

CANNABIS AND WASTE: ANOTHER "GREEN" OPPORTUNITY

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While the rapid growth of the cannabis industry in Canada has created new and exciting opportunities, this breakneck pace raises questions regarding the management of cannabis-related waste.

Cannabis production generates a significant amount of waste in the form of almost all of the by-products of production, including plant discards, air emissions, wastewater and other solid waste. Some estimates have found that Canada's cannabis industry will generate up to 6,000 tonnes of cannabis waste in 2020.^[1]

However, despite the general emphasis of regulators on the importance of proper waste management, there is little guidance from either the federal or the provincial governments on this issue specific to the cannabis industry.

Federal Regulation

Generally, the production of cannabis is regulated by the federal government under the *Cannabis Act*^[2] and *Cannabis Regulations*.^[3] Cannabis producers are subject to strict requirements regarding licensing, security, production standards and product quality.

The *Cannabis Act* provides for a comprehensive definition of "cannabis", which in effect includes any part of the cannabis plant, any substance or mixture that contains or has on it any part of the plant, and any substance that is identical to any phytocannabinoid (e.g. THC or CBD) produced by or found in such a plant.^[4] Schedule 2 excludes certain parts of the plant, including non-viable seeds, mature stalks without leaves, flowers, seeds or branches, fibres derived from any items listed in Schedule 2 and the root or any part of the root of the plant.^[5]

The federal *Cannabis Regulations* provide that any unused cannabis must be "destroyed". The method of destruction, however, is not set out. Nevertheless, cannabis may only be destroyed by methods that comply with otherwise applicable federal, provincial and municipal laws. For example, destruction must not result in anyone being exposed to cannabis or cannabis vapour, must take place in the presence of two witnesses and producers are to record every instance of destruction and keep these records for a minimum of two years.^[6]

With the exception of destruction of unused cannabis, the *Cannabis Act* and *Regulations* do not address the management of the waste resulting from the production of cannabis.

Provincial and Territorial Regulation

Given the limited guidance of federal law, the regulation of cannabis waste falls to the provinces and territories, all of which have pre-existing waste management regimes.

In Ontario, for example, a well-established and comprehensive regulatory scheme comprised primarily of the *Environmental Protection Act* [7] (“EPA”) and the *Ontario Water Resources Act* [8] (“OWRA”) regulates every aspect of waste. In addition, the *Pesticides Act* [9] and the *Nutrient Management Act* [10] deal with waste issues specific to agricultural operations. Other provinces have similar schemes.

The EPA is the principal environmental framework in Ontario governing waste. The purpose of the Act is to conserve the environment by regulating activities that discharge contaminants into the natural environment. Various regulations have been enacted under the EPA to regulate waste related activities such as soil management, greenhouse gas emissions, waste disposal and landfill sites. Generally, a party is required to obtain an Environmental Compliance Approval (“ECA”) prior to undertaking any activity that will result in the discharge, emission or disposal of contaminants. If a company or producer obtains an ECA, they are only entitled to emit a specified amount and type of emission into the environment for a limited period of time. The EPA imposes various penalties, including substantial fines, for failure to comply.

The OWRA protects and governs the quality of water resources in the province by controlling the discharge of contaminants into local water bodies. Generally, an ECA must be obtained under the OWRA prior to any discharge occurring. Approval must also be obtained for the taking of surface or groundwater at a rate above 50,000 litres per day.

The *Pesticides Act* and the *Nutrient Management Act* regulate the use of pesticides, fertilizers and the application of soil nutrient material to land. Users of these materials are subject to licensing requirements and nutrient-management plan approvals.

It remains unclear just how Ontario’s regulatory scheme governing waste will be applied to waste generated from the production of cannabis. The answer will likely depend on how cannabis operations are ultimately characterized for the purposes of regulation. For example, certain emissions from agricultural operations are exempt from large portions of the EPA, including the requirement under section 9.1 to obtain ECAs prior to discharging a contaminant into the natural environment. As a result, if cannabis growers are considered agricultural operations as opposed to industrial operations they may be exempt from a large portion of Ontario’s waste framework. However, if they are not exempt in this way, they will face strict waste compliance and reporting obligations.

The Future

Cannabis producers are properly focused on destroying cannabis so as not to run afoul of federal law. However, this can lead to cannabis being mixed with other waste, potentially making it unrecognizable as well as unusable and creating complications when it comes to composting and disposal.

While some commentators point to a missed opportunity to repurpose cannabis waste, including the unused portions of the plant into other products such as hemp items and construction materials, as the law currently stands, cannabis producers are largely unable to reuse or repurpose cannabis parts. This leads to unnecessary waste and expense.

New companies are cropping up to deal with cannabis waste opportunities, including start-ups developing technology to dispose of cannabis through a process that results in compostable biomass solids while extracting water clean enough to be reintroduced into the municipal water system.^[1]

Given the absence of clear rules provided by the federal, provincial or territorial governments, cannabis producers should seek legal advice when contemplating what to do with their waste and to help them devise appropriate waste management, disposal and recycling protocols that dovetail with the applicable provincial and territorial regulations. McMillan has the expertise to navigate these regulations and assist cannabis industry members in weighing all of their options.

Ultimately, we should expect higher levels of regulation as the environmental impacts of the cannabis industry become better understood and the industry itself matures. Hopefully, future regulation will provide clarity on cannabis waste management options as well as appropriately incentivizing producers who prioritize environmentally sound practices and sustainability.

by Holly Sherlock, Talia Gordner and Ralph Cuervo-Lorens

[1][ps2id id='1' target=''] [Senate of Canada, Standing Committee on Agricultural and Forestry Evidence](#), (Published 27 March 2018).

[2][ps2id id='2' target=''] *Cannabis Act*, SC 2018, c 16 (Cannabis Act).

[3][ps2id id='3' target=''] *Cannabis Regulations*, SOR/2018-144 (Cannabis Regulations).

[4][ps2id id='4' target=''] Schedule 1, *Cannabis Act*.

[5][ps2id id='5' target=''] Schedule 2, *Cannabis Act*.

[6][ps2id id='6' target=''] *Cannabis Regulations*, s. 146(7).

[7][ps2id id='7' target=''] *Environmental Protection Act*, R.S.O. 1990, c. E19.

[8][ps2id id='8' target=''] *Ontario Water Resources Act*, R.S.O. 1990, c. O.40.

[9][ps2id id='9' target=''] *Pesticides Act*, R.S.O. 1990, c. P.11.

[10][ps2id id='10' target=''] *Nutrient Management Act*, 2002, S.O. 2002, c. 4.

[11][ps2id id='11' target=''] Vancouver Sun, "[Vancouver startup high on technology to process cannabis plant](#)

[waste](#)", (Published 4 April 2018).

A Cautionary Note

The foregoing provides only an overview and does not constitute legal advice. Readers are cautioned against making any decisions based on this material alone. Rather, specific legal advice should be obtained.

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