

Disrupting Canada's Marijuana Grow Industry

Four deterrents intended to limit a primary funding
source for Organized Crime Groups



A submission to the Standing Committee on Justice and Human Rights on April 30, 2009 by:

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Royal Canadian Gendarmerie royale
Mounted Police du Canada



Executive Summary

Growing marijuana in Canada continues to be a lucrative business – estimated at \$6 billion per year in British Columbia alone.¹ RCMP statistics show the number of marijuana plants seized across Canada increased eight-fold between 1993 and 2007, from about 238,000 plants to almost 1.9 million per year. In that same time frame, the amount of marijuana seized grew almost seven-fold, from 7,314 kilograms to 49,918 kilograms. About ninety per cent of the seizures occurred in B.C., Ontario and Quebec, although the displacement of grow operations to the Prairies and the Maritimes is occurring.²

The RCMP has identified an increased number of marijuana growing operations in rural communities and remote areas in Canada, and notes that marijuana trafficking remains highly profitable for organized crime. Far from being small independent outfits, grow operations are considered by the RCMP to be money machines that fund major crime networks. B.C.'s Organized Crime Agency has estimated that organized crime groups control 85% of B.C.'s marijuana trade. According to the RCMP, most crime groups in Canada are involved at some level of the marijuana trade.³

The United States remains a key market for Canadian marijuana – a continuing concern for law enforcement authorities on both sides of the border.⁴ Marijuana has become a form of currency for crime groups, and is widely traded in the U.S. for guns, cocaine, MDMA (Ecstasy) and illegal tobacco⁵.

In B.C., the RCMP believes 50-80% of the province's marijuana is exported to the U.S.⁶ Across Canada, seizures of U.S.-bound Canadian marijuana at the border rose from 2,235 kilograms in 2000 to 15,697 kilograms in 2003.⁷ While the number of seizures dropped by 36% in 2007, the quantity seized increased by 65%, suggesting larger-sized shipments. This aligns with the RCMP's observation that organized crime groups involved in marijuana cultivation showed increased proficiency, mobility and sophistication in 2007.⁸

While Canada's marijuana industry has thrived, the criminal justice system has struggled to keep pace. Despite a greater coordinated response at the provincial level and the widespread introduction of dedicated marijuana police teams, the problem persists, as the continuing atmosphere of high reward and low penalties draws more criminals into this lucrative illegal industry. Over the years this issue has absorbed a growing share of anti-drug policing resources – to the point that marijuana grow operations constitute more than half of all drug cases for some Canadian police forces.⁹

The problem has stretched police resources and overloaded the court system. In B.C., the proliferation of organized criminal groups has forced police to concentrate on the greatest threats, which has allowed smaller groups to become more sophisticated and experienced. It is estimated that between 2007 and 2008, police had the capacity to investigate approximately 23% of known organized crime groups, down from 30% in 2003.¹⁰

Aside from funding organized crime, marijuana grow operations bring myriad public safety risks to Canadian communities, including fire, electrocution, structural hazards and violence. Largely due to unsafe and illegal electrical practices, the likelihood of a grow operation catching fire is one in 22 – that is, a home with a grow operation is 24 times more likely to catch fire than a typical home.¹¹ Notably, violence is on the rise, including an increase in homicides, armed confrontations, drive-by shootings, "grow rips" and extortions.¹² B.C. in particular has experienced a recent spate of gang-related violence.

¹ Based on comments by RCMP "E" Division Deputy Commissioner Gary Bass at a May 2, 2008 Consultation Workshop to Eliminate Use of Hydroponic Equipment in Marijuana Grow Operations.

² *Drug Situation in Canada – 2001 and 2007*, written by the RCMP Criminal Intelligence Directorate (2002/2008).

³ Information in this paragraph from: RCMP Criminal Intelligence Directorate (2008); *Eliminating Residential Grow Operations – An Alternative Approach*, by Surrey Fire Chief Len Garis (2005); and the Organized Crime Agency of British Columbia's Annual Report (2001).

⁴ RCMP Criminal Intelligence Directorate (2008).

⁵ RCMP "E" Division Deputy Commissioner Gary Bass (2008) and RCMP Criminal Intelligence Directorate (2008).

⁶ *Eliminating Residential Grow Operations – An Alternative Approach*, by Surrey Fire Chief Len Garis (2005).

⁷ RCMP Criminal Intelligence Directorate (2004).


⁸ RCMP Criminal Intelligence Directorate (2008).

⁹ RCMP Criminal Intelligence Directorate (2004).

¹⁰ RCMP "E" Division Deputy Commissioner Gary Bass (2008).

¹¹ *Marihuana Growing Operations in British Columbia Revisited 1997-2003*, conducted by Dr. Darryl Plecas, Aili Malm and Bryan Kinney (2005) through the Centre for Criminal Justice Research at the University of the Fraser Valley.

¹² RCMP "E" Division Deputy Commissioner Gary Bass (2008)



Certainly, the recent introduction of municipal safety inspections in a number of B.C. communities, in addition to targeted programs in other Canadian provinces, has started to address these public safety threats. However, the continuing persistence and adaptability of Canada’s marijuana trade makes it clear that a multi-pronged approach is necessary to have a significant impact on this issue.

Even as new measures are implemented across Canada, the marijuana industry nimbly adapts its practices. For example, in B.C., legislation was introduced that gives cities direct access to electricity consumption records, helping them identify properties with unusually high power use – a key indicator of a grow operation. This important tool supported the widespread implementation of municipal safety inspections in cities across B.C. How did the marijuana growers adapt? Increasing numbers are resorting to stealing power rather than paying for it. As well, more and more grow operations are moving to areas that either don’t have inspection programs or don’t have the municipal governance structure necessary to establish them.

That being said, the widespread success of these programs demonstrates how a multi-faceted approach can have an impact on the marijuana trade and the crime networks it funds. This submission describes some of the necessary steps forward to address this endemic and complex problem from many angles. It’s important to note that some of these ideas have already been recommended by the National Coordinating Committee Working Group on Marijuana Grow Operations.¹³

1. **Disruption of funding sources** – increase the sharing of information to ensure the Canadian Revenue Agency can pursue tax audits of individuals with marijuana and drug production income.
2. **Regulate access to equipment** – regulate or control the sale and purchase of hydroponics equipment, used in the majority of grow operations.
3. **Monitor legal grow operations more closely** – licenced indoor medical grow operations share the same risks as illegal operations and operate with minimal scrutiny.
4. **Research, and adapt** – apply resources to researching new detection technology, to assessing regional programs and to monitoring the overall marijuana trade, in order to develop approaches that work.

Without a doubt, some successes have been achieved by targeted efforts initiated in recent years across Canada. It is also evident that more must be done. Just as the marijuana industry adapts and changes when faced with obstacles, we must also continue to adjust and expand our approach.

The solutions outlined in this submission are the next logical step forward; if implemented, they will have a significant impact on Canada’s marijuana industry, on the crime groups it supports, and on the safety of all Canadian citizens. Although there is some indication of a recent decline in the marijuana industry, it remains a highly lucrative criminal enterprise, and the organized crime groups behind it are quickly adapting and growing more sophisticated. Unless these and other strategies are pursued, a resurgence in Canada’s marijuana trade is inevitable.

¹³ NCC Working Group on Marijuana Grow Operations, *Report and Recommendations to Ministers* (2003).

Deterrent 1: Tax Audits of Illegal Drug Production Income

PROBLEM

Criminals are reaping enormous undeclared profits from the production of marijuana and other drugs, despite a Canada Revenue Agency program that collects tax from those suspected of earning income from illegal activities.

BACKGROUND

Cultivating marijuana represents an estimated \$6 billion of trade per year in B.C. alone. Most of that money is income for organized crime: B.C.'s Organized Crime Agency has estimated that organized crime groups control 85% of B.C.'s marijuana trade, and the RCMP believes most crime groups in Canada are involved at some level of the marijuana trade.¹⁴

The considerable income gained from illegal grow operations, as well as the production of other drugs, is neither declared nor taxed. However, proceeds of crime in Canada are taxable, and the Canada Revenue Agency (CRA) operates a Special Enforcement Program (SEP) that conducts audits or undertakes other civil enforcement actions on individuals suspected of earning income from illegal activities. Through the SEP, the CRA conducted more than 1,100 audits in 2007-08 of taxpayers suspected of earning income illegally, resulting in the identification of \$82.2 million in additional taxes owing.

Here is an illustration of the potential lost tax revenue from grow operations in one city alone. An average grow operation has 250 plants, each of which produces roughly 100 grams of marijuana four times a year, for a total annual yield of 100,000 grams (100 kilograms). With a sale price of \$3,500 per kilogram, this creates an annual revenue of \$350,000 for a single operation. In 2008, 277 grow operations were identified in the City of Surrey, B.C. If all were of average size and operated for a full year, they would have produced almost \$97 million in revenue.¹⁵

Based on 2008 tax rates, that revenue represents more than \$28 million in federal taxes and \$14 million in provincial taxes, for one year in one city. Given that audits review four years of income, those figures could be multiplied by four. RCMP analysis has estimated that B.C. alone has 20,000 grow operations¹⁶ – representing as much as \$7 billion in revenue, or \$3 billion in lost tax revenue that could benefit Canadians.

Economic sanctions can be successful in deterring grow operations, as evidenced in the City of Surrey following the introduction of Electrical and Fire Safety Inspections and a cost-recovery Controlled Substances Property Bylaw. Prior to the bylaw, 4-12% of grow operations addressed by either the RCMP or the EFSI later re-established; after the bylaw, the number dropped to 0.

Also of note is a recommendation by the National Coordinating Committee Working Group on Marijuana Grow Operations for increased intelligence-sharing between police, CRA and provincial tax authorities.¹⁷

KEY ISSUES

- **Organized crime groups receive significant income from the production of marijuana and other drugs, but pay no tax on it.**
- **Opportunities to tax this lucrative illegal activity are being missed** because there is no mechanism to automatically share information about suspected or confirmed drug production operations with the CRA. Citizens across Canada could benefit from this significant source of tax revenue.
- **A high risk of being audited would provide a strong financial deterrent to growing marijuana or producing other drugs** – further disrupting a significant funding source for organized crime networks.

SOLUTIONS

We recommend that legislation be introduced to achieve the following:

- That the police and municipal safety inspection programs be directed to report to the Canada Revenue Agency all individuals who are prosecuted for or suspected of conducting an illegal marijuana grow or drug production operation, and that the CRA review and take appropriate action.

¹⁴ Organized Crime Agency of British Columbia's Annual Report (2001); RCMP Criminal Intelligence Directorate (2008).

¹⁵ Sample figures derived from the City of Surrey, B.C. and Plecas *et al.* (2005).

¹⁶ Garis (2005).

¹⁷ NCC Working Group on Marijuana Grow Operations (2003).

Deterrent 2: Greater Regulation of Hydroponics Equipment

PROBLEM

Hydroponics equipment is being used in Canada to illegally grow marijuana. This high-wattage equipment, and the unsafe methods used to install it, bring a high risk of fire and electrocution to communities and emergency responders, along with violence and other hazards typically associated with grow operations.

BACKGROUND

While many gardeners use hydroponics equipment to grow tomatoes and orchids, scores of criminals are using similar procedures to illegally harvest marijuana. Based on estimates, as many as 15,000 dangerous hydroponic grow sites could be operating in B.C. alone., using sophisticated high-wattage equipment such as 1000-watt bulbs, fans, pumps and other devices.¹⁸

These illicit operations typically use an unsafe, unapproved network of electrical wiring that poses significant electrocution and fire risks, according to electrical engineer Richard van Leeuwen's report (2004) on the electrical risks associated with grow operations. In fact, the likelihood of a grow operation catching fire is one in 22 – that is, a home with a grow operation is 24 times more likely to catch fire than a typical home.¹⁹ Other risks include structural hazards, mould and violence.

Hydroponic equipment is generally used for all indoor grow operations, which in B.C. make up 75% of a \$6-billion industry with clear links to organized crime.²⁰ In addition, to fuel the extreme electricity needs of hydroponic equipment, many illegal growers steal power by tampering with or bypassing their electricity meter; BC Hydro estimated its loss from grow operation theft between 2002 and 2006 was 275 to 525 GWh/year, valued at about \$16 million to \$33 million per year.²¹

Currently, there is no regulation or inspection requirement for sales of hydroponic equipment for residential settings, even though this high-wattage equipment, if improperly installed, could pose a safety risk even for legal indoor gardening.²²

Commercial hydroponics operations are already subject to government controls and inspections that would hinder the establishment of a grow operation.

Given the prevalence of hydroponics used for marijuana production, any reduction or restriction to hydroponic grow operations would have a significant impact on the overall marijuana trade. Regulations on hydroponics equipment sales may cause some inconvenience to vendors and legitimate residential users, but these are far outweighed by the public safety benefits and the potential to disrupt a key income source for organized crime. The regulation of hydroponics equipment sales was among the recommendations of the National Coordinating Committee Working Group on Marijuana Grow Operations.²³

KEY ISSUES

- **The illegal marijuana industry that supports organized crime groups relies heavily on the use of hydroponics equipment.**
- **High-wattage hydroponics equipment is being installed unsafely and without permits or inspections in residential settings to grow marijuana,** bringing to neighbourhoods an increased risk of fire, electrocution, violence and other hazards.
- **Regulating the sales and purchase of hydroponics equipment and supplies for residential use would hurt the illegal marijuana trade** while ensuring that the equipment is installed safely in legal applications.

SOLUTIONS

We recommend that legislation be introduced to achieve the following:

- That the sale of hydroponics equipment in Canada is regulated and controlled on the basis that this high-wattage equipment is a safety risk in any residential setting if improperly installed.

¹⁸ Plecas *et al.* (2005); *Marihuana Grow Operations and Hydro Bypasses Report*, Richard van Leeuwen, P.Eng (2004).

¹⁹ Plecas *et al.* (2005).

²⁰ Plecas *et al.* (2005); RCMP Criminal Intelligence Directorate (2008).

²¹ Letter by Ray Steward, BC Hydro's Chief Safety, Health and Environment Officer, to Surrey Fire Chief Len Garis on May 10, 2007.

²² Based on comments by electrical engineer Richard van Leeuwen at a May 2, 2008 Consultation Workshop to Eliminate Use of Hydroponic Equipment in Marijuana Grow Operations.

²³ NCC Working Group on Marijuana Grow Operations (2003).

Deterrent 3: Greater Regulation of Medical Marijuana Production

PROBLEM

No mechanism is in place to ensure that individuals legally growing medical marijuana in a residential setting – as licensed under federal Marijuana Medical Access Regulations – are adhering to provincial, regional and municipal fire, safety and electrical regulations. The result is increased and unaddressed fire, health and safety risks to the building occupants and emergency responders.

BACKGROUND

Administered by Health Canada, the Marijuana Medical Access Regulations (MMAR) do not “supersede other legislation, including municipal bylaws. Individuals licensed under the MMAR are required to observe all other laws, including bylaws such as zoning, fire and safety regulations.” However, “it is not the mandate of Health Canada to verify the safety standard of each production site.”²⁴

Canadian fire departments are finding that growers licensed under the MMAR are not adhering to those zoning, fire and safety regulations. A recent example: when Ontario’s Niagara Falls Fire Service inspected a residential MMAR grow operation on June 20, 2008, it discovered numerous violations of the provincial fire code, building code and electrical safety code. A family with two young children lived in the house, which contained the grow operation on its third storey. This was the second such site inspected by the department within a year.

In B.C., the City of Surrey’s Electrical Fire Safety Team has inspected eight residential MMAR grow operations in the past three years. The city was alerted to the sites because they consumed five times the average daily electricity usage. Violations of municipal regulations were found at all sites, as well as numerous violations to the provincial electrical code, building code and fire code. Four sites required immediate electrical remediation, and there was also evidence of improper chemical storage, mould and excess moisture, electrical violations, fire hazards, and structural changes that would help spread flames and heat in a fire.

As of July 4, 2008 (the most recent statistic available), 2,017 Canadians had MMAR licenses to grow medical marijuana, up from 1,374 in July 2007, 1,045 in June 2006 and 586 in July 2005. But as the numbers of licenced operations steadily rises, there is no mechanism to inform the communities of their existence. This not only brings unnecessary public safety risks to Canadian communities, but also prevents local authorities from monitoring the sites to ensure they limit their marijuana production to medical use.

KEY ISSUES

- **Growing marijuana indoors – legally or not – tends to result in health, fire and safety hazards** related to electrical reconfiguring, structural changes and excessive moisture.
- **MMAR licensees are changing the use of buildings without obtaining permits** that would ensure the safety of occupants and emergency responders.
- **No procedure is in place to inform local governments of MMAR licenses issued in their communities.** This means cities have no triggers to conduct inspections to ensure the sites meet all necessary building, fire and electrical safety regulations, and are later remediated after the license is expired. This omission also places future occupants or purchasers at risk, from both a health/safety and financial perspective.

SOLUTIONS

We recommend that legislation be introduced to achieve the following:

- That Health Canada require electrical, fire and building inspections as part of the MMAR license approval process.
- That Health Canada inform local governments of MMAR licenses issued in their communities, so cities can ensure the sites comply with provincial and local regulations.



Hazards found at medical grow operations in Surrey, B.C. – signs of mould and electrical issues above, and electrical and fire safety issues below.



²⁴ Communication from Ronald Denault, Manager Marijuana Medical Access Division Drug Strategy and Controlled Substances Programme, dated February 2, 2008.

Deterrent 4: Funding to Support Research

PROBLEM

Funding support is needed to research technology that could assist in detecting illegal marijuana grow operations, and to regularly assess and share information about strategies being implemented across Canada to address the marijuana trade.

BACKGROUND

Scientific innovations can help us find better ways to do things. Certainly, a technological advantage would benefit those fighting against Canada's illegal marijuana industry, in which growers quickly adapt and evolve in order to protect this critical income source for organized crime. However, funding for research and development is not readily available.

As part of its ongoing efforts to eliminate marijuana grow operations, the City of Surrey, B.C. has self-funded research into an electromagnetic radiation analyzer that can detect, from a moving vehicle, the high-wattage hydroponics equipment used in grow operations. The equipment shows promise, but there are limits to a city's ability, or civic taxpayers' willingness, to fund scientific research of this type.

Another potential research project would examine the use of airborne longwave hyperspectral imagery to detect clandestine drug labs, which also have connections to organized crime.²⁵ Hyperspectral imaging sensors have wide-area surveillance and detection capabilities that offer investigative agencies and first responders the ability to detect chemical production threats before they can become a public menace. An application to a grant program for this project was rejected.²⁶

These are examples of potential scientific advancements that could enable the authorities to out-manoeuvre the marijuana growers. At the same time, however, innovative programs are being implemented in numerous Canadian cities that bear consideration and support on a larger scale, as well as assessment of their effectiveness.

One example is the public safety inspections taking place in many B.C. communities that are disrupting hundreds of marijuana grow operations each year. Without ongoing analysis of these programs and baseline studies of the Canadian marijuana trade, the effect of these programs is not fully known, and further, opportunities for knowledge-sharing are lost.

To fully develop and exploit the programs and innovations taking place across the country, and to ensure they continue to remain effective, dedicated funding must exist for research targeting illegal narcotics production. The National Coordinating Committee Working Group on Marijuana Grow Operations has also identified the need for a strategy for systematic data collection and analysis.²⁷

KEY ISSUES

- **Lack of dedicated funding is stalling research into technology that could assist in the detection and enforcement of marijuana and drug production operations.**
- **Strategies that target illegal drug operations are being implemented across Canada on an ad-hoc basis,** with no regular assessment to determine their effect on a broader scale, or to share information with other jurisdictions.

SOLUTIONS

We recommend that legislation be introduced to achieve the following:

- That the federal government dedicate funding to research that is intended to eliminate illegal narcotics production, including the development of new detection technology, the ongoing assessment of regional programs and baseline studies of Canada's marijuana trade.

²⁵ RCMP "E" Division Deputy Commissioner Gary Bass (May 2, 2008), regarding the involvement of organized crime in chemical drug production.

²⁶ A 2008-2009 CRTI research proposal was made by a cross-Canada project team including representatives from Defence Research & Development Canada, Canadian Police Research Centre, Telops Inc., McGill University, University of Victoria, RCMP Clandestine Laboratory Investigation Team, Abbotsford Police Department, Quebec Ministry of Public Security, Sûreté du Québec and City of Surrey.

²⁷ NCC Working Group on Marijuana Grow Operations (2003).