



# City of Richmond

## Report to Committee

**To:** General Purposes Committee **Date:** November 16, 2021  
**From:** Peter Russell **File:** 10-6175-05-01/2021-Vol 01  
 Director, Sustainability and District Energy  
**Re:** **Metro Vancouver's Proposed Air Emission Regulation for Cannabis Production and Processing Operations Update**

### Staff Recommendation

That the comments regarding Metro Vancouver's proposed regulation to manage emissions from cannabis production and processing operations outlined in the report titled "*Metro Vancouver's Proposed Air Emission Regulation for Cannabis Production and Processing Operations Update*", dated November 16, 2021, from the Director, Sustainability and District Energy, be endorsed and forwarded to Metro Vancouver.

Peter Russell  
 Director, Sustainability and District Energy  
 (604-276-4130)

Att. 1

REPORT CONCURRENCE		
ROUTED TO:	CONCURRENCE	CONCURRENCE OF GENERAL MANAGER
Community Bylaws	<input checked="" type="checkbox"/>	
Building Approvals	<input checked="" type="checkbox"/>	
Development Applications	<input checked="" type="checkbox"/>	
Policy Planning	<input checked="" type="checkbox"/>	
<b>SENIOR STAFF REPORT REVIEW</b>	INITIALS: 	<b>APPROVED BY CAO</b> 

## Staff Report

### Origin

Metro Vancouver is responsible for managing and regulating regional air quality under the authority delegated through the provincial *Environmental Management Act*. Cannabis emissions occur most notably during the flowering, harvesting, drying and trimming phases of cannabis production. Air quality concerns that can arise from this sector include volatile organic compounds (VOC) that can contribute to the formation of harmful ground-level ozone, fine particulate matter and odour.

Metro Vancouver is developing a new air emission regulation for cannabis under Metro Vancouver's *Bylaw No. 1082* and is seeking input from local communities. The input collected will inform Metro Vancouver's proposed regulation and determine how to effectively manage cannabis-related emissions in the region. Metro Vancouver's first phase of consultation began in June 2019. This initial phase of consultation was supported by Metro Vancouver's discussion paper titled "*Proposed Emission Regulation for Cannabis Production and Processing Operations Discussion Paper*". The City's Phase 1 comments were endorsed by Council at the Regular Council meeting, held on January 13, 2020 and were forwarded to Metro Vancouver.

Metro Vancouver consolidated the feedback from Phase 1 and released an updated Discussion Paper in August 2021 to commence the second phase of consultation. This report summarizes Metro Vancouver's updated cannabis emission regulation and provides additional comments on the matter for Council consideration.

This report supports Council's Strategic Plan 2018-2022 Strategy #1 A Safe and Resilient City:

*1.4 Foster a safe, caring and resilient environment.*

### Analysis

#### Proposed Metro Vancouver Cannabis Emissions Regulation

Metro Vancouver is the regional air quality regulator that is responsible for managing air emissions, including cannabis emissions, under the *Greater Vancouver Regional District Air Quality Management Bylaw No. 1082*. Metro Vancouver's proposed regulatory requirements to manage emissions from indoor commercial cannabis production and processing facilities (licensed by the federal government – Health Canada) is categorized under five categories including:

- **Emission Management Plan** - All facilities must prepare and implement an Emission Management Plan, which specifies the number of activated carbon filters, sizes, and mass of activated carbon, air flow rates and replacement frequency of activated carbon. For facilities with a growing area greater than 200 m<sup>2</sup>, the plan must be prepared by a qualified professional, be approved by Metro Vancouver, and confirm analytical testing of activated carbon to determine replacement efficiency.

- **Emission Control Requirements** – Volatile Organic Carbon emissions must be captured and treated with activated carbon filters to the maximum extent feasible at all times, based on industry best practice assessed periodically. VOC emission controls must achieve minimal control efficiencies, and include mandatory features such as rapidly closing doors.
- **Complaints Response Plan** - All facilities must prepare and implement an air quality complaints response plan that includes contact information, recording and investigation procedures, remedial actions, and a communication plan. The current proposals call for cannabis production operations to receive, track, and respond to complaints in addition to Metro Vancouver addressing complaints through its air quality complaint response service.
- **Required Records and Reporting** - All facilities must keep records and report information annually related to activated carbon usage, facility operations and complaints.
- **Minimum Distance Requirement** - New facilities must be located more than 200 metres from land zoned for residential use, hospitals, schools, daycares, playgrounds and community care facilities. Existing facilities would not have to meet this new requirement if the regulation is approved.

As proposed, only indoor production facilities will be subject to this regulation. Metro Vancouver will not subject outdoor operations under this regulation if approved. Indoor cannabis operations would have the choice of being registered under the regulation or applying for a site-specific air contaminant discharge permit if they are unable to meet the future regulation requirements. Under a site-specific air contaminant discharge permit scenario, the applicant would be required to notify relevant municipalities, health authorities and other potentially concerned persons or agencies of the application and feedback on the specific permit would be collected by Metro Vancouver. The application would be evaluated by Metro Vancouver for administrative and technical completeness, and Metro Vancouver would consider comments, responses and current best practice for emission mitigations to develop the emissions permit requirements for the individual facility. This process can take anywhere from several months to a year or more, depending on the complexity of the application, the quality of information provided by the applicant and the public notification process.

The facilities that would be subject to the potential emission regulation include operations conducting indoor cultivation, cultivation by several individuals in cooperatives, cannabis processing operations such as drying, trimming and harvesting of cannabis plant material and cannabis oil and active ingredient extraction facilities. Outdoor cultivation, personal growing of cannabis plants under BC's *Cannabis Control and Licensing Act* and the federal *Cannabis Act*, and cultivation under the federal *Industrial Hemp Regulations* will not be covered under the proposed regulation.

The City's Phase 1 Comments, endorsed in January 2020, are included in Attachment 1. Many of the technical comments related to odour control and emissions standards have been addressed by Metro Vancouver. Outstanding items related to enforcement and Metro Vancouver staff resources have not been addressed including:

1. The City recognizes that odour detection and perceived odour impacts can be subjective and difficult to quantify. The City recommends establishing industry-specific air quality standards, similar to those developed for the provincial *Contaminated Sites Regulations* for site vapour, air, water and sediment. Metro Vancouver should work with laboratories to develop standardized quantitative cannabis air emissions assessment methodologies to facilitate regional compliance and enforcement;
2. The City requests more information on how Metro Vancouver intends to address outdoor cannabis production/cultivation as permitted under Provincial ALR Legislation and requests that a specific approach be developed by Metro Vancouver to address emissions from outdoor operations and private growers; and
3. That Metro Vancouver develop a staff resource plan for enforcement that includes an immediate, full-time enforcement resource to address existing regional enforcement concerns and includes provisions for future enforcement staff as the number of these facilities establish operations in the region.

#### Implications to the City of Richmond

The City's current regulatory framework for cannabis production and/or processing facilities contained in the Official Community Plan (OCP) and Zoning Bylaw requires consideration and approval of a rezoning application to allow this use. The OCP land use policies currently directs cannabis production and related activities to industrial areas. Use of agricultural land for cannabis production and related activities is not permitted in the OCP and regulated to the fullest extent possible in the Agricultural Land Reserve. The OCP also contains a policy to limit cannabis production activities to one facility only and any additional facilities may be considered on a case-by-case basis.

If additional rezoning applications for cannabis production and/or processing facilities are received by the City, processing of these rezoning applications will need to be coordinated with Metro Vancouver emission regulation requirements. Council approved cannabis facilities operating in Richmond will be subject to the proposed regulations and will be required to meet the requirements of the proposed regulation or apply for a site-specific permit if the regulation is implemented.

Staff have concerns about Metro Vancouver's proposal to include a minimum distance requirement for cannabis production and processing facilities from certain sensitive land uses (i.e. residential use, hospitals, schools, daycares, playgrounds and community care facilities) and have provided these comments in the "Metro Vancouver Phase 2 Staff Comments" section of this report.

#### Metro Vancouver Phase 2 Staff Comments

Staff have participated in a number of stakeholder meetings and webinars coordinated by Metro Vancouver and have reviewed Metro Vancouver's Phase 2 Discussion Paper. Metro Vancouver identified the City's Advisory Committee on the Environment (ACE) and Food Security and Agricultural Advisory Committee (FSAAC) as stakeholders. Metro Vancouver staff presented to

ACE (on October 13, 2021) and FSAAC (on October 28, 2021) to provide an overview of the proposed regulatory approach. No comments related to the matter were noted.

Staff have evaluated the Metro Vancouver response to Phase 1 comments, and when necessary, comments have been updated and restated in the following Phase 2 comments. Staff recommend that Council endorse the comments below for submission to Metro Vancouver:

1. The Emissions Control Plans and Emission Control Requirements should specifically be designed to control odour, and not just VOC.
2. Metro Vancouver is proposing this regulation for indoor cannabis operations. Explicit definitions for indoor, outdoor and greenhouse structures are needed to support the proposed regulation to avoid misinterpreting differing design concepts or alterations.
3. Metro Vancouver should require a Qualified Professional to generate all Emission Control Plans for all facilities, and not just larger operations (growing area greater than 200 m<sup>2</sup>). In addition, Metro Vancouver should develop resources such as guidelines, for Qualified Professional to encourage the consistent preparation of Emission Control Plans should the regulation be approved.
4. Metro Vancouver should include in this proposed regulation, or in an additional aligned initiative, a comprehensive plan to manage odour and odour complaints originating from outdoor and personal cannabis cultivation.
5. The City agrees that Metro Vancouver should have the administrative powers to issue appropriate penalties for contravening this proposed cannabis emission regulation. The City is seeking confirmation that the existing fine structure in Metro Vancouver's *Bylaw No. 1082* will be adopted if approved.
6. Metro Vancouver should conduct inspections of all cannabis facilities against the approved Emission Control Plan, upon start-up, annually and in response to complaints from the public at the operator's expense. Analytical air quality testing should be completed by Metro Vancouver to ensure VOC, and potentially odorous chemicals are not allowed to be discharged, and the emission controls are working adequately.
7. Adequate community notification and cannabis operation transparency should be a central requirement of the cannabis regulation. Complaints from the public should not be directed to the individual cannabis facility, but remain directed to Metro Vancouver.
8. Metro Vancouver should confirm new staffing resources are in place to ensure compliance to the proposed regulation and to enforce penalties on non-compliant cannabis operations.
9. Related to the minimum distance requirements proposed, the City currently requires facilities to enter the rezoning process, which provides opportunity for a site specific assessment and community consultation as part of Council's consideration of any proposed rezoning. Minimum distance requirements within the proposed emissions regulation should be reconsidered for the following reasons:
  - a. Establishing a minimum distance or setback requirement for these operations would limit local government autonomy in relation to implementing regulations for cannabis production and processing activities;

- b. Local Government land use policy and regulation, through the Official Community Plan and Zoning Bylaw, are the best suited tools to place minimum distance requirements, should that be the intent of the Local Government based on the local context and existing land use policies towards managing cannabis related facilities under their jurisdiction; and
  - c. It remains unclear how Metro Vancouver would implement or enforce a minimum distance requirement for cannabis production and processing activities.
10. Metro Vancouver should develop a plan to directly liaise with all existing licensed commercial cannabis operations in the region (including Richmond) to communicate information on and achieve compliance with requirements of the cannabis production and processing emission regulations, once adopted by Metro Vancouver.

### **Financial Impact**

None.

### **Conclusion**

Emissions from cannabis production and processing can include VOCs which contribute to the formation of ground-level ozone, and nuisance odour which can impact the quality of life of Richmond residents. Metro Vancouver's proposed cannabis emission regulation is intended to provide a streamlined mechanism to manage emissions from the cannabis sector and to protect the environment and human health. Staff have identified opportunities to improve the proposed regulation for Richmond residents by bolstering the amount of Metro Vancouver application review, and enforcement effort, while maintaining Richmond's ability to manage these activities based on the existing regulatory framework contained in the OCP and Zoning Bylaw. If endorsed, the comments included in this report will be sent to Metro Vancouver to inform the final Cannabis Emissions regulation.



Chad Paulin  
Manager, Environment  
(604-247-4672)

Att. 1: Richmond's Phase 1 Comments: Metro Vancouver Proposed Cannabis Air Emission Regulation

**Richmond's Phase 1 Comments: Metro Vancouver Proposed Cannabis Air Emission Regulation**

The following comments were endorsed by Council at the January 13, 2020 Regular Council meeting and forwarded to Metro Vancouver:

1. Some cannabis operations may not require a site-specific permit if they adhere to the operating requirements proposed in the new regulation. The City requests that all operations, including those that meet the minimum operating standards as proposed, be required to obtain a site-specific air contaminant discharge permit from Metro Vancouver.
2. Existing and future operations will have the option of meeting the future requirements of the regulation or obtaining a site-specific air contaminant discharge permit from Metro Vancouver. Both regulatory options should explicitly prohibit the ventilation of untreated air to the environment during the stages of cannabis production including harvesting, drying, trimming and packaging that pose the greatest risk to emit odour generating air contaminants.
3. Technological solutions for cannabis emissions are an effective way to reduce odorous emissions. Consideration should be given to the potential noise disturbances of such technologies to the surrounding area and additional resource requirements such as energy and water needed to run complex air treatment systems. Carbon filters, for example, may reduce airflow needed for production, so additional fans may be required for circulation.
4. The City does not support the use of technologies such as ozone generators or masking agents that introduce volatile organic compounds, fine particulates, by-products or subsidiary waste into the environment.
5. The City recognizes that odour detection and perceived odour impacts can be subjective and difficult to quantify. The City recommends establishing industry-specific air quality standards, similar to those developed for the provincial *Contaminated Sites Regulations* for site vapour, air, water and sediment. Metro Vancouver should work with laboratories to develop standardized quantitative cannabis air emissions assessment methodologies to facilitate regional compliance and enforcement.
6. The proposed regulation targets commercial/industrial cannabis production for the recreational market. The City also expects an increase in private cannabis production in the community pursuant to the federal *Cannabis Act*. The City requests that Metro Vancouver consider addressing the emissions from private cannabis growers within the proposed regulations and the nuisance complaints that will be subsequently reported.
7. The City requests more information on how Metro Vancouver intends to address outdoor cannabis production/cultivation as permitted under Provincial ALR Legislation and requests that a specific approach be developed by Metro Vancouver to address emissions from outdoor operations.
8. The City requests Metro Vancouver create and maintain a public database that houses all of the information related to site-specific air contaminant discharge permits decisions, permit conditions and a record of formal odour complaints listed by permit number.
9. That Metro Vancouver develop a staff resource plan for enforcement that includes an immediate, full-time enforcement resource to address existing regional enforcement concerns and includes provisions for future enforcement staff as the number of these facilities establish operations in the region.