

**Township of Cavan Monaghan  
Job Description**

**Position: Water Wastewater Lead Operator**

**Reports to: Water Wastewater Supervisor**

**This Job Description is revised: January 2026**

**Page 1 of 5**

**Job Summary**

**Water Wastewater Lead Operator**

Reporting to the Director of Public Works and the Water Wastewater Supervisor, the Water Wastewater Lead Operator will coordinate and oversee maintenance, repairs, administration, reporting and cleaning tasks at and on the Millbrook Wastewater Treatment Plant (WWTP), Millbrook Sewage Pumping Station (SPS), Millbrook Water Treatment Plant (WTP), and Millbrook Water Storage Facility and Booster Station and related assets. The Lead Operator will act as the Overall Responsible Operator (ORO) in the Water Wastewater Supervisor's absence and as required.

**Duties and Responsibilities**

1. As the Lead Operator, assist the Supervisor to direct and oversee the work of full-time plant operators, maintenance and electrical staff performing work at facilities owned and/or operated by the Township of Cavan Monaghan as assigned.
2. Assist the Water Wastewater Supervisor in ensuring that all systems and plant processes are properly monitored and controlled.
3. Perform the duties and responsibilities of the Water Wastewater Operator.
4. Assists the Water Wastewater Supervisor in the development and implementation of short- and long-range strategies, time sensitive special projects and operating plans for the municipality.
5. Monitor and interpret Supervisory Control and Data Acquisition (SCADA) system for all assigned systems to ensure that daily operations comply with and fulfill the requirements of environmental legislation, including but not limited to Municipal Drinking Water License, Permit to Take Water (PTTW) and applicable Environmental Compliance Approval (ECA).
6. Operate pumps, compressors, etc. adjusts chlorinator, chemical feed pumps, valves and other operational equipment, to ensure that correct dosages and proper plant operations are maintained.

7. Perform assigned duties such as janitorial cleaning, chemical mixing, filter washing, and minor maintenance of equipment.
8. Report and document in the plant log, all unusual operating conditions and equipment in need of service.
9. Respond appropriately to alarms and messages generated by the Supervisory Control and Data Acquisition (SCADA) System.

10. Control plant processes by:

- Operating pump controls and valve controls for pumping of all process streams;
- Mix, monitor, and adjust process chemicals to ensure adequate treatment;
- Record and analyze flow rates, chemicals used, chlorine residuals, turbidity, and other process readings as required;
- Record and analyze chemicals used, process water and wastewater flow calculations;
- Calculate, record, and analyze the amount of wastewater treated, the daily and monthly flows, and standby equipment running hours.

11. Plan for and perform preventative and emergency maintenance work on all assigned systems including:

- Inspect process control equipment to ensure proper operation;
- Check Well and level of groundwater to ensure aquifer is not over-pumped;
- Open, exercise and flush water hydrants annually, make repairs and winterize each fall;
- Inspect and continually monitor stand-pipe exterior reservoir through visual inspection; checking controls and valves, and by monitoring pressure and water levels.
- Inspect and continually monitor systems, visually, for major leaks, damage or other maintenance requirements;
- Check the pumping station and grounds to ensure proper operation and complete routine readings;

- Provide supervision and/or inspection of water distribution repairs, performed by staff and/or a third-party contractor;
- Routinely conduct water/wastewater sampling/testing throughout the system in accordance with Environmental Laws, including any applicable permits and licenses;
- Calibrate and service equipment in accordance with any applicable legislation and manufacturer recommendations and ECA;
- Complete routine cleaning of various processes to ensure proper operation and treatment.

12. Perform internal operational data forms for statistical input including recording all required flow readings.

13. Maintain detailed daily records of all preventative and corrective maintenance performed, in accordance with Ministry of the Environment regulations.

14. Install, replace or repair water services, hydrants, mains and other related appurtenances as required.

15. Assist with the connections of new water and wastewater infrastructure to the existing systems and emergency repairs as per Provincial regulations.

16. Performs and assists with confined space entries, and uses self-contained breathing apparatus, as required.

17. Operate and maintain Township owned vehicles, equipment, tools, and assets.

18. Assist the Supervisor in communicating with the general public regarding emergencies, inquiries, and investigations as required.

19. Sample Small Drinking Water System's owned and operated by the Township.

20. Report suspicious or malicious activities related to SCADA and/or facilities.

21. Assist with capital or emergency projects related to construction, maintenance and repairs.

22. Adhere to all Township by-laws and policies.

23. Ensure all required certifications are up to date and training is completed for all staff.

24. Other duties as assigned.

## **Work Conditions**

- The position has exposure to treatment chemicals, physical stress, working at heights, confined spaces, and all types of weather.
- Requires working outside normally scheduled hours, including evenings and weekends, and statutory holidays when needed to handle emergencies.
- Must be available for overtime and the ability to be on-call after regular working hours as part of a rotation. Must be able to respond to on-call within 1 hour.
- The position is physically strenuous and demanding. Must have the ability to perform manual labour, lift (up to 30 pounds), pull and manage equipment and objects.
- This position requires the transportation and handling of potentially dangerous materials.

## **Education/Experience**

- Post-secondary education or equivalent in a related field. A degree in Environmental or Civil Engineering is considered an asset.
- 3 years' experience in Municipal Water and Wastewater systems.
- Current Class 1 Water Distribution and Supply license, Class 2 Wastewater Treatment license, and Class 1 Wastewater Collection license are mandatory. Current Class 2 Water Distribution and Supply license, Class 3 Wastewater Treatment license and Class 2 Wastewater Collection license is considered an asset and will be given preference.

## **Skills/Abilities**

- Strong knowledge of the Ministry of the Environment regulatory requirements in Municipal water and wastewater systems.
- Must have a working knowledge of computers including the ability to use: SCADA, CityWide, Outlook, Excel, and Word.
- Sound knowledge of the Occupational Health and Safety Act and other relevant regulatory and legislative acts, codes, policies, guidelines and procedures related to water and wastewater operations and maintenance; health and safety procedures/WHMIS.
- Analytical, problem-solving, planning and scheduling skills required to effectively inspect, operate and monitor the facilities and processes and equipment.
- Knowledge of basic mathematics and chemistry to make calculations for chemical and

operating processes.

- Ability to interpret maintenance manuals, blueprints and other technical specifications; use and storage of industrial chemicals.
- Must possess as a minimum a valid Class "G" Ontario Drivers License and maintain a satisfactory driving record.
- Ability to work in a fast-paced environment.
- Mechanically and electrically inclined.
- Good oral and written communication skills to liaise with a variety of people including coworkers, clients, suppliers, while keeping accurate logs and writing reports.
- Ensure ORO duties have been assigned in their absence.

Please note: The above statements reflect the general details considered necessary to describe the principal functions of the job identified and shall not be considered as a conclusive description of all work required in the position. This job description may be subject to change to meet organizational or operational requirements.

**Reviewed By:**

U. Hurley  
Chief Administrative Officer

Jan 27/26  
Date

