

Greater Vancouver Regional District

Position Description: WATER TREATMENT OPERATOR (G761)

August 2005

Purpose: Operates, monitors, calibrates and assists in the maintenance and repair of the water treatment systems and equipment at various GVRD water treatment facilities.

Duties: *(The duties described hereunder are intended to be representative of the position and are not to be considered all-inclusive)*

Controls Water Treatment Plant operation taking samples, analyzing results, and determining flows and chemical feed rates as required.

Performs maintenance and cleaning of chlorine analyzers, chlorination equipment, turbidity meters, pH analyzers, streaming current detectors, UV reactors, ozone systems, sodium hydroxide scrubber systems, hydrogen peroxide ozone quenching systems, particle counters, and various other water treatment equipment.

Performs visual checks and monitors the operation of treatment plant equipment such as filters, mixing tanks, lime/soda ash system, sludge thickening and dewatering, and chemical feed systems.

Adjusts chemical feed rates.

Performs filter backwashes and operates residuals handling systems.

Operates treatment facility process computer systems.

Maintains daily operating records including analysis, flows, water quality and chemical use.

Conducts tours of the Water Treatment facilities as required.

Assists with the unloading of chemicals and completes required documentation.

Performs chlorine cylinder changes.

Performs sampling and laboratory tests of plant treatment processes to ensure efficient and effective operation.

Operates chemical feed systems such as alum, ferric chloride, sodium hypochlorite, chlorine, lime, soda ash, liquid oxygen, ozone and polymers.

Troubleshooting of chemical feed, and delivery systems, filtration systems and residual handling systems.

Coordinates equipment shut-downs and assists other work groups with maintenance tasks as required.

Disinfection and de-chlorination of new or repaired water mains.

Attends to alarm calls during and after normal working hours.

Responds to chemical spills and treated water discharges to the environment.

Assists Foreman with the production of safety and operations procedures.

Works in compliance with all District safety policies and procedures and WCB regulations.

Assists and trains junior operations staff.

Maintains treatment facility buildings and performs housekeeping duties as required.

Performs related work as required.

Requirements:

Grade 12 and graduation from a two year Water Quality Technology education program or related discipline (i.e. environmental sciences, environmental or chemical technology, instrumentation)

At minimum, British Columbia EOCP Class II Water Treatment Operator Certification. The highest EOCP Water Treatment Certificate achieved shall be maintained in good standing and a copy of the Certificate shall be filed in the employee file in Human Resources as proof of eligibility.

Minimum two years work experience in a Water Treatment environment.

Knowledge and experience in operating, troubleshooting, and repairing water treatment system equipment.

Knowledge of basic process control systems, telemetry, electric motors, and calibration of instrumentation.

Ability to use a variety of software applications including process control, data acquisition, reporting and record keeping, word processing, common spreadsheet applications and email.

Ability to perform laboratory tests on water supplies and plant processes to optimize water quality and plant performance.

Sound knowledge of safety practices, procedures, and occupational hazards in the water treatment environment and the ability to react promptly and effectively in emergencies.

Ability to communicate effectively both verbally and in writing.

Ability to work co-operatively in a team environment and deal effectively with the public.

Demonstrated mechanical ability and experience performing maintenance duties in a water treatment field.

Physically capable of performing the duties of the position and able to wear full and half-face respirators, SCBA and level A suit.

Willingness and ability to work on a variable shift. Ability to be on standby.

Valid BC driver's license.