



Plant Operator A-C / D Operator Trainee

Department: Treatment /Operations

FLSA Status: Non-Exempt

Reports to: Plant Manager / Operator in Responsible Charge (ORC) **Revision Date:** 01/08/2026

Pay Grade 11-14: \$54,649 - \$98,802

Summary

Under the direct supervision of the Plant Manager/Operator in Responsible Charge (ORC), performs a variety of skilled and semi-skilled technical duties in the operation and maintenance of St. Vrain Sanitation District's Wastewater Treatment Plant and Lift Stations. Work must meet all local, state, and federally mandated treatment standards. This position does not supervise but may provide guidance or act as a lead to lower-level operators as needed. The position requires being on-call, working rotating shifts, holidays, and weekends. Ensures compliance with safety and environmental regulations while collaborating with others to maintain plant system integrity.

Essential Duties and Responsibilities:

The following list is intended to be the core responsibilities at all operator levels. The district may change these duties at any time.

- Inspect treatment process components and equipment daily.
- Collect samples from treatment processes throughout the facility.
- Perform and document laboratory tests; take appropriate actions based on results. Fill in for the laboratory technician when needed.
- Monitor plant operations daily through gauges, meters, control panels, and SCADA systems.
- Perform process control tests and evaluate test results to determine appropriate treatment process requirements.
- Operate heavy equipment, including, but not limited to, front-end loader, skid steer, etc.
- Calibrate laboratory and field instruments and online monitoring equipment.
- Follow all safety regulations and guidelines while working in and around the district
- Operate and maintain the facility, equipment, vehicles, and controls at the wastewater treatment plant; perform basic equipment repairs.
- Keep accurate records of all operations, maintenance, and repair, including daily data entry. Complete, record, and close out work orders. Write and edit SOPs, JSA, etc.
- Perform daily biosolids processing and drying duties.
- Perform related work as required and assigned.

Plant Operator A

- Leads plant operations and ensures compliance with regulatory permits, including NPDES.
- Performs complex troubleshooting, diagnosis, and repairs of treatment plant systems.
- Calibrates and maintains laboratory and online instrumentation to ensure data accuracy.
- Reviews and evaluates logs, SCADA data, and lab results from operators to identify trends and recommend improvements.
- Serves as lead operator in the absence of the Plant Manager, delegating tasks and mentoring junior staff.
- Trains other operators in process control, equipment maintenance, safety, and regulatory compliance.
- Develop and revises SOPs, JSAs, and training materials based on operational experience.

Plant Operator B

- Interprets lab and SCADA data to proactively adjust treatment processes.
- Calibrates sensors and probes (e.g., ORP, DO), ensuring accuracy in system monitoring.
- Conducts advanced lab testing and documents results for regulatory and operational use.
- Performs equipment inspections, identifies malfunctions and possible causes, and assists with pump rebuilds or replacements.
- Analyzes SCADA trends to optimize plant performance and energy efficiency.
- Completes complex maintenance tasks with minimal supervision.
- Participates in process improvement initiatives and assists with documentation (e.g., SOPs, maintenance logs).

Plant Operator C

- Applies working knowledge of wastewater treatment systems and applicable regulatory standards.
- Independently perform process control tests and interpret results to assist in operational decisions.
- Performs routine maintenance and troubleshooting on equipment such as pumps, valves, and motors.
- Completes sampling and basic lab testing to monitor treatment effectiveness.
- Utilizes plant software (e.g., SCADA, Asset Essentials) to monitor performance and log data.
- Calculates operational metrics with accuracy, including flow rates and chemical dosing needs.
- Identifies equipment issues or process anomalies to senior staff.

Plant Operator D

- Demonstrates basic knowledge of wastewater treatment processes and associated safety regulations.
- Reads and records gauges, meters, control panels, and SCADA systems under supervision.
- Assists with plant inspections and identifies basic process or equipment irregularities.
- Performs basic data entry and documentation related to plant operations.
- Supports daily plant operations and learns lab sampling procedures and treatment plant equipment functions.

- Demonstrates foundational math skills to support calculations such as rates, flow, and volume.
- Use standard software applications (e.g., Microsoft Office) and begin training on plant-specific software.

Supervisory Duties:

None at this time.

Level Differentiation**Plant Operator D (Entry Level):**

Performs basic plant operations under close supervision while gaining foundational knowledge of wastewater treatment systems, safety protocols, and data monitoring. Assists in plant inspections, sample collection, and documentation. This level focuses on learning plant processes, developing computer and lab skills, and understanding regulatory requirements.

Plant Operator C (Developing/Independent Operator):

Performs daily operations and process control functions with limited supervision. Demonstrates working knowledge of treatment plant systems, performs lab testing, calculates operational metrics, and troubleshoots equipment. Uses SCADA and asset management systems to monitor and record plant performance. Supports plant optimization and identifies issues for further investigation by senior staff.

Plant Operator B (Advanced Operator):

Independently interprets lab and SCADA data to make operational adjustments and optimize system performance. Performs advanced maintenance, complex lab testing, and troubleshooting of mechanical and electronic systems. Participates in process improvement efforts, documents SOPs, and mentors less experienced operators. Plays a key role in ensuring plant reliability and regulatory compliance.

Plant Operator A (Lead/Expert Operator):

Serves as a technical expert and lead operator responsible for overseeing plant compliance with all regulatory permits. Conducts complex system troubleshooting, equipment calibration, and data analysis. Assists the Plant Manager and ORC in training, delegation, and documentation. Leads operational decision-making in the absence of management and develops SOPs and training tools based on operational expertise.

Knowledge, Skills, and Abilities:

To perform this job successfully, an individual must be able to perform each essential duty satisfactorily. Reasonable accommodations may be made for individuals with disabilities to perform the essential functions. The requirements listed below are representative of the knowledge, skills, and/or abilities required:

- Knowledge of the overall wastewater treatment operations.
- Knowledge of regulations regarding treatment plant system operations.
- Knowledge of heavy equipment operations, including, but not limited to, backhoe/excavator, dump truck, skid steer, and truck-mounted crane.
- Knowledge of basic laboratory procedures and testing performed in monitoring treatment plants as well as treatment plant equipment.
- Basic knowledge of water treatment systems maintenance, including motors and pumps.
- Ability to perform strenuous physical labor for extended periods of time, including: operating various types of tools and equipment associated with water maintenance, lifting, carrying, and loading/unloading heavy items and materials, hand-digging

trenches and holes, accessing and working from below-grade trenches and above-grade ladders, scaffolds, or platforms.

- Ability to communicate effectively in English verbally and in writing and follow oral and written instructions.
- Ability to prepare and calculate fundamental mathematical problems, including rates, ratios, fractions, and percentages.
- Ability to set work priorities.
- Ability to read and interpret maps.
- Basic computer skills.
- Must be able to respond to emergencies and work a variable work schedule, including overtime, weekends, and holidays as needed.

Education and Experience:

- High school diploma or GED required.
- An equivalent combination of education and experience may be considered.

Licenses/Certifications:

- Valid Colorado driver's license and satisfactory driving record required.
- **Operator D:** Colorado Wastewater Plant Operators License D is required, or one must be obtained within 1 year.
- **Operator C:** Must hold a Colorado Wastewater Plant Operators License C at the time of hire.
- **Operator B:** Must hold a Colorado Wastewater Plant Operators License B at the time of hire.
- **Operator A:** Must hold a Colorado Wastewater Plant Operators License A at the time of hire.

Physical Activities:

The physical demands described here are representative of those that an employee must meet to perform the essential functions of this job successfully. Reasonable accommodations may be made to enable individuals with disabilities to perform the essential functions. The employee must frequently lift and/or move up to 50 pounds. This job's specific vision abilities include Close vision, Peripheral vision, and the Ability to adjust focus. The employee is frequently required to stand, walk, stoop, kneel, and reach. Work requires speech and hearing within normal limits, with or without correction, and requires frequent driving of various motor vehicles.

Working Environment:

Work is performed in a variety of settings, including office and industrial buildings, outdoors day or night in all weather extremes, in hazardous areas that include electrical, drowning and fall hazards, high noise levels, dangerous machinery, confined spaces, and in conditions that may require the use of respirators, heavy lifting, manual labor, and physically strenuous work on a routine basis that require the ability to sit, stand, walk, climb, stoop, bend, kneel and reach. Work requires the ability to respond to emergencies and call-outs, and work in a team environment. Requires the ability to work under time constraints and in confined spaces as needed. Performs manual labor and physically strenuous work on a routine basis. Must work in various settings, with all-weather extremes and conditions during the day, as well as possible call-back situations. Work may result in exposure to wastewater or untreated water supplies containing infectious disease agents such as bacteria, viruses, fungi, and parasites.

NOTE: This job description is not intended to be an exhaustive list of all duties, responsibilities, qualifications, or other duties assigned by management.