



CLASS SPECIFICATION FOR:

## Water/Wastewater Plant Mechanic III

### General Statement of Duties:

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

### Distinguishing Features of Class:

An employee in this class demonstrates a comprehensive knowledge of the methods, tools and materials used in the area of assignment; independently performs inspections; performs complex installations, replacements and preventive maintenance on industrial-scale mechanical, hydraulic, pneumatic, and plumbing equipment; performs complex troubleshooting and diagnosis; identifies solutions and makes complex repairs and replacements to malfunctioning equipment used in water and wastewater operations; performs all types of necessary fabrication of parts; serves as a lead worker and may train and direct the work of other mechanics; work is performed independently and as part of a team under minimal supervision.

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

- Proficiently and independently diagnoses and troubleshoots malfunctioning equipment, identifies and recommends appropriate cost effective solutions, implements solutions;
- Performs the duties and responsibilities typically assigned to a Water/Wastewater Plant Mechanic I and II;
- Performs complex visual inspections, tests, routine and preventative maintenance to ensure proper functioning of complex 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 complex maintenance and repairs on all types of industrial-scale mechanical, hydraulic, pneumatic, plumbing and electrical equipment in County water and wastewater facilities;
- Performs complex troubleshooting and diagnosis as needed, identifies and recommends solutions to supervisor, makes repairs or resolve issues as directed;
- Accurately measures and performs necessary math calculations, including complex conversion and calculations utilizing measuring devices such as micrometers, rulers, calipers and feeler gauges;
- Uses a variety of schematics, drawings, and maps to locate, troubleshoot and repair or replace above or underground equipment or and drawings and maps to locate yard and underground equipment;
- Safely operates a wide variety of hand and power tools and related industrial-scale equipment such as laser alignment tools, lathes, milling, stick welding tools, etc.;
- Works at extreme heights/depths, on ladders, and in confined spaces;
- Uses appropriate and required personal protection equipment (PPE) at all times including 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;
- May train, coach, mentor and direct the work of other Utility Plant Mechanics;
- May serve as supervisor during the supervisor's absence;
- 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 comprehensive working knowledge of plant processes and operations as well as industrial-scale mechanical, hydraulic, pneumatic, and plumbing equipment 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:

Thorough working knowledge of the safe use and maintenance of hand and power tools; demonstrated skill in the use and care of tools and equipment; comprehensive working knowledge of operations, processes and equipment at assigned locations; thorough working knowledge of the occupational hazards and safety precautions of the assigned facility; physical ability to perform inherent to the assigned duties and tasks 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.; ability to perform thorough visual inspections; ability to work safely in adverse weather conditions and temperatures extremes; ability to read, write, and accurately interpret and comprehend complex manuals and instructions; ability to read, follow and give clear and concise instruction to other mechanics and Division staff; demonstrated high-level proficiency in the use and care of tools and equipment incidental to assigned duties; demonstrated ability to understand and carry out complex technical oral and written instructions; demonstrated 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, data mining, data queries, data reporting); 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, identify appropriate cost effective solutions, make recommendations, make appropriate decisions and efficiently implement approved solutions; demonstrated ability to collaborate and work effectively as a team member and a leader; basic supervisory skills to assist with training and directing co-workers as needed; effective oral and written communications skills with the ability to communicate, interpret and understand complex technical information; 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: Six (6) 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.