CANOPY GROWTH CANNABIS PRODUCTION FACILITY ST. JOHN'S, NEWFOUNDLAND AND LABRADOR

ENVIRONMENTAL ASSESSMENT REGISTRATION

Pursuant to Part X. Section 49 of the NL Environmental Protection Act, SNL 2002

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1.0 NAME OF THE UNDERTAKING

Canopy Growth Cannabis Production Facility

2.0 PROPONENT

2.1 Name of Corporate Body

80694 NEWFOUNDLAND & LABRADOR INC.

2.2 Address:

Cox & Palmer Scotia Centre 235 Water Street - Suite 1100 St. John's NL A1C 1B6

2.3 Chief Executive Officer

Name: Mr. Mark Zekulin

Official Title: Chief Executive Officer

Address: 1 Hershey Drive

Smiths Falls, ON

K7A 0A8

Telephone: 855.558.9333

2.4 Principal Contact Person for Purposes of Environmental Assessment

Name: Mr. Travis Grimes

Official Title: Director Project Management and Expansion

Address: 1 Hershey Drive

Smiths Falls, ON

K7A 0A8

Telephone: 613.799.2571

3.0 THE UNDERTAKING

3.1 Name of the Undertaking

Canopy Growth Cannabis Production Facility

3.2 Purpose/Rationale/Need for the Undertaking

The purpose of the Undertaking is to establish a licensed Cannabis Production Facility in St. John's, Newfoundland and Labrador. The project is being proposed to produce and sell cannabis products within the province, nationally, and potentially to international markets. The project is needed to supply the anticipated demand for licensed cannabis products with the planned legalisation of cannabis in Canada in 2018. Canopy Growth has entered an agreement with the Government of Newfoundland and Labrador to supply cannabis products to licensed retail outlets in the Province. The types of cannabis (including genus/species) which may be grown at the facility are presented in Attachment A.

The East White Hills site was one of two sites considered. The second site location at Aberdeen Avenue in St. John's was also considered (refer to Pinnacle Concept Plan 15034-F025). The proposed East White Hills site was determined to be the most suitable for the project. The East White Hills site was selected because it was the consensus location between the developer and owner. East White Hills was better priced, had better highway access, and was a larger site capable of accommodating future expansion and parking.

4.0 DESCRIPTION OF THE UNDERTAKING

4.1 Geographic Location

The Canopy Growth Cannabis Production Facility (herein in referred to as the "Site") will be located at Civic No. 390 Eastland Drive, in St. John's, NL (47° 36′ 35.02″ North/52° 40′ 39.88″ West). The property is approximately 4.8 hectares in size and has not previously been developed. Access to the Site is via Eastland Drive, a relatively-new commercial cul-de-sac off East White Hills Road, in the northeast end of St. John's. Most of the property is zoned as Commercial Industrial (CI) by the City of St. John's; a very small portion of the property southeast corner is zoned Industrial Special (IS). A small portion of the property northeast corner is zoned as Open Space Reserve (OR). Surrounding properties may be described as follows:

North: The site is bounded to the north by a NL Power pole line easement and further north by vacant wooded property.

East: The site is bounded to the east by undeveloped woodland.

South: The site is bounded to the south by various commercial properties fronting onto Eastland Drive. NLL Recycling Ltd. (a metal-recycling operation) and Robin Hood Bay Waste Management Facility (the regional waste disposal site for the Northeast Avalon) are located approximately 150 m and 350 m, respectively, southeast of the property.

West: The site is bounded to the west by Leon's Furniture warehouse and other undeveloped land fronting onto Sugarloaf Road. The site is bounded to the southwest by undeveloped land fronting onto East White Hills Road. Properties further southwest, across East White Hills Road, are comprised of various Commercial/Industrial businesses, including a large area occupied by A1 Automotive/Newco Metal Recycling Ltd (auto and metals recycling).

Refer to Figure 1: Site Location and Figure 2: Site Plan for details.

4.2 Physical Features

4.2.1 Proposed Undertaking

The project will include the development and construction of a 126,500 ft² (11 750 m²), two-storey, steel-frame structure to house the cultivation of cannabis plants and the production of associated retail products. Refer to Figure 3: Site Details. The building will include up to 33 grow rooms/flowering rooms, as well as locker rooms, lunch rooms, warehousing, distribution, automated bud packaging, offices, and retail. The site will also contain asphalt access/parking areas for staff and visitors and be enclosed within a secure chain-link perimeter fence. The facility will be secure and access will be controlled. The facility will be connected to the City of St. John's municipal water and sewer infrastructure.

4.2.2 Existing Biophysical Setting

The site is largely cleared/grubbed but is otherwise undeveloped. There are no wetlands or watercourses located within or near the property limits. The site was largely treed woodland prior to recent clearing. The nearest waterbody is a bog/wetland area (Lundrigan's Marsh) which is located approximately 350 m to the southwest. A small pond (Sugarloaf Pond) is located approximately 500 m to the northeast and Robin Hood Bay is located 1.3 km to the east. Although there is very limited habitat for terrestrial wildlife on Site, the area has been host to

some bird species and mammals (fox, moose, rodents, etc.). The current site topography slopes moderately towards the west-southwest. The site will be levelled somewhat using a standard cut and fill process to achieve appropriate design elevations and grades as necessary for development and building construction. The surrounding properties are in use primarily for Commercial/Industrial activities; there are very few residential properties in the area and the nearest being several hundred metres to the north.

4.3 Construction

4.3.1 Site Development

Site development/construction will begin in June 2018 (pending receipt of all applicable approvals) and is expected to be complete by June 2019. The key stages of Site development include:

- earthworks (excavation/backfill)
- foundations, floor slab, site services
- structural steel
- building envelope
- building fit-up (mechanical/electrical)
- parking, landscaping.

4.3.2 Sources of Pollution

Potential sources of pollution which may occur during the construction period include:

Solid Waste

Solid waste generated during the construction of the project can potentially negatively impact area watercourses, as well as the esthetics of the area. Good housekeeping practices during the construction phase should effectively mitigate and potential negative effects related to solid waste.

Noise and Dust

Noise and airborne emissions (dust and equipment exhaust) may be associated with heavy equipment (trucks, excavators, compactors, cranes, etc.) and worker activities; these can impact negatively on area residents/businesses and potentially wildlife. The contractor will conform to the City of St. John's Noise bylaws during all site construction activities. Dust suppression measures will be employed, including but not limited to, application of water and calcium

chloride where there is a risk for generation of excess dust. With the implementation of these mitigative measures during construction, noise and dust should not be a significant issue.

<u>Liquid Effluent</u>

Excavation activity associated with Site development may produce unwanted impacts in the form of erosion and siltation from site run-off, which can in turn negatively impact area waterways. Silt fencing, sediment containment basins, infiltration trenches / rock soak-a-ways and stabilized construction entrances will be specified for use for the duration of the site construction phase until surfaces are stabilized with permanent finishes (asphalt, concrete, hard/soft landscaping).

Handling of Petroleum, Oils and Lubricants

Petroleum, oils, and lubricants (POLs) represent a potential source of soil, groundwater, and surface water contamination. Storage and handling of POLs will be strictly controlled during construction. Spill kits will be mandatory on site and a spill contingency plan will form part of the Site Health and Safety Plan.

4.3.3 Resource Conflicts/Mitigative Measures

Various mitigative measures will be incorporated into the project development to minimise the potential for negative environmental impacts. As a result, the potential for a significant pollution event or resource conflict associated with construction related Site activities is relatively low. Refer to Table 1: Summary of Potential Resource Conflicts - Construction

Table 1: Summary of Potential Resource Conflicts - Construction				
Item	Potential Impacts	Mitigative Measures		
Solid Waste	Waste materials may be blown around the site impacting area environment, waterways, etc.	 all refuse to be collected/disposed on a regular basis no burning of wastes permitted good housekeeping practices to be employed at all times and waste will not be permitted to accumulate temporary, self-contained sanitation facilities to be kept on site during construction; these will be pumped and cleaned on a regular basis 		
Noise and Dust	Noise and air-borne emissions associated with construction equipment and worker activity.	 all site work will conform with the City of St. John's noise bylaws respecting hours of work noise control features on equipment and machinery will be maintained per manufacturer specifications dust control measures (application of water or calcium chloride) will be employed as required during construction phase 		
Liquid Effluent	Erosion/sedimentation caused by precipitation events during earthworks can adversely impact area waterways.	 silt fencing, sediment containment basins, infiltration trenches / rock soak-a-ways and stabilized construction entrances to be in use during construction activities to control site run-off and minimise the potential for escape of silty water use of silt screens across ditches 		
Handling of POLs	Accidental release of POLs from construction related equipment can cause contamination of soils, groundwater and surface water.	 all and any storage and handling of POLs will adhere to the Newfoundland and Labrador Environmental Protection Act (including the Storage and Handling of Gasoline and Associated Products Regulations) smoking will be prohibited within 15 metres of any POL storage regular inspections of fuel and hydraulic systems on all heavy equipment will be required; any deficiencies or leaks will be repaired immediately a spill kit and contingency plan will be provided 		

4.4 Operation

4.4.1 Cannabis Production

Cannabis cultivation will take place in a series of grow rooms. Each room will be self-contained with strict environmental controls on temperature, lighting, and humidity through a complex Heating Ventilation and Air Conditioning (HVAC) system. The plants will be grown hydroponically, using a rock wool growth medium, with nutrients supplied in solution. The solution will be fed to the plants and re-circulated/re-used to the extent possible. The cannabis production process will involve the extraction of cuttings from mother plants to create new clone plants that will be grown for the production of cannabis flower, following a generalised sequence of steps that include:

- new clone plants enter a vegetative state of growth until large enough to begin the flowering process
- the plants are put into a flowering state to produce a cannabis flower
- mature plants are harvested for their flower
- the cannabis flower is trimmed and air-dried until it reaches the optimal moisture level
- the dried cannabis flower is packaged into saleable units (jars) of different sizes and product contents
- the dried cannabis flower is milled to be used in the process of cannabis oil production
- cannabis oil is bottled into saleable units (jars) of different size and product content
- medical and recreational cannabis ordered are filled.

Canopy Growth currently operates several similar cannabis production facilities across Canada. This experience has allowed the company to develop Standard Operating Procedures (SOPs) to ensure a high-quality production process with consistent results. The St. John's facility will be GAP/GMP (Good Agricultural Practices/Good Manufacturing Practices) certified.

4.4.2 Sources of Pollution

Potential sources of pollution which may occur during the facility operations include:

Pesticides/Chemical Storage

A variety of pesticides, nutrients and other chemical products will be required in the production process. All pesticides which could be potentially be used at the facility are approved by the Office of Medical Cannabis – Pest Management Regulatory Agency, and may include one or more of the products listed in Attachment B. Pesticide storage will be compliant with all applicable

regulations and guidelines. A complete list of proposed chemicals/nutrients is included in Attachment C.

A limited quantity of these products will be stored within a dedicated chemical storage room. A chemical management plan and spill responses plan will be prepared to address the safe storage, handling and emergency response as relates to these products.

Air Emissions/Odour

Significant amounts of air will be exhausted from the facility and with it the potential for objectionable odours from the operations (from Drying Rooms, grow rooms, etc.) to impact the outside air. Canopy has experience in dealing with this at other production locations in Canada and will implement proven mitigative measures to address potential impacts (carbon filters/ scrubbers and mist cannons). Section 61 of the Access to Cannabis for Medical Purposes Regulations (ACMPR) published by the Federal Government states the following regarding Air Filtration: "Those areas must be equipped with a system that filters air to prevent the escape of odours and, if present, pollen". The Regulations do not specify what technology is applied, as this is decided by the applicant based on the type of facility being built, as the needs can vary (i.e. greenhouse vs. indoor facility, etc.). Typically, with an indoor grow, such as the Newfoundland project, Canopy Growth Corporation uses a combination of Carbon and HEPA filters to meet the requirements of Section 61 of the ACMPR. The system will be evaluated as part of the application procedure applied by Health Canada before a license is issued. As part of the application to Health Canada, HVAC diagrams will be provided, as well as any specifications with the associated equipment, to facilitate their review. After licensing, Health Canada will evaluate the measures in place to meet the requirements of Section 61 of the ACMPR through on-site inspections. Health Canada typically conducts one annual inspection (determines risk rating), and several random inspections throughout the year, based on the site's risk rating. For a new site, we estimate that Health Canada would be on-site at least three to four times in the first year post-licensing. If Health Canada determines that the measures in place are not adequate, the site will receive an observation by Health Canada under Section 61 of the ACMPR. In response to this observation, Health Canada would expect the licensee to take measures to correct the situation. These measures could range from the installation of additional carbon or HEPA filtration systems to more frequent changing of the filters within the existing system(s). Typically, the corrective actions are the decision of the site's Quality Assurance Person, and the corrective measures will be re-evaluated at the next on-site inspection by Health Canada.

There is potential for odour from the nearby (approximately 350 m) Robin Hood Bay Waste Management Facility to impact Site operations. Canopy Growth is aware of this and, given that Site operations are conducted inside the plant, controls in place with the HVAC system should adequately mitigate odours which may periodically emanate from the Robin Hood Bay Site.

Solid Waste

Typical commercial solid wastes will be generated from the site; these will be collected and stored in proper waste containers for off-site disposal. All recyclable materials, such as plastic and cardboard, will be recycled. Vegetative wastes will be generated from the stalk, roots, etc. Plant waste will be denatured, mulched to a fine grade, and mixed with soil for off-site disposal as required by Health Canada. Refer to Attachment D, Process of Destruction of Cannabis, to comply with Health Canada Requirements. Other options will be explored for beneficial re-use of this material as a compost or other product. Any such re-use will be done only with Health Canada approval. Also refer to Attachment E, outlining potential Solid and Liquid Waste Streams.

Noise

Site operations will produce noise through day-to-day activities of shipping and receiving. Most of the shipping and receiving would occur during the daytime and would be typical of that expected for the area. Noise may also be expected from the HVAC system. These systems will be engineered to meet all applicable standards with consideration for excess noise levels.

Liquid Waste

Nutrients are fed to the plants through solution. The nutrients will be supplied to the site in powder and liquid form. Although inputs will be recycled to the extent possible, there will be some liquid waste or effluent discharges generated at the site. Plant leachate is collected from the grow tables and recirculated through a leachate reverse osmosis system (RO). The plant leachate will pass through a paper filter to remove all particulate matter such as stone wool fibres and particles of soilless mix. The used paper from the paper filter, and the particulate matter it removes, will be disposed of as regular garbage. The remaining solution will then be treated using a leachate RO filter system. The product (filtered) water produced from this process will be sent back into the Irrigation System to be reused. The waste water solution will be sent through an evaporator to remove the water, while leaving behind nutrients/fertilizer salts. The evaporated water vapour will be condensed back to water and disposed of in the sanitary sewer. The leftover nutrients/fertilizer salts will be disposed of by a third-party, licensed waste disposal company.

Plant effluent will be treated as necessary to meet the Environmental Control Water and Sewage discharge limits. Refer to Attachment E, outlining potential Solid and Liquid Waste Streams.

- The plant leachate will contain:
 - Water.
 - Nutrient/fertilizer salts:
 - Calcium Nitrate (CANO3)
 - Potassium Sulphate (K2S04)
 - Potassium Nitrate (KNO3)
 - Mono Potassium Phosphate (KH2PO4)
 - Magnesium Sulphate (MGS04)
 - Trace Elements (TE)
 - Particulate matter:
 - Stone wool fibres.
 - Soilless mix particles.
 - Paper particles (from the stone wool wrappers).

Handling of Petroleum, Oils and Lubricants

Petroleum, oils, and lubricants (POLs) represent a potential source of soil, groundwater, and surface water contamination. There will be no on-site storage tank systems containing POLs. The only POLs issue is the potential for a leak or spill associated with delivery trucks. The site will be equipped with the necessary spill response materials to mitigate any associated leaks/spills.

4.4.3 Resource Conflicts/Mitigative Measures

Various mitigative measures will be incorporated into the project development to minimise the potential for negative environmental impacts. As a result, the potential for a significant pollution event or resource conflict associated with Site operations is low. Refer to Table 2: Summary of Potential Resource Conflicts – Operation:

Table 2: Summary of Potential Resource Conflicts - Operation				
Item	Potential Impacts	Mitigative Measures		
Pesticides/ Chemical Storage	Chemical/pesticide spills may occur: 1. resulting in impacts to the environment; 2. Resulting in impacts to human health and safety.	 chemical management plan spill response plan spill response equipment and materials worker training dedicated storage rooms standard operating procedures 		
Air Emissions/Odour	Odours may be generated from HVAC system exhaust air. Odours from the nearby Waste Disposal Site may impact on the Site.	 Mist cannons will be used within grow rooms to suppress odours at source. Odour control will be accomplished within the HVAC system using carbon filters and scrubbers. Site operations occur exclusively inside. Intake air will be filtered to eliminate periodic odours that might occur from the nearby landfill. 		
Solid Waste	Waste materials may be blown around the site impacting area environment, water ways, etc.	 all refuse to be collected/disposed on a regular basis no burning of wastes permitted good housekeeping practices to be employed at all times and waste will not be permitted to accumulate temporary, self contained sanitation facilities to be kept on site during construction; these will be pumped and cleaned on a regular basis 		
Noise	Noise may occur from typical daily activities (such as shipping and receiving), similar to other area businesses; as well as the building HVAC systems.	 all operations will conform with the City of St. John's noise bylaws respecting hours of work noise control features on equipment and machinery will be maintained per manufacturer specifications HVAC systems will be designed, supplied and installed to meet noise control standards 		
Handling of POLs	Accidental release of POLs from delivery trucks.	a spill kit and contingency plan will be provided		

4.5 Occupations

Construction of the Canopy Growth Cannabis Production Facility is expected to create approximately 80 person-years of employment over an approximately 12-month time period. Once in operation, the facility is anticipated to employee approximately 150 personnel in a year-round, seven-day-a-week operation. The vast majority of the workers will be direct hire by the company. Canopy Growth is committed to employment equity relative to age and gender. Hiring practices will be in general conformance with the Atlantic Canada *Employers Guide to Gender Diversity in Employment*.

A breakdown of the projected occupations and numbers of personnel required during the construction and operation phases of the project are outlined in Table 3: Employment Breakdown, below:

Table 3: Employment Breakdown				
Occupation	NOC 2016	Number of Positions	Length of	
			Employment	
Construction Phase (Approximately June 2018 - June 2019)				
Proj	ect Managemen	nt	_	
Project/Construction Manager	0711		Full Time	
Project Superintendent	7302	4	Project	
Site Engineer-Construction	2131	4	Construction	
Construction Foreman/Supervisor	7302		Staff	
Site Lab	our (Various Tra	ides)		
Structural Metal Fabricators & Fitters	7235			
Ironworkers	7236		Full Time	
Electricians	7241		Positions as	
Plumbers	7251		Trades	
Carpenters	7271	160	Personnel are	
Heating, Refrigeration & AC	7313		Required for	
Crane Operator	7371		Construction	
Heavy Equipment Operator	7521		Progress	
Construction Trades - Labourers	7611			
·	erations Phase			
	dministration			
Financial Manager	0111			
Human Resources Manager	0112		Permanent	
Administration Manager	0114	10	Full Time	
Payroll Administration	1432		T dii Tiiric	
General Office Support Worker	1411			
	Management	1		
General Manager	0016			
Facilities Manager	0714		Permanent	
Production Manager	0822	10	Full Time	
Process Manager	0911		T dii Tiiile	
Process Supervisor	2123			
Professional				
Regulatory Affairs	1122	10	Permanent	
Quality Assurance	0911	10	Full Time	
Labour				
Maintenance Technician (Elect)	2241			
Maintenance Technician (Mechanical)	2232	120	Permanent	
Production Assistants	8682	120	Full Time	
Processing/Manufacturing Labour	8432			

4.6 Project Related Documents

Existing project related documents include

- Phase I Environmental Site Assessment 410 East White Hills Road, Stage 2 Development, St. John's, NL. February 22, 2018. This assessment was completed by CBCL Limited to identify any actual or potential impacts that may have resulted from existing or previous land uses or site activities on and adjacent to the Site. The report concluded that there was a low level of concern relative to three areas of potential concern: i) presence of the nearby Municipal Landfill, ii) presence of minor debris (plastics, metal) on site, and iii) potential associated with site fills of unknown origin.
- Geotechnical Sub-surface Investigation Proposed East White Hills Industrial Park, St. John's, NL. December 2010. This investigation was completed by ADI Limited to confirm soil conditions in the development area and make recommendations at to site development. Most of the Site was underlain by a dense to very dense till, with an isolated area of fill up to 1.7 m deep. Bedrock was encountered over much of the Site at depths ranging from 1.0 m to 4.0 m below the existing ground surface.

5.0 APPROVAL OF THE UNDERTAKING

The following is a list of permits, licenses, approvals and authorisations that may be required to enable the undertaking:

Table 4: Summary of Required Approvals				
Authorisation	Legislation	Responsible Department		
Project Registration	NL Environmental Protection Act			
	- Environmental Assessment			
	Regulations	NL Department of Municipal		
	Water Resources Act -	Affairs and Environment		
Discharge to Sewer	Environmental Control Water			
	and Sewage Regulations			
Various	Cannabis Act	Health Canada		
Various	City of St. John's Development	City of St. John's		
various	Regulations and Specifications	City of St. John's		
	NL Environmental Protection Act	Service NL		
Datroloum Starage	 Storage and Handling of 			
Petroleum Storage	Gasoline and Associated			
	Products (GAP) Regulations			

6.0 SCHEDULE

The project is proposed to start between June and August 2018, pending receipt of the necessary approvals. June is the earliest possible date the overall site and foundation design plans will be available from the designers. Construction is expected to take approximately twelve months. The facility should be operational by summer, 2019.

7.0 FUNDING

This project will not require any government loans or grants. The capital cost to complete the undertaking is estimated at \$55,000,000 (CAD).

Date

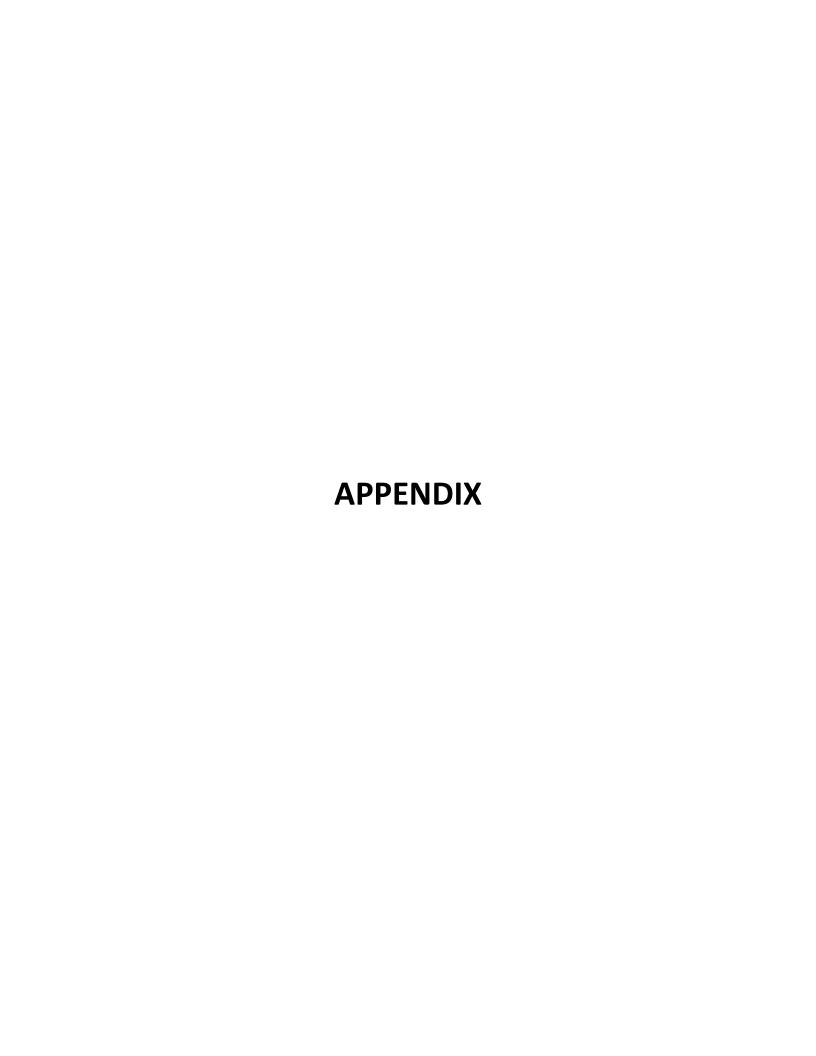
Signature of Chief Executive Officer

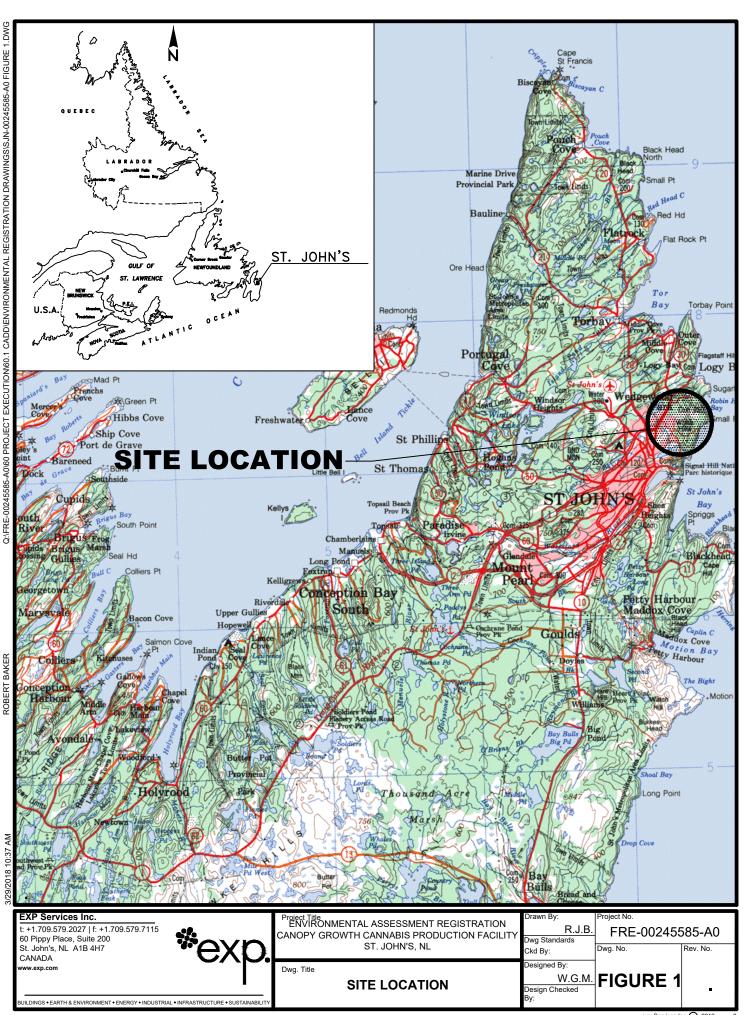
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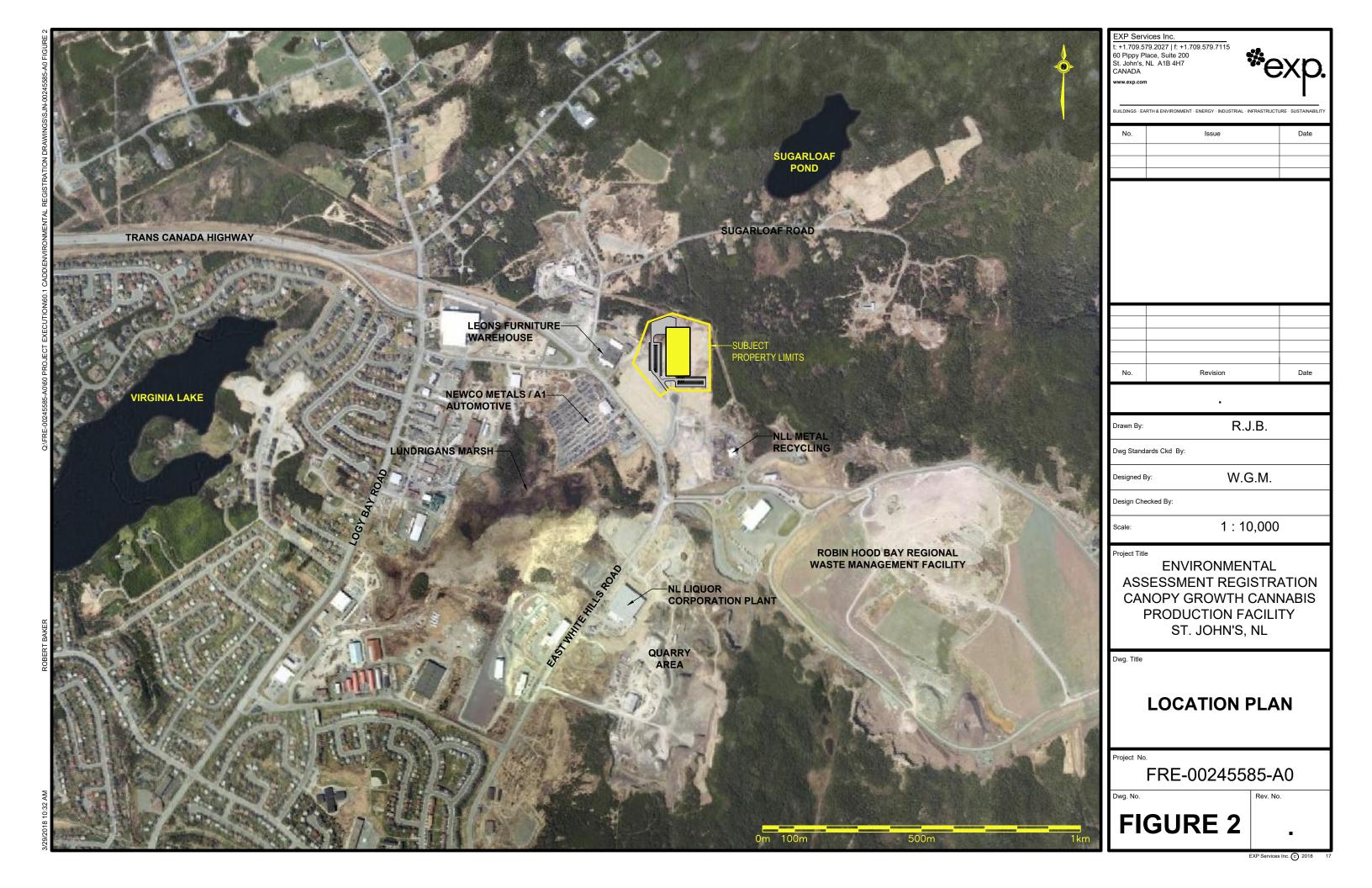
4 Figures

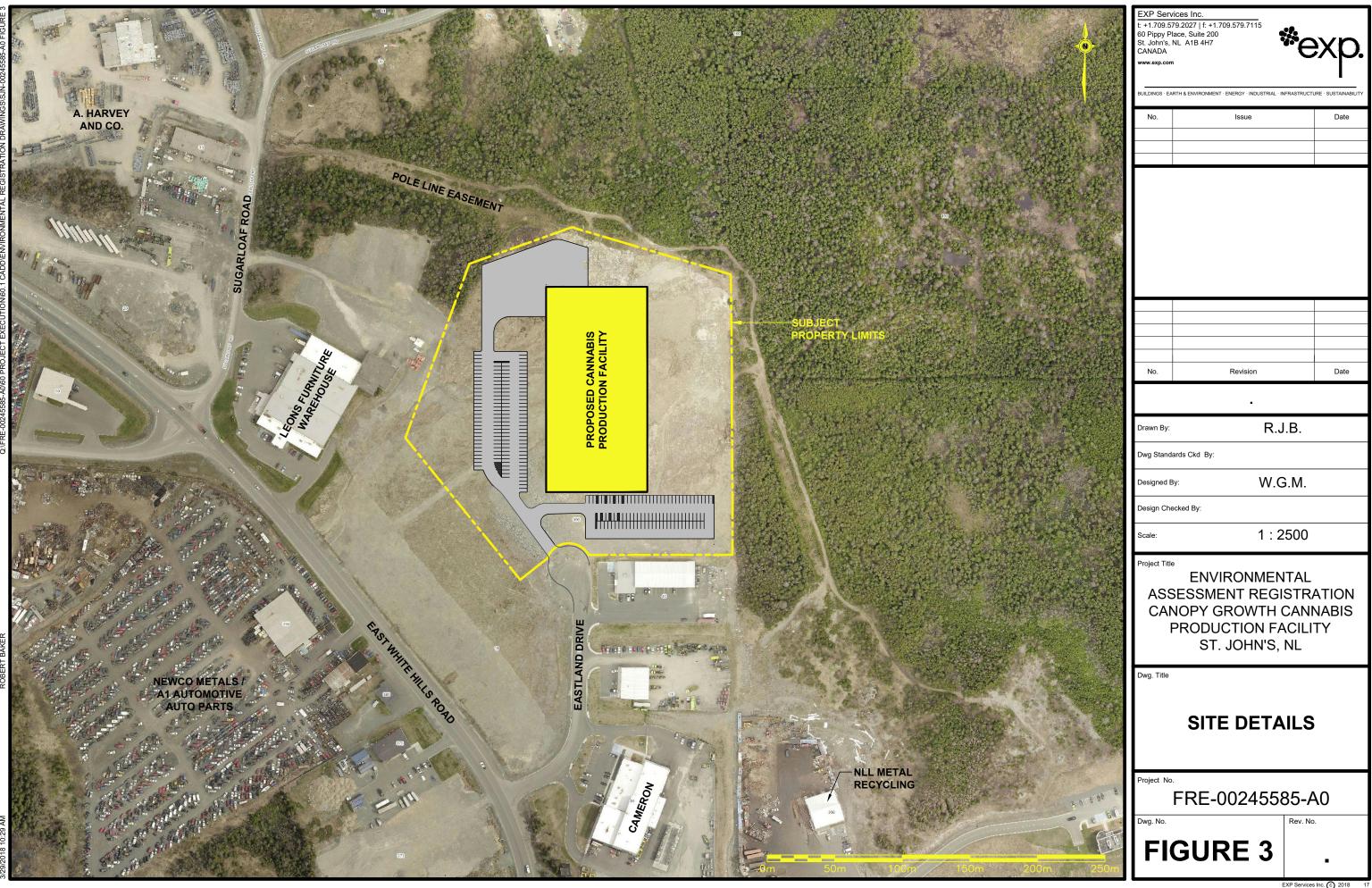
May 3, 2018

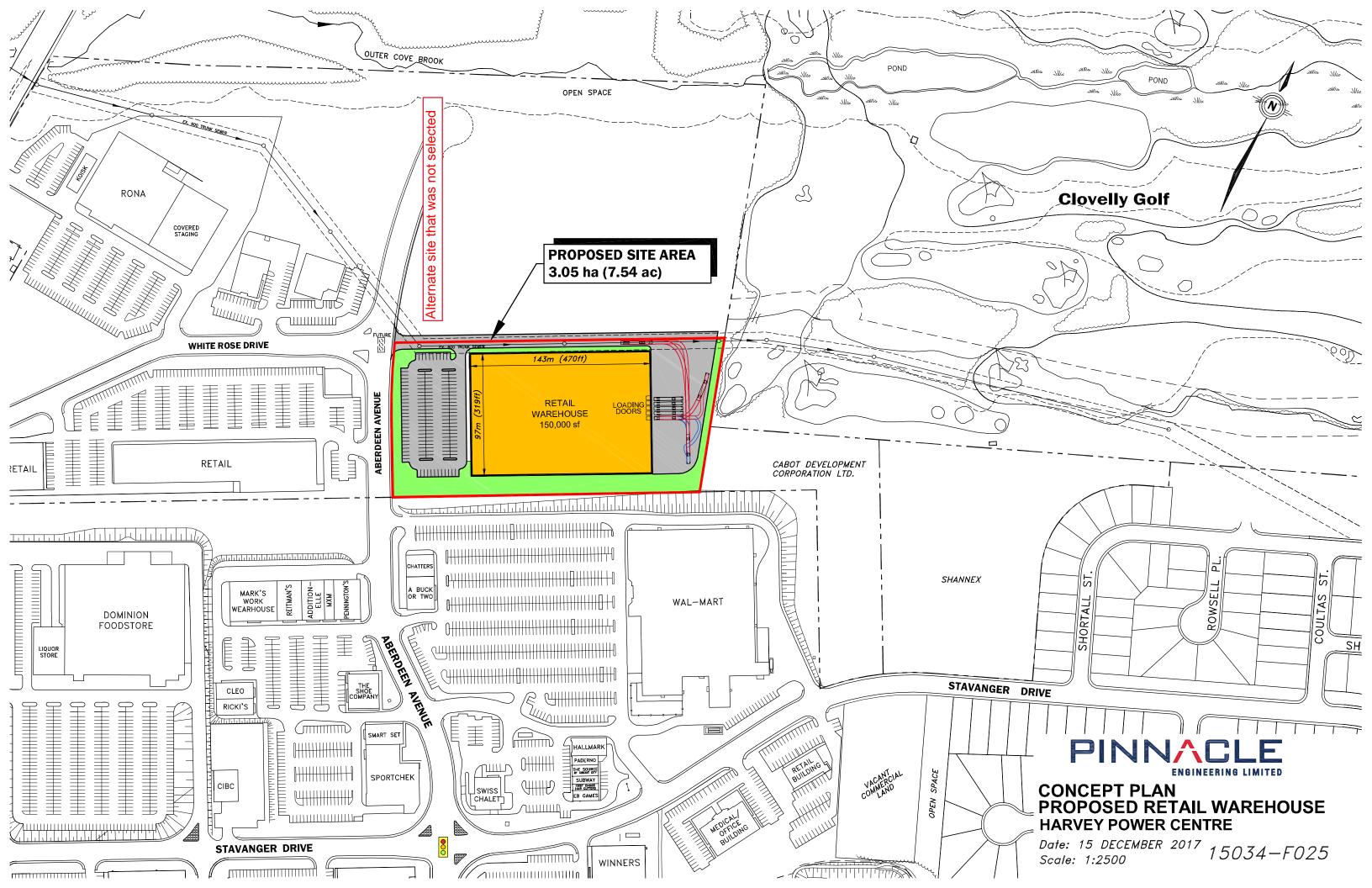
5 Attachments











ATTACHMENT A

LIST of CANNABIS GENIUS and SPECIES

Genus and Species

- Cannabis Sativa:
 - o https://en.wikipedia.org/wiki/Cannabis_sativa
 - o https://en.wikipedia.org/wiki/Hemp
- Cannabis Indica:
 - o https://en.wikipedia.org/wiki/Cannabis_indica
- Cannabis Ruderalis:
 - o https://en.wikipedia.org/wiki/Cannabis indica
- Hybrids of the above strains developed through cross-breeding.
 - o Cannabis Sativa X Cannabis Indica
 - o Cannabis Sativa X Cannabis Ruderalis
 - o Cannabis Indica X Cannabis Sativa
 - o Cannabis Indica X Cannabis Ruderalis
 - o Cannabis Indica X Cannabis Sativa X Cannabis Ruderalis

ATTACHMENT B

OFFICE OF THE MEDICAL CANNABIS – PEST MANAGEMENT REGULATORY AGENCY (PMRA) DATABASE

Thanks,

Mark

From: Pierre-Antoine Jollez pierre-antoine.jollez@hc-sc.gc.ca>

Date: Tuesday, April 10, 2018 at 11:35 AM

To: CMC < CMC@hc-sc.gc.ca >

Subject: Revised list of approved pesticide/ Liste révisée des pesticides approuvés

(Le texte français suit l'anglais)

Dear Licensed producer,

The Office of Medical Cannabis would like to inform you that as of March 12, 2018 there are now 21 registered pesticides on the Pest Management Regulatory Agency (PMRA) database approved for use on cannabis (marihuana) produced commercially indoors (please see the table below).

Licensed producers are reminded that they must comply with section 66 of the *Access to Cannabis for Medical Purposes Regulations* (ACMPR) which states that "fresh or dried marihuana or marihuana plants or seeds must not be treated with a pest control product unless the product is registered for use on marihuana under the *Pest Control Products Act* or is otherwise authorized for use under that Act".

In addition, the Office of Medical Cannabis would like to remind licensed producers that:

- · marihuana must not be sold or provided with any additives other than marihuana, and
- cannabis oil must not be sold or provided with any additives other than those that are necessary to maintain the product's quality and stability.

Please note that the above term "additive" does not include any residue of a pest control product, or its components or derivatives, unless the residue amount exceeds any maximum residue limit specified for the product, component or derivative under section 9 or 10 of the *Pest Control Products Act*, as indicated in subsections 18(2) and 19(2).

In the event that an unauthorized pest control product is used on fresh or dried marijuana, or marijuana plants or seeds intended for sale, Health Canada will take applicable enforcement actions. This includes, but is not limited to, the seizure and destruction of the product, recall of products if they are sold to clients, suspension and/or revocation of the licence. Compliance action may also be taken under *Pest Control Products Act*.

Tableau I: registered pesticides approved for use on cannabis (marihuana)

Registration Number	Registrant Name	Product Name
<u>26854</u>	AEF GLOBAL INC	BIOPROTEC CAF
<u>27115</u>	BIOWORKS INC	ROOTSHIELD HC BIOLOGICAL FUNGICIDE WETTABLE POWDER
<u>27886</u>	W. NEUDORFF GMBH KG	NEUDOSAN COMMERCIAL
<u>28095</u>	BIOWORKS INC	MILSTOP FOLIAR FUNGICIDE
28146	OMEX AGRICULTURE INC.	OPAL INSECTICIDAL SOAP
28672	MONSANTO CANADA INC.	ACTINOVATE SP
29320	LAM INTERNATIONAL CORPORATION	BOTANIGARD ES
29321	LAM INTERNATIONAL CORPORATION	BOTANIGARD 22 WP
29890	BIOWORKS INC	ROOTSHIELD(R) WP - BIOLOGICAL FUNGICIDE
30345	GREENSTAR PLANT PRODUCTS INC	AGROTEK ASCEND VAPORIZED SULPHUR
31433	W. NEUDORFF GMBH KG	KOPA INSECTICIDAL SOAP
32408	W. NEUDORFF GMBH KG	VEGOL CROP OIL
32425	AEF GLOBAL INC	BIOPROTEC PLUS
<u>31091</u>	AEF GLOBAL INC	SIROCCO
<u>31231</u>	ANATIS BIOPROTECTION INC.	BIO-CERES G WP
<u>30692</u>	AEF GLOBAL INC	INFLUENCE LC
<u>28820</u>	DANSTAR FERMENT AG	PRESTOP
<u>30110</u>	LACTO PRO-TECH INC	LACTO-SAN
<u>30459</u>	AEF GLOBAL INC	CYCLONE
32819	753146 AB LTD. O/A ULTRASOL INDUSTRIES	DOKTOR DOOM FORMULA 420 PROFESSIONAL USE3-IN- 1
<u>27666</u>	INTELLIGRO	PURESPRAY GREEN SPRAY OIL 13E *

^{*} Newly approved pesticide

You can find more information, and view the pesticides labels by visiting the Pesticides and Pest Management Section at: http://pr-rp.hc-sc.gc.ca/ls-re/index-eng.php.

Thank you for your cooperation and should you have any questions on this issue, please contact us at ACMPR-

RACFRM@hc-sc.gc.ca.

National Compliance and Enforcement Section Office of Medical Cannabis Health Canada

Cher producteur autorisé,

Le bureau du cannabis médical souhaite vous informer qu'en date du 12 mars 2018, les pesticides enregistrés dans la base des données de l'Agence de réglementation de la lutte antiparasitaire (ARLA) et approuvés pour l'utilisation sur le cannabis (marijuana) produit commercialement à l'intérieur sont au nombre de 21 (Prière de voir le tableau ci-dessous)

Les producteurs autorisés doivent se conformer à l'article 66 du Règlement sur l'accès au cannabis à des fins médicales (RACFM), qui spécule que "la marihuana fraîche ou séchée ainsi que les graines ou les plants de marihuana ne peuvent être traités au moyen d'un produit antiparasitaire que si celui-ci est homologué pour utilisation avec la marihuana en vertu de la Loi sur les produits antiparasitaires ou si l'utilisation du produit est autrement autorisée sous le régime de cette loi".

En plus, le bureau du cannabis médical souhaite vous rappeler que :

- · La marihuana ne peut être vendue ou fournie dans le cas où des additifs y ont été ajoutés;
- · L'huile de chanvre indien ne peut être vendue ou fournie dans le cas où des additifs autres que ceux nécessaires au maintien de sa qualité et de sa stabilité y ont été ajoutés.

Prière de noter que le terme "additif" susmentionné n'inclut pas les résidus d'un produit antiparasitaire ou de ses composants ou dérivés, à moins qu'ils ne soient présents en quantité supérieure aux limites maximales de résidus fixées, le cas échéant, relativement à ce produit, ses composants ou dérivés en vertu des articles 9 ou 10 de la Loi sur les produits antiparasitaires.

Si un pesticide non autorisé est appliqué sur de la marijuana destinée à la vente ou à la distribution, qu'il s'agisse de marijuana fraîche ou séchée, ou de plants ou graines de marijuana, Santé Canada prendra les mesures d'application de la loi appropriées. Les mesures possibles comprennent entre autres, la saisie et la destruction des produits, le rappel des produits déjà vendus aux clients, la suspension ou la révocation des licences. Des mesures de mise en conformité peuvent également être prises en vertu de la *Loi sur les produits antiparasitaires*.

Tableau I : les pesticides approuvés pour l'utilisation sur le cannabis (marijuana)

Numéro d'homologation	Nom du Titulaire	Nom du produit	
<u>26854</u>	AEF GLOBAL INC	BIOPROTEC CAF	
27115	BIOWORKS INC	POUDRE MOUILLABLE BIOFONGICIDE ROOTSHIELD HC	
<u>27886</u>	W. NEUDORFF GMBH KG	NEUDOSAN COMMERCIAL	

28095	BIOWORKS INC	MILSTOP FONGICIDE FOLIAIRE	
28146	OMEX AGRICULTURE INC	OPAL SAVON INSECTICIDE	
28672	MONSANTO CANADA INC.	ACTINOVATE SP	
29320	LAM INTERNATIONAL CORPORATION	BOTANIGARD ES	
<u>29321</u>	LAM INTERNATIONAL CORPORATION	BOTANIGARD 22 WP	
29890	BIOWORKS INC	AGENT FONGICIDE BIOLOGIQUE- ROOTSHIELD WP	
<u>30345</u>	GREENSTAR PLANT PRODUCTS INC	SOUFRE A VAPORISER AGROTEK ASCEND	
<u>31433</u>	W. NEUDORFF GMBH KG	KOPA SAVON INSECTICIDE	
<u>32408</u>	W. NEUDORFF GMBH KG	VEGOL HUILE DE CULTURE	
<u>32425</u>	AEF GLOBAL INC	BIOPROTEC PLUS	
<u>31091</u>	AEF GLOBAL INC	SIROCCO	
<u>31231</u>	ANATIS BIOPROTECTION INC.	BIO-CERES G WP	
30692	AEF GLOBAL INC	INFLUENCE LC	
28820	DANSTAR FERMENT AG	<u>PRESTOP</u>	
30110	LACTO PRO-TECH INC	LACTO-SAN	
30459	AEF GLOBAL INC	CYCLONE	
32819	753146 AB LTD. O/A ULTRASOL INDUSTRIES	DOKTOR DOOM FORMULE 420 POUR USAGE PROFESSIONNEL USE3-IN-1	
<u>27666</u>	INTELLIGRO	PURESPRAY GREEN HUILE DE PULVERISATION 13EPURESPRAY GREEN HUILE DE PUL *	

^{*} Pesticide nouvellement approuvé.

Vous pouvez trouver plus d'information et consulter les étiquettes des pesticides en visitant la section Pesticides et lutte antiparasitaire à: http://pr-rp.hc-sc.gc.ca/ls-re/index-fra.php.

Nous vous remercions de votre coopération. Si vous avez des questions, n'hésitez pas à communiquer avec nous, à l'adresse <u>ACMPR-RACFM@hc-sc.gc.ca</u>.

Section de la conformité et de la mise en application nationale Bureau du Cannabis Médical Santé Canada

ATTACHMENT C

LIST OF PROPOSED CHEMICALS/NUTRIENTS PRODUCTS

List of Proposed Chemical/Nutrients Products

- Nutrients:
 - o 2-part Grow formula
 - Composition:
 - Calcium Nitrate (CANO3)
 - Potassium Sulphate (K2S04)
 - Potassium Nitrate (KNO3)
 - Mono Potassium Phosphate (KH2PO4)
 - Magnesium Sulphate (MGS04)
 - Trace Elements (TE)
 - Used to fertilize plants in the Vegetative growth stage.
 - The Irrigation Department keeps 1000L of each on hand to refill the system as needed. All other stock to be delivered to site within a few hours when needed.
 - o 2-part Bloom formula
 - Composition:
 - Calcium Nitrate (CANO3)
 - Potassium Sulphate (K2S04)
 - Potassium Nitrate (KNO3)
 - Mono Potassium Phosphate (KH2PO4)
 - Magnesium Sulphate (MGS04)
 - Trace Elements (TE)
 - Used to fertilize plants in the Bloom stage.
 - The Irrigation Department keeps 1000L of each on hand to refill the system as needed. All other stock to be delivered to site within a few hours when needed.
- Nutrient Supplements:
 - Rooting supplement.
 - Occasionally used to feed clones.
 - Stored in the Chemical Storage Room.
- Pesticides:
 - o Health Canada approved pesticides for use on cannabis.

- Will be applied as necessary.
- Stored beside the Insect Refrigerator.

• Other:

- Rooting hormone
 - Used during cloning to promote rooting.
 - Stored in the Mother Rooms
- Nitric Acid
 - Used to lower the pH of nutrient solutions.
 - Stored in the Chemical Storage Room.
- o Potassium Hydroxide
 - Used to raise the pH of nutrient solutions.
 - Stored in the Chemical Storage Room.
- Hydrogen Peroxide
 - Used as a sterilizing agent.
 - Stored in the Chemical Storage Room.
- o Bleach
 - Used for cleaning.
 - Stored in the Chemical Storage Room.
- Isopropyl Alcohol
 - Used for cleaning and sterilizing.
 - Stored in the Chemical Storage Room.

ATTACHMENT D

PROCESS OF DESTRUCTION OF CANNABIS TO COMPLY WITH THE REQUIREMENTS OF SECTIONS 30

Process of Destruction of Cannabis to comply with the requirements of Sections 30

Process of Destruction of Cannabis to comply with the requirements of Sections 30, 166, 170 of the Access to Cannabis for Medical Purposes Regulations (SOR/2016-230). (A) RPICs are responsible for accompanying cannabis to its destruction location, witnessing and signing off the destruction record. Section 30 (Destruction) - Live Cannabis Plant pruning waste, cleaning activities, whole plant, root balls, wet and dry trimmings, dried Marihuana, Moisture Analysis waste, Oil Waste, Seeds, Soft Gels, Crude Resin, Refined Resin, Oil, Wax and Resin Contaminated Towels are all sources of destruction and there are various methods of destruction performed to ensure the characteristic properties have been altered or destroyed to an extent that its consumption is rendered impossible or improbable. These methods include introduction through Mulching equipment and into bail breaker. The mulched plant waste is mixed with soil and water before it enters the dumpster. Mix oil is mixed with (3x) volume of dry soil. Capsules are fully submerged into warm water until they are dissolved and mixed with (3x) the volume of dry soil. Seed destruction is equipped with appropriate ventilation that will prevent the escape of odors and pollen as per the ACMPR. Seeds are placed in a pre-heated laboratory oved set at 160 C for minimum of 2 hours then transferred into a blender cup and blended until they are visibly pulverized. Section 166, (Inventory) - Waste package IDs and destruction details are entered into the software application and barcode waste labels are applied to these packages. Verification is performed for information entered on the Destruction of Cannabis Bag Tag for accuracy. Five forms are completed for Destruction of Cannabis- Bag Tag Form, Destruction of Plant Material Record, Destruction of Seeds Record, Destruction of Cannabis Packaging Record and Destruction of Cannabis Packaging Record Log. Section 170, (Information required by Minister) - Destruction records are maintained so that they are secure and easily retrievable. They are conveniently accessible with sufficient redundancy to prevent loss. All electronic records are backed up daily and backed up to a removable media each week and stored in a secure off-site location.

ATTACHMENT E SOLID AND LIQUID WASTE STREAMS

Solid and Liquid Waste Streams

- Solid Waste:
 - o Stone wool:
 - Composition:
 - Stone wool, is a mineral wool made of volcanic rock. It consists of 5% solid material in the form of stone fibers. The remaining 95% is porous.
 - The basic materials for stone wool are basalt and limestone.
 - We will store 2,222 cubic ft of new stone wool cubes on site, in the Storage/Supply Warehouse.
 - Once we are fully operational, we will generate 556 cubic ft of stone wool waste per week, or 28,889 cubic ft per year.
 - All stone wool waste will not be stored but will be disposed of immediately, with the regular garbage.
 - Soilless Mix:
 - Composition:
 - Sphagnum Peat Moss (65-75% in volume)
 - Horticultural Grade Perlite
 - Chunk COCO COIR
 - Calcitic Limestone
 - Dolomitic Limestone
 - Macronutrients
 - Micronutrients
 - Wetting Agent
 - Beneficial Fungi
 - We will store 10,240 liters, or 362 cubic ft, of new soilless mix on site, in the Storage/Supply Warehouse.
 - All soilless mix waste from the mother plants will be disposed of with the plant waste. Any soilless mix spilled during transplanting or during regular plant maintenance, will be disposed of immediately, with the regular garbage.
 - We will generate 5,120 liters of soilless mix waste every 3 weeks, or 88,747 liters per year. Which is about 3,134 cubic ft per year.
 - New, unused soilless mix will be added to the plant waste, and blended with it, as required by Health Canada, for plant waste disposal. We will use 23 cubic feet of soilless mix per day for this purpose, or 8,395 cubic ft per year.
 - Fertilizer Salts from the Leachate RO:
 - Calcium Nitrate (CANO3)

- Potassium Sulphate (K2S04)
- Potassium Nitrate (KNO3)
- Mono Potassium Phosphate (KH2PO4)
- Magnesium Sulphate (MGS04)
- Trace Elements (TE)
- o Disposable PPE
 - Tyvek suits
 - Nitrile gloves
 - Shoe covers
 - Hair nets
 - Beard nets
 - Face masks
- Regular garbage
 - Conventional non-gardening related garbage.
 - Used gardening equipment:
 - Unusable pots
 - Worn out scissors/pruning shears.
 - Unusable propagation equipment
 - Unusable propagation trays
 - Unusable propagation domes
 - Used trellis netting
 - Used plant stakes
 - Beneficial insect satchels

Liquid Waste:

All leftover nutrient solution and flush water will be filtered using the Leachate RO system, leaving us with water we will reuse, and a concentrated nutrient solution we will dispose of. We will remove the water from the concentrated nutrient solution, using evaporation, and then condense it back into water, and dispose of it in the sanitary sewer. The dried fertilizer salts will be disposed of by a third party, licensed, waste disposal company.