



CLASS SPECIFICATION FOR:

Water/Wastewater Plant Mechanic II

General Statement of Duties:

Performs inspections, maintenance, troubleshooting and repairs on industrial-scale mechanical, hydraulic, pneumatic, and plumbing equipment in County water treatment and wastewater reclamation facilities; exercises and/or operates equipment; does related work as required.

Distinguishing Features of Class:

An employee in this class demonstrates a sound working knowledge of the methods, tools and materials used in the area of assignment; independently performs inspections, testing, installations, replacements, preventive maintenance, and repairs on assigned industrial-scale mechanical, hydraulic, pneumatic, and plumbing equipment; performs more complex troubleshooting and diagnosis; completes more complex repairs to malfunctioning equipment used in water and wastewater operations; performs minor fabrication of parts; work is performed independently and as part of a team under minimal supervision at locations County-wide.

Examples of Assigned Duties *(illustrative of the types and scope of duties and responsibilities assigned to positions in this class):*

- Proficiently performs the duties and responsibilities typically assigned to a Water/Wastewater Plant Mechanic I;
- Diagnoses and troubleshoots malfunctioning equipment and systems as assigned, recommends possible solutions, and makes approved repairs;
- Performs visual inspections, tests, routine and preventative maintenance to ensure proper functioning of water and wastewater processing equipment including but not limited to industrial-scale mechanical, hydraulic, pneumatic, and plumbing equipment, as well as centrifuges, belt conveyors, bar screens, chemical feed systems, blowers, pumps, valves, grinders, digesters, and screw pumps in County water treatment and wastewater reclamation facilities and reports any condition issues to supervisor;
- Performs routine and moderately complex maintenance and repairs, replacements or alignments to malfunctioning items such as replacing seals, valves, bearings, mixers, gear boxes; rebuilding small centrifugal pumps; pipe repair, progressive cavity pump repair, sheave alignment, etc.;
- Performs moderately complex troubleshooting as needed and reports findings to supervisor, makes recommendations for resolution, may make repairs or resolve issues as directed;
- Accurately measures and performs necessary math calculations which may include converting fractions to decimals;
- Uses a variety of schematics, drawings, and maps to locate, troubleshoot and repair or replace above or underground equipment;
- Safely operates a wide variety of hand and power tools and related industrial-scale equipment including: hydraulic shear press, metal brake, pipe threader, calipers and micrometers, centrifuge specialty tools, MIG welders, plasma cutters, jet rodder pipe hunter, etc.;
- Works at extreme heights/depths, on ladders, and in confined spaces;
- Uses appropriate personal protection equipment (PPE) at all times including but not limited to fall arrest equipment and gear, confined space meters, may include SCBA;
- Collaborates effectively with coworkers and other Division staff to ensure the safe and efficient functioning of equipment and processes;
- Assists with training mechanics as assigned;
- Maintains a thorough working knowledge of on-site chemicals and existing materials through O&M manuals, other reference materials, higher level mechanics, and/or supervisors to prevent caustic, corrosive, combustible or toxic interactions with equipment components;
- Maintains thorough working knowledge of plant processes and operations as well as industrial-scale mechanical, hydraulic, pneumatic, and plumbing equipment used in County water treatment and wastewater reclamation facilities;
- Performs on-call rotation duties as assigned;
- Participates in meetings and trainings as required;
- Performs other duties as assigned.



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Required Knowledge, Skills and Abilities:

Sound working knowledge of the safe use and maintenance of hand and power tools; demonstrated skill in the use and care of tools and equipment; thorough working knowledge of operations, processes and equipment at assigned locations; physical ability to perform tasks inherent to the assigned duties requiring varying degrees of physical effort which may include bending, stooping, lifting and carrying heavy loads, climbing, entering and working in confined spaces, working in elevated and underground work spaces, etc.; thorough working knowledge of the occupational hazards and safety precautions of the assigned facility; ability to perform thorough visual inspections; ability to work safely in adverse weather conditions and temperature extremes; ability to read and write and comprehend complex manuals and instructions; understand and carry out complex oral and written instructions, including complex technical instructions; ability to read and follow detailed directions; demonstrated ability to read and accurately interpret complex technical schematics and drawings; ability to keep accurate and detailed technical records and make written reports as assigned; math skills sufficient to accurately measure and perform calculations including conversion fractions to decimals; basic knowledge of personal computers and/or automated systems and the ability to enter, maintain, retrieve and analyze data (CMMS data entry); good organizational skills; sound research skills to do research as assigned; good computer skills with demonstrated ability to efficiently research product information and installation instructions as well as perform other research as assigned; sound judgment and critical thinking skills with the demonstrated ability to problem solve, make sound recommendations and make appropriate decisions; demonstrated ability to collaborate and work effectively as a team member and/or leader; ability to train co-workers as needed; effective oral and written communications skills with the ability to accurately communicate, interpret and understand complex technical information; ability to create and maintain detailed and accurate records; ability to establish and maintain good working relationships with Department personnel; personal accountability including teamwork and establishing and maintaining positive relationships with Department personnel and other County employees; excellent customer service skills, tact, and courtesy. Requires ability to work a flexible schedule or overtime as needed.

Minimum Education and Experience:

Education: High School Graduate, with relevant vocational or trade school training or apprenticeship preferred;

Experience: Four (4) years of relevant work experience;

OR: Any equivalent combination of experience and training which provides the required knowledge, skills and abilities.

Additional Requirements:

NOTE: Effective 4/1/2009 County Ordinance 1128 requires a criminal history record check and fingerprinting of all employees in authorized and hourly safety sensitive positions.

NOTE: All employees are required to successfully complete National Incident Management System (NIMS) Incident Command System (ICS) 700 (Introduction) training. Successful completion of additional NIMS ICS training courses may be required based on the job classification, level of responsibility, and department. Please refer to Fire's Intranet site for a list of NIMS ICS requirements by job classification.

- Valid driver's license with a safe driving record.
- May require a pre-work physical examination and/or medical tests administered by Henrico County Employee Health Services, the components of which are based on and appropriate to the specific sensory and/or physical demands of the given position.