Small Wastewater Systems
Requirements under WSER

Under the *Wastewater Systems Effluent Regulations* (WSER), wastewater systems are classified based on size and type of system. The classification determines the wastewater system's sampling, flow monitoring and reporting requirements.

This factsheet applies to systems that have an average daily flow less than or equal to 2,500 m^3/day.

Types of Wastewater Systems

Mechanical Plant
A continuously discharging system that uses equipment such as pumps, screens, blowers and tanks to treat wastewater.

Outfall (No Treatment)
A continuously discharging system that does not have any treatment.

Lagoon (Continuous)
A large pond (or ponds) with a storage capacity of at least 5 days, where wastewater is treated through natural biological processes and discharged continuously. They are referred to as continuously discharging lagoons.

Lagoon (Intermittent)
A lagoon that is designed to hold the wastewater for at least 90 days and releases effluent up to four times per year. These are referred to as intermittently discharging lagoons.

WSER Requirements

A summary of the main requirements of the WSER are outlined below.

Effluent Quality Standards

The WSER requires effluent to meet certain standards during discharge. These standards aim to protect the environment and public health. The WSER requires that:

- Effluent must not be acutely lethal.
- Effluent must meet the WSER limits.

The table below outlines the WSER effluent limits. It also states the sampling and reporting requirements.

Pollutant*	Limit	Sampling Requirement	Reporting Requirement
Carbonaceous Biochemical Oxygen Demand (CBOD)	Average ≤ 25 mg/L	Yes	Yes
Suspended Solids (SS)	Average ≤ 25 mg/L	Yes	Yes
Total Residual Chlorine	Average ≤ 0.02 mg/L	Not Required	Not Required
Un-ionized Ammonia	Maximum < 1.25 mg/L	Not Required	Not Required

*Acute lethality testing is not required for small systems with flow less than 2500 m^3/day.

Monitoring Requirements

Under the WSER, small wastewater systems must:

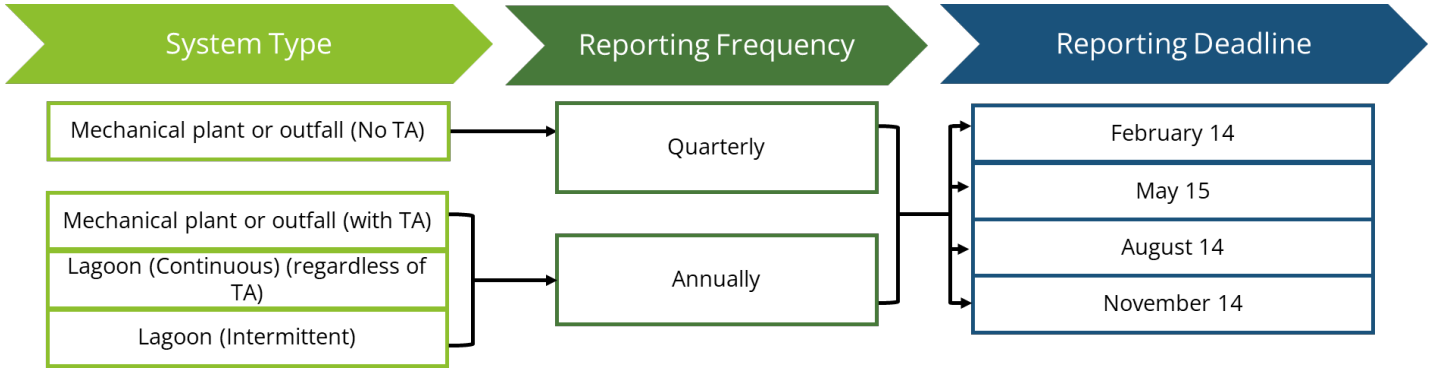
- Submit to Environment and Climate Change Canada (ECCC), and keep up-to-date, an identification report for the system.
- Sample wastewater effluent for CBOD and SS on the required schedule shown below.
- Monitor effluent volume with a method approved for your system type, either:
  - By using monitoring equipment (such as a flow meter); or
  - By using a method of estimation based on generally accepted engineering practices with a margin of error of ± 15%.
- Submit monitoring reports on the required schedule to ECCC. The reports must state effluent volume, number of days that effluent was deposited and average concentrations of CBOD and SS.

The sampling and flow monitoring requirements depend on the type and size of wastewater system, and whether the system was issued a Transitional Authorization (TA). The requirements are shown in the table below.

System Type		Sampling Schedule	Flow Monitoring
Mechanical Plant or Outfall	No TA	Monthly, at least 10 days between samples	Flow meter
	With TA	Quarterly, at least 60 days between samples	Flow meter or method of estimation
Lagoon (Continuous)	No TA	Quarterly, at least 60 days between samples	Flow meter
	With TA	Quarterly, at least 60 days between samples	Flow meter or method of estimation
Lagoon (Intermittent)		Once at discharge if it lasts less than 30 days, or every two weeks if more than 30 days	Flow meter or method of estimation

Reporting & Record Keeping Requirements

Reporting is completed through the Effluent Reporting Information System (ERRIS), which can be accessed via the Single Window Information Manager (SWIM). Paper reporting forms are available upon request. Systems must keep all related records on site for at least five years. Reporting schedules are shown below.



For additional help or information on monitoring and reporting requirements, please contact Environment and Climate Change Canada (ECCC). They can be reached at eu-ww@ec.gc.ca.

Disclaimer

This information does not in any way supersede or modify the *Wastewater Systems Effluent Regulations* or the *Fisheries Act*, or offer any legal interpretation of those Regulations or Act. Where there are any inconsistencies between this information and the Regulations or Act, the Regulations or Act take precedence, respectively.