

Memorandum

Date: October 22, 2021 **To:** Board of Education

From: Planning and Facilities Committee
Prepared by: Mitch Van Aller, Director of Operations

Action Item: Annual Integrated Pest Management Report 2021

1.0 ISSUE STATEMENT

The Board authorizes the use of all suitable techniques in an organized program to suppress pest populations in effective, economical and environmentally safe ways.

2.0 RELEVANT BOARD MOTION/DIRECTION

Policy 620 – Integrated Pest Management (IPM): "Each year a report shall be provided to the Board on the effectiveness of the pesticide management program, with appropriate recommendations for possible enhancements."

3.0 BACKGROUND

School District policy ensures that no chemical pesticides are used on District sites. This requires alternative measures to control landscape and structural surfaces.

4.0 POINTS FOR CONSIDERATION

None.

5.0 OPTIONS FOR ACTION

Continue the program as currently funded and advised by our District Horticulturists and external expert consultants.

6.0 FOLLOW-UP/REVIEW:

Yearly report required as per Policy 620 – Integrated Pest Management (IPM).

7.0 DIRECTOR'S COMMENTS:

The District will continue supporting a proactive and preventative approach to managing noxious weeds, invasive plants, vegetation and pests on all of our sites, (landscape or structural). Integrated Pest Management is a long-term program that reduces the reliance on pesticides and can lead to a reduction in their use. At this time no pesticides are utilized to control pests on any school site.

8.0 RECOMMENDATION:

THAT: The Board of Education accept the Annual Integrated Pest Management Report as the Annual Report required in Policy 620 – Integrated Pest Management (IPM), as attached to the Agenda and presented at the October 27, 2021 Public Board Meeting.

9.0 APPENDICES

- A. District Horticulturist, Mike Daley detailed 2020/2021 report
- B. Policy 620 Integrated Pest Management (IPM)
- C. BC Ministry of Environment Integrated Pest Management Act and Regulation.

Appendix "A"

Central Services IPM Report - October 2020 to October 2021

Preventing pests through the design, construction of facilities and landscapes is an essential component of IPM and developing cost-effective maintenance regimes. Pests can easily take up residence in areas that are not landscaped appropriately or areas with inappropriate plant growth and materials.

We continue to work towards improving the efficiency and sustainability of the IPM program by using good sound physical and cultural practices.

The IPM approach is based on using proactive, preventative and cultural strategies and relies less on reactive measures for pest control. Cultural practices are referred to as sound plant health care practices; they focus on prevention of the pest by maintaining a healthy host through proper planting, mowing, pruning and mulching. Cultural practices also focus on reducing pest establishment, reproduction, dispersal and survival.

October 2020 to October 2021 the following occurred:

- All schools/sites were inspected on a regular basis for any pest issues,
- Irrigation on all schools/sites were set on timers to ensure proper irrigation coverage,
- Two grass crews ensured the fields were mowed on a scheduled basis,
- One additional grass crew mowed 2 days per week,
- Shrub beds at schools/sites were weeded and mulched,
- Any tree that was identified as a hazard was pruned or removed,
- Autumn leaves were mulched on site in the fall and then were spread on the turf and on the shrub beds.

APPENDIX "B"



School District No. 23 (Central Okanagan)

Policies And Procedures

"Together We Learn"

Section Six: School District Facilities

620 -INTEGRATED PEST MANAGEMENT (IPM)

Introduction

The Board of Education believes that an *Integrated Pest Management (IPM)* program, as recommended by the BC Ministry of Environment, is the most suitable method for maintaining sites in a safe, useable condition for current and future use.

Policy

- 1. The Board authorizes the use of all suitable techniques in an organized program to suppress pest populations in effective, economical and environmentally safe ways.
- The essential components of the school district's integrated pest management 2. program include:
 - 2.1 identification of the problem through an examination of the fields conducted by the office of the Director of Operations or designate:
 - 2.2 regular monitoring of the sites (to determine the most appropriate time, method and follow-up necessary);
 - 2.3 determining plant damage relative to a tolerance level acceptable to the Superintendent or designate and considering safety, financial and aesthetic implications;
 - 2.4 determining appropriate action to manage problems identified, including an appropriate combination of:
 - physical or mechanical controls;
 - cultural controls:
 - chemical controls.
- 3. Substituting physical or cultural controls for chemicals will be encouraged wherever possible. When not possible, pesticides will be selected based on compatibility with other treatment methods. When a pest count indicates that some chemical controls are needed, school principals will be informed of the results and the anticipated dates for treatment of the sites. Principals will then inform their parent advisory councils of the treatment plans.
- 4. Each year a report shall be provided to the Board on the effectiveness of the pesticide management program, with appropriate recommendations for possible enhancements.

Date Agreed: May 26, 1993; Date Amended: January 24, 2001

Date Reviewed/Amended: November 13, 2002

Date Amended: February 25, 2004; November 26, 2014

Related Documents:

APPENDIX "C"

Integrated Pest Management Act and Regulation

Landscape/Structural Sector Review Paper

This is a summary prepared to provide general guidance on the use of pesticides in British Columbia. This is not a legal document and the contents should not be relied upon for legal purposes. In all cases the *Integrated Pest Management Act* and Regulation will prevail. Copies of the *Act* and Regulation may be obtained through the Queen's Printer.



Integrated Pest Management Program
April 2009

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Introduction – Purpose of this Review Paper

This review paper provides information drawn from the *Integrated Pest Management (IPM) Act* and Regulation that will be of particular interest to pest managers **working in the landscape or structural industry sectors**. The *IPM Act* was brought into force on December 31, 2004, replacing the *Pesticide Control Act*. The legislation sets out requirements for the use and sale of pesticides in British Columbia.

This document presents a lay summary of the requirements set forth in the *IPM Act* and Regulation for landscape and structural pest management. Additional information – including a summary overview, other industry sector reviews of the *Act* and Regulation and links to application forms and the legislation – can be accessed by clicking on the address below, or from the Ministry of Environment homepage, by following the *Environmental Protection Division*, *Environmental Management Branch*, and *IPM* links. The IPM Program webpage address is: www.env.gov.bc.ca/epd/ipmp/index.htm

2. General Information

2.1 Who administers the IPM Act?

The B.C. Ministry of Environment is responsible for the protection of human health and the environment in British Columbia. The Integrated Pest Management (IPM) Program of the ministry promotes IPM and environmental stewardship, and ensures compliance with the *Integrated Pest Management Act* and Regulation.

The Act mandates the appointment of an Administrator for the legislation, with powers and duties to issue, amend or revoke licences, certificates or permits – as well as to delegate specific duties to assistant administrators, and to designate inspectors (employees of provincial, federal or local government). The legislation includes provisions for appeals of the Administrator's decisions to the Environmental Appeal Board (established under authority of the Environmental Management Act), and for establishment of an IPM Committee with representatives of identified government regulatory agencies to review issues referred to it by the Administrator.

2.2 What does the Act regulate? How?

The *Integrated Pest Management Act* and Regulation establish conditions for the sale and use of pesticides through a classification system and regulatory provisions and standards for licences, certification, permits, Pest Management Plans (PMPs) and pesticide use notices (PUNs). The Regulation also contains public notification, consultation, reporting and record keeping provisions – as well as standards for use of integrated pest management and for human health and environmental protection.

Under the *IPM Act*, a person must not "use a pesticide that causes or is likely to cause, or use, handle, release, transport, store, dispose of, or sell a pesticide in a manner that causes or is likely to cause an unreasonable adverse effect." This general prohibition, in concert with use of Integrated Pest Management (IPM), underpins the ministry's approach to regulation of pesticide use in British Columbia.

Key Regulatory Tools and Processes under the IPM Act:

Pesticide classes: using definitions, labeling and other standards set out in the federal Pest Control Products Act

Licences: for sale or use of specified pesticides

Certificates: for dispensing or applying specified pesticides

Permits: for use of pesticides of particular concern

Pest Management Plans and pesticide use notices: for specified large scale programs that require IPM plans and ministry notification

2.3 How is Integrated Pest Management (IPM) defined under the Act?

Because it requires a proactive and preventative approach, IPM reduces reliance on pesticides and can lead to a reduction in their use. The *Act* and Regulation require the use of Integrated Pest Management (IPM) for pesticide use on public land; on private land used for forestry, transportation, public utilities and pipelines; and for pest control service companies (including service companies managing landscape, structural, forestry, noxious weed or mosquito pests).

The Act defines IPM as "a process for managing pest populations that includes the following elements:

- a. Planning and managing ecosystems to prevent organisms from becoming pests;
- b. Identifying pest problems and potential pest problems;
- Monitoring populations of pests and beneficial organisms, damage caused by pests and environmental conditions;
- d. Using injury thresholds in making treatment decisions;
- e. Suppressing pest populations to acceptable levels using strategies based on considerations of:
 - Biological, physical, cultural, mechanical, behavioural and chemical controls in appropriate combinations,
 - Environmental and human health protection; and
- f. Evaluating the effectiveness of pest management treatments."

2.4 What is a "pesticide" and how are pesticides classified under the Act?

A **pesticide** is defined under the *Act* as a "micro-organism or material that is represented, sold, used or intended to be used to prevent, destroy, repel or mitigate a pest." This includes growth regulators, defoliators or desiccants; control products defined in the federal *Pest Control Products Act*; and other substances classed as a pesticide by regulation.

A number of micro-organisms, substances and control products are explicitly excluded from the definition of pesticide:

- Instruments or "gadgets" that are used as a means to control pests (directly or indirectly) (e.g., a trap);
- Control products used to control arthropods on or in humans, livestock or domestic animals and are administered internally by mouth or injection;
- Control products used to attack viruses, bacteria or other micro-organisms with the aim of treating, mitigating or preventing disease in humans or animals; and
- Control products used to attack mould, mildew or odors (except when used as a wood preservative).

The *IPM Act* and Regulation establish **classes** of pesticides, and requirements for licences, certification, permits and pesticide use notices for each class. The classification system utilizes definitions, labeling and other standards for sale and use of pesticides set out in the federal *Pest Control Products Act*. Pesticide classes under the *IPM Act* are:

Permit-restricted: the most strictly controlled pesticides, because the Administrator considers that
the risk of unreasonable adverse effects from their use should be evaluated for each proposed use,
requiring a permit for purchase or application;¹

¹ Permit-restricted pesticides listed in the Regulation are 4-aminopyridine, strychnine used to control bird populations and monosodium methanearsonate (MSMA).

- Restricted: a pesticide labeled under the federal Act with the product class designation "RESTRICTED" (and not a permit-restricted or an excluded pesticide), requiring a pesticide applicator certificate for purchase or use;
- Commercial: a pesticide that bears a product class designation on its label that is acceptable under the federal Act in relation to its general use in "commercial," "industrial," "agricultural" or other commercial activities (and is not a permit-restricted or an excluded pesticide);
- Domestic: required under the federal Act to be labeled with the product class designation "DOMESTIC" (and not an excluded pesticide) or pesticides that are contained in a fertilizer registered under the Fertilizers Act (Canada); and
- Excluded: specified pesticides assigned to this class because the Administrator considers that their use without a licence, permit² or pesticide use notice will not increase the risk of unreasonable adverse effects (see list of excluded pesticides on the following page).

The table below provides a summary of requirements for each class of pesticide under the *IPM Act* and Regulation. Excluded products named in the Regulation are listed on the following page.

Summary of Requirements for each Class of Pesticide under the IPM Act and Regulation

	Pesticide Classes				
Requirements	Permit- restricted	Restricted	Commercial	Domestic	Excluded
Permit required for purchase and all uses	Yes	No	No	No	No
Applicator certificate required for purchase and all uses	Yes	Yes	No	No	No
Purchase must be recorded by Vendor	Yes	Yes	Yes	No	No
Dispenser certificate required for selling pesticides	Yes	Yes	Yes	Yes	No
Vendor licence required for selling pesticides	Yes	Yes	Yes	Yes	No
User licence required for pesticide applications	Yes	Yes	Yes	Yes	No
Pesticide user licence required for use on specified private or public lands for specified purposes to a defined maximum area per year (see Compendium of IPM Legislation and Industry Sector Reviews)	Yes	Yes	Yes	Yes	No
Pesticide user licence required for use in a multi-resident building in rooms occupied as living accommodation, or to a common area (effective January 7, 2007)	Yes	Yes	Yes	Yes	No
Pest Management Plan and confirmation of receipt of pest- icide use notice required for specified pesticide use and lands (see Compendium of IPM Legislation and Industry Sector Reviews)	Yes	Yes	Yes	Yes	No
Applicator certificate required to supervise applications to public land or on fee-for-service basis	Yes	Yes	Yes	Yes	No
Pesticide use permit required for uses of high concern (e.g., aerial application over urban or residential areas)	Yes	Yes	Yes	Yes	Yes
Use must not cause an unreasonable adverse effect	Yes	Yes	Yes	Yes	Yes

Note that the Administrator may require a permit for a specified use of an excluded pesticide in some circumstances (e.g., aerial application).

The Regulation lists the following excluded pesticides:

- 1. acetic acid (DOMESTIC)
- animal repellents (DOMESTIC and COMMERCIAL) except thiram
- anti-fouling paints (DOMESTIC and COMMERCIAL)
- antisapstain wood preservatives used on private, industrial land owned by the company or person responsible for the application (COMMERCIAL)
- asphalt solids (pruning paints) (DOMESTIC and COMMERCIAL)
- 6. bacillus thuringiensis kurstaki (Btk) (DOMESTIC)
- bactericides used in petroleum products (DOMESTIC and COMMERCIAL)
- 8. boron compounds (DOMESTIC)
- boron compounds with up to 5 % copper for insect control and wood preservation (COMMERCIAL)
- capsaicin (DOMESTIC, COMMERCIAL and RESTRICTED)
- 11. cleansers (DOMESTIC and COMMERCIAL)
- 12. corn gluten meal (DOMESTIC and COMMERCIAL)
- 13. d-phenothryn (DOMESTIC)
- d-trans-allethrin, also referred to as d-cis, trans allethrin (DOMESTIC)
- deodorizers (DOMESTIC and COMMERCIAL)
- 16. fatty acids (DOMESTIC)
- ferric phosphate (DOMESTIC and COMMERCIAL)
- 18. ferrous sulphate (DOMESTIC and COMMERCIAL)
- hard surface disinfectants (DOMESTIC and COMMERCIAL)
- 20. insect bait stations (DOMESTIC)
- insect pheromones (DOMESTIC and COMMERCIAL)
- 22. insect repellents (DOMESTIC)
- 23. laundry additives (DOMESTIC and COMMERCIAL)

- material preservatives (DOMESTIC and COMMERCIAL)
- 25. methoprene (DOMESTIC)
- mineral oils for insect and mite control (DOMESTIC)
- n-octyl bicycloheptene dicarboximide (DOMESTIC)
- 28. naphthalene for fabric protection (DOMESTIC)
- paradichlorobenzene for fabric protection (DOMESTIC)
- 30. pesticides in aerosol containers (DOMESTIC)
- pesticides registered under the federal Act for application to pets (DOMESTIC & COMMERCIAL)
- 32. piperonyl butoxide (DOMESTIC)
- 33. plant growth regulators (DOMESTIC)
- polybutene bird repellents (DOMESTIC and COMMERCIAL)
- 35. pyrethrins (DOMESTIC)
- 36. resmethrin (DOMESTIC)
- 37. rotenone (DOMESTIC)
- silica aerogel, also referred to as silica gel, amorphous silica and amorphous silica gel (DOMESTIC & COMMERCIAL)
- silicon dioxide, also referred to as "diatomaceous earth" (DOMESTIC and COMMERCIAL)
- 40. slimicides (COMMERCIAL)
- 41. soaps (DOMESTIC and COMMERCIAL)
- sulphur, including lime sulphur sulphide sulphur and calcium polysulphide (DOMESTIC)
- 43. surfactants (DOMESTIC and COMMERCIAL)
- swimming pool algicides and bactericides (DOMESTIC and COMMERCIAL)
- 45. tetramethrin (DOMESTIC)
- 46. wood preservatives (DOMESTIC)

Information for Pest Managers in the Landscape and Structural Sectors

3.1 Who requires a pesticide user licence?

A pesticide user licence is required if a person provides, or offers to provide, a service involving the use of a non-excluded pesticide under a contract for services. This requirement for a licence includes services for the management of structural or landscape pests on public or private land.

A pesticide user licence is also required for a use that is not a service under a service contract, but is a use **on public land** of a non-excluded pesticide for the management of:

- Pests of structures and pests of goods; or
- Pests of gardens and pests of landscaping, including the management of weeds in sidewalks and on parking lots.

This requirement for a licence includes pesticide use by regional districts, municipalities, crown corporations, hospitals, schools and universities for structural or landscape pest management on public land.

Effective January 7, 2007, a licence will also be required for the use of pesticide that is not a service on private land for:

- The management of pests inside rooms used as living accommodation, or in areas to which more than
 one occupier has access, in a multi-residence property containing at least four separate units; and
- The management of pests on outdoor areas, to which more than one occupier has access, of a multiresidence property containing at least four separate units.

This requirement for a licence includes pesticide use by the owners or managers of multi-residence buildings for structural or landscape pest management on private land.

The Regulation includes provisions for a number of other pesticide uses (e.g., forestry, industrial vegetation, noxious weed and mosquito pest management) for which a licence, permit or Pest Management Plan and pesticide use notice confirmation may be required. Those wishing definitions and requirements concerning other industry sectors should consult the Integrated Pest Management Regulation and other industry sector review documents posted on the ministry's IPM website.

Who does not require a licence?

A licence for structural or landscape pest management is not required by a person who:

- · Uses, sells or provides a service using an excluded pesticide;
- Uses a pesticide only as an employee or contractor of a licensee;
- · Occupies, and uses a pesticide only within, his or her own living accommodations;
- Under a contract for paving services, uses a pesticide to manage vegetation on land before paving it;
 or
- Is a veterinarian, or an individual under direction of a veterinarian, who uses a pesticide for the treatment of animal pests.

A licence is not required for the use of excluded pesticides.

3.2 What category of licence do I require?

The Regulation prescribes pesticide user service and pesticide user non-service (as well as pesticide vendor) categories of licence. Pesticide users require a licence endorsed as either "service" or "non-service" (as appropriate to their situation and identified in their licence application).

A licence endorsed for the service category must be held by a person who:

- Provides, or offers to provide, a service respecting pesticides; or
- Purchases, directly or indirectly, a pesticide for the purpose of providing such a service.

A licence endorsed for the non-service category is required if a person uses, or if his or her employees use, a pesticide on public land managed by that person.

3.3 How do I apply for a pesticide user licence?

To be eligible for a licence, an applicant must maintain a business address in British Columbia for doing business in the province, (or provide a British Columbia address where that person may be served with documents) and hold (or employ a person who holds) the appropriate pesticide applicator certification (see sections 3.5 and 3.6 below). Information that is required from the applicant for a licence includes: the applicant's name and contact details; the business address from which pesticides are to be used; the intended uses of pesticides (e.g., structural or landscape pest management); whether the applicant intends to use a pesticide on public land; whether the applicant intends to use fumigants (e.g., methyl bromide or aluminum phosphide); the term requested (one to five years); and payment details.

Information on how to obtain licence application forms or assistance in completing the forms and where to send them is included in Appendix I of this Review Paper.

3.4 What are the terms and fees for a pesticide user licence?

An applicant may request a licence term of up to five years. A "year" means the period from the date a licence is issued until March 31 in the next calendar year. A full year fee is required for any portion of the year to which the application relates (i.e., fees are not prorated).

The fee for a non-service licence is \$250 for each year or part year to which the application relates.

The fee for a **service licence** depends on the number of business addresses to which the application relates. An applicant must include with the application the following fee **for each year** or part year to which the application relates:

- \$250 if the application is for pesticide use from one business address;
- \$500 if the application is for pesticide use from two or three business addresses; or
- \$1,000 if the application is for pesticide use from four or more business addresses.

A licensee is required to give notice to the Administrator within 30 days of a change that has the effect of increasing the fee payable in relation to the licence, and to accompany the notice with the appropriate fee. For example, if in any year within the term of a licence, a licensee increases the number of business addresses from which pesticides are used from one to two or more, the licensee must submit a notice informing the Administrator, accompanied by an additional fee payment.

3.5 What general conditions must a licensee follow?

All licence holders (licensees) are required to ensure compliance with standards for the use of integrated pest management and the protection of human health and the environment, as specified in the *Act* and Regulation.

The Administrator may suspend or revoke a licence for failure to comply with the *Act* or Regulation. A licence is not transferable without the written authorization of the Administrator. A licensee must provide the Administrator with written notice of a change in any information provided by the licensee in an application (e.g., classes and amounts of pesticides used, types of use, change in business location or contact information) within 30 days of the change.

If a licensee believes that the *Act* or Regulation has been contravened (by the licensee themselves, or another person) in a manner involving the release of pesticide into the environment, the licensee must give written notice to the Administrator as soon as possible after forming the belief.

3.6 What certified staff is a licensee required to engage and what is their role?

A pesticide licence holder (licensee) must hold, or employ one or more people who hold, a **pesticide** applicator certificate (certificate holder) endorsed for the appropriate category of pesticide use. The licensee must ensure that each pesticide use is performed by or supervised by a certificate holder. A certificate holder must not supervise more than four uncertified individuals and must be no more than 500 m from, and in continuous visual or auditory contact with, each person being supervised. The licensee must also ensure that a copy of the certificate of each individual using or supervising the use of a pesticide is at or near the treatment area during the pesticide use.

3.7 How can a pesticide applicator certificate be obtained and renewed? What fees are required? What are the terms and conditions of the certificate?

To be eligible for a pesticide applicator certificate for B.C., a person must be at least 16 years of age and have successfully passed the appropriate B.C. examination. The certification examination is based on a syllabus set out in the Regulation.³ The Administrator may also consider evidence of the applicant having passed an examination of another provincial government, and require an additional B.C. examination only to test the knowledge of an applicant in relation to the *IPM Act* and Regulation.

An applicant for a certificate must note on their application form personal information (including date of birth) and the category of certificate being applied for. A certificate is not transferable. An applicant must include a fee of \$90 for each examination required for the certificate. An applicant is deemed to have forfeited their application and fee if they fail (on two different occasions) to attend an examination for which they have been given notice of time and place.

Study materials for home study or use in classroom training to prepare for certification examinations are available (for specified charges) from the Distribution Centre Victoria of the B.C. Ministry of Management Services. Information on how to obtain study materials and to apply to write an examination is included in Appendix I of this Review Paper.

A certificate is valid on issue for the category endorsed on it, and for a period of up to five years, at the discretion of the Administrator.

³ The Regulation lists ten "certificate examination matters": general pesticide characteristics, *Act* and Regulations, labeling, human health, pesticide safety, environment, pest management, application technology, emergency response, and professionalism.

A certificate holder must comply with all applicable terms and conditions set out in the *Act* and Regulation (e.g., standards to minimize hazards to human health and the environment, safe handling and application, and reporting). If a certificate holder believes that a contravention of the *Act* and Regulation in a manner involving the release of pesticide into the environment has occurred, he or she must give written notice to the Administrator as soon as possible after forming that belief. A certificate holder must also ensure that his or her certificate is at or near the place of pesticide use.

The Administrator may renew a certificate before its expiry date, or within one year after that date, without requiring the applicant to sit an examination, if the certified individual has accumulated 20 continuing education credits⁴ relating to subjects set out in the examination syllabus within the five year period immediately preceding the application date for re-certification, or, if the applicant for certificate renewal has not completed 20 (but has completed at least five) continuing education credits and agrees as a term of the new certificate to obtain the additional continuing education credits within the period specified for that purpose. An applicant for a certificate renewal must include a non-refundable fee of \$25 with the application.

3.8 What are the standards for use of Integrated Pest Management

A licensee may use a pesticide only after undertaking all of the following actions in accordance with integrated pest management principles:

- Identify and implement, or identify and advise the owner or manager of the treatment area, of reasonable measures to prevent pests;
- Identify pest species and pest complexes to be managed;
- Monitor to determine the population of pests and their location;
- Determine the injury threshold for each pest and apply them to the determination of when to use a
 pesticide;
- Select pest treatment methods based on:
 - consideration of practical alternatives to pesticide use, and
 - protection of human health and the environment; and
- Evaluate, following each pesticide use, the effectiveness of that use.

3.9 What are the public notification requirements for use of a pesticide in or around schools or child care facilities, multi-residence properties, and outdoor public use areas?

The Regulation includes specific notification requirements for licensees who use pesticides on the property of a school or child care facility, indoors in areas occupied as a residence and in the common areas and restricted access areas of "multi-residence" buildings or properties. 5 As well, there are notification requirements for outdoor common use areas around residences 6 and other outdoor public use areas.

⁴ A "continuing education credit" is equal to one hour of training that is related to topics listed in the examination syllabus, and provided by a training provider that is approved (and provides training approved by) the Administrator and maintains (for at least five years) registration, attendance and course completion information for each student.

⁵ A "multi-residence building" is a building that contains two or more separate units occupied as living accommodation (including apartment buildings, hotels and strata titled buildings). A "multi-residence property" is a parcel of land on which is located two or more separate units occupied as living accommodation, whether the units are in the same building or detached.

⁶ An "outdoor multi-residence common area" is defined as being within 5 m of an entrance or a window, or an area of a multi-residence property that is maintained for the purposes of passage, parking or recreation.

The Regulation is intended to ensure that **advance notification** about pesticide use is provided to building managers and users of any indoor area used as living accommodation, and indoor and outdoor common areas associated with residences. Notification of the public about a pesticide use in other outdoor public use areas is required **immediately before** a pesticide treatment. Licensees are also required to provide the site owner or manager (or their representative) with written notice **immediately following** treatment using a pesticide – informing the individual that the pesticide use occurred and noting any differences between the information provided in the advance notification and the actual use of the pesticide.

What is a "Treatment Notice" and what information must it convey?

A "Treatment Notice" is required for public notification of pesticide use. A treatment notice must contain all of the following information:

- A description of the area to be treated;
- Name of the targeted pest;
- The federal Pest Control Products Act registration number of the pesticide to be used and its active ingredient;
- Proposed date and start time, and proposed alternate dates and times, of the pesticide use;
- Name and licence number of the licensee and a phone number at which the licensee or an employee can be reached for more information about the proposed pesticide use;
- Precautions that should be taken to minimize exposure to a pesticide or its residues, including a statement that indicates the period following the use during which people should not enter the treated area (re-entry period); and
- If fruit-bearing trees or other food crops are treated, the number of days before food can be harvested safely.

Posted treatment notices are to have the following characteristics:

- For signs posted in outdoor areas, be at least 550 cm² in size (a letter size sheet of paper), or for signs posted in indoor areas, be at least 200 cm² in size (one half a letter size sheet of paper);
- If the notice may be exposed to water, be constructed of water resistant material;
- Use type or letters that are clearly legible to a person approaching the treatment area;
- Contain a cautionary symbol (such as a stop sign or raised hand) that will draw the attention of a
 person approaching the treatment area; and
- Display, in bold block letters, the words "NOTICE OF PESTICIDE USE" or in place of the word "pesticide," the word "insecticide," "herbicide," or another category of pesticide.

On the property of a school or child care facility:

At least 72 hours before using a pesticide on the property of a **school or child care facility**, a licensee must provide a treatment notice that complies with the Regulation to the school or facility administrator, principal or manager (or their agent).

⁷ This notice period may be shortened only with the consent of each person who has access to the proposed treatment area and is entitled to notice of the proposed use either in writing or by posted notice.

In living accommodations:

A licensee intending to use a pesticide in any **area occupied as living accommodation** must provide a treatment notice, at least 72 hours prior to a proposed pesticide use, to the occupant of the living accommodations, and (if different from the occupant) to the owner or manager of the building, (or the agent of either).⁸

A licensee intending to use a pesticide in **unoccupied living accommodations** must provide a treatment notice, before or immediately following the use, to the owner or manager of the building (or the agent of either) and either:

- Provide a treatment notice to a person who will be occupying the living accommodations if that
 person will occupy the accommodations within 48 hours after the pesticide use; or
- Immediately following the use, post a treatment notice at each entrance to the unoccupied living accommodation.⁹

In common areas and restricted access areas of multi-residence properties:

At least 48 hours before using a pesticide in an indoor or outdoor multi-residence common area, ¹⁰ a licensee must provide a treatment notice to the owner or manager of the building (or the agent of either) and either:

- Provide a treatment notice to each person who has access to the common area within 48 hours after the pesticide use; or
- Post a treatment notice at each entrance to an indoor treatment area, at each gate or opening to fenced outdoor common areas, and at intervals around outdoor common areas that are not fenced.

Before or immediately following the use of a pesticide in a multi-residence restricted access area, ¹³ a licensee must provide a treatment notice to the owner or manager of the building (or the agent of either).

Also for the multi-residence restricted access area, a licensee must either:

- Provide a treatment notice to each person who has access to the treatment area within 48 hours after the pesticide use; or
- Immediately following the use, post a treatment notice at each entrance to the treatment area.

⁸ This notice period may be shortened only with the consent of each person who has access to the proposed treatment area and is entitled to notice of the proposed use either in writing or by posted notice.

⁹ Treatment notices must not be removed by the licensee for 48 hours after the pesticide use.

¹⁰ A multi-residence common area is an indoor area of a multi-residence property to which all or most occupants of the property have access, or an outdoor area of a multi-residence property that is within 5 m of an entrance or window to living accommodations or maintained for purposes of passage, parking or recreation.

¹¹ So that the notice is clearly visible and will provide notice of the pesticide use to any person approaching the common area. Treatment notices must not be removed by the licensee for 48 hours after the pesticide use.

¹² This notice period may be shortened only with the consent of each person who has access to the proposed treatment area and is entitled to notice of the proposed use either in writing or by posted notice.

¹³ A multi-residence restricted access area is an area of a multi-residence property that is not used or intended to be used as living accommodation and is not accessible to the general public and most occupants of the property.

¹⁴ Treatment notices must not be removed by the licensee for 48 hours after the pesticide use.

In outdoor public use areas:

Before using a pesticide in an outdoor public use area, 15 a licensee must post a treatment notice:

- · At each gate or opening that provides access to treatment areas that are fenced; or
- At intervals around or along the treatment area if it is not fenced.¹⁶

Written notice following pesticide use:

Immediately following a pesticide use that required giving or posting a treatment notice, the licensee must provide written notice to the owner, manager, administrator or principal (or their agent), giving notice that the pesticide use occurred and of any differences between the information given in the treatment notice and the actual pesticide use.

Situations When the Notification Requirements May Be Altered

If a medical health officer has given direction in writing for a differing notification requirement – the licensee must comply with the medical health officer's direction.

The provision and posting of a treatment notice (except to the owner or manager, or their agent, where required) for pesticide use in a multi-residence common area, multi-residence restricted access area or outdoor public use area is not required if the pesticide is:

- An insecticide applied in cracks and crevices;
- An insect gel, or insect gel bait in a bait station, that is placed in a concealed location not accessible to children or pets;
- An insecticide applied to a wasp nest that is outdoors, or is indoors and no person will have access to the treatment area within the 48 hour period after the use;
- A rodenticide and is used in accordance with requirements under the Regulation;
- A herbicide and is used to manage weeds along fences or in cracks in the pavement on roads, in sidewalks or in parking lots;
- A granular pesticide used in flower, vegetable or shrub beds and mixed into soil; or
- A bacterial pesticide applied to water.

The notice period before use of a pesticide in occupied living accommodations, a multi-residence common area, or on the property of a school or a child care facility may be shortened only with the consent of each person who has access to the proposed treatment area and is entitled to notice of the proposed use (either in writing or by posted notice).

¹⁵ An outdoor public use area is an outdoor, landscaped area of **public land** that is maintained for the purposes of public passage or recreation (e.g., playing fields in a municipal park).

¹⁶ So that the notice is clearly visible and will provide notice of the pesticide use to any person approaching the treatment area. Treatment notices must not be removed by the licensee for 48 hours after the pesticide use.

3.10 What are the standards for containment, transport, storage or use of pesticides?

Standards set out in the Regulation are intended to ensure that any person storing, transporting or using a pesticide, does so only in a manner that minimizes hazards to human health and the environment.

Standards for pesticide containment

A pesticide must be kept, handled, stored or transported in the container in which it was originally packaged and with the label originally affixed by the manufacturer, or in an appropriately designed and labeled container.¹⁷

Standards for pesticide transport

Pesticides must be transported in a manner that is sufficient to prevent escape, discharge or unauthorized removal of the pesticide from the transport vehicle; and that prevents contamination of food or drink intended for human or animal consumption, or of household items such as furnishings, clothes, toiletries, or bedding.

Standards for pesticide storage

Pesticides (other than domestic or excluded pesticides) must be stored in a storage facility that is:

- Separated from (and not used for storage of) food intended for human or animal consumption;
- Ventilated so that pesticide vapours are vented outside;
- Locked when unattended; and
- Accessible only to persons authorized by the person storing the pesticide.

Each door providing access to a pesticide storage facility must have a sign that is clearly visible to a person approaching, with the words "WARNING: CHEMICAL STORAGE – AUTHORIZED PERSONS ONLY" written in block letters. Fumigants and other pesticides that release vapours and bear a "poison" symbol on the label must be stored in a facility that is not attached to or within a building used for living accommodations.

Within 60 days after starting to store pesticides at a location, a pesticide licensee must provide notice of the storage location to the fire department closest to that location.

General standards for pesticide use

A container used to prepare, mix or apply a pesticide must not be washed or submerged in a body of water. Pesticides must be prevented from entering any body of water or irrigation system used to draw water from for the containment, preparation, mixing or application of a pesticide. ¹⁸

A licensee must ensure that:

- Each individual who will be using a pesticide (for which the licence is required) is informed of:
 - The boundaries of the proposed treatment area;
 - The requirements for personal protection;
 - The pesticide use procedures required to protect human health and the environment;

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¹⁷ One designed for the containment of the pesticide, with a label that displays the pesticide's trade name, the name and concentration of the pesticide's active ingredient and the pesticide's registration number under the federal Act. This requirement does not apply to tanks being used for mixing pesticides, or for holding pesticides during use.

¹⁸ By maintaining a gap between the pesticide and the equipment used to draw water.

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- The application equipment is in good working order and, if required, is calibrated to conform with the application rates on the pesticide label; and
- An inspection of the treatment area is carried out to ensure that the applicable regulatory requirements and standards can be met in carrying out the use.

A licensee must ensure that the following precautions are taken in carrying out pesticide use:

- Precautions to prevent unprotected human exposure to pesticide;
- Precautions to ensure that domestic water sources, agricultural water sources and soil used for agricultural crop production are protected for their intended use; and
- Avoiding the use of pesticide over vertebrate wildlife or domestic animals that are visible to the user.¹⁹

A licensee must ensure that their use of a herbicide does not remove vegetation that is necessary to:

- Prevent erosion of a streambank;
- Prevent debris that would cause an unreasonable adverse effect from entering a stream; or
- Maintain slope stability in areas where landslides have occurred.

A licensee must not:

- Engage in broadcast spraying or foliar spraying outdoors if the wind speed exceeds 8 km an hour;
- Use a residual pesticide on water-saturated soil, during heavy rainfall or if heavy rainfall is imminent;
- Spray a pesticide on foliage covered by ice or frost or if water is flowing on the foliage; or
- Spray a pesticide between 30 minutes after sunset and 30 minutes before sunrise unless a lighting device is used so that the person applying the pesticide and the pesticide use are clearly visible from a distance of at least 30 m.

No-treatment zone standards for all licence holders

A 30 m no-treatment zone must be maintained around a water supply intake or well used for domestic or agricultural purposes¹⁹ (including water used for livestock or irrigation of crops) unless the licensee is "reasonably satisfied" that a smaller no-treatment zone is sufficient to ensure that pesticide from the use will not enter the intake or well.²⁰

No-treatment zone means an area of land that must not be treated with pesticide

Body of water does not include a human made, self-contained body or structure for water.

The licensee must ensure that a no-treatment zone between an outdoor pesticide use area and a body of water is sufficient to prevent the release of pesticide spray or runoff into the body of water¹⁹. The licensee must also ensure that a no-treatment zone between an outdoor pesticide use area and an adjacent property is sufficient to prevent the release of pesticide spray or runoff onto the adjacent property (unless the adjacent property owner or manager agrees otherwise).

Standards for use of slug bait

If using a slug bait pesticide that may be harmful to children or domestic animals, a licensee must place the pesticide in slug bait stations that are resistant to tampering by children and animals, or in areas that are inaccessible to children and domestic animals.

¹⁹ This provision does not apply if the pesticide is a bacterial pesticide (e.g., Btk).

²⁰ A record must be kept of the information on which the decision was based for a smaller no-treatment zone that still ensures no pesticide enters the intake or well.

Standards for use of rodenticides

A licensee using a rodenticide must:

- Deploy rodenticide bait only in rigid walled bait containers that are fastened down to prevent tipping
 or removal and that remain securely closed for the period of time that they are in use, or in locations
 and in a manner so that unauthorized people and domestic pets cannot gain access to them;
- Ensure that any deployed container of a rodenticide is properly labeled with the word "Poison" or the symbol for poison, the name and phone number of the contact person who can provide information about the pesticide use, and the pesticide's active ingredient or its registration under the federal Act;
- If the rodenticide bait is applied (or deployed) in living accommodations, areas of multi-residence buildings or properties to which children have access, in playgrounds, or inside or outside schools, daycares, recreational facilities or other facilities likely to be frequented by children, the rodenticide bait must contain an agent (like denatonium benzoate) that causes a bitter taste, and the bait must be removed from the treatment area and destroyed when the baiting program is complete.

Standards for use of a fumigant gas

A licensee who uses a fumigant gas must:

- Post a treatment notice at each entrance to the structure prior to use of the fumigant, and ensure that
 the treatment notice remains posted until the licensee confirms that it is safe to enter the structure;
- Monitor the concentrations of the fumigant in the air and near the treatment area for the purposes of:
 - Detecting fumigant leaks from the treatment area,
 - Determining whether the pesticide use is effective,
 - Determining when concentrations are at a level that is safe for humans to re-enter the treatment area, and
 - If the fumigant is released into buildings or spaces where humans may be present, determining if concentrations are at a level that is safe for human exposure;
- Restrict access by unprotected individuals to the treatment area until a certified applicator has determined that the fumigant gas concentration levels are safe for human exposure; and
- When clearing a fumigant gas from a treatment area after the use, release the fumigant into the atmosphere in a manner that prevents human exposure to hazardous concentrations of the fumigant gas.

3.11 What are the reporting and record keeping requirements associated with a pesticide user licence?

If a licensee has not given prior notice to the Administrator through his or her licence application about the following pesticide uses, he or she must give written notice to the Administrator at least two business days before the first intended:

- Use of a pesticide on public land;
- Aerial application of a pesticide; or
- Use a fumigant gas pesticide.

Within 60 days after starting to store pesticides at a location, a pesticide licensee must provide notice of the storage location to the fire department responsible for fire protection at that location.

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Licensees are required to maintain a record of pesticide use for each treatment location or day of use that includes:

- If the use was performed as a service, the name and address of the person for whom the service was performed;
- If the service was performed for another licensee (or permit holder or PMP confirmation holder), the number of the person's licence (or permit or confirmation);
- If the use was not performed as a service, the name and address of the owner or manager of the treatment location;
- The name and certificate number of the certified applicator who used or supervised the use of the pesticide;
- The date and time of the pesticide use;
- The name of the pest targeted by, or the purpose of, the pesticide use;
- The trade name of each pesticide used and its registration number under the federal Act;
- · For each pesticide used, the method and rate of application and total quantity used;
- If the use was outdoors, the prevailing meteorological conditions, including temperature, precipitation and velocity and direction of the wind;
- If the pesticide used was a fumigant gas, the results of monitoring concentrations of the fumigant in the air inside and outside the area being fumigated;
- Pest monitoring methods and injury thresholds used to fulfill the licensee's IPM requirements in relation to the use;
- Advice given to the owner or manager of the treatment area, including safe re-entry time, the number
 of days before a crop can be harvested safely (where applicable), and any additional precautions that
 should be taken to minimize exposure to the pesticide; and
- If the licensee decided that a no-treatment zone around a water supply intake or well used for domestic or agricultural purposes may be reduced, the information on which the licensee based the decision.

Records must be kept up to date, at the business location identified on the licence application (except as required during pesticide use) and for a period of three years after the use or application to which they relate. A licensee may keep records relating to a pesticide use at or near the treatment location during the use, provided that he or she ensures that these records are at the business location within 60 days after the completion of the pesticide treatment to which they relate.

What records of pesticide use must be submitted annually to the Administrator?

A pesticide user service and user non-service licensee must submit an annual report of pesticide use to the Administrator by January 31 of every year (for the previous calendar year's use). The annual report must include:

- The name and address of the licensee and their licence number;
- For each pesticide used in the calendar year, the trade name, registration number under the federal Act, active ingredient and amount in kilograms; and
- The total area treated.

The annual report of a pesticide service licensee must also provide separate records of the use of pesticides: a) used for another licensee or a permit holder or pesticide use notice confirmation holder; and b) used for a person who did not hold a licence, permit or pesticide use notice confirmation for the use.

3.12 How is the Act enforced? What penalties may be imposed for noncompliance with terms of the Regulation?

Under the *Act*, the minister may designate specified provincial, federal or local government employees as "inspectors," with authority to audit for compliance and enforce provisions of the Regulation.

If the Administrator considers that the holder of a pesticide service or non-service licence, or certificate has not been or is not complying with the Act, the licence or certificate may be revoked or suspended, and the person ordered to refrain from using a particular pesticide. The Administrator may also restrict the eligibility of the holder to apply for another licence or certificate – for the period of time that the Administrator considers appropriate.

If the Administrator believes on reasonable grounds that a person's handling, release, transport, storage, use or disposal of a pesticide has caused or is likely to cause an unreasonable adverse effect – or that a person has contravened the *Act* or Regulation – the Administrator may order the person to stop or refrain from the action, or take other actions to assess, repair, clean or decontaminate any premises, equipment or site.

The Act contains provisions for substantive penalties if deemed warranted (for a first offense, up to a maximum of \$200,000 for an individual or \$400,000 for a corporation), as well providing latitude to the Courts for sentencing options (e.g., directing payment of funds or services to environmental restoration).

Appendix I: Application and record forms & certification information

Application and Record Forms

Pesticide licence application forms are available by following the links to the ministry's IPM website, or directly, by clicking on the hyperlinks highlighted below.

The ministry IPM Program webpage address is: www.env.gov.bc.ca/epd/ipmp/index.htm
It can also be accessed by going to the B.C. Government web page at www.gov.bc.ca and in the search function inserting the words IPM Program or by doing a Google search for IPM BC

IPM Forms are all in portable document format (PDF). Adobe Acrobat PDF Reader may be downloaded for free by following the links from www.adobe.com or by clicking the following link (Download). This software will enable you to read and print the forms.

Application for a Pesticide Licence: to apply for a Pesticide Licence for retail sale of Domestic, Commercial or Restricted label pesticides, for the application of pesticides as a service / business, and for non-service pesticide uses prescribed by the *Integrated Pest Management Act* Regulation.

Licence Application Form

Application forms or information for completing the forms can also be obtained by telephoning the Environmental Management Branch receptionist in Victoria at (250) 387-3205 (you will be directed to the appropriate IPM Program person). Forms may be ordered by mail from the following address:

Pesticide Licence Processing Ministry of Environment PO Box 9377 Stn Prov Govt Victoria, BC V8W 9M1

Application forms may be returned to the ministry by mail or fax. The fax number is (250) 356-0299 in Victoria.

The following links provide an explanation and templates for recording and reporting pesticide use:

Pesticide Use Record: for pesticide users to record information about each pesticide application.

- Pesticide Use Records Explanatory Information
- Pesticide Use Record

Annual Summary of Pesticide Use: to record the total quantities of pesticides applied in the last calendar year, to be submitted with the annual licence renewal application form by Pest Control Service Licensees.

Annual report form for licence holders

Pesticide Certification Information

Pesticide certification for dispensers and applicators must be in the appropriate category (see <u>category</u> descriptions). There is a separate study kit and exam for each category.

Study Materials

Order study materials for the selected certification category from the B.C. Government's Distribution Centre (located in Victoria, BC). See the list of study kit contents and prices for each category on the second page of the Order Form (PDF: 116 KB / 2 pages).

It is usually easiest to order study materials by telephone and pay by credit card. Call 1-800-282-7955 (or 250-952-4460 outside B.C.).

To fax or mail in your order, use the Order Form.

Note:

- The study materials for most certification categories include a core manual which is the same for several categories, as well as category specific booklets.
- If you require certification in more than one category, you do not need to order duplicate materials.
- Any item can be ordered by itself, if you are missing that item or for purposes other than certification.

If you have a study kit that is more than one year old, check the <u>list of current editions</u> to find out if any documents have been revised, before using it to study for the certification exam. Order updated versions if yours have been revised.

Certification Examinations

When you have obtained the study materials and are prepared to write the exam, read the exam instructions (PDF: 38 KB / 7 pages) enclosed with the study materials. Candidates can arrange to write the B.C. certification exam at many government agents' offices and some colleges across B.C., and also outside of B.C., as listed in the exam instructions.

The fee for writing an examination is \$90, to be sent with the exam application – not when ordering study materials.

Appendix II: Compliance Checklist and Legislative References

The following checklist provides a summary of key requirements of pesticide licensees under the *IPM Act* and Regulation. A similar list will be used by ministry compliance officers when inspecting pesticide user service and non-service licensees. IPM practitioners working in the landscape or structural sectors may consider using the checklist as a guide to ensure that they are fulfilling their responsibilities under the legislation.

	Compliance Requirements	Yes	No
1.	Are non-excluded pesticides used? (If yes, a pesticide user service licence is required) (If only excluded pesticides are being used, a licence is not required)		
2.	Does the company posses a valid pesticide user service licence?		
3.	Is pesticide use being conducted by a certified applicator? (If others are being supervised, there are not more than 4 people per certified applicator)		
4.	Are records of use complete? If service, name and address of person for whom service was performed If service performed for licensee, or permit or confirmation holder, the applicable number Name and address of the owner or manager of the treatment location Name and certificate number of the certified applicator who used or supervised the use Date and time of pesticide use Name of pest targeted by the use, or the purpose of the use Trade name and registration number of each pesticide used Method, rate of application and total quantity used – for each pesticide used If use outdoors, the prevailing weather conditions (temperature, precipitation, wind) Pest monitoring methods and injury thresholds used to fulfill IPM requirements Fumigant gas monitoring results Advice given to owner/manager (e.g., safe re-entry time, crop harvest safety precautions)		
5.	Is an appropriate spill kit and material readily available on site?		
6.	Has the licensee provided appropriate public notification (if required)?		
7.	Do posted treatment notices (if required) contain appropriate and accurate information? - Description of the treatment area - Name of the targeted pest - Registration number and active ingredient - Proposed date and start time of the pesticide use - Name and licence number of the licensee, contact name and phone number - Precautions that should be taken to minimize exposure to a pesticide or its residues - Safe re-entry time, days before food can be harvested safely Are the size, material and wording of notices appropriate and legible to an approaching person? - Indoor at least 200 cm², outdoor at least 550 cm²		
8.	Water resistant if the notice may be exposed to water Type and letters clearly legible to a person approaching the treatment area Clear cautionary symbol (stop sign/raised hand) draws attention of approaching person Bold, block letters with the words "NOTICE OF PESTICIDE USE" (or "HERBICIDE", or "INSECTICIDE") Are appropriate transportation practices in place and used?		
,	 Secured to prevent escape, discharge or unauthorized removal from a vehicle? Transported in a manner that prevents contamination of food or drink intended for human or animal consumption, household furnishings, toiletries, bedding, clothing, or similar items transported with the pesticide 		

	Compliance Requirements	Yes	No
9.	Are pesticides (all except domestic and excluded) stored in an appropriate manner? - Separately from food intended for human or animal consumption - Fumigants and pesticides that release vapours and bear a poison symbol on their label are in a facility that is not attached to or within a building used for living accommodation - Pesticide vapours are ventilated to the outside - Storage facility is locked when unattended and accessible only to authorized persons - Storage sign clearly visible to an approaching person posted on each access door with the words: "WARNING CHEMICAL STORAGE – AUTHORIZED PERSONS ONLY" written in block letters		
10.	Are pesticides kept, handled, stored and transported in their original containers with the manufacturer's labels intact?		
11.	If any pesticide is not in its original container, is it in a container designed to hold the pesticide and labeled with trade name, PCP number, active ingredient and concentration?		
12.	Are pesticide disposal protocols appropriate?		
13.	Have applicable fire departments been notified of pesticide storage?		
14.	If a certified applicator is supervising uncertified staff, is the applicator within 500 m of, and in continual visual or auditory contact with, the other pesticide users?		
15.	Has the licensee notified the ministry (Administrator of <i>IPM</i> Act) of particular pesticide uses (as required in the Regulation)? - Use on public land - Fumigation - Aerial use		
16.	Are IPM principles and practices being followed? - Prevention - Identification - Monitoring - Control Selection - Thresholds - Evaluation		
17.	Are all applicators aware of appropriate handling and use procedures required to protect human health and the environment?		
18.	Is application equipment properly calibrated and in good working order?		
19.	Has an inspection of the treatment area prior to pesticide use been conducted?		
20.	Have appropriate precautions been taken to prevent unprotected human exposure to pesticides?		
21.	Have appropriate precautions been taken to protect domestic and agricultural water sources, and agricultural soil?		
22.	Has a 30 m no treatment zone been maintained around water wells used for domestic or agricultural purposes?		
23.	Has an appropriate no treatment zone been identified and maintained, sufficient to prevent over- spray or runoff into adjacent water bodies?		
24.	Has an appropriate no treatment zone been identified and maintained, sufficient to prevent drift to adjacent properties?		
RO	DENTICIDE USE		
25.	If rodenticides have been deployed, are they in rigid walled bait containers?		
26.	If rodenticides have been deployed, are they in areas inaccessible to people and domestic pets?		
27.	Are all bait stations labeled with appropriate information: - Word "Poison" and/or symbol - Contact name and phone number - Active ingredient and PCP number		
28.	Does the bait contain a bittering agent (if required)?		

	Compliance Requirements	Yes	No
FUMIGANT GAS USE			
29.	If a fumigant gas has been applied, was the air in and around the treatment area monitored to detect leaks, determine treatment efficacy and identify time for safe re-entry?		
30.	Was access to the application area restricted until gas concentrations were determined to be safe?		
31.	When fumigant gas was cleared, was it released in a manner to prevent human exposure to hazardous concentrations?		

The following sections of the *IPM Act* and Regulation are of particular relevance to pest managers working in the landscape or structural industry sectors (these sections were used in the preparation of this review paper):

Integrated Pest Management Act:

- Section 3 (1)(a),(b) and (c). A person must not use, handle, release, transport, store, dispose of or sell a pesticide: 1) in a manner that causes, or is likely to cause, an unreasonable adverse effect; 2) other than in accordance with the Act and/or Regulation; or 3) in a manner that does not accord with the manufacturer's instructions specified on the label of the container or in the manufacturer's instructions.
- Section 3 (2)(a) and (b). A person must not use a pesticide registered under the Pest Control Products Act (Canada) unless it is used for the purpose for which it was registered under the Act, and must not use a pesticide not registered under the Act unless it is used in a manner and for a purpose expressly allowed under that Act
- ☐ Section 3 (2)(c). A. person must not use a fertilizer containing a pesticide, unless the mixture is used in a manner and for a purpose allowed under the Fertilizers Act (Canada).
- Section 4 (1) (b) and (c). A person must not use a pesticide for a prescribed use or provide, or offer to provide, a service using non-excluded pesticides on a fee-for-service basis without possessing a valid pesticide user or pesticide non-user service licence.
- Section 4 (1)(d). A person must not purchase a non-excluded pesticide for the purpose of providing a service to an individual without possessing a pesticide service licence.
- □ Section 5 (2). A licensee who provides a service using a prescribed class of pesticides must ensure that a certified individual performs all duties relating to pesticide use required by the Regulation.
- ☐ Section 21 (1). A person must not interfere with an inspector's right to enter lands or premises, inspect vehicles and/or seize items in accordance with Sections 17, 18 and 20 of the Act.

Integrated Pest Management Regulation:

General Requirements:

- ☐ Section 10. Public notification requirements prior to, or at the time of, pesticide treatment.
- Section 33 (1). Storage of pesticides in a manner that minimizes hazards to human health and the environment and is in accordance with applicable standards set out in the Regulation.
- Section 33 (2). Securing and transporting of pesticides in accordance with applicable standards set out in the Regulation.
- Section 33 (3). Use of pesticides in a manner that minimizes hazards to human health and the environment, and is in accordance with applicable standards for handling, mixing, applying or disposal of pesticides set out in the Regulation.

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	Section 35. Maintenance of records of pesticide use with appropriate information as set out in the Regulation.			
	Section 40. Notification of the Ministry of the licensee's intent to: use a pesticide on public land; aerially apply pesticide; or use a fumigant gas pesticide.			
Requ	uirements relating to Certified Applicators:			
	Sections 46 and 49. A licensee providing a service involving use of a non-excluded pesticide must ensure that a certified individual conducts the pesticide use or supervises no more than 4 non-certified individuals who perform the use, and is within 500m and in continuous visual or auditory contact with each individual being supervised.			
	Section 49 (1) (c). The licensee must ensure that a copy of the applicator's certificate is at or near the treatment area during pesticide use.			
	Section 50 (3). An individual must hold a pesticide applicator certificate endorsed for the class of pesticide being used.			
	Section 54 (a) and (d). A certified applicator must comply with all applicable regulations, and ensure that their certificate is at or near the location of pesticide use while they are performing any required duties under the Regulation.			
Forr	n and Content of Treatment Notices:			
	Section 63. A treatment notice, if required under the Regulation, must be of a type and contain all information specified in the Regulation.			
Lab	eling and Storage Requirements:			
	Section 65 (1). Pesticide must be kept in its original container with labeling intact, or in a specifically designed and labeled container.			
	Section 66 (1)(a). Pesticides, other than excluded or domestic pesticides, must be stored in a manner that separates them from food intended for human or animal consumption.			
	Section 66 (1)(b). Pesticides, other than excluded or domestic pesticides, must be stored in an appropriate storage facility.			
	Section 66 (2). Each door providing access to a storage facility must bear a sign that has the words "WARNING: CHEMICAL STORAGE – AUTHORIZED PERSONS ONLY" written in block letters and is clearly visible to a person approaching the door.			
	Section 66 (3). Fumigants, and other pesticides that release vapours and bear a "poison" symbol, must be stored in a facility that is not attached to, or within, a building used for living accommodation.			
Inte	grated Pest Management Requirements:			
	Section 68. A licensee must identify measures to prevent pests, pest species and complexes to be managed, population and location of pests, injury thresholds, selected treatment methods based on consideration of alternatives to pesticide use and protection of human health and the environment and effectiveness evaluation measures – following integrated pest management principles as specified in the Regulation.			
Protection of Water Sources when Preparing for Pesticide Use:				
	Section 70. A container used to prepare, mix or apply a pesticide must not be submerged in a body of water, and any equipment used to draw water from a body of water or irrigation system for mixing or application of a pesticide must be maintained following direction set out in the Regulation.			

Requ	irements for the Protection of Human Health and the Environment:			
	Section 71 $(1)(a)$. A licensee must ensure that before a pesticide is used each individual who will be using it is informed of procedures required to protect human health and the environment, as well as the boundaries of the treatment area and requirements for personal protection.			
	Section 71 (1)(b) and (c). A licensee must ensure that before a pesticide is used the application equipment is in working order and properly calibrated, and that an inspection of the treatment area is carried out to ensure that all applicable regulatory requirements and standards can be met.			
	Section 71 (2). A licensee must ensure that in using a pesticide precautions are taken to prevent unprotected human exposure, protect domestic and agricultural water sources and agricultural soils, and avoid use of a pesticide over vertebrate wildlife or domestic animals that are visible to the user.			
	Section 71 (3) and (4). A licensee must ensure that, except where noted in the Regulation, a 30 m no-treatment zone is maintained around a water supply intake or well used for domestic or agricultural purposes. This zone may be reduced only if the licensee is reasonably satisfied that the smaller zone will still ensure that pesticide from the use will not enter the water supply intake or well.			
	Section 71 (5). A licensee must ensure that a no-treatment zone between an outdoor pesticide use area and a body of water is sufficient to prevent the release of pesticide spray or runoff into the body of water.			
	Section 71 (6). A licensee must ensure that, unless an adjacent property owner or manager agrees otherwise, a no-treatment zone between an outdoor pesticide use area and the adjacent property is sufficient to prevent the release of pesticide spray or runoff onto the adjacent property.			
	Section 71 (7). A licensee must not engage in broadcast spraying or foliar spraying outdoors if the wind speed exceeds 8 km an hour, unless specifically exempted from this requirement under the Regulation.			
	Section 71 (8). Except in the case of pesticide use to manage adult mosquitoes, a licensee must spray pesticides only in the period between 30 minutes before sunrise and 30 minutes after sunset (daylight hours), unless a lighting device is used so that the person applying the pesticide and the pesticide use are clearly visible from a distance of at least 30 m.			
	Section 71 (9). A licensee must not use a residual pesticide on water-saturated soil, during heavy rainfall or if heavy rainfall is imminent, or spray a pesticide on foliage covered by ice or frost, or if water is flowing on the foliage.			
	Section 71 (10). A licensee must ensure that use of a herbicide does not remove vegetation that is necessary to prevent erosion of a stream bank, prevent debris that would cause an unreasonable adverse effect from entering a stream, or maintain slope stability in areas where landslides have occurred.			
	Section 71 (11). If using slug bait that may be harmful to children or domestic animals, a licensee must use bait stations that are resistant to tampering and inaccessible to children or domestic animals.			
Rodenticide Application Requirements:				
	Section 81 (1). A licensee must deploy rodenticide bait only in rigid walled bait containers, and in a location and manner specified in the Regulation.			
	Section 81 (2). A licensee who deploys rodenticide bait in a container must ensure that it is appropriately labeled as a poison and in accordance with the Regulation.			
	Section 81 (3), (4). A licensee who deploys rodenticide bait in living accommodations, in areas of multi-residence buildings or properties, in a playground or inside or outside a school, daycare, recreational facility or other facility to which children have access must ensure that the bait contains a bittering agent and is removed and destroyed when the baiting program is complete.			

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Fumigant Gas Use Requirements: Section 82(1). A licensee who uses a fumigant gas must monitor the concentrations of the fumigant in the air, for the purposes specified in the Regulation. Section 82(2). A licensee using a fumigant gas must restrict access by unprotected individuals to the treatment area, until a certified applicator has determined that re-entry is safe. Section 82(3). When clearing a fumigant gas from a treatment area, a licensee must do so in a

Record Keeping Requirements:

Section 83. A licensee must keep up to date records at the business location specified on his or her licence (except where and when required to keep records at or near treatment locations), and for a period of three years after the use or application to which they relate.

manner that prevents human exposure to hazardous concentrations of the gas.