WASTEWATER OPERATOR III

MAJOR FUNCTION

The Class "A" Operators perform a variety of skilled and skilled and complex work related to the operation and maintenance of an Advanced Wastewater Treatment (AWT) plant, as well as some administrative duties while working on an assigned shift. The Class "A" Operator will perform duties with a broader scope of authority and be expected to exercise greater independent problem solving and decision making skills than a Class "B" Operator. Work is reviewed through inspection and by observing the effectiveness of plant operations through the review of shift reports and chemical laboratory tests. Training and learning acquired as a Class "A" Operator help to prepare the incumbent for a supervisory role in the operations of a wastewater treatment plant.

ESSENTIAL AND OTHER IMPORTANT JOB DUTIES

Essential Duties

Independently performs assigned work under a Wastewater Operator Supervisor that includes: Inspects and evaluates treatment processes and equipment that control the operation and effectiveness of a AWT Wastewater treatment facility in order to optimize performance, maintain regulatory compliance, and minimize local and/or plant wide adverse impacts while taking into consideration cost, equipment capabilities, and environmental impacts. Adjusts aeration system, valves, solids handling system and other equipment so as to maintain the highest degree of Utilizes available tools to perform operational duties and document work activities treatment. including but not limited to SCADA systems, operational database, and computerized maintenance management system (CMMS). Records and enters operational data in database, records work details in maintenance database, completes work requests and retrieves work order details. Reads and interprets a variety of charts and meters, keeping log sheets, maintains simple records of shift operations and preparing reports. Proficiently monitors flow rates, and conducts water quality analysis of dissolved oxygen, chlorine residual, pH, turbidity, temperature, mixed liquors suspended solids (MLSS), total Nitrogen and other plant conditions. Reliably isolates, tags out and takes appropriate actions required to make ready systems and equipment to support/perform maintenance activities. Adjusts chemical injection systems to achieve optimum treatment results by evaluating online metering/monitoring data and be able to make decision based on analytical results and perform minor maintenance on chemical injection systems and process analyzers. Troubleshoots equipment malfunctions by performing preventative maintenance diagnostics, and routine preventative maintenance. Responds to electrical malfunctions or power outages by properly resetting, restarting, and bringing systems for plant operations back on-line. Proficiently provides wastewater laboratory analysis of Total Nitrogen, pH, TSS and calibrates lab equipment, process instrumentation, control systems, on line analytical equipment to ensure compliance and accuracy. Provides oversight to lower level license operators including Quality Assurance of data collection and records. Prepares reports, perform communications and record and analyze data using desktop computer software. Reads, interprets and understands technical manuals, drawings, blueprints, and diagrams as related to job duties. Accountable for the efficient operation, in compliance with applicable regulations, of all processes within an assigned work area in a AWT wastewater treatment plant as well as for personal performance and promoting optimal team performance. Performs a variety of public relations related duties; conducts tours and provides educational information. Performs a variety of public relations related duties; conducts tours and provides educational information. Prepares operational reports for submission to appropriate agencies. Ensures accuracy, guality of data and identifies any discrepancies, excursions and takes lead role in resolving any issues of concern. Makes decisions regarding the optimization of the equipment including recommendations for rehabilitation and replacement of equipment. Performs other related work as assigned.

WASTEWATER OPERATOR III

Other Important Duties

Operates, services, adjusts and conducts routine preventative maintenance to SCADA controlled equipment and related treatment equipment. Adjusts disinfection equipment, records operational and maintenance details, collects process and compliance samples for analysis following appropriate QA procedures, performs routine process sample analysis. Will be required to work varying shifts, hours and locations in order to become trained in all aspects of plant operations. Ensures cleanliness and safety of facilities by maintaining the work area clean and organized. Attend training courses, when available, during off-duty hours. May coordinate the work of trainees, participates in developmental and training activities as recommended by supervisor, performs related work as required and attend training courses, when available, during off-duty hours. Develops training activities and provides instructional training for lower level operators

DESIRABLE QUALIFICATIONS

Knowledge, Abilities and Skills

Expert knowledge of the implications of improper sewage treatment for community health and wellbeing. Expert knowledge of the occupational hazards involved in sewage treatment and disposal. Expert knowledge of the rules, regulations and public laws pertaining to sewage treatment plant operations. Expert knowledge of chemistry and mathematics as they apply to sewage. Expert knowledge of the methods and practices of modern sewage treatment; standards and normal operating procedures applicable to treatment; the functions and mechanics of pumps and other plant mechanical equipment. Expert knowledge of the materials, equipment and procedures for activated sludge processes, anaerobic digestion, nitrification/de-nitrification and chlorination. Considerable knowledge of the occupational hazards involved in sewage treatment and disposal. Considerable knowledge of the rules, regulations and public laws pertaining to sewage treatment plant operations. Understands basic principles of microbiology in relation to wastewater treatment. Knowledge of hydraulic principles and electrical safety. Working knowledge in SCADA systems and can monitor and control plant processes. Working knowledge of mechanical, electrical and instrumentation systems, as they apply to the wastewater treatment process. Must be in good physical condition and able to endure intermittent periods of sitting, standing and walking when collecting samples, operating equipment and changing chemical system. Ability to climb stairs; turn large valves, lift objects weighing over 50 lbs. and use tools requiring a high degree of dexterity. Ability to understand and follow oral and written instructions. Ability to recognize the need to adjust treatment procedures to meet requirements of volumes to be treated. Ability to troubleshoot complex process problems in many different areas of wastewater treatment. Ability to read blue-prints with working knowledge and understanding of the lay-out and flow patterns of sewage treatment plants. Ability to understand and follow oral and written instructions. Ability to train, educate, communicate and instruct working knowledge to the public and other staff, including lower lever operators. Ability to learn how to coordinate the work of trainees, develop and participate in training activities of lower level staff as recommended by supervisor.

Minimum Training and Experience

Possession of a high school diploma or an equivalent recognized certificate and four years of experience in the operation and maintenance of a wastewater plant. Studies should have included courses in basic mathematics and chemistry.

Necessary Special Requirements

Applicant must be at least eighteen years of age.

Must possess and maintain a Florida Department of Environmental Protection Class "A" Wastewater Plant Operator's Certificate.

WASTEWATER OPERATOR III

Must possess and maintain a valid class E State driver's license as a condition for continued employment.

Revised: 09-30-83 11-07-83 12-30-87 02-15-90 01-17-92 09-09-93 04-09-03 10-07-03 04-08-04 04-15-17