

A PROPOSAL FOR A HARMONIZED PESTICIDE CLASSIFICATION SYSTEM FOR CANADA

NOVEMBER 2002

CONSULTATION DOCUMENT

Prepared by the Federal/Provincial/Territorial Committee
on Pest Management and Pesticides



Development of A Proposal for a Harmonized Classification System for Canada

The Federal/Provincial/Territorial (FPT) Committee on Pest Management and Pesticides brings together federal and provincial/territorial pesticide officials to exchange information and expertise. The FPT Committee provides advice and direction to governments on programs, policies and issues relating to pesticides and actively pursues solutions to shared issues of concern through the activities of its working groups. Progress is being made toward enhancing sustainable pest control practices in Canada and harmonizing whenever possible the pesticide-related programs and policies of the federal and provincial or territorial governments.

The FPT Committee has developed this consultation document which outlines a proposal for a harmonized pesticide classification system and proposed plans for implementing the changes to domestic product classification. Stakeholders are invited to comment on this proposal document.

Information on Submitting Comments

- Comments are welcome on any aspect of this proposal and in particular on the following four areas:
 - areas that you agree with,
 - areas that concern you and the reasons for these concerns,
 - recommendations to address your concerns, and
 - positive or negative impacts that the proposal may have on you or your organization.
- Whenever possible, please reference your comments to the applicable section(s) of the discussion document by using the following headings:
 - 3.1 General Description
 - 3.2 Criteria for Human Health
 - 3.3 Consideration of Environmental Toxicity and Fate
 - 4.1 Additional Criteria for Domestic Products
 - 4.2 Application of Classification Criteria for Domestic Products
 - 4.3 Vendor Requirements: Training and Interaction with Consumers
 - 4.4 Proposed Controls for Pesticide-Fertilizer Mixtures
 - 5.1 Decision Making Process for Domestic Pesticides
 - 5.2 Decision Making Process for Commercial and Restricted Pesticides
 - 6.0 Implementing the Proposed System
 - 7.0 Exemptions from Provincial and Territorial Pesticide Legislation

Forward written comments and the completed Guide for the Submission of Comments (attached at the end of this document) by **February 4, 2003** to:

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Please visit the FPT Committee Internet website at <http://www.hc-sc.gc.ca/pmra-arla/english/fpt/fpt-e.html> for electronic copies of the proposal document.

Executive Summary

As part of the federal pesticide registration process, pesticide products are assigned a federal class designation or classification (Domestic, Commercial, Restricted or Manufacturing). Four provinces (Alberta, British Columbia, Ontario and Quebec) have established unique provincial pesticide classification systems that provide a framework for provincial regulation, while the remaining provinces use the federal class designations along with supplementary regulations to control the sale, use, transportation, storage and disposal of pesticides.

In 1996, the Federal/Provincial/Territorial (FPT) Committee¹ on Pest Management and Pesticides proposed harmonization of existing federal and provincial classification systems. The FPT Committee established the Classification Criteria Working Group (CCWG) to develop a proposal for a harmonized classification system for pesticides.

The proposed classification system consists of six categories: one for manufacturing and five for end-use products. Pesticide products would be placed in one of five end-use product categories (Lower Risk Domestic, Higher Risk Domestic, Lower Risk Commercial, Higher Risk Commercial, and Restricted) based on human health toxicity, environmental fate and ecotoxicity, and use and application technology.

Improving the classification of domestic class pesticide products was identified as one of the elements of the Healthy Lawns Strategy (HLS), which was launched in the fall of 2000 by the Pest Management Regulatory Agency (PMRA). The Strategy, aimed at reducing the reliance on pesticide use for lawn care, invited stakeholders to comment on the proposed domestic product classifications under the harmonized pesticide classification system. Stakeholder suggestions have been incorporated into the proposed system.

It is intended that the harmonized system be implemented in a phased approach. Changes to the process of classifying domestic pesticide products would be implemented in the first phase. Following further consultation the PMRA would proceed to implement phase two of the harmonized system for commercial and restricted products.

This consultation document outlines the proposal for a harmonized pesticide classification system and plans for implementing the changes to domestic product classification.

¹ The FPT Committee includes representation from all provinces and territories, federal government and is used as a forum to address issues of mutual interest or concern.

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1.0 Introduction

Under the federal *Pest Control Products Act* (PCP Act) the Pest Management Regulatory Agency (PMRA) of Health Canada is responsible for registering pesticides for use in Canada. As a part of federal registration, pesticide products are assigned a class designation (Domestic, Commercial, Restricted or Manufacturing). The class designations (or classification) provide a framework for the provinces and territories to regulate who can sell or use these pesticides. Four provinces (Alberta, British Columbia, Ontario and Quebec) have developed their own unique provincial classification systems, which in some cases includes additional classification categories, as a basis for implementing appropriate regulatory controls on the sale and use of pesticides in their jurisdictions. Other provinces and territories use the federal classes and supplementary regulations, where needed, to regulate the sale and use of pesticides.

In 1996 provinces, territories and the PMRA agreed that there were benefits to harmonizing existing classification systems into a single harmonized system. These benefits include:

- uniform sale and use requirements across Canada;
- opportunity to standardize training requirements;
- improved framework for directing pesticide products to users appropriately trained for their handling and use;
- easier implementation of international protocols and criteria when appropriate.

To proceed with harmonization the FPT Committee established the Classification Criteria Working Group (CCWG) which consisted of representatives from the PMRA, the pesticide manufacturing and agriculture industries, and regulatory officials from several provinces. An initial proposal for a harmonized pesticide classification system was developed by the CCWG, and subsequently refined following input from members of the FPT Committee.

A subsequent committee, the Classification Implementation Working Group (CIWG) was established to co-ordinate a consultation process for Canada and to develop a final proposal based on stakeholder input.

In the fall of 2000 the PMRA announced the launch of the Healthy Lawns Strategy (HLS) in partnership with the provinces, territories and interested stakeholders. The objective of the strategy is to reduce reliance on pesticide use for lawn care. Changes to the federal classification of domestic products were identified as one mechanism for achieving the objectives of the strategy. Stakeholders were asked to comment on the criteria under consideration for domestic pesticide products and their input was taken into consideration in developing the current classification proposal.

1.1 Definition of a Pesticide

A pesticide or pesticide product is a chemical, organism or device used to control, destroy, repel, attract or reduce pests. Pesticides include:

- Insecticides (*i.e.*, products to control insects)
- Herbicides (*i.e.*, products to control weeds)
- Fungicides (*i.e.*, products to control fungus diseases)
- Algicides (*i.e.*, products to control algae)
- Bactericides (*i.e.*, products to control bacteria)
- Rodenticides (*i.e.*, products to control rats and mice)
- Avicides (*i.e.*, products to control birds)
- Piscicides (*i.e.*, products to control fish)
- Molluscicides (*i.e.*, products to control slugs and snails)
- Miticides (*i.e.*, products to control mites)

2.0 Background

2.1 The Federal Role: Pesticide Registration

Pesticide products are registered under the federal *Pest Control Products Act* (PCP Act) following an assessment by the PMRA of the human health and the environmental risks and value of the pesticide product. For products containing new active ingredients or for major new uses of a product, an extensive risk assessment is conducted which includes consideration of the potential for adverse effects as a result of the expected exposure pathways. The PMRA assesses the risk by reviewing the following areas:

Health

A human health risk assessment for a new pesticide is based on a thorough understanding of the toxicological profile of the pesticide and the nature and relevance of the observed toxic effects to human health. Standardized studies in test animals are required. These tests provide the basis for determining what is the toxic effect; at what dose level does it appear; and at what dose level is there no effect. Short and long-term toxicity studies as well as studies in special areas, such as carcinogenicity, mutagenicity, etc., are assessed. Occupational exposure assessments determine the exposure that could occur for persons handling the pesticide on a regular basis, any possible bystander exposure and the potential for exposure from food residues. PMRA uses modern risk assessment concepts, including special consideration of children and other vulnerable groups, and the need to assess aggregate exposure and cumulative effects of pesticides that act in the same way.

Environment

The environmental assessment includes evaluation of environmental chemistry, fate, persistence and toxicity to fish and wildlife. To assess the potential effects of pesticides on the environment, tests in surrogate species together with conservative estimates of expected environmental concentrations, are used. The environmental assessment predicts potential risks for a wide range of wildlife species, and ecosystems under a wide range of conditions. The environmental assessment also results in recommendations on mitigative measures that would reduce concerns for residue accumulation, groundwater contamination, runoff and risk to non-target organisms.

Value and Efficacy

The efficacy of the pesticide at different doses is determined to help establish the lowest application rate at which the pesticide is effective to minimize risks to health and to the environment. The value assessment also looks at the intended benefit the product provides in improving crop yield, reducing damage, etc.

Decisions

Once all of the components of a submission have been evaluated, the PMRA determines whether or not a product should be granted registration. A decision is made to register a product only if there is sufficient scientific evidence to show that a product does not pose unacceptable health or environmental risks and that it serves a useful purpose. A registration is normally granted for a term of five years, subject to renewal, unless it is determined that it should be reviewed at an earlier date.

Re-evaluation

After products are registered, the PMRA routinely assesses new information on registered products. Where there is evidence that the pesticide poses unacceptable risks to human health, the environment, or that the product is without value for its intended purpose, the registration may be terminated.

2.2 The Provincial/Territorial Role: Regulating Sale and Use

The primary role of provinces and territories is to regulate the sale, use, storage, transportation and disposal of federally registered pesticides in their jurisdictions as long as the measures they adopt are consistent with any conditions, directions and limitations imposed under the PCP Act or other federal legislation. For example, a province or territory may prohibit the use of a registered pesticide in its jurisdiction, or it may add more restrictive conditions on the use of a product than those established under the PCP Act. It may not, however, authorize the use of a product that has not been approved under the PCP Act and may not relieve the user of the obligation to comply with the conditions, directions and limitations imposed under the PCP Act.

Provinces and territories administer pesticide management programs that include education and training programs, the licensing and certification of applicators, vendors and growers, and the issuing of permits for certain pesticide uses. Other important roles, carried out in co-operation

with PMRA regional offices, are those of enforcement and compliance monitoring and response to spills or accidents.

2.3 Current Classification Systems

The purpose of classification is to provide a framework for regulating the sale and use of registered pesticides. Classification has an important role in mitigating potential risks associated with pesticide use; for example, ensuring that Commercial products are only available to those individuals who are properly trained and licensed.

2.3.1 Federal Class Designation

Following a registration decision, pesticide products are currently classified into one of the following classes: Domestic, Commercial, Restricted or Manufacturing. These designations are based on:

- a combination of hazard and risk,
- use-site (e.g., products intended for direct application to bodies of water or products intended for direct application to forests), and
- intended market (e.g., commercial, agriculture or domestic use).

The primary consideration in the classification is the intended use of the product as indicated by the registrant. Additional details of the federal class designations are provided in Appendix A.

2.3.2 Provincial Classification Systems

Four provinces (Alberta, British Columbia, Ontario and Quebec) have established provincial classification systems. Pesticide products are classified into schedules or classes based on considerations such as the percentage concentration of the active ingredient in the pesticide product, intended market, acute toxicity, environmental fate and persistence, container size, etc. The classification category signals who can sell or use the pesticides as well as other specific requirements relating to use and disposal. Other provinces use the federal classification designations to regulate the sale and use of pesticide products.

2.4 International Harmonization of Hazard Classification for Chemicals

Since 1992, several countries including the United States and Canada have been working on the development of a Globally Harmonized System (GHS) for the classification and labelling of chemicals. The GHS is a hazard-based system, which will encompass all hazardous chemicals, including pesticides. The GHS includes (1) harmonized criteria for evaluating the health, environmental and physical hazards of chemicals, and (2) harmonized hazard communication elements, including the requirements for labelling and for safety data sheets.

The federal government is representing Canada in the development of the GHS. Countries that implement this new system will be free to determine which of the elements of the GHS will be applied in different sectors of their regulatory systems. Canada has committed to adopt GHS criteria for all products in the interests of international harmonization. Over the next few years the PMRA, with input from stakeholders, will develop plans for the application of the GHS to Canada's pesticide regulatory framework.

3.0 The Proposed Harmonized Pesticide Classification System

The proposed new harmonized pesticide classification system is based on the current federal and provincial classification schemes and the international Globally Harmonized System (GHS).

The acute toxicity cut-off values from the GHS, a hazard-based system, (Appendix B) have been incorporated into the proposed system. The design of the proposed system also provides for a detailed assessment of human and environmental exposure during pesticide application. This assessment will be used to determine the risk associated with various uses of a pesticide product. Classification categories will be assigned based on the overall risk of the product. This will allow provinces to regulate the sale and use of pesticide products based on their degree of risk.

The harmonized system proposes five categories for pesticide products. There will be two categories for Domestic products to separate those of lower and higher risk. Similarly, Commercial products would be separated into two categories based on risk. The Restricted category would include only those products with the highest risk.

3.1 General Description

Table 1 provides an overview of the proposed system describing the various categories for the classification of a pesticide product. The table also describes the minimum sale and use requirements for each category. For example, the Lower Risk Domestic products would be available to homeowners at retail outlets that do not require a licence/permit to sell these products. Products in the Higher Risk Domestic category would only be sold by vendor outlets holding a provincial licence/permit. These vendor outlets must have trained/certified employees to give homeowners advice and directions for use of the product. Commercial products would only be sold by vendor outlets holding a provincial licence/permit with trained/certified employees. Both Commercial categories would require training and mandatory certification for all users. However, the training and mandatory certification for the lower risk category may not apply to agricultural growers in all provinces². The Restricted category includes the highest risk products and may require provinces to impose additional product specific use restrictions.

² All provinces have training and mandatory certification programs and in some provinces these requirements apply to agricultural growers.

Table 1. Overview of Proposed System: Classification Categories and Standard Minimum Sale and Use Requirements.

		Restricted	Higher Risk Commercial	Lower Risk Commercial	Higher Risk Domestic	Lower Risk Domestic
Category Description		Products considered of the highest risk because of toxicity or environmental impacts.	Products marketed for use in commercial activities but considered higher risk because of toxicity or environmental impacts.	Products marketed for use in commercial activities.	Products marketed to consumers for use in and around a dwelling but do not meet the criteria for “Lower Risk Domestic”.	Products marketed to consumers for use in and around a dwelling. Products present very low risk to human health or the environment.
Proposed Standard Minimum Regulatory Requirements for Sale and Use	Sale	Licence/permit for vendor outlets. Training/mandatory certification for employees.	Licence/permit for vendor outlets. Training/mandatory certification for employees.	Licence/permit for vendor outlets. Training/mandatory certification for employees.	Licence/permit for vendor outlets. Mandatory training and/or certification for employees.	No specific requirements.
	Use	Training/mandatory certification* for use, along with provincial requirements and/or use permit.	Training/mandatory certification* for all users.	Training/mandatory certification* for all users**.	No specific requirements.	No specific requirements.

* The Standard for Pesticide Education, Training and Certification in Canada, endorsed by all provinces and territories in 1994, sets basic education requirements, common terminology, certification categories, certification and re-certification requirements and guidelines for testing competency.

** This requirement may not apply to agricultural growers depending upon provincial legislation.

3.2 Criteria for Human Health

The acute toxicity limits for the five categories are outlined in Table 2. These include oral LD₅₀³ dermal LD₅₀ and inhalation LC₅₀⁴ values of the formulated pesticide product. These toxicity values coincide with the GHS cut-off values (Appendix B) except for the acute oral LD₅₀ value for the Higher Risk Domestic category. Use of a GHS cut-off value of >300 mg/kg for the

³ LD₅₀ indicates the median lethal dose of the formulated pesticide product. The lower the LD₅₀ value of the product, the more acutely toxic the product is.

⁴ LC₅₀ indicates the median lethal concentration of the formulated pesticide product. The lower the LC₅₀ value of the product, the more acutely toxic the product is.

Higher Risk Domestic Class products would have required that the toxicity limit be relaxed from a current value of >500 mg/kg (Appendix A) to >300 mg/kg. By using a LD₅₀ cut-off value of >300 mg/kg, products with greater acute toxicity would have been eligible for inclusion in the Higher Risk Domestic category and available to homeowners. This would not be consistent with current efforts to reduce potential exposure risk to homeowners. Therefore, it is proposed that the acute toxicity LD₅₀ limit of >500 mg/kg be maintained.

Table 2. Proposed System: Human Health Criteria and Cut-off Values

	Restricted	Higher Risk Commercial	Lower Risk Commercial	Higher Risk Domestic	Lower Risk Domestic
Acute Oral Mammalian – LD₅₀* (mg/kg)	Case-by-case/rationale	≤50	>50	>500	>2000
Acute Dermal Mammalian – LD₅₀ (mg/kg)	Case-by-case/rationale	≤200	>200	>1000	>2000
Acute Inhalation Mammalian – 4 hour LC₅₀* (mg/L) Dusts/mists only**	Case-by-case/rationale	≤0.5	>0.5	>1	>5
Irritation/Corrosion – skin	These end-points have not been developed and will be assessed on a case-by-case/ rationale basis.				
Irritation/Corrosion – ocular					
Other Criteria***					

* LD₅₀ and LC₅₀ values indicated are for formulated pesticide products.

** There is no general requirement for respiratory protection for products with LC₅₀ values above 0.5mg/L.

*** Criteria not listed above but applicable to a particular product will be adopted from the GHS with appropriate rationale by the PMRA.

The human health criteria outlined in Table 2 are used to determine how acutely toxic (*i.e.*, short-term toxicity) a product could be to humans through various exposure routes. PMRA will use these criteria and cut-off values of a formulated product to determine the appropriate classification category for each product. Other effects, such as chronic toxicity (*i.e.*, long-term toxicity) as well as carcinogenicity, reproductive and developmental toxicity etc., are assessed by the PMRA as a part of the registration process. The PMRA reviews this data and can decline to register or impose restrictions on the use of a pesticide product to manage any identified risks. Although long-term toxicity limits are not proposed for the classification of pesticide products, they could be incorporated at a future date if the limits are developed internationally through the GHS.

3.3 Consideration of Environmental Toxicity and Fate

The overall environmental risk of a pesticide product will be considered in determining the appropriate classification category. Assessing the environmental fate and the toxicity for the purposes of classification is complex, and will continue to be done on a product-by-product basis rather than by applying a standard set of criteria. Where appropriate, the environmental toxicity criteria developed through the GHS or other international agreements will be considered for incorporation into the classification system at a later time.

As part of the registration process the PMRA's environmental risk assessment integrates the information on both the exposure and the hazard associated with a pesticide. The PMRA estimates the environmental exposure of a pesticide to predict the concentrations in soil, in surface water, and on vegetation and other wildlife food sources. The hazard to non-target organisms is determined using standard laboratory toxicity tests, with a number of organisms that act as surrogate species, to predict the toxicity to a wide range of species that may be exposed following the actual field applications of the pesticide.

For domestic class products it is proposed that the labels be screened and those with warnings of specific environmental or non-target toxicity concerns (e.g., toxic to fish, toxic to bees) be placed into the Higher Risk Domestic category to promote awareness of special use precautions. Furthermore, it is proposed that persistent pesticides that do not readily breakdown be removed from the domestic market altogether.

Pesticide products which have been assessed to have significant environmental concerns associated with their use (e.g., potential for residue accumulation due to persistence, potential to leach and to contaminate ground water, potential to runoff, or high toxicity to pollinators or to aquatic organisms) would be placed in either the Higher Risk Commercial or the Restricted category. This would allow for an appropriate degree of risk mitigation.

4.0 Impact of the Healthy Lawns Strategy on Classification

In the fall of 2000, Health Canada launched the Healthy Lawns Strategy (HLS) as part of its "Action Plan for Urban Use Pesticides". The objective of the Strategy is to reduce the reliance on pesticide use for lawn care, mainly through the application of Integrated Pest Management (IPM) principles. Particular emphasis is placed on pest prevention, use of reduced risk products and the application of pesticides only when necessary. Implementation of the HLS is a federal/provincial/ territorial initiative co-ordinated through the FPT Committee.

One mechanism for achieving these objectives is through more rigorous classification of domestic products. This concept has been incorporated into the harmonized pesticide classification system. For example it is proposed that in order to promote awareness of special use precautions needed for products with environmental or non-target toxicity concerns, that these products be placed in the Higher Risk Domestic category. Additional criteria for domestic products are outlined in the following section.

4.1 Additional Criteria for Domestic Products

Table 3 outlines the proposed additional criteria that would be used by the PMRA to place pesticide products into either the Lower Risk or Higher Risk Domestic category. For example, “ready to use” products that do not require mixing, dilution or calibration would be placed in the Lower Risk category provided that they also meet the human health criteria and environmental considerations. On the other hand, products that require calibration or mixing would be placed in the Higher Risk category even if the toxicity criteria indicate a fit with the Lower Risk category. This approach would require the sale of the Higher Risk Domestic products at licensed vendor outlets with trained staff to assist homeowners. Direct advice to the consumer would be available to promote safe and proper use of pesticides.

Table 3. Additional Criteria* used for Domestic Product Classification

Type of Additional Criteria	Higher Risk Domestic	Lower Risk Domestic
Product Strength	<ul style="list-style-type: none"> • Products that are sold as concentrates intended to be diluted or mixed or applied with calibrated equipment 	<ul style="list-style-type: none"> • “Ready to use” products that do not require dilution, mixing or calibration of equipment
Application Type	<ul style="list-style-type: none"> • Products intended for broadcast application • Products packaged with attachments for garden hoses. 	<ul style="list-style-type: none"> • Where applicable, products intended/ designed to be used as spot treatments only
Multiple Class Products	<ul style="list-style-type: none"> • Products that are designed to control more than one class of pest (<i>i.e.</i>, an insecticide-fungicide combination product) • Products with dual function (<i>i.e.</i>, pesticide-fertilizer combination products **) 	<ul style="list-style-type: none"> • Products intended to control one class of pest (<i>i.e.</i>, an insecticide to control insects) • Products with one function only (<i>i.e.</i>, pesticide only)

* Refer to Table 4 for details on the application of additional criteria.

** Refer to Section 4.4 of the document for additional details on pesticide-fertilizer products.

Establishing the limits on the package size of domestic products has also been examined for incorporation as criteria under the proposed system. Limiting the package size of domestic products is important to avoid hazards associated with storing surplus product.

Two options have been identified for consideration. One approach would be to limit the package size of domestic products to correspond to “single season use”. Adopting this approach would require that restrictions on the package size take into consideration the recommended rates of application, the average treatment area (e.g., average Canadian lawn area) and the average number of treatments per season required for the effective control of the pests listed on the product label.

A second approach would be to restrict domestic pesticides to specific package sizes (e.g., 1 litre or 1 kg). Consumers who have large properties and may require larger quantities to control a pest problem would need to purchase several packages. Similarly, products that are applied at higher rates of application would require that consumers purchase more than a single package.

Adopting either approach may require changes to the package size of domestic products that are currently available on the domestic market and would need to be implemented at the same time as labels are being revised to reflect the new classification categories.

4.2 Application of Classification Criteria to Domestic Products

There is a wide range of domestic products available to homeowners for maintaining landscapes, for use inside the home and for personal or pet use. It is important to outline how the classification criteria would be applied to the different groups of domestic products. Classification in the Lower Risk Domestic category would require that a product meet all criteria checked off for that product type, in Table 4. For example to be classified in the Lower Risk Domestic category an outdoor insecticide must meet checked criteria in Table 4 (refer to column 1). Specifically,

Toxicity criteria	<ul style="list-style-type: none">• oral LD₅₀ > 2000 mg/kg• dermal LD₅₀ > 2000 mg/kg• inhalation LC₅₀ > 5 mg/kg• low skin and eye irritation potential• no corrositivity• no special environmental concerns
Formulation/Packaging criteria	<ul style="list-style-type: none">• serves one function• package size restrictions
Application criteria	<ul style="list-style-type: none">• “ready to use” formulation• intended as a spot or limited area treatment• no broadcast applications• there is no critical timing application or pest identification required to use the product

Table 4. Criteria Applicable to the Different Use types of Pesticide Products for Classification in the Lower Risk Domestic Category.

		Use types of Pesticide Products											
		Outdoor Use						Indoor Use				Personal/ Pet Use	
Criteria for Inclusion in Lower Risk Domestic Category		Insecticides	Insecticides (baits)	Rodenticides	Fungicides	Herbicides	Microbials	Insecticides	Insecticides (baits)	Rodenticides	Fungicides	Insecticides	Insect Repellents
Toxicity	Oral LD ₅₀ ⁵ > 2000 mg/kg	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	Dermal LD ₅₀ > 2000 mg/kg	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	Inhalation LC ₅₀ ⁵ > 5 mg/kg	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	Low Skin and Eye Irritation Potential; No Corrosivity	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	No Special Environmental Concerns Identified On Label	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Formulation/ Packaging	Serves One Function (Insecticide or Fungicide or Herbicide)	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	Package Size: < 1 kg or 1 Litre, or single season use	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Application	“Ready to Use”: not requiring dilution, mixing or calibration of equipment	✓	✓	✓	✓	✓	N/A	✓	✓	✓	✓	✓	✓
	Spot or Limited Area Treatment	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	No Broadcast Application or application with garden hose attachments	✓	N/A	N/A	✓	✓	✓	✓	N/A	N/A	✓	✓	N/A
	No Critical Timing and Pest Identification required	✓	✓	✓	✓	✓	N/A	✓	✓	✓	✓	✓	✓
	Pre-packaged and Sold in a Tamper Proof Bait Station	N/A	✓	✓	N/A	N/A	N/A	N/A	✓	✓	N/A	N/A	N/A

⁵ LD₅₀, median lethal dose, and LC₅₀, median lethal concentration, are given for the formulated pesticide product.

4.3 Vendor Requirements: Training and Interaction with Consumers

Vendors are an important source of information for the users of domestic pesticide products, and thus they play a key role in the promotion of responsible pesticide use. The proposed system includes a minimum requirement for vendors of Higher Risk Domestic products to employ one or more trained/certified persons to ensure that the purchasers of these products are provided with appropriate pest control advice and product information.

Provinces will need to implement new training programs or adjust existing training programs for retail vendors selling Higher Risk Domestic products in order to meet the standard minimum sale and use requirements under the proposed system.

During dialogue on the HLS some stakeholders supported the concept of requiring Higher Risk Domestic products to be available “behind the counter” and to be dispensed by trained staff similar to pharmaceuticals. Other stakeholders were of the opinion that such an approach would be impractical for vendors to implement and would need to be thoroughly examined to determine the implications.

4.4 Proposed Controls for Pesticide-Fertilizer Mixtures

Pesticides contained in pesticide-fertilizer mixtures must be registered for this purpose, but are otherwise exempt from further requirements under the PCP Act. They are, however, subject to the *Fertilizers Act*, administered by the Canadian Food Inspection Agency (CFIA), and the *Compendium for Fertilizer-Use Pesticides*, which is published in accordance with the *Fertilizers Act*. The *Compendium* requires specific information to be provided on the label including the name of the pesticide contained in the mixture, recommended uses and claims, warning statements and other pertinent information about the pesticide-fertilizer mixture. In addition, pesticide-fertilizer mixtures are classified and subject to provincial regulation in some provinces.

Comments received from some stakeholders during the HLS consultation suggested that the use of pesticide-fertilizer combination products is not always consistent with the principles of Integrated Pest Management (IPM) (see glossary) and that these products should be considered for elimination from the domestic marketplace. Due to the dual functionality of such mixtures, it is proposed that these mixtures be considered as Higher Risk Domestic products (see Table 3 for additional criteria used for domestic pesticide product classification) and could only be sold through licensed vendor outlets.

5.0 The Decision Making Process for Product Classification

As a part of the registration process the PMRA would assign product classification by comparing the registrant submitted acute toxicity data to the human health cut-off values outlined in Table 2 and by assessing the environmental data. The additional criteria outlined in

Table 3 would also be used in the decision making process. It is important to note that the highest risk in any area (*i.e.*, human health, environmental, or additional criteria) would be the determining factor in how a product is classified thus ensuring that human health and the environment receive the highest consideration.

5.1 Domestic Pesticides

Figure 1 details the proposed decision steps involved in classifying domestic pesticides. Specifically, it describes how the toxicity criteria and cut-off values and the consideration of environmental risk as well as the additional criteria will be used for classification decisions. For example, to be eligible for the Lower Risk Domestic category a product must not exceed the toxicity cut-off values established for that category, and the label must not contain warnings of specific environmental or non-target toxicity concerns. Lower Risk Domestic products must also satisfy the additional criteria that apply to that category as described in Table 3 and pesticide product use type as outlined in Table 4. Products that meet the Lower Risk Domestic toxicity and cut-off values but do have environmental concerns, or are identified as Higher Risk Domestic products through the application of the additional criteria outlined in Table 3, would be placed in the Higher Risk Domestic category.

5.2 Commercial and Restricted Pesticides

Figure 2 indicates the decision steps involved in classifying commercial and restricted pesticides. Specifically, it details how the toxicity criteria and the consideration of environmental risk would be factored into classification decisions. For instance, to be eligible for the Lower Risk Commercial designation, a product must not exceed the toxicity cut-off values established for the category and must not be identified as a high risk to the environment. Products that meet the toxicity criteria for the Lower Risk Commercial category but pose a high risk to the environment would be placed in either the Higher Risk Commercial or the Restricted category, as appropriate.

Under the proposed system, the PMRA will consult with the provinces and territories in advance of classifying a product in the Restricted category since provincial and territorial action may be needed to impose special use conditions via permits or to implement special training requirements.

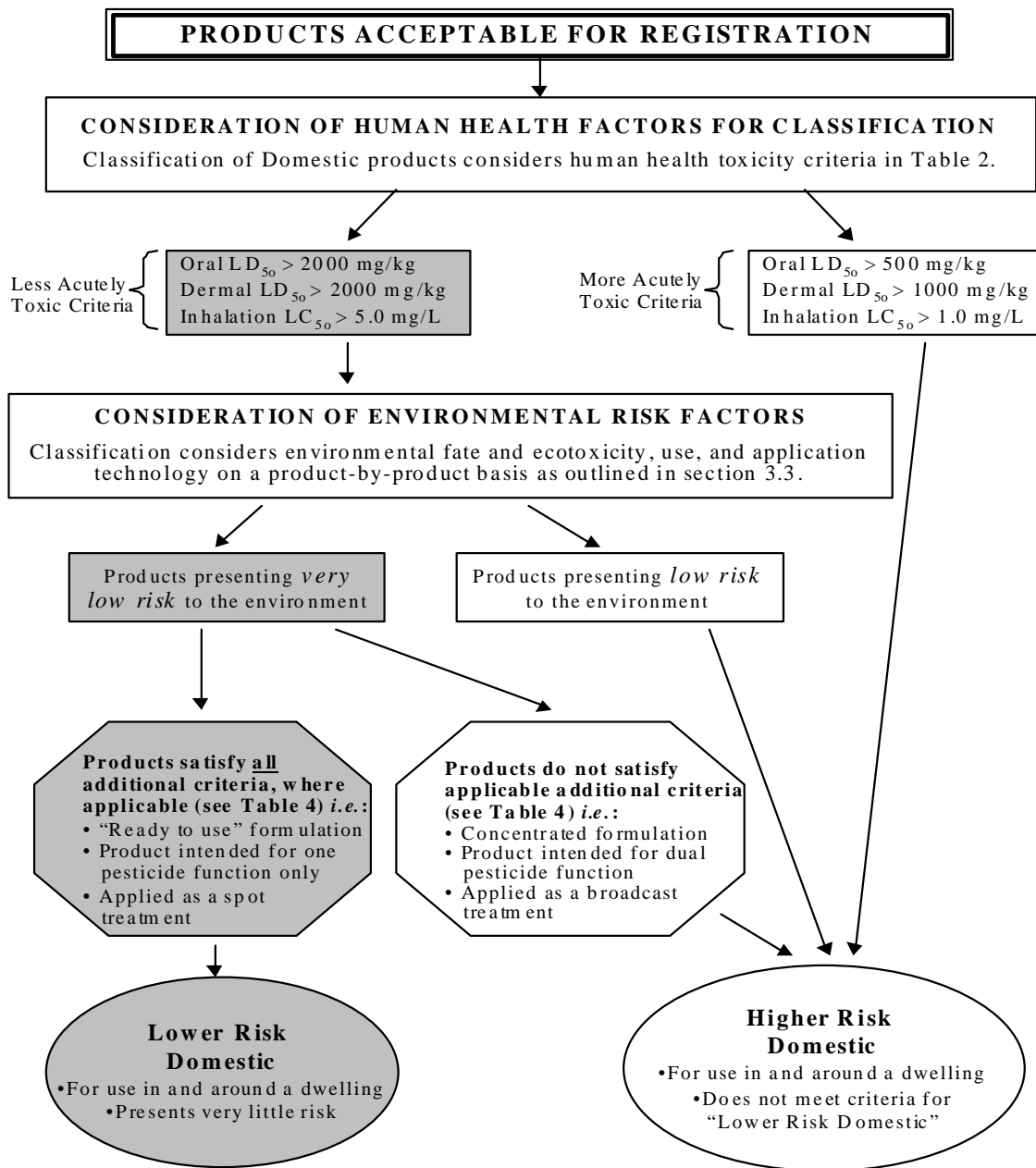


Figure 1. Under the proposed harmonized classification system, pesticide products considered acceptable for registration by the PMRA, would be assigned to a category. This diagram depicts the assessment of human health, environmental risk, and additional product characteristics for the classification of domestic products into one of two categories: Lower Risk Domestic and Higher Risk Domestic.

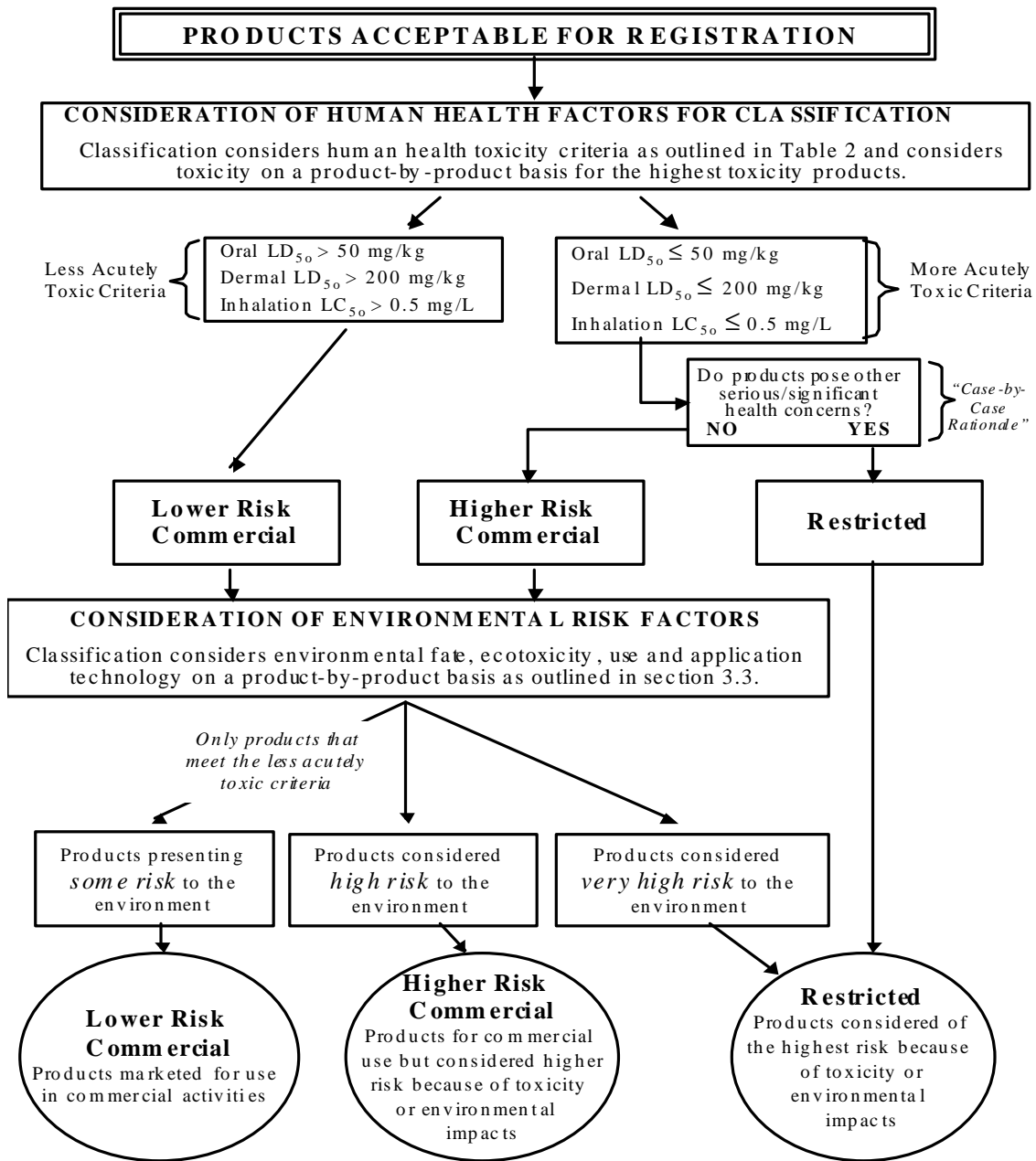


Figure 2. Under the proposed harmonized classification system, pesticide products considered acceptable for registration by the PMRA, would be assigned to a category. This diagram depicts the assessment of human health and environmental risk considerations for the classification of commercial and restricted pesticides into one of three categories: Lower Risk Commercial, Higher Risk Commercial and Restricted.

6.0 Implementing the Proposed System

The proposed system would need to be implemented in a phased manner to minimize impacts on stakeholders and federal/provincial/territorial programs and regulations.

The first phase of implementation would involve the adoption of the two new Domestic categories. This would also lend support to the objectives of the HLS. The second phase of implementation would see the adoption of the Restricted and two Commercial categories.

The placement of products into the Higher Risk Commercial or Restricted categories will be especially difficult for provinces and territories that currently do not require mandatory pesticide safety training for growers who need to use these products.

To facilitate and accelerate the adoption of the proposed harmonized system, alternative means of identifying the new classification categories of products need to be developed until such time as the product labels are changed to reflect the new classification categories. One possible approach would be to modify an existing PMRA product database that is accessible by the public as a means of providing the provinces and territories, the public and affected stakeholders with the new product classification information. New labels reflecting the new product categories would ideally be combined with other physical identifiers, such as colour coded stickers, to indicate the product category designations to pesticide vendors and users.

It may be necessary to establish a mechanism to obtain input from provinces, territories, and PMRA to ensure that the harmonized classification system is working. It is proposed that a multi-jurisdictional committee be set up to address any classification issues that may arise in adopting, implementing and maintaining the proposed system.

7.0 Exemptions from Provincial and Territorial Pesticide Legislation

Provincial and territorial pesticide legislation regulates the sale and use of most types of pesticides used within their jurisdictions. Certain pesticide types, such as swimming pool chemicals or antifouling paints have historically been exempt from provincial and territorial certification and licensing requirements. Exemption of these products is based on their use in a wide array of commercial (*e.g.*, sanitizers in hospitals), industrial (*e.g.*, anti-fouling paints) and consumer (*e.g.*, swimming pool algicides) sectors. PMRA will continue to classify such products. Pesticides proposed for exemption from provincial and territorial requirements are listed in Appendix C.

8.0 Appendices

Appendix A. Current Federal Class Designations*

	RESTRICTED	COMMERCIAL	DOMESTIC
Class Description	Products with additional use limitations.	Products marketed for general use in the commercial activities.	Products marketed to consumers for use in and around a dwelling.
Acute Oral LD₅₀ (mg/kg)	<50	>50	>500
Acute Dermal LD₅₀ (mg/kg)	<100	>100	>1000
Inhalation	Product specific	Product specific	No special precautions or equipment required
Notes	<ul style="list-style-type: none"> • Significant environmental risks • Control products used in aquatic or forestry applications 	<ul style="list-style-type: none"> • Potential for restricted uses • Agricultural and industrial products 	<ul style="list-style-type: none"> • No irreversible effects from repeated exposures • Containers can be discarded in household garbage • Package sizes limited to single season use

* PMRA Registration Handbook, Section 6.0

Appendix B. Globally Harmonized System (GHS) Acute Toxicity Criteria and Cut-off Values

	Category 1	Category 2	Category 3	Category 4	Category 5
Oral (mg/kg)	<5	<50	<300	<2000	<5000
Dermal (mg/kg)	<50	<200	<1000	<2000	
Gases (ppm)	<100	<500	<2500	<5000	
Vapours (mg/l)	<0.5	<2	<10	<20	
Dusts and Mists (mg/l)	<0.05	<0.5	<1.0	<5	

Appendix C. Types of Pesticides Proposed for Exemption from Provincial and Territorial Certification and Licensing Requirements

Product Code	Product Type	Description
ADJ	Adjuvant	Compounds or substances of the end-use formulations or used separately for in-tank mixing by the end-user that enhance or modify the physical or chemical characteristics of a pesticide.
AFP	Antifouling paints	Products that are coatings used to control aquatic fouling organisms e.g. molluscs on ships, small boats etc. in freshwater and marine environments.
AIS	Air Sanitizer	Products that reduce the level of microorganisms present by significant numbers.
ARP	Animal Repellent (does not include thiram)	Products used to repel animals on the basis of irritation (but not toxicity).
DIS	Hard-surface disinfectant	Products that destroy or inactivate microorganisms on inanimate surfaces.
DEV	Electronic or Mechanical Devices	Products that repel pests. Not toxic.
HDW	Heavy duty wood preservative	Products applied at specialized industrial facilities using vacuum/pressure or thermal methods.
JON	Joinery wood preservative	Products applied at secondary wood manufacturing plants using vacuum or pressure or thermal methods for millwork, windows and doors to prevent decay or damage from insects and termites.
LAA	Laundry additive	Products added for cleaning fabrics and textiles etc.
MPS	Material preservatives	Products that are usually applied during the manufacture of various materials to protect them against bacterial or fungal deterioration.
PGR	Plant growth regulator	Products used for controlling or modifying plant growth processes without severe phytotoxicity (not traditional pesticides).
PHE	Insect pheromones	Products that affect behaviour between members of the same species.
PRP	Pruning paint	Used to protect exposed surfaces of a tree after pruning.

Product Code	Product Type	Description
REM	Domestic remedial wood preservatives (non-creosote)	Products applied on wood to prevent decay or damage from insects and termites.
SAN	Sanitizer only (no disinfecting properties)	Products that reduce the level of microorganisms present by significant numbers.
SAP	Anti-sapstain wood preservative	Products applied to freshly sawn lumber, timbers or logs to prevent mould growth, stain and decay for short-term storage or transit.
SLI	Slimicide	Products that are applied to industrial cooling or process waters to control the growth of slime-forming microorganisms.
STN	Wood preservative stain	Products that prevent surface growth of mould or decay on exterior wood products.
SWA	Swimming pool algicide	Products applied to water in swimming pools to control various species of algae.
SWB	Swimming pool bactericide	Products applied to water in pools, hot tubs, whirlpools and spas to control harmful bacteria.

9.0 Glossary

CCWG	Classification Criteria Working Group, established by the Federal/ Provincial/ Territorial Committee on Pest Management and Pesticides, to develop a proposal to harmonize pesticide classification systems across Canada.
Certification	The recognition by a regulatory agency that an individual has met or exceeded the Standard to use or sell pesticides. For example, an applicant who successfully passes an exterminator exam is certified as an exterminator to apply pesticides. [Excerpted from Revised Framework (Draft 2002) for the National Standard for Pesticide Education, Training and Certification in Canada.]
CFIA	Canadian Food Inspection Agency
CIWG	Classification Implementation Working Group established by the Federal/Provincial/Territorial Committee on Pest Management and Pesticides to consult on A Proposal for a Harmonized Pesticide Classification System for Canada.
Compendium for Fertilizer-Use Pesticides	The regulatory document outlining information requirements on the pesticide label, recommended uses and claims, warning statements and other pertinent information on fertilizer-pesticides mixtures.
Efficacy	In the context of the PMRA risk assessment for registration of pesticide products, a pesticide is assessed in order to establish the lowest effective rate at which it can be applied to achieve the desired effect, thus minimizing the risks to health and to the environment.
<i>Fertilizers Act</i>	The federal legislation that regulates agricultural fertilizers and fertilizer products.
FPT Committee	Federal/Provincial/Territorial Committee on Pest Management and Pesticides, includes representatives from all provinces, territories, and the federal government and provides a forum to address issues of mutual interest or concern (e.g. The Healthy Lawns Strategy). See the FPT Committee Internet website: http://www.hc-sc.gc.ca/pmra-arla/english/fpt/fpt-e.html .
GHS	Globally Harmonized System for the classification and labelling of chemicals, including pesticides.

Hazard	The inherent toxic potential of a pesticide, describes the nature of a risk.
HLS	The Healthy Lawns Strategy is a partnership with provinces, territories and interested stakeholders. The objective of the strategy is to reduce reliance on pesticide use for lawn care, mainly through the application of Integrated Pest Management (IPM) principles. Implementation of the HLS is a national initiative co-ordinated through the FPT Committee.
IPM	The Expert Committee on Integrated Pest Management defines Integrated Pest Management (IPM) as a decision-making process that uses all necessary techniques to suppress pests effectively, economically and in an environmentally sound manner. The elements of IPM include: a) planning and managing ecosystems to prevent organisms from becoming pests; b) identifying potential pest organisms; c) monitoring populations of pests and beneficial organisms, pest damage, and environmental conditions; d) using injury thresholds in making control decisions; e) reducing pest populations to acceptable levels using strategies that may include a combination of biological, cultural, mechanical, behavioural and chemical controls, and f) evaluating the effects and efficacy of pest management strategies.
LC ₅₀	The median lethal concentration of the formulated pesticide product. The lower the LC ₅₀ value of a chemical the more acutely toxic that chemical is. [Excerpted from <i>A Decision Framework for Risk Assessment and Risk Management in the Pest Management Regulatory Agency – Science Policy Note SPN2000-01.</i>]
LD ₅₀	The median lethal dose of the formulated pesticide product. The lower the LD ₅₀ value of the product, the more acutely toxic the product is. [Excerpted from <i>A Decision Framework for Risk Assessment and Risk Management in the Pest Management Regulatory Agency – Science Policy Note SPN2000-01.</i>]
Licence	A document issued by a regulatory agency authorizing an individual, entity or institution to carry on the business of selling or applying pesticides. Individuals who apply pesticides commercially are required to obtain a provincial pesticide licence. Applicants must successfully complete training and pass a certification exam in order to be eligible for a licence. [Excerpted from Revised Framework (Draft 2002) for the National Standard for Pesticide Education, Training and Certification in Canada.]

Limited Area Treatment	Application of a pesticide product to small areas where pests occur. For example, a pesticide product may be applied to a section of lawn where weeds are growing.
PCP Act	The <i>Pest Control Products Act</i> is the federal legislation used to regulate products for use in Canada to control pests and the organic functions of plants and animals.
Pesticide or pesticide product	A chemical or device used to control, destroy, repel, attract or reduce pests. Pesticides include insecticides (<i>i.e.</i> products to control insects), herbicides (<i>i.e.</i> products to control weeds), fungicides (<i>i.e.</i> products to control fungus diseases), algicides (<i>i.e.</i> products to control algae), bactericides (<i>i.e.</i> products to control bacteria), rodenticides (<i>i.e.</i> products to control rats and mice), avicides (<i>i.e.</i> products to control birds), piscicides (<i>i.e.</i> products to control fish), molluscicides (<i>i.e.</i> products to control slugs and snails) and miticides (<i>i.e.</i> products to control mites).
PMRA	The Pest Management Regulatory Agency, under Health Canada, is the federal agency that assesses and registers all pesticide products for use in Canada.
Risk	A measure of the likelihood that a ‘hazard’ occurs and the magnitude of the risk at a defined level of exposure.
Single Season Use	The amount of pesticide product, that would be needed by an average homeowner for application in a single growing season.
Spot Treatment	Application of a pesticide product to a very small area where pests occur. For example, pesticide products may be applied to target a single weed.
Value	Pesticide products that have a useful purpose in the marketplace and actually do what is claimed on the label, <i>i.e.</i> , improves crop yield, reduces damage etc.
Vendor	A person or retail establishment that holds a licence/permit to sell pesticide products.

Guide for the Submission of Comments

Part 1 Identification Profile

Date of Submission: _____

Name: _____

Address: _____

Phone/email: _____

Please complete the following sections if you are submitting comments on behalf of an organization or association.

Type of Organization: (e.g., professional, community, corporation, individual etc.) _____

Scope of Organization: (e.g. Municipal, Provincial, Regional, National etc.) _____

Description of Organization: (e.g. size or membership, when established etc.) _____

Mandate of Organization _____

Objectives or Activities Related to Pesticides _____

Position/Qualifications/Interests held in Organization: _____

Forward comments to:

FPT Secretariat
Attention: Tanya Saunders
Pest Management Regulatory Agency, Health Canada
Sir Charles Tupper Building
2720 Riverside Drive, A.L. 6606D1
Ottawa, Ontario
K1A 0K9