



## Pest Management Regulatory Agency

# Fact Sheet on The Regulation of Pesticides in Canada

Pesticides are carefully regulated in Canada through a program of premarket scientific assessment, enforcement, education and information dissemination. These activities are shared among federal, provincial/territorial and municipal governments, and are governed by various acts, regulations, guidelines, directives and bylaws. Although it is a complex process, regulators at all levels work together towards the common goal—helping protect Canadians from any risks posed by pesticides and ensuring that pest control products do what they claim to on the label.

### The Federal Role

The Pest Management Regulatory Agency (PMRA) of Health Canada has the mandate to protect human health and the environment by minimizing the risks associated with pest control products, while enabling access to pest management tools, namely, these products and sustainable pest management strategies.

Pesticides imported into, or sold or used in Canada are regulated nationally under the *Pest Control Products Act* (PCP Act) and Regulations. The PMRA is responsible for administering this legislation, registering pest control products, re-evaluating registered products and setting maximum residue limits under the *Food and Drugs Act* (FDA).

Companies that wish to have the right to sell a pest control product in Canada must submit detailed information and data to be evaluated by the PMRA. Companies must provide all the scientific studies necessary for determining that the product is acceptable in terms of safety, merit and value. Depending on the complexity of the submission, a complete evaluation can take anywhere from a number of weeks to a year or more. The evaluation results either in the product being granted registration and allowed for sale and use in Canada, or in the product being refused registration.

### Distribution of principal responsibilities

Federal (Pest Management Regulatory Agency of Health Canada)	Provincial/Territorial	Municipal
<ul style="list-style-type: none"> <li>• <i>Pest Control Products Act</i> (PCP Act) and Regulations</li> <li>• Pesticide registration and re-evaluation</li> <li>• Human health and safety</li> <li>• Environmental impact</li> <li>• Value (including efficacy) assessment</li> <li>• Alternative strategies</li> <li>• Compliance and enforcement</li> </ul>	<ul style="list-style-type: none"> <li>• Transportation, sale, use, storage and disposal</li> <li>• Training, certification and licensing of applicators and vendors</li> <li>• Spills and accidents</li> <li>• Permits and use restrictions</li> <li>• Compliance and enforcement</li> </ul>	<ul style="list-style-type: none"> <li>• Bylaws for municipal (and, in some cases, private and residential) lands</li> </ul>



## The PMRA registration process

### Screening

Before a submission is evaluated for health and environmental considerations and for its value (including efficacy), it is first examined by Screening Officers of the PMRA's Submission Coordination Division (SCD). The purpose of the initial screening is to make sure that submissions meet the format, content and fee requirements of the Agency before they are sent for detailed evaluation. The screening process ensures that only complete, accurate and standardized submissions are brought forward for assessment. To this end, the Agency provides to industry detailed presubmission guidance on administrative procedures and data requirements. In the Screening Section, preliminary analyses of the studies are also carried out to determine if they are acceptable and whether they comply with international protocols.

### Reviews

#### *Health*

The PMRA's Health Evaluation Division (HED) has three main areas:

*The Toxicological Evaluation Sections* (Fungicides, Herbicides, Insecticides and Antimicrobials) identify possible human health effects of pesticides and establish the levels at which humans can be exposed to the products without any harm. Studies assessed include short- and long-term toxicity, carcinogenicity (the capacity to cause cancer), genotoxicity (the capacity to cause damage to chromosomes) and teratogenicity (the capacity to produce fetal malformations), among others. The toxicology sections are responsible for setting acceptable daily intakes, the amount of a compound that can be consumed daily for a lifetime with no adverse effects. Acceptable daily intakes always have safety factors built in, ranging from 100 to 1000. These safety factors are designed to take into account the potential differences in response, both within the same species (e.g., adults versus children) and between species (e.g., animals versus humans).

*The Occupational Exposure Assessment Section (OEAS)* performs exposure assessments on all new active ingredients and all major new uses of a pesticide to determine how much exposure to a pesticide could occur in a typical day. These assessments take into account the different exposures that people could have to pesticides, such as those who work with the pesticides (formulators, applicators and farmers) and bystanders (people working or living near where a pesticide is used). They also take into consideration the differing exposures that adults and children would have. Exposure data considered include residues found in air and on surfaces indoors and outdoors following application in domestic, commercial and agricultural situations. Along with the exposure estimates, the end points identified in toxicity studies are also considered during the risk assessment. Margins of exposure ranging from 100 to 1000 are typically required. Higher margins may be necessary to address special sensitivities of infants and children or to account for uncertainty regarding the toxicology or exposure data bases. Routes and duration of exposure, and the species tested in toxicity studies are also considered. Assessments of the effectiveness of personal protective equipment are often performed, and wearing such equipment during handling of the product can be required as a condition of registration.

*The Food Residue Exposure Assessment Section (FREAS)* evaluates every submission where a product could come in contact with food, including field crops, meat and dairy products and processed foods. These evaluations are conducted to set the maximum residue limits for pesticides on food, both domestic and imported, under the FDA. Dietary risk assessments are also carried out to assess the potential daily intake of pesticide residues from all possible food sources. Dietary risk assessments take into account the different eating patterns of infants, toddlers, children, adolescents and adults, and so include a detailed evaluation of the foods and drinks that infants and children consume in quantity, such as fruits and fruit juices, milk and soya products.

#### *Environment*

The Environmental Assessment Division (EAD) evaluates data on the environmental chemistry and toxicology of products, as well as their

environmental fate (i.e., what happens to the pesticide once it enters the environment). To address environmental concerns that may arise from the intended use of a product, the EAD also makes recommendations for restrictions on use that would lessen risk. This could include label statements outlining buffer zones, timing and frequency of applications, rate at which the product can be applied, etc. As with the other PMRA divisions, the EAD maintains contact with their counterparts in other federal and provincial government departments and in other countries so that they have access to the most up-to-date information, standards and protocols.

### **Laboratory services**

The PMRA's laboratory scientists evaluate the product chemistry data that companies must provide as part of submissions for registering any pest control product. This International Standards Organization accredited laboratory also performs approximately 1500 guarantee, formulation and residue analyses every year in support of the PMRA's compliance investigations and microcontaminant, guarantee and misuse inspection programs.

### **Value and efficacy assessments**

An applicant for registration of a pesticide must establish that the product has merit and value for the purposes claimed when the product is used according to label directions. Efficacy and Sustainability Assessment Division evaluators carry out these assessments, which include determining the efficacy or effectiveness of the product at various doses. This helps establish the lowest effective rate at which pesticides can be applied, and contributes to the minimizing of risks to health and the environment, crop damage and resistance problems. These assessments have led to many Canadian products having up to 50% lower label use rates than the same products in other countries. Efficacy assessments also help protect users from deceptive claims regarding the effectiveness of pest control products. The "value" aspect of the assessment is linked to efficacy, and looks at whether the product improves crop yield, reduces damage by pests, etc., depending on the intended use of the product.

## **Decisions**

### **New products**

Once all the component parts of a submission have been evaluated, the PMRA determines whether or not a

product should be granted registration. 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, will a decision to register be made. A registration is normally granted for a term of five years, subject to renewal. The term will be limited to less than five years, however, where it is determined that the risks or value should be reviewed after a specified period. In all cases, conditions of registration are specified, including detailed use instructions, so that the product can be used safely.

### **Registered products**

After a product is registered, the PMRA may re-evaluate the products, resulting in changes to the use pattern, label statements or classification of a product, to ensure that the risks and value of that product remain acceptable. Where it is determined that the risks to human health or the environment are no longer acceptable, or that the product is without value for its intended purpose, the registration is amended or cancelled.

## **Other PMRA responsibilities**

### **Alternatives and regulatory affairs**

The PMRA's Alternative Strategies and Regulatory Affairs Division develops and implements federal policy and legislation for pest control products, and works with other government bodies, grower groups, research facilities and industry to facilitate information exchange and to promote risk reduction. Cooperative efforts include:

- Integrated Pest Management partnership projects;
- initiatives to facilitate access to new technologies (e.g., microbials, pheromones);
- participation within international bodies such as the North American Free Trade Agreement (NAFTA) and the Organisation for Economic Co-operation and Development (OECD) for the development of risk reduction policies, joint reviews and the harmonization of data requirements, and cooperation with international initiatives such as Persistent Organic Pollutants and Prior Informed Consent agreements;
- working with other governmental departments and the Federal/Provincial/Territorial Committee on Pest Management and Pesticides (F/P/T Committee) on pesticide-related issues; and

► active involvement with agriculture, forestry, aquaculture, urban and other sectors to identify and manage problems using sustainable pest management practices.

### Compliance and regional operations

Working with other federal and provincial ministries, the PMRA regional offices promote and verify compliance with the PCP Act and Regulations through investigations, inspections and consultations. They have the mandate to investigate the use, sale and importation of products; perform on-site inspection of usage and storage of products; do soil, crop and product sampling; and educate individuals, local officials and grower groups as to regulatory requirements. Where contraventions of the Act or regulations occur, appropriate enforcement measures may be taken.

### Consultation and communications

The PMRA is committed to providing an open, transparent and participatory process for the regulation of pesticides. The Agency seeks the advice of Canadians by frequent consultations with its advisory bodies, including the F/P/T Committee. It solicits public comment on proposals for new policies and programs as well as on major pesticide registration decisions. Information on the PMRA's extensive involvement in international pesticide-related efforts, notably the NAFTA Technical Working Group (TWG) on Pesticides and the OECD's Pesticide Programme is circulated broadly and regularly, and a consultation meeting with stakeholders is held prior to the yearly full meeting of the NAFTA TWG.

The Agency's web site at [www.hc-sc.gc.ca/pmra-arla/](http://www.hc-sc.gc.ca/pmra-arla/) contains all of the publications issued by the PMRA and a wide range of information and data useful to the general public and industry. The PMRA also operates a toll-free information line to answer pest management-related inquiries. The number is 1-800-267-6315, (613) 736-3799 outside of Canada. The PMRA Publications Coordinator can be reached at:

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## The F/P/T Committee

This committee brings together federal and provincial/territorial pesticide officials to exchange information and expertise. The F/P/T 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 wherever possible the pesticide-related programs and policies of the federal and provincial or territorial governments.

## The Provincial/Territorial Role

Only pesticides that are registered for use under the PCP Act may be imported into or sold or used in Canada. The provinces and territories may regulate the sale, use, storage, transportation and disposal of 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 a pesticides management program that includes education and training programs, the licencing and certification of applicators, vendors and growers, and the issuing of permits for certain pesticide uses. Other important roles, carried out in cooperation with PMRA regional offices, are those of enforcement and compliance monitoring, and response to spills or accidents.

Following are some of the areas of regulatory responsibility that can be held by provinces and territories. Please consult provincial/territorial officials (see list) for specific legislation and requirements.

### **Classification of pesticides for sale and use**

Pesticide product class designations (domestic, commercial, restricted) are reviewed and products are assigned to schedules to limit the sale and use of certain products to the appropriate individuals/operators who are trained to use them.

### **Vendor/dispenser licensing and applicator certification, training and licensing**

Retail pesticide vendors and pesticide applicators must be trained and licensed to ensure that products are used responsibly.

### **Grower and vendor certification**

Growers and representatives of vendor outlets must be trained and certified to ensure responsible purchase and use of products.

### **Permits**

Applicators can be required to obtain use permits for restricted class pesticides (e.g., for application by air, for fumigation or for aquatic use) that set out strict conditions for use in the province or territory (e.g., the requirement for buffer zones).

### **Posting and notification**

Pesticide applications on public land, and by pest control operators on residential property, require the posting of signs in most provinces.

### **Transport, storage and disposal**

Provincial/territorial regulatory departments can establish additional requirements for the safe handling and management of pesticides to meet local needs and conditions.

### **Compliance and enforcement**

Provincial authorities set fines, revoke and refuse licences, issue warnings, issue control orders, etc.

Contact your provincial/territorial agency for questions regarding use permits and classifications.

**Newfoundland and Labrador** Department of Environment and Labour; Department of Forest Resources and Agrifoods

**Prince Edward Island** Department of Agriculture and Forestry

**Nova Scotia** Department of the Environment and Labour

**New Brunswick** Department of the Environment and Local Government

**Québec** Environnement Québec

**Ontario** Pesticides Section, Ontario Ministry of the Environment

**Manitoba** Manitoba Agriculture and Food

**Saskatchewan** Sustainable Production Branch, Department of Agriculture, Food and Rural Revitalization

**Alberta** Pesticide Management Branch, Alberta Environment

**British Columbia** Ministry of Water, Land and Air Protection

**Yukon** Department of Environment

**Northwest Territories** Environmental Protection Service, Resources, Wildlife and Economic Development

**Nunavut** Environmental Protection, Department of Sustainable Development

## **Municipal and Local Role**

Provincial/territorial jurisdictions may allow cities, towns and municipalities to enact bylaws that set further conditions on the use of pesticides, such as when and where certain types of pesticides (usually lawn, turf and garden products) may be used.

# Pesticide Terminology

## **Active ingredient**

That ingredient of a pesticide that actually controls the targeted pest.

## **End-use product**

A control product that has been manufactured, packaged and labelled in a form that is usable by the consumer.

## **Formulant**

Ingredients that serve a purpose other than the actual control of the targeted pest (e.g., solvents to dissolve solids, emulsifiers to prevent the settling of liquids in the container, carriers to deliver the active ingredient uniformly to the site, etc.).

## **Guarantee**

The amount of active ingredient contained in a product, expressed as either a percentage or a weight. The PCP Act requires that the guarantee be stated on the label.

## **Label**

The product label that is approved as part of the registration process contains the conditions of registration that, along with the PCP Act and Regulations, govern the use of the product. In effect, the label is a legislative document. Use of a product in a manner that is inconsistent with the directions or limitations on the label is prohibited. Any control product offered for sale in Canada must bear the approved label. Advertisements for the product must relate only to the claims carried on the label.

## **PCP Act registration number**

A four or five digit number assigned to each registered pest control product by the PMRA. Unless expressly exempt by regulation under the Act, all pest control products must be registered and be issued a PCP Act registration number before being permitted for sale, import or use in Canada.

## **Pest**

Any injurious, noxious or troublesome insect, fungus, bacterial organism, virus, weed, rodent or other plant or animal.

## **Pesticide or pest control product**

Any product, device, organism, substance or thing that is manufactured, represented, sold or used as a means for directly or indirectly controlling, preventing, destroying, mitigating, attracting or repelling any pest. Control products include active ingredients used in the manufacture of end-use products and the end-use products themselves. Includes herbicides, insecticides, fungicides, antimicrobial agents, pool chemicals, microbials, material and wood preservatives, animal and insect repellents, and insect- and rodent-controlling devices.

## **Registrant**

An organization or individual that holds the certificate of registration and is thereby responsible for the product. A registrant can be a chemical company, federal or provincial agency, importer or any person wishing to market a pest control product in Canada. The registrant's name and address must appear on the product label.

## **Uses**

The specific pest(s) the product is designed to control and the sites where the product can be used. Each pest and site combination constitutes a use (e.g., dandelions on lawns, fleas on cats, fungi on potatoes, etc.).

For more information please refer to the PCP Act and Regulations, available through the website [www.hc-sc.gc.ca/pmra-arla/](http://www.hc-sc.gc.ca/pmra-arla/).