

## Leachate Treatment Plant Operator

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### **DEFINITION**

This class is responsible for the operation and maintenance of the City's leachate treatment plant and collection system. Operational responsibilities include the efficient operation of the primary, secondary and residual treatment processes within the plant, and the operation of the pumping stations and collection vaults and pipeline for conveying leachate to the plant from Clover Bar Landfill. Considerable judgment is exercised in monitoring and controlling process flows, chemical feed rates and modes of operation to withdraw and treat leachate in the required quantities and to the required effluent standards for wastewater flows discharged into the City's sanitary sewer system in accordance with applicable bylaws.

Under the direction of a Supervisor, this class is responsible for the implementation, coordination and record keeping of comprehensive maintenance and servicing records for all process equipment and infrastructure within the plant and leachate collection system. This will include general housekeeping and equipment troubleshooting and the execution of specific work packages including preventative maintenance, scheduled servicing, cleaning, overhaul and major repair and refurbishment. Where external contractors are used for maintenance work onsite, this class may be required to provide direction to an outside vendor and monitor their work as well as giving a safety orientation.

Incumbents in this class will relieve and act for the Leachate Treatment Plant Supervisor during the latter's absences from duty.

### **TYPICAL DUTIES \***

#### Under the direction of the Leachate Treatment Plant Supervisor

Controls the operation, monitoring, and inspection of process electrical and mechanical equipment within the primary and secondary treatment and residuals handling areas of the plant including pumps and motors, batch and blending tanks, compressors, chemical storage and feed equipment, overhead cranes, and sludge conveying and dewatering equipment. Mobile equipment (eductor truck, tandem dump truck and backhoe) controlled at the leachate treatment plant is also operated as required.

Routine sampling and conduct of process control tests for solids content and chemical oxygen demand (COD). Collection and delivery of samples to outside analytical laboratory for other regulatory parameters required by City's Sewers Use Bylaw.

Controls the operation, monitoring and inspection of the leachate collection system from various parts of Clover Bar Landfill to the plant, including pumping station equipment, controls, manholes, storage vaults and associated equipment. Process operations are continuously monitored for performance within specifications and to obtain the required quantities of leachate blended to the right quality characteristics for treatment through the plant.

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Routine mechanical maintenance of process equipment such as replacing pumps, valves, pump seals, bearings, piping, filters, etc. General plant housekeeping to maintain a safe, orderly and sanitary working environment.

Interprets process control data against performance standards; initiates required adjustments to equipment within the area to ensure effective and efficient processing and advises the supervisor when operating conditions with a particular unit warrants.

Monitors and records onto daily log sheets unit process metering devices via gauges, computer process control systems, etc. on an ongoing basis. Keeps track of process chemical inventories and reorders as required through existing outline agreements with suppliers.

### **KNOWLEDGE, ABILITIES AND SKILLS**

Considerable knowledge of physical, chemical and biological treatment unit processes and equipment for both municipal and specialized wastewaters.

Knowledge of management options and equipment for handling wastewater treatment residues.

Knowledge of standard and quick test methods for the analysis of wastewater.

Mechanical aptitude in troubleshooting and servicing wastewater treatment process equipment.

Working familiarity with tools, equipment and techniques associated with carpentry and sheet metal work.

Working familiarity with computer systems and software for process control monitoring.

Ability to take analytical data and instrument readings and mathematically calculate and transform various flow rates, mass loadings, concentrations as required.

Ability to perform functions within defined safety and hygiene standards.

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**TRAINING AND EXPERIENCE REQUIREMENTS**

Job Level

Completion of the twelfth school grade and successful completion of a technical Wastewater Treatment Operator training program as recognized by the City of Edmonton.

Possession of a Class 3 Alberta Motor Vehicle Operator’s License w/ air brakes and eligibility to obtain and hold a City Drivers permit.

Upon appointment, incumbents are expected to:

- Complete the Edmonton Waste Management Training program for the safe operation of heavy equipment within 1 year;
- Complete an emergency first aid course within 2 years;
- Complete a confined space entry course within 1 year; and
- Progressively attain AESRD Wastewater Treatment Operator certification to Level III within 5 years as detailed below.

In addition to the work time requirements in the C.U.P.E. Local 30 Collective Agreement Schedule of Wages, progression to the succeeding pay step will be incumbent upon successfully attaining the following AESRD Wastewater Treatment Operator certification:

- 1<sup>st</sup> Year (after first 1940 hrs) – AESRD Level I certification;
- 2<sup>nd</sup> Year (after next 1940 hrs) – AESRD Level II certification; and
- 4<sup>th</sup> Year (after 7,760 hrs) – AESRD Level III certification.

\* *This is a class specification and not an individualized job description. A class specification represents and defines the general character, scope of duties and responsibilities of all positions within a specific job classification. It is not intended to describe nor does it necessarily list the essential job functions for a specific position in a classification. Positions may perform some of the duties listed above but this does not necessarily qualify for placement into this classification.*

LEACHATE\_TREATMENT\_PLANT OPERATOR\_2013.DOC

Salary Plan	<u>10M</u>	<u>10A</u>	<u>10B</u>	<u>10D</u>
Drainage Uncertified Grade	1928 076			
Drainage Certified Grade				
Last Updated:	2012-01			
Previous Updates:				
Originated:	2006-01			