

Process Instrumentation Technician

Dept/Div: Engineering/Wastewater

FLSA Status: Non-Exempt

General Definition of Work

Performs intermediate technical work conducting preventative maintenance on instrumentation equipment, testing electrical, electronic and pneumatic systems, detecting and diagnosing malfunctions, building and installing new instrumentation equipment, maintaining programmable logic process, and related work as apparent or assigned. Work is performed under the limited supervision of the Assistant Superintendent.

Qualification Requirements

To perform this job successfully, an individual must be able to perform each essential function satisfactorily. The requirements listed below are representative of the knowledge, skill and/or ability required. Reasonable accommodations may be made to enable an individual with disabilities to perform the essential functions.

Essential Functions

- Performs preventive maintenance on instrumentation equipment.
- Tests electrical, electronic and pneumatic systems; detects and diagnoses malfunctions.
- Maintains communication and telemetry systems for automated monitoring and control of division operations.
- Maintains programmable logic process control system.
- Builds and installs new instrumentation equipment.
- Performs electrical and circuit board troubleshooting, repair and adjustments.
- Maintains, sets up, operates and trains personnel on backup power generator use.
- Assists with instructing operators and maintenance personnel in operating automatic controls.
- Maintains records of repairs, calibrations and maintenance performed.
- Participates in an on-call rotation providing first response to after-hour alarms or calls.

Knowledge, Skills and Abilities

General knowledge of the methods and techniques used in wastewater treatment and collection systems; general knowledge of the maintenance of programmable logic process control systems; thorough knowledge and skill in the operation of required tools and equipment, such as computers, control devices, scientific instrumentation, meters and microprocessors; thorough knowledge of the occupational hazards and safety precautions of the work; ability to detect flaws in the operation of mechanical equipment and to determine proper remedial actions; ability to understand and follow oral and written instructions; ability to read and interpret technical documents such as electrical and process instrumentation diagrams and reports; ability to establish and maintain effective working relationships with associates, officials and the general public.

Education and Experience

Associates/Technical degree with coursework in instrumentation electronics, or related field and considerable experience in industrial process control systems, or equivalent combination of education and experience.

Physical Requirements

This work requires the regular exertion of up to 25 pounds of force, frequent exertion of up to 50 pounds of force and occasional exertion of up to 100 pounds of force; work regularly requires walking, frequently requires standing, using hands to finger, handle or feel and repetitive motions and occasionally requires sitting, climbing or balancing, stooping, kneeling, crouching or crawling, reaching with hands and arms, pushing or pulling and lifting; work requires depth perception, color perception, night vision and peripheral vision; vocal communication is required for expressing or exchanging ideas by means of the spoken word and conveying detailed or important instructions to others accurately, loudly or quickly; hearing is required to perceive information at normal spoken word levels and to receive detailed information through oral communications and/or to make fine distinctions in sound; work requires preparing and analyzing written or computer data, visual inspection involving small defects and/or small parts, using measuring devices, assembly or fabrication of parts within arms length, operating machines, operating motor

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vehicles or equipment and observing general surroundings and activities; work frequently requires exposure to outdoor weather conditions and occasionally requires exposure to fumes or airborne particles, exposure to toxic or caustic chemicals, exposure to extreme cold (non-weather), exposure to vibration, bloodborne pathogens and may be required to wear specialized personal protective equipment; work is generally in a loud noise location (e.g. grounds maintenance, heavy traffic).

Special Requirements

ISA Control System Technician Level 1 Certificate, may be obtained within four years of hire.
Minnesota Wastewater Treatment Facility Class D Operator License within one year of hire.
Valid commercial driver's license.

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