

CLASSIFICATION: WATER TREATMENT PLANT OPERATOR**POSITION TITLE:** WATER TREATMENT PLANT OPERATOR**REFERENCE NO:** 51405**DIVISION:** MEDICINE HAT POWER AND WATER**DEPARTMENT:** ENERGY AND INFRASTRUCTURE**APPROVAL DATES:** BY:  **DATE:** March 11, 2022
MANAGING DIRECTOR – ENERGY AND INFRASTRUCTUREBY:  **DATE:** February 17, 2022
CHIEF HUMAN RESOURCES OFFICER**GENERAL DESCRIPTION:**

The Water Treatment Plant Operator is accountable for the safe and efficient operation of equipment associated with the production and distribution of the municipal water supply, as required, for the City of Medicine Hat and area. This position is also responsible for treatment of the waste stream created by the water treatment process, before being returned to the river. This includes making operational decisions to maintain water quality to meet all applicable federal and provincial regulations to protect public health. This position requires quick decisions in trouble situations to prevent upsets and maintain the integrity of the City's potable water system. On occasion this position is involved in providing support to Power Plant operations.

ORGANIZATIONAL RELATIONSHIPS:

- Reports directly to the Superintendent – Water Treatment.
- Maintains relationships with City Assets Water Distribution and Wastewater Collection Operators, and administration staff.
- Maintains relationships with Medicine Hat Power and Water Electrical and Instrumentation Technicians, mechanical maintenance, engineering and administration staff and Power Plant operations staff.
- Maintains working relationships with the other Water Treatment Plant Operators.
- Supervises casual summer staff.
- Work performance is subject to City and department policies; applicable government legislation and safety procedures; utility bylaws and work procedures.

PRIMARY FUNCTIONS/ACCOUNTABILITIES:

- Responsible for the safe and efficient operation of equipment as well as daily and other routine maintenance.
- Responsible for the continuous monitoring and calibration of equipment to ensure compliance with approvals and established quality guidelines.
- Required to troubleshoot and take corrective action in order to prevent upsets and to control the effects of any upset.
- Required to assist in the training of new operators and other Water Treatment Plant Staff.
- Plans, participates in, and completes other projects, experiments, and research of new or different technology or processes as assigned.
- Ensures accurate completion of operational, maintenance and other records necessary to ensure Alberta Environmental Protection (AEP) Approval and plant process requirements are being met.
- Ensures by written and verbal communication that administrative and maintenance personnel are kept informed regarding the plants' operational and mechanical status.

- Performs sampling and laboratory tests, as required.
- Required to properly batch, mix and handle chemicals as required.
- Ensures that all safety and environmental Standard Operating Procedures are adhered to, and work standards are observed.
- Arranges for short term coverage of unexpected operator vacancies (i.e., illness, etc.)
- Ensures that all safety, environmental and operational Standard Operating Procedures are adhered to, and work standards are observed.
- Performs routine cleaning, painting and other general plant maintenance duties as assigned.
- Performs grounds maintenance duties as assigned.
- Assists with equipment maintenance scheduling by attending maintenance planning meetings and ensures proper safe out for maintenance work.
- Monitors the Water Distribution System to establish accurate system demand requirements and adjusts plant operation and fill rates for the major reservoirs to meet system demand while balancing production.
- Initiates call out for Water Distribution and Wastewater Collection Operators based on SCADA alarms.
- Required to meet all Alberta Environment and City requirements to maintain and renew water treatment certification.
- Initiates call out for maintenance personnel when unscheduled maintenance work is required outside of regular working hours.
- Available for work call out when required.
- Must have the ability to wear Respiratory Protective Equipment.
- Performs other duties, as assigned.

REQUIRED COMPETENCIES

- Must have the ability to successfully complete the Alberta Level III Water Treatment Certificate.
- Sound knowledge of current practices, materials, tools/equipment and methods used in Water Treatment Plant operations, laboratory and maintenance.
- Sound knowledge and skill in the proper and safe operation of plant vehicles, equipment and tools.
- Sound knowledge of water treatment distribution systems to establish operating and pumping parameters.
- Sound knowledge of plant heating, ventilation, electrical and instrumentation / control and SCADA systems.
- Sound knowledge of the principles of supervision.
- Demonstrated mechanical aptitude and have mechanical abilities.
- Working knowledge of applicable safety regulations, standards, policies and procedures.
- Knowledge of Alberta Environment regulations and City Approval documents.
- Ability to understand manufacturers and engineering documents, specifications and drawings.
- Ability to establish and maintain effective working relationships with others.
- Ability to express ideas clearly and effectively, orally and in writing.
- Ability to operate a personal computer for SCADA, operational record keeping and reporting, and planning maintenance functions.
- Must possess a good working knowledge of software used for plant operational record keeping and reporting, such as Microsoft Excel, Microsoft Word, CMMS, and Hach WIMS and other City-specific software as required.
- Ability to understand and execute oral and written instructions.
- Ability to work with minimal supervision.
- Ability to train and direct assistants in safe and effective operations and maintenance activities.
- Ability to perform heavy physical work.

REQUIRED QUALIFICATIONS:

- Successful completion of Grade 12 or high school equivalency diploma with a minimum of Math 30 and Chemistry 30.
- Must possess a Level III AEP Water Treatment Certificate.
- Valid Class 5 operator's license and an acceptable driving record
- Must hold a valid Standard First Aid Certificate and WHMIS certification
- An equivalent combination of management approved training and experience may be considered.

- Required to obtain an Alberta Level III Water Treatment Certification within the time frame outlined below. This includes the completion of an assigned study program. Progress as defined by the Operations Manager, or WTP Superintendent must be achieved within the defined period set in offer of employment period, and as outlined in the Collective Agreement.

**RECRUITMENT ISSUE FOR UNDERFILLING
CERTIFICATION REQUIREMENTS****Minimum Plant Certification requirement is:
Alberta Environment Water Treatment Level III**

Certification requirement progression is as follows:

LEVEL I

- Must have successfully completed Grade 12 education or high school equivalency diploma (minimum Math 30, Chemistry 30).
- Operating experience and/or certification is desirable.
- Minimum 12 months of operating time required.
- AEP Certification Level I (certification must be achieved within 18 months).
- Sacramento Water Treatment Book 1 or City equivalent if required by management.

LEVEL II

- Minimum of 12 months of operating time required after obtaining Level I.
- AEP Certification Level II within 24 months of achieving Level I.
- Sacramento Water Treatment Book 2 or City equivalent if required by management.

LEVEL III

- Minimum of 12 months of operating time after obtaining Level II plus 2 years of DRC (Direct Responsible Control) plus 90 Continuing Education Units (CEUs) or 2 years of post-secondary education in an AEP approved field.
- AEP Certification Level III within 36 months of achieving Level II.
- Sacramento Utility Management or City equivalent if required by management.

LEVEL IV

- Minimum of 12 months of operating time after obtaining Level III plus 3 years of DRC (Direct Responsible Control) in a class 3 plant or higher, plus 180 Continuing Education Units (or a combination of CEUs and DRC) or 4 years of post-secondary education in an AEP approved field.
- AEP Certification Level IV.

RELIEF OPERATIONS FOCUS SUMMARY

Certification Notes:

Once Level III Certification is achieved, as well as proven knowledge of plant operation specific to the Medicine Hat plant, this position may rotate into a relief operations role as required. The specific focus of this role is outlined on an attached summary.

- Includes all duties as outlined in the Water Plant Operator Job Description.
- Provide shift coverage as required for WTP Operations staff.
- Plan, participate in and complete special projects / duties / experiments and QA/QC as assigned.
- Must have the ability to analyze overall plant performance and make recommendations for improved efficiency and performance.