts and threads pipes; and makes minor modifications to existing piping systems.
108. Performs basic to routine maintenance and repair tasks on engines, such as changes oil, belts, and spark plugs; replaces filters; obtains oil and fuel samples; and takes hydrometer readings of coolant and battery fluids.
109. Performs regularly scheduled maintenance, inspection, and repair tasks on comminuting and grinding devices; replaces and adjusts cutters and combs; cleans bar screens; lubricates devices; and assists others in the more complex repairs.
110. Performs basic maintenance, inspection, and repair tasks on mechanical and electrical drive components.
111. Maintains, inspects, and repairs a variety of hydraulic, pneumatic and electrical process control equipment.
112. Follows the safe and proper use of various hand, power tools and test instruments.
113. Follow proper safety practices, precautions, and procedures, such as confined space entry, storing, handling, and transporting gases, using correct lockout and tagout procedures; and assisting in rigging as required for the movement or placement of heavy machinery or equipment.
114. Complete minimal work process documentation.

**ESSENTIAL DUTIES**

**Plant Maintenance Grade IV**

400. Essential duties identified on the Test Content Specifications for Plant Maintenance Grade I, and Electrical Instrumentation Technology and Mechanical Technology Grades II, and III.
401. Initiates, plans, directs and oversees the sequence of operations for large and complex repair and construction work at wastewater treatment plants, wastewater pump stations, storm drainage stations, potable water systems, chemical handling systems and oxygen injection systems.
402. Coordinates staffing with operational activities, directs the coordination of assigned work with appropriate personnel, reviews, preliminary design and specification, and in association with appropriate staff, makes recommendations involving modifications to facilities.
403. Directs, coordinates and reviews the work plan for assigned plant facility services and activities; assigns work activities and projects, monitors work flow; reviews and evaluates work products, methods and procedures; and meets with staff to identify and resolve problems.
404. Establishes policies and procedures for operation and maintenance of complex water and wastewater treatment equipment, chemical handling systems and oxygen injection.
405. Designs and implements training of crews in plant maintenance, construction, repair and safety principles to meet and comply with national, federal, state, and local regulations.
406. Schedules and directs computer based maintenance programs.
407. Formulates, initiates and directs the operational parameters for facilities and equipment under manager's jurisdiction during storm periods or emergencies.
408. Approves time sheets, equipment, labor changes and assigns priority of work orders for plant maintenance personnel.
409. Participates in the development and implementation of goals, objectives, policies and priorities.
410. Selects, train, motivates and evaluates personnel performance; and implements discipline and termination procedures, when required.
411. Prepares and presents staff reports and other correspondence as appropriate and necessary.
412. Designs and administers safety programs.