

Cannabis Wastewater Fact Sheet

Cannabis refers to the cannabis plant and anything listed in the Federal Cannabis Act, Schedule 1.

With the recent legalization of cannabis, new industrial and retail establishments may apply to operate in our region. This fact sheet summarizes contaminants associated with specific industries.

Cannabis Waste Disposal

Cannabis waste may be regulated as hazardous or non-hazardous. It is the responsibility of the producers or processors to evaluate their waste to determine its classification. Hazardous waste is subject to applicable waste management requirements listed in the Waste Control Regulation (AR 192/1996) and the Alberta User Guide for Waste Managers.

- Hazardous wastewater can be disposed of at a deep-well or hazardous waste treatment facility.
- Non-hazardous wastewater can be sent to a wastewater treatment plant (i.e. ACRWC's plant) or disposed of in a deep-well facility.



Permit Requirements

The ACRWC will conduct Source Control Inspections of the cannabis facility to characterize the waste stream. Compliance or overstrength sampling may also be conducted.

A Wastewater Discharge Permit may be required if:

- Discharge volume is greater than 1,000m³/day; or,
- The proposed discharge is not in compliance with any of the terms and conditions of ACRWC's Quality of Wastewater Bylaw No. 8; or,
- ACRWC's Regulatory Services Source Control Group determines to initiate the Wastewater Discharge Permit process based on an inspection of the facility.

To help facilitate the inspection and/or permit process, it is recommended that the cannabis-related industry submit a Wastewater Discharge Application in advance.

What types of cannabis-related industry may operate in our region?



Cultivation Facilities

Concerns are largely related to substances used to optimize plant growth. A number of these substances can be harmful to the biological processes at a wastewater treatment plant.

Contaminants of Concern:

- Nitrates
- Phosphorus
- Pesticides
- Total Suspended Solids

Extraction Facilities



These facilities use solvents to extract cannabinoid oils from the cannabis plants. The solvents pose an explosion risk within the sewer transmission lines.

Contaminants of Concern:

- Hexane
- Alcohols

Food Services Involving Cannabis



As with other food service establishments, facilities where foods containing cannabis are cooked, processed, or prepared are required to install a food-related oil and grease interceptor.

Contaminants of Concern:

- Biochemical Oxygen Demand
- Chemical Oxygen Demand
- Total Oil and Grease
- Total Suspended Solids



Cannabis Dispensaries

As with any other retail establishments, there are no contaminants of concern associated with cannabis dispensaries.

The ACRWC is committed to protecting the environment and public health through the provision of responsible wastewater transmission and treatment services. The ACRWC strives to exceed regulated standards for wastewater, serving as environmental leaders and enabling member growth.

