

BARBADOS WATER AUTHORITY



Vacancy Notice

Sea Water Reverse Osmosis (SWRO) Plant Operator

Applications are invited from suitably qualified persons to fill the vacant position of **Sea Water Reverse Osmosis Plant Operator**.

The SWRO Plant Operator is responsible for the safe, efficient and continuous operation of a Seawater Reverse Osmosis desalination facility. This includes monitoring equipment, performing routine maintenance, optimizing plant performance and ensuring that potable water produced meets all Barbados Water Authority (BWA) and international drinking water standards.

KEY RESPONSIBILITIES

- Operate and monitor SWRO systems, including intake structures, pre-treatment, high-pressure pumps, membranes, post-treatment and distribution equipment.
- Conduct routine inspections of pumps, valves, filters, chemical dosing systems and instrumentation.
- Start up and shut down plant systems following established SOPs.
- Record operating data (flows, pressures, temperature, conductivity, pH, chlorine residual, etc.) in logs and digital systems.
- Conduct monthly inventory of plant equipment, spare parts, chemicals etc
- Perform on-site water quality testing and verify results from laboratory analysis.
- Ensure treated water consistently meets WHO standards and BWA regulatory requirements.
- Adjust chemical dosing, membrane cleaning schedules and operational parameters based on water quality indicators.
- Conduct routine preventive maintenance on mechanical and electrical equipment.
- Identify performance issues such as membrane fouling, pump inefficiencies and abnormal noise/vibration.
- Assist maintenance technicians with corrective repairs and membrane cleaning (CIP).
- Maintain cleanliness of plant equipment and surroundings.
- Follow all plant safety protocols in accordance with OSHA standards and local health & safety regulations.
- Use PPE correctly and ensure chemical handling safety (chlorine, antiscalants, acids/alkalis).
- Support environmental compliance related to brine discharge, waste handling and chemical storage.
- Complete daily plant logs, shift reports and incident reports.
- Document maintenance activities, chemical usage and system performance trends.
- Communicate operational issues promptly to supervisors.

QUALIFICATIONS & REQUIREMENTS

Education & Experience

- Diploma/Certificate in Mechanical, Electrical, Environmental, Process Engineering, or related field.
- Minimum 1–3 years' experience in water treatment, industrial plant operations, or utilities.
- Previous SWRO or membrane system experience is an asset.

Knowledge and Skills

- Knowledge of RO membrane systems, pre-treatment filtration and high-pressure pumping systems.
- Familiarity with SCADA and automated control systems.
- Ability to read P&IDs, equipment manuals and standard operating procedures.
- Basic mechanical and electrical troubleshooting skills.
- Strong attention to detail and situational awareness.
- Ability to work independently and as part of a shift team.
- Good communication skills, both written and verbal.
- Must be mobile and energetic. Medium Work - Lifting, carrying and /or pushing 50 pounds with frequent lifting and/or carrying of objects weighing up to 25 pounds.

Working Hours (Shift)/Conditions

- 7am to 3pm;
- 3pm to 11pm;
- 11pm to 7am;
- Work around high-pressure systems, chemicals and rotating equipment.

SALARY AND ALLOWANCES

The successful candidate will receive an attractive salary and benefits package based on their qualifications and experience.

Applications with full curriculum details should be emailed to hr@bwa.gov.bb or addressed to:

The Director of Human Resources Management and Development
Barbados Water Authority,
Pine Commercial Estate,
The Pine,
St Michael

The closing date for receipt of application is **Friday, March 20th, 2026.**

Unsuitable applications will not be acknowledged, and only shortlisted candidates will be contacted.