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Pest Management Regulatory Agency

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2008–2009

Canada

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Table of Contents

Message from the Executive Director

The Pest Management Regulatory Agency is aware that Canadians sometimes see pesticides as a potential risk to their health and environment. However, pesticides are among the most strictly regulated substances in Canada, and must undergo extremely rigorous and thorough health and environmental risk assessments before they can be registered and allowed to be sold or used in Canada. Products that are found to pose unacceptable risks are not allowed in Canada.

As a branch of Health Canada, the Pest Management Regulatory Agency's primary mandate is protection of human health and the environment. The core regulatory activities of the PMRA are built on solid and internationally recognized risk assessment methods to ensure reasonable certainty that no harm will result when pesticides are used according to label directions. The day-to-day work of hundreds of PMRA employees revolves around protecting the environment and health of Canadians.

Science and our ability to understand and reduce risk are continually evolving and improving. The PMRA keeps pace by using and contributing to the development of the most up-to-date risk assessment tools and methods and by working closely with other government regulatory agencies and partners around the world. This ensures that Canadians have access to the safest and most effective pest control tools.

The PMRA is on target to complete the re-evaluation of all older pesticides registered before 1995 to ensure they meet the most modern standards, and to continue the re-evaluation of all pesticides on a 15-year cycle. We have also significantly increased our capacity to monitor pesticides and their effects on health and the environment through the Incident Reporting program, as well as through research and monitoring projects in partnership with other federal departments and agencies, and the provinces. We are gaining a clearer picture of pesticide use and fate in the environment, and this will allow us to continue to refine and improve our risk reduction efforts.

Canada plays a leading role in international efforts to integrate various regulatory systems into an increasingly global market. Most of the new active ingredients registered last year were assessed through joint reviews with other regulators from around the world, and this number is increasing every year. International cooperation on pesticide evaluations ensures that Canadian growers have access to the lowest-risk and most effective products, and significantly increases the collective scientific expertise and body of knowledge on pesticides.

The PMRA is proud of its ability to deliver an efficient and effective pesticide regulatory system in Canada using the best science available. Our accomplishments in the 2008–2009 fiscal year reflect our continued commitment to protecting human health and the environment while ensuring Canadians have access to effective pest control strategies and products.

Richard Aucoin, Ph.D.
Executive Director
Pest Management Regulatory Agency
Health Canada

Vision

Continually promoting the highest standards for the protection of health and the environment, based on modern science, Health Canada has been an international force in the regulation of pesticides leading to public confidence and improved access to safer and innovative pesticides for Canadians. The Pest Management Regulatory Agency has invested in its workforce, workplace and partnerships to support one of the best pesticide regulatory systems in the world.

Mission

Protecting the health and environment of Canadians and supporting Canadian competitiveness by regulating pesticides and their use in an effective and transparent manner.

About the PMRA

The Pest Management Regulatory Agency (PMRA) is a branch of Health Canada and is responsible for regulating Canadian pest control products under the federal authority of the Pest Control Products Act. *Our mandate is to prevent unacceptable risks to people and the environment from the use of these products. We also encourage the development and application of sustainable pest management strategies and facilitate access to lower risk pest control products. We use modern scientific assessment techniques to assess human and environmental health risks when evaluating and re-evaluating pest control products. The PMRA endeavours to address public and stakeholder concerns, as well as to develop mechanisms to give Canadian users access to innovative products to remain competitive in domestic and international markets.*

Canada's Pesticide Regulatory System:

Excellence in Health and Environmental Protection

There is a great deal of interest surrounding the use of pesticides in Canada, from their applications in urban settings, to agricultural uses, to environmental and health impacts, and economic and trade issues. For these reasons, pesticides are among the most strictly regulated and well-researched substances in Canada today.

In Canada, all pesticides are subject to the federal ***Pest Control Products Act***. Under the Act, a pesticide can only be registered for use in Canada if there is reasonable certainty that no harm to human health, future generations or the environment will result when a product is used according to label directions. Pesticides must also demonstrate an acceptable contribution to pest management before they may be registered.

The safety and value of all pesticides submitted for registration are scrutinized by PMRA scientists, who perform thorough **health and environmental risk assessments** involving hundreds of different studies for each product. Approximately 70% of PMRA employees are scientists, including biologists, chemists, toxicologists, and epidemiologists with backgrounds in health, environmental science, plant pathology, weed science, and entomology.

Pesticides are critical to the success of Canada's agriculture and forestry sectors, and homeowners and city dwellers rely on them for protection from infestation and property damage. The Canadian public also has high expectations of government's ability to guard against, prevent or quickly address any threat to human health, the environment or the economy, as well as to provide timely and informative communications.

Did you know…

Product Registration Facts

It can cost a manufacturer many millions of dollars and a decade or more of research to discover, develop and register a new pesticide. The magnitude of the investment in the development and application process means that registrants tend to only submit products that are viable candidates for registration. When submitting a pesticide for registration, the onus of proof lies with the registrant to submit all the required studies. These studies are generally conducted by independent laboratories with some studies conducted by registrants, and must follow internationally developed and validated test guidelines and study protocols that adhere to the principles of Good Laboratory Practice. This extensive data reporting allows Health Canada scientists to conduct independent analyses of the raw data. Health Canada currently has more than 300,000 scientific studies on pesticides in its database.

The Pest Management Regulatory Agency will face numerous challenges in the coming years. We operate in an increasingly complex environment influenced by a number of factors—public expectations and awareness, evolving science and technology, the global regulatory environment, and government priorities. These factors influence how we carry out our mandate and deliver our programs and services to meet the evolving needs of our stakeholders and Canadians. They also reinforce the need for coordinated government action, partnerships and collaboration.

Reducing Risk Day-to-day: Our Regulatory Activities

The PMRA regulates the entire **life-cycle** of a pesticide, from determining value, to risk assessment, characterization and mitigation, to registration of products, to monitoring and enforcement, through re-evaluation of older pesticides every 15 years, and finally phase-out or cancellation of products that do not meet the most modern scientific criteria.

Scientific Evaluation and Registration of New Products

In order to be registered for use, a pesticide must undergo a thorough health and environmental risk assessment process which can involve the review of over 200 different types of studies in **three key areas: health, environment and value**. A pesticide can only be registered for use in Canada if there is reasonable certainty that no harm to human health, future generations or the environment will result when a product is used according to label directions. Pesticides must also demonstrate an acceptable contribution to pest management before being granted registration.

The development of pesticides is an evolving science. New methods and products are continually being developed, and there is a growing focus on the creation of pesticides that pose lower risks to human health and the environment. The PMRA encourages and facilitates the registration and use of these products through initiatives such as expedited review timelines, consultation with stakeholders and international cooperation.

In 2008–2009, 14 **new active ingredients** were registered for use in Canada. Of these, six were biopesticides, seven were conventional pesticides and one was an antimicrobial. Active ingredients are used in the formulation of pesticides. Typically, the registration of a new active ingredient permits the registration of multiple pest control products. **Appendix Table 6** provides details on these new active ingredients and their uses.

During the **pre-market assessment** of a pesticide, the product is evaluated in the context of restrictions that will be placed on its future use, to minimize any potential risk. For example these might include limitations on which crops they may be applied to, weather conditions for application, buffer zones for habitat protection, determining the lowest effective application rate, and protective equipment or clothing that must be used. These risk reduction measures form part of the product registration.

Minor Use

For many years, Canadian producers, especially those involved in the horticultural and specialty-crop industry, have not had access to the same range of pesticide products as producers in other countries. Because many Canadian crops involve small acreages, some manufacturers have not generated data to support pesticide registrations for this important part of the agriculture industry.

In an effort to support Canadian growers in developing sustainable pest control strategies and maintaining their competitiveness in the international market, the PMRA is actively involved in several initiatives and programs to increase the number of products available on a minor use basis. These include User Requested Minor Use Label Expansions (**URMULE**), User Requested Minor Use Registrations (**URMUR**), minor use joint reviews, and **grower-requested priority reviews** to address the technology gap.

Application of Additional Uncertainty Factor for Vulnerable Populations

In 2008, after extensive consultation with Canadian and international stakeholders, the PMRA published a new policy on the application of uncertainty and safety factors in the quantitative assessment of risk for products used in schools and homes and on food. This policy describes the application of an additional 10-fold margin of safety, referred to as the PCPA factor, in providing additional protection for infants and children in the risk assessment. Details on how the new factor is protective of human health can be found in the Science Policy Note *The Application of Uncertainty Factors and the* Pest Control Products Act *Factor in the Human Health Risk Assessment of Pesticides* (SPN2008-01).

In the 2008–2009 fiscal year, a total of 623 new minor uses were registered. As a result, newer, more environmentally sustainable and more modern products have been made available to Canadian producers, which helps sustain Canada's competitive position globally.

Emergency Registrations

A pest control product can be registered for up to one year, for the emergency control of pest infestations where no other effective method of control exists. Emergency use will be considered only if the product is effective, and the health and environmental risks are acceptable. Emergency registrations are not intended as a solution to an ongoing pest management problem. However, in cases where an emergency situation may exist in subsequent years and there is evidence that users and the sponsoring agencies are actively working towards satisfying the data requirements for a long-term solution, emergency registration may be renewed. The number of emergency requests that the PMRA receives can vary from year to year, depending on pest outbreaks and the availability of alternative products and methods. In the 2008–2009 fiscal year, the PMRA granted 50 emergency registrations, 22 of which were new requests.

Closing the Technology Gap

A technology gap exists when certain pesticides are registered in other countries, but not in Canada, because manufacturers have not brought their products to the Canadian market. Often these products are newer, and have potentially lower risk profiles than those currently available to Canadian growers, but the Canadian market may be too small to attract registrants of these products.

The PMRA works in consultation with the agricultural sector, provinces, industry, and international regulators to minimize the impact of the technology gap on growers. Needs and priorities for new active ingredients are identified, and strategies are developed to encourage and facilitate the registration of products that will put Canadian growers in a better competitive position. In addition, the PMRA, in consultation with stakeholders, is developing a grower priority database to facilitate the identification of critical gaps in access to pesticides in Canada.

The following are some examples of lower-risk products registered in Canada in the 2008–2009 fiscal year:

Ammonium soap of fatty acids, a new domestic herbicide for the control of weeds, algae, and moss in various areas such as vegetable and flower gardens, driveways, patios and gravel.

Safer's TopGun Herbicide containing fatty acids, expanded from domestic to commercial uses such as vacant lots, storage areas, greenhouses, plant nurseries, recreational areas and parks.

RagWeed Off and Adio Ambros, new herbicide products containing sodium chloride for use on roadsides, highways, walkways, vacant lots and other non-cropland sites.

Ferric sodium, a new molluscicide used to control slugs and snails in a variety of fruit trees, turf, grasses, vegetables, berries and ornamentals in greenhouses and outdoors.

Mono and di-potassium salt of phosporous acid, a new fungicide used for post-harvest treatment of russett-skinned potatoes intended for processing.

Ongoing Active Risk Reduction Measures:
Programs and Initiatives

Re-evaluation of Older Pesticides Using Modern Criteria

Re-evaluation involves the application of modern scientific approaches to examine the continued acceptability of older pesticides, including the assessment of exposure risks to sensitive groups such as children; aggregate exposure from combined dietary, residential and drinking water sources; and risk of cumulative exposure to chemicals with a common mechanism of toxicity. Because risk evaluation methods are continually improving, the PMRA **re-evaluates older pesticides** against modern scientific criteria on a 15-year cycle.

> If at any time there are reasonable grounds to believe that the health or environmental risks of a product are unacceptable, a **special review** may be undertaken. Please see page 12 for a full description of this process.

To support continued registration, the registrant must prove that the health and environmental risks of the product continue to be acceptable, and may be required to provide supporting data. Other published scientific literature, incident reports, and decisions by other countries are also examined by PMRA scientists to strengthen the re-evaluation. Re-evaluation outcomes can range from continued registration with no changes, to changes in use or addition of mitigation measures, to discontinuation of products.

As of March 31, 2009, 82% (330 of 401) of pesticides registered before 1995 have been re-evaluated according to current standards, and the PMRA is on target to complete the remaining 71 active ingredients by March 31, 2010.

Of all the pesticides re-evaluated unti March 31, 2009, 102 active ingredients were either voluntarily discontinued by the registrant, or are in the discontinuation process; 11 have been phased out (or proposed for phase-out) as a result of PMRA review; 198 have been proposed for continued use with modifications to the way they are to be used; and 19 actives were accepted for continued use without any label changes (see **Appendix Table 7** for a full list of re-evaluation decisions).

Adding Protective Measures to Existing Products

Re-evaluation is an opportunity not only to assess products against modern scientific and regulatory criteria, but also to take into account real-world use information such as incident reports, food residues and environmental monitoring data. Often, re-evaluation will determine that a product is suitable for continued registration with the addition of extra protective measures. These measures can include the addition of protective buffer zones around nearby sensitive habitats, the requirement for extra protective clothing during application, or limitations on where, when and under what circumstances the product may be used. As of March 31, 2009, a total of 198 re-evaluation decisions have resulted in PMRA requiring changes to products, and this has contributed to reduced risk to workers, bystanders and the environment.

Over the past year, the PMRA has built a framework to roll out the next phase of the re-evaluation program, which respects the *Pest Control Products Act* commitment to re-evaluate all pesticides on a 15-year cycle.

Transition Strategies

Occasionally, re-evaluation results in the decision to phase out the use of a product for which there is no alternative on the market. The PMRA is committed to working with stakeholders toward the development of strategies to facilitate the transition to safer alternatives by assisting commodity groups to identify potential alternative products, prioritize potential solutions, and gain access to lower risk pesticides and management practices. Transition strategies are currently being developed for azinphos-methyl, phorate and terbufos, and diazinon.

Canada's Chemicals Management Plan

The PMRA continued to meet its commitments under Canada's Chemicals Management Plan. The PMRA works closely with Environment Canada and other branches of Health Canada to assess high priority chemical substances including those found in pesticides, and make risk management decisions to protect Canadians and the environment from any risk these substances might pose. In addition to remaining on target to complete the re-evaluation of older pesticides, the PMRA strengthened current regulatory activities to accelerate the registration of new and safer pesticide products. The PMRA also increased its monitoring capacity with the first full data collection of the incident reporting program, and the introduction of the sales reporting database.

Pooling Expertise and Accelerating North American Re-evaluations

Because many pesticides are common to all of North America, the PMRA is working with the U.S. EPA to cooperate on re-evaluation of common pesticides by adopting a **work sharing** and **joint review** approach wherever possible. Two pilot products have been identified (clofentazine and clomazone) and preliminary discussions on worksharing re-evaluations of other active ingredients have taken place. Combining expertise and reducing duplication of effort is expected to accelerate the re-evaluation process, and ensures that products meet all modern North American safety criteria.

Tracking Impurities in Active Ingredients

The PMRA provides support to risk management activities by maintaining the **Microcontaminants Database,** an updated database of impurities found in technical-grade active ingredients, including those identified as "Challenge Substances" under the Chemicals Management Plan. These are compounds that were identified as being priority for assessment by Health Canada and Environment Canada in the categorization of the Domestic Substances List*. The database allows PMRA to make informed decisions on the registration of active ingredients, and for subsequent post-registration monitoring and risk management.

*Published under the *Canadian Environmental Protection Act.*

Ensuring Canadians Have Access to the Lowest-Risk and Most Effective Products and Strategies

Canadian growers consider themselves stewards of the land, and are eager to adopt the most environmentally sound practices, while playing a crucial role in providing safe and healthy food for Canadians and people around the world. The PMRA works closely with growers to identify and meet their pest management needs, while ensuring that the health and environment of Canadians is protected.

The PMRA and Agriculture and Agri-Food Canada are working together with growers under the **Pesticide Risk Reduction Program** to ensure that growers have access to the most effective and reduced-risk products. Together, these organizations work with stakeholders to foster initiatives to support the development and availability of reduced risk pesticides such as biological pesticides, and sustainable pest management practices that lead to reductions in human health and environmental risks.

Facilitating Access to Biopesticides

PMRA and Agriculture and Agri-food Canada (AAFC) work together under the Pesticide Risk Reduction program to increase the availability and adoption of biopesticides and integrated pest management practices in Canada.

PMRA and AAFC's Pest Management Centre have been working together with stakeholders to support registration and adoption of biopesticide solutions for control of insect pests on strawberries. Research trials have been funded to determine the value of various Integrated Pest Management approaches, including cultural, physical and biochemical approaches for control of weevils on strawberries.

Work was also carried out to support registration of a biopesticide for leafhopper control. Regulatory support from both PMRA and AAFC resulted in the availability of two new biopesticides, Met-52 and Surround WP in 2008 for strawberry growers.

In the 2008–2009 fiscal year, a total of 623 new minor uses were registered. As a result, newer, more environmentally sustainable and more modern products have been made available to Canadian producers, which helps sustain Canada's competitive position globally.

A Leader in the Global Approach to Evaluating Pesticides

Until recently, countries evaluated and registered pesticides individually. These processes are resource-intensive and can be duplicative, particularly given the increasingly integrated nature of the global market. While each country must consider its own legislation and conditions of use, separate regulatory structures between countries give rise to different requirements for pesticide registration, and ultimately differences in the way products are used. This can cause barriers to trade, and disparities in access to crucial lower-risk products.

The PMRA plays an important role in North American and international cooperative efforts. Our commitment to sound science, efficiency and leading-edge applications is recognized and respected worldwide. Increasing the pool of expertise in the evaluation of new products ensures a more thorough and rigorous investigation, while reducing overlap and expediting registration of newer reduced-risk products.

Crop Grouping Exercise

To facilitate access to new pesticides for minor crops, and to streamline the setting of Maximum Residue Limits, the PMRA is revising and updating how Canada categorizes crops. In co-operation with the US EPA and the International Crop Grouping Consulting Committee (ICGCC), PMRA is adding new crops to existing crop groups, establishing new subgroups and revising the representative crops in some groups. This will allow PMRA to use data and reviews for similar crops and groupings to register minor use products and facilitate the establishment of MRLs.

Within North America, the governments of Canada, the United States and Mexico have been working together under the **NAFTA Technical Working Group** (TWG) to ensure a collaborative approach to pesticide regulation within its territory. But since pesticide regulation is becoming a global activity, governments worldwide are working together to address associated science and policy issues. The **Organisation for Economic Co-operation and Development Working Group on Pesticides** provides a setting where governments can compare policy experiences, seek answers to common problems, identify good practice and coordinate domestic and international policies.

As of March 31, 2009, a total of 35 active ingredients have been registered in cooperation with other international regulatory bodies (27 **joint reviews** and 8 **work-shares**, with 5 of the joint reviews being trilateral or global). This has resulted in 89 new product registrations including both actives and end-use products. In 2008–2009, the PMRA registered 14 new pesticide active ingredients for use in Canada, with 67% (4/6) of the new agricultural conventional chemical active ingredients being registered through joint reviews or work-shares (3 were global joint reviews). The first **"global" joint review** registered was the insecticide chlorantraniliprole, involving the United States, Canada, Ireland (rapporteur for EU), the UK, Australia, and New Zealand. The product was registered in Canada in May 2008, with 73 minor crop uses.

In 2008–2009, two joint reviews (a trilateral and global) were under review (fluopyram and saflufenacil). In addition, the PMRA received 10 new proposals from industry for trilateral or global joint reviews.

The NAFTA Technical Working Group is also facilitating joint reviews for minor use submissions, which allow Canadian specialty growers to access lower-risk products that manufacturers have not registered in Canada because of the smaller market size. The Technical Working Group also approved three new **joint labels** in 2008–2009, facilitating cross-border movement and access to these North American products. Stakeholders view NAFTA labels as a major accomplishment and the preferred path forward in terms of price discipline and product accessibility for growers within the United States and Canada.

The PMRA is working closely with OECD countries on science policy issues and now have an extensive joint review/work sharing program under development. Currently, most major new agricultural chemicals are being introduced through the global joint review process.

Terrestrial Field Dissipation Study Guideline Harmonization and Ecoregion Crosswalk Project

International Joint Reviews can be complicated by differences in environmental and use conditions, and the resulting behaviour of pesticides in different environments around the world. Under NAFTA, PMRA spearheaded an initiative to identify similar ecoregions between the US and Canada, and to harmonize North American methods of conducting terrestrial field dissipation studies so that field studies conducted in the US may be acceptable in Canada and vice versa.

This harmonized guidance was published in the US and Canada in 2006, and following on this success, the *Terrestrial Field Dissipation Study Guideline Harmonization and Ecoregion Crosswalk* project was introduced to the OECD. This project will not only further streamline the international Joint Review process, it will allow for more refined risk assessments and facilitate North American access to modern lower-risk products.

Taking Action when New Risks are Identified

The pre-market pesticide evaluation process takes into account many different scenarios, for example how a product will be used, how long it will persist in the environment, how the product breaks down, or who will be exposed to it during normal use. Occasionally, however, after a product is registered, new information arises that causes concern. The PMRA has several mechanisms in place to help validate assumptions made during the pre-market evaluation, and to identify and ultimately mitigate unexpected risks.

Incident Reporting

The **Incident Reporting Regulations** were implemented in April of 2007 to improve the capacity to monitor health and environmental incidents related to pesticide use and exposure, and to help the PMRA develop corrective actions when necessary. Registrants are required by law to report incidents involving their products to the PMRA.

The incident reporting database is used by scientific evaluators to look for trends and additional information about pesticides to support the risk assessment process. The more serious incidents are evaluated individually to determine if there is a causal relationship between the pesticide and the effect, as well as the strength of that relationship. The data can result in a special review of a product if unacceptable health or environmental risks are identified.

A total of 2294 incident reports were filed between the coming into force of the regulations on April 26, 2007 and March 31, 2009. Of these, 1393 occurred in Canada. In 2008-2009, 1373 incident reports were filed, 822 of which were Canadian. Details of these reports can be found on the PMRA website. The majority of Canadian incidents involved domestic animals (526), followed by humans (217) and the environment (47). The remainder involved packaging failures (23) and new information gained through scientific studies (9).

In 2008, the voluntary program for the public to report incidents was updated, and electronic reporting form for registrants was updated to improve data collection. The first annual summary of the incident reporting program was drafted and will be published before the end of 2008–2009.

Over the coming years, incident reports will play an increasingly important role in improving the risk assessment process, improving product label information, and the development of prevention and education programs.

Sales Reporting

The Pest Control Products Sales Information Reporting Regulations were introduced in 2006 as a mechanism to collect data from registrants about the quantity of their product sold over a one-year period. June 1, 2008 marked the first deadline for registrants to submit sales data for the 2007 calendar year to the PMRA. We anticipate that data will eventually be used in the re-evaluation of older pesticides, special reviews and the evaluation of incident reports.

Research and Monitoring: Improved Risk Management of Pesticides

The PMRA is continually improving its ability to protect human health and the environment by identifying areas where new knowledge will further refine the risk assessment process, and communicating these needs to the research community through various interdepartmental committees.

Environment Canada, Fisheries and Oceans Canada and Natural Resources Canada monitor and research the presence and effects of pesticides in the environment and provide reports to the PMRA. Where possible, provinces and other countries also provide monitoring data to the PMRA. For example water, air and biota monitoring data from Environment Canada and Fisheries and Oceans Canada was used in the proposed re-evaluation decision for trifluralin, and water monitoring data from Environment Canada was used to refine the risk assessment for the proposed re-evaluation decision for atrazine. The Canadian Food Inspection Agency provides access to data on pesticide residues on food, which are considered in human health risk assessments.

Monitoring data provides the PMRA with better information on the presence and effects of pesticides in the environment and food supply, improves the body of knowledge on pesticides, and contributes to decisions that are protective of human health and the environment.

National Biomonitoring

Two national biomonitoring surveys with pesticide monitoring components are ongoing in Canada under the Chemicals Management Plan: The Canadian Health Measures Survey (CHMS) and the Maternal-infant Research on Environmental Chemicals (MIREC). Results from these studies will provide information for use in the risk assessment of pesticides, particularly for re-evaluation of older pesticides.

Special Reviews

If at any time there are reasonable grounds to believe that the health or environmental risks of a product are unacceptable, a special review may be undertaken. Special reviews can be initiated as a result of new scientific information that arises in the research community, regulatory decisions made by other countries or data from incident reports. As with re-evaluation, special review outcomes can include label changes, use changes and discontinuation. No special reviews were initiated in 2008–2009.

Ensuring Compliance with Pesticide Regulations

The use of registered pesticides in Canada is subject to strict regulation, and conditions as set out on the product label. Health Canada's Regional Offices throughout Canada promote and verify compliance with the *Pest Control Products Act* and Regulations. Activities conducted through the Regions include **inspections**, and responding to situations of known or suspected noncompliance with **investigations**. All of this is done to ensure that only the products that meet stringent safety standards are used in Canada, and they are imported, manufactured, distributed and used according to regulatory requirements.

Compliance activities may be conducted in partnership with other relevant federal and provincial governments. Where violations of the PCPA or Regulations occur, appropriate enforcement measures may be taken. These enforcement measures are under the Criminal Code provisions of the PCPA, or carried out in accordance with the provisions of the Agriculture and Agri-Food Canada *Administrative Monetary Penalties Act*.

In the 2008–2009 fiscal year, the PMRA developed 13 **Compliance Programs**, targeting pesticide registrants, distributors and users. Programs included surveillance and assessment of levels of compliance in inspected sectors, promotion of compliance requirements, and grower and public cooperation in the reporting of unregistered products.

Fifty-three surveillance inspections were conducted and 466 investigations related to reported or detected non-compliance were completed. A total of 812 enforcement responses were delivered, including Notices Of Violation and warnings.

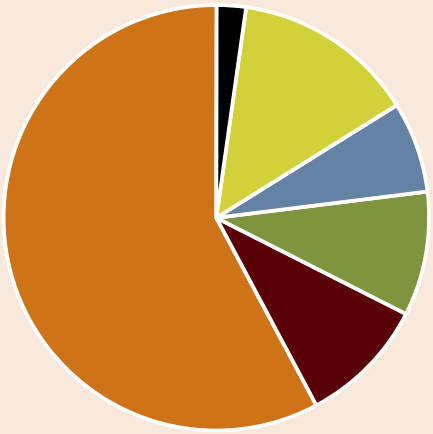
Increased Compliance Enforcement Capacity

In 2008, the PMRA embarked on a 5-year initiative focussing on risk-reduction measures through **Canada's Food and Consumer Safety Action Plan**. This includes engaging industry to take broader responsibility for consumer pesticide safety, enhancing PMRA's compliance and enforcement capacity in support of our expanded regulatory authority, and maintaining public confidence in pesticide product safety. PMRA will be working with key stakeholders to strengthen compliance, monitoring and enforcement measures, to promote of safe and proper pesticide use along the entire supply chain, and to develop accessible material to help Canadians make informed choices about pesticides.

Significant work was conducted in 2008–2009 on the PMRA's **Investigation Tracking Database**, which is being developed to go beyond the current searchable repository of investigations data, to enhance the analysis and identification of trends, and as a risk management tool.

Financial Profile

In the 2008–2009 fiscal year, the PMRA received $51.8M in funding: $30.0M from A base, $7.3M from revenues and $14.5M from other funding initiatives.
(Figure 1)



A-Base	$30.0M
Revenue	$7.3M
Enhancing Access	$5.0M
Minor Use	$3.5M
Chemical Management Plan	$4.9M
Food and Consumer Safety Action Plan	$1.1M
Total Funding 08/09	**$51.8 Million**

Under the Enhancing Access to Pest Management Tools initiative, in collaboration with Agriculture and Agri-Food Canada, the PMRA received $18.7M for fiscal years 2007–2008 to 2010–2011. These funds, along with one-time funding to extend resources from the Agricultural Policy Framework for Minor Uses, are being used to address the technology gap, including enhancing access to new and lower-risk pesticides and to new minor uses for existing pesticides.

Under Canada's Chemicals Management Plan, the PMRA received $19.9M for fiscal years 2007–2008 to 2010–2011 to accelerate the re-evaluation of older pesticides, strengthen current regulatory activities for registration of new pesticides, facilitate access to new and safer pesticide products and improve risk management approaches through Incident Reporting and Sales Reporting regulations.

The PMRA is receiving $13.2M for the Canada Food and Consumer Safety Action Plan for fiscal years 2008–2009 to 2012–2013. This plan encourages and facilitates industry quality assurance and stewardship programs for the safe manufacture, selection and use of consumer pesticide products. These funds are also being used to enhance targeted oversight by increasing compliance enforcement capacity, which in turn will increase public confidence in pesticide product safety, and increase rapid response to consumer product health and safety issues.

Where we are Going

In 2008, the PMRA published its 2008–2013 Strategic Plan. The Plan places priority on protecting the health and environment of Canadians, and strives for six strategic outcomes that address the challenges facing the PMRA, and will guide our work over the years ahead.

By 2013:

1. By contributing to and benefiting from science internationally, our assessments and decisions will integrate cutting-edge science and we will use a progressive approach based on level of anticipated risk.

2. Canadians will be better informed about how Health Canada regulates pesticides and how they should be used, and will be confident in the results.

3. We will have established with partners a comprehensive framework for continuous evaluation and management of risks and value of pesticides throughout their life cycle.

4. As an influential international voice, we will have achieved high international standards for protection of human health and the environment, and Canadians will have timely access to safer and innovative pesticides.

5. We will have enhanced strategic partnerships to support the effective delivery of the Pest Management Regulatory Agency's mandate.

6. We want to be a dynamic organization focussed on leadership, opportunity and excellence in science and the Public Service by fostering a highly skilled and motivated workforce.

The PMRA will hold itself accountable to this plan, and will continue to report on our progress towards these goals annually.

Appendix

Submission Categories

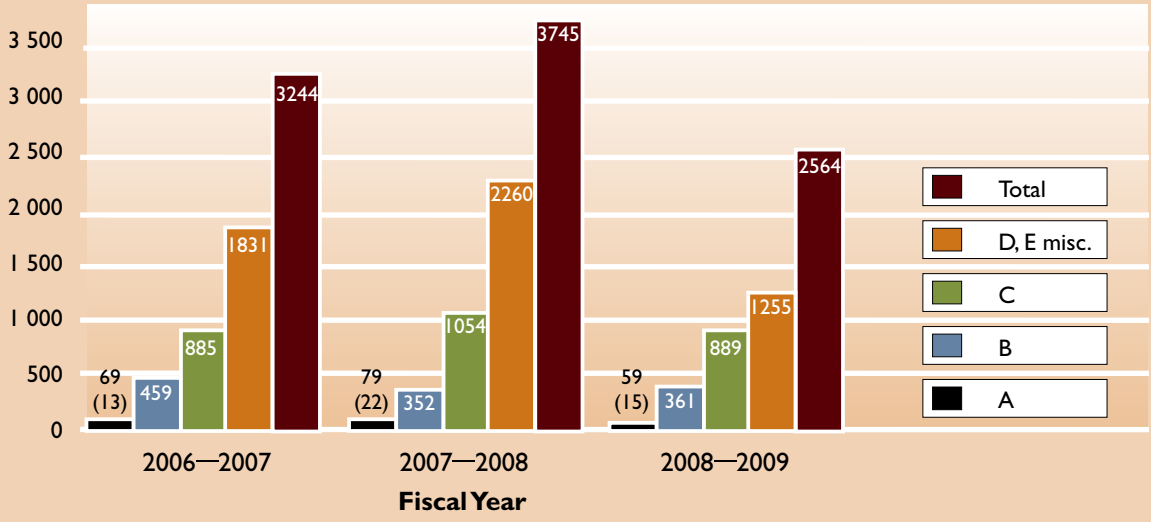
Product submissions fall into one of the following five categories:

(Table 1)

Category A	Includes submissions to register new active ingredients and their companion end-use product(s); applications to add a major new use to registered pesticide; and submissions to establish a maximum residue limit for a previously unassessed active. User Requested Minor Use Registrations (URMURs) are also included in this category. Category A submissions require a full supporting data package.
Category B	Include submissions to amend a product label (e.g., changes in application rates, timing of applications, new pests, changes to precautionary statements), or to change the product chemistry. Supporting data must be provided.
Category C	Submissions to register or amend a product label (add pest, use, or change application rate) or change a formulation based on previously established precedents or those that have reduced data requirements.
Category D	Submissions to register or amend products within particular programs, such as the Import for Manufacture and Export, Own-Use Import, Grower Requested Own Use (GROU) program, Master Copy, Private Label, User Requested Minor Use Label Expansion (URMULE) and renewal of registration.
Category E	Includes submissions for research permits and research notifications, when the research is carried out in Canada.

Number of Submissions Completed[1] by the PMRA for the period of April 1, 2006 to March 31, 2009

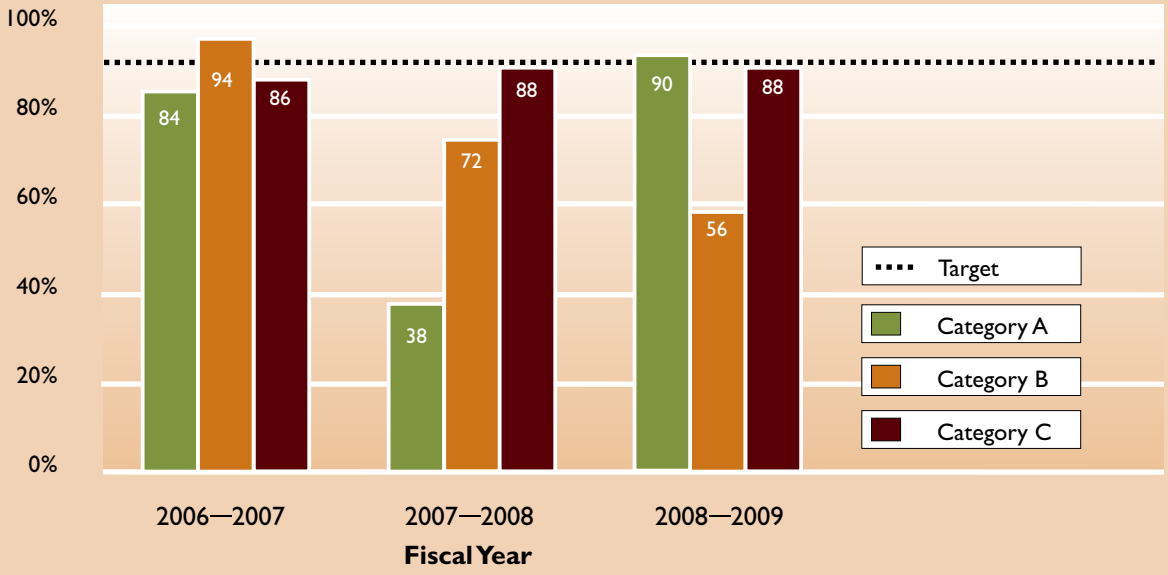
(Figure 2)



[1]For Category A, the number in ( ) is the number of new active ingredients.

Performance Against the Review Performance Standard for Category A, B and C Submissions Completed

(Figure 3)



In order to best meet the needs of registrants and growers, the PMRA sets targets for completion of pesticide submission evaluations. In 2008–2009, the PMRA largely met targets for Category A and C submissions, but fell short of these targets for Category B submissions (see Appendix Table 1 for a description of each submission category).

The PMRA has developed plans to improve the efficiency of the registration process for Category B submissions and expects to reliably meet submission completion targets by mid-2010. These initiatives are important for the long-term sustainability of Canadian sectors that rely on pesticides.

Minor crop uses registered in the 2008–2009 fiscal year

(Table 2)

Total food uses	**517**
Biopesticides	39
Conventional chemicals	478
Antimicrobial	0
Total non-food uses	**106**
Biopesticides	32
Conventional chemicals	74
Antimicrobial	0
Overall total	**623**

PMRA Registration Actions 1 April 2008 – 31 March 2009

(Table 3)

	Totals[1]	Conditional registration[2]	New actives of agricultural interest
Total New Active Ingredients (total new uses[3] = 342)	14 (4)	9 (3)	11 (4)
Conventional Chemicals (new uses[3] = 284)	7 (4)	5 (3)	6 (4)
Biopesticides (new uses[3] = 56)	6 (0)	3 (0)	5 (0)
Antimicrobials (new uses[3] = 2)	1 (0)	1 (0)	0

1 The number in parentheses () represents the number of joint reviews or work shares with other jurisdictions, e.g., U.S. Environmental Protection Agency (US EPA).

2 Conditional registrations are granted when the product meets current health and environmental safety standards and is efficaceous, but the product is registered on the condition that further data be provided within a specified time period (for example, heavy restrictions may be placed on conditionally registered products, and further data is needed to lift these restrictions). Conditional registrations are also issued by pesticide regulators in the same way in the United States and in Europe.
Percent of total Canadian registered products that are full registrations: 95%.
Percent of total Canadian registered products that are conditional registrations: 5%.

3 A new use is defined as the addition of a new crop or site to the use pattern of an active ingredient, and does not include the addition of new pests, tank mixes, etc.

Re-evaluation Activities as of March 31, 2009

(Table 4)

Decisions on Older Pesticides as of March 31, 2009	Final[1] Decisions	Proposed[2] Decisions	Pending[3] Publication	Total Decisions
Active ingredients addressed	252	25	53	330
Discontinued/withdrawn by registrant	83	0	19	102
Phase-out requested (or proposed for phase-out) as a result of PMRA review	7	2	2	11
Registration continued—label modifications	153	22	23	198
Registration continued—no label modifications	9	1	9	19

1 The PMRA has finalized the re-evaluation decisions for these products (usually published in an RVD or REV Note) or registrants have indicated their intent to discontinue all products with that pesticide.

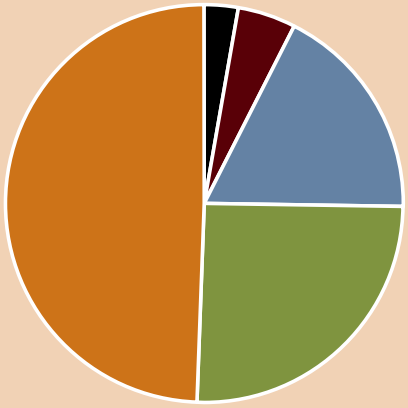
2 The PMRA has published the proposed decisions (usually PACR or PRVDs).

3 Assessments have been completed and decisions proposed, but the PMRA has not yet published the proposed decisions.

Re-evaluation Outcomes as of March 31, 2009

(Figure 5)

- Discontinued/withdrawn by registrant **102**
- Phase-out requested (or proposed for phase-out) as of result of PMRA review **11**
- Registration continued—label modifications **198**
- Registration continued—no label modifications **19**
- Remaining active ingredients to be re-evaluated **71**



Grower Requested Own Use (GROU) Program

GROU is a price-discipline initiative put in place by the PMRA to make it easier for Canadian growers to access less expensive equivalent pest control products available in the U.S. Representatives of key grower associations sit on the GROU Nomination Committee and choose appropriate products for the program. Thanks to this mechanism, growers with an approved import certificate can legally obtain the U.S. version of a Canadian-registered product.

In 2008, 12 products were approved under GROU. Additional products are under review.

(Table 5)

Approved GROU products
Reglone Dessicant (Diquat ions)
2,4-D Amine 500 Liquid Herbicide (2,4-D)
Sevin Brand XLR Plus Carbaryl Insecticide (Carbaryl)
Bravo Zn (Chlorothalonil)
GF-120 NF Naturalyte Fruit Fly Bait (Spinosad)
Aatrex Liquid 480 (Atrazine)
Gavel 75 DF Fungicide (Mancozeb and Zoxamide)
Touchdown iQ Liquid Herbicide (Glyphosate)
Reflex Liquid Herbicide (Fomesafen)
Roundup Weathermax with Transorb 2 technology
Liquid Herbicide (Glyphosate)
Banvel II Herbicide (Dicamba)

Active Ingredients Registered in 2008—2009

(Table 6)

No.	Active Ingredient	End-Use Product(s)	Product Type	Registration Status	Chemical Type	Uses
1	Ammonium salt of fatty acid	Finalsan Concentrate	Herbicide	Full	Biopesticide	Vegetable and flower gardens, landscaped areas, around buildings, near small fruits, fruit trees
		Finalsan Ready-To-Use				
2	Beauveria bassiana strain HF23	BalEnce ES	Insecticide	Conditional	Biopesticide	Poultry production houses
3	Chlorantraniliprole	Dupont Acelepryn Insecticide	Insecticide	Conditional	Conventional Chemical	Turf
		Dupont Altacor Insecticide	Insecticide	Conditional	Conventional Chemical	Pomefruit Group, Stone Fruit Group, and Grapes
		Dupont Coragen Insecticide	Insecticide	Conditional	Conventional Chemical	Fruiting Vegetables (Except Cucurbits) Group Brassica Vegetables Group, Leafy Vegetabels Group and Potatoes.
4	Coniothyrium minitans strain con/m/91-08	Contans WG	Fungicide	Full	Biopesticide	Agricultural soils (field and greenhouse) where vegetables, oilseed crops, soybeans and ornamental cut flowers will be planted - (controls Sclerotinia sclerotiorum and Sclerotinia minor)
5	Flumioxazin	Broadstar Herbicide	Herbicide	Conditional	Conventional Chemical	Container-grown ornamentals trees: Eastern white cedar, amur maple, Japanese maple, red oak, blue spruce, white spruce, yew, boxwood tree, creeping juniper, sabin juniper
		Flumioxazin 51WDG Herbicide	Herbicide	Conditional	Conventional Chemical	Preemergence weed control in field-grown ornamental deciduous and coniferous trees including Christmas trees and trees produced for reforestation, soybean, dry bulb onion, potato, pome fruit (apple and pear), grape, strawberry, highbush blueberry, stone fruit (peach, cherry, nectarine, plum, and apricot), asparagus, and to maintain bare ground noncrop areas, including bare ground non-crop areas in and around ornamental nurseries and on farms.
		Valtera Herbicide	Herbicide	Conditional	Conventional Chemical	Preemergence weed control in soybean and to maintain bare ground non-crop areas, including bare ground non-crop areas on farms.
		Chateau Herbicide WDG	Herbicide	Conditional	Conventional Chemical	Dry bulb onion, potato, pome fruit (apple and pear), grape, strawberry, highbush blueberry, stone fruit (peach, cherry, nectarine, plum, and apricot), asparagus and to maintain bare ground non-crop areas, including bare ground non-crop areas of farms.
		Payload Herbicide	Herbicide	Conditional	Conventional Chemical	Bare ground non-crop areas (industrial and agricultural)
		Flumioxazin 0.25G Herbicide	Herbicide	Conditional	Conventional Chemical	Field-grown ornamental trees: Eastern White Cedar, Douglas Fir, Balsam Fir, Fraser Fir, Blue Spruce, Green Ash, Norway Maple, Japanese Lilac.
		SureGuard Herbicide	Herbicide	Conditional	Conventional Chemical	Preemergence weed control in field-grown ornamental deciduous and coniferous trees including Christmas trees and trees produced for reforestation, and to maintain bare ground non-crop areas in and around ornamental nurseries
6	Gliocladium catenulatum	Prestop	Fungicide	Full	Biopesticide	Greenhouse Vegetables (cucumber, pepper, tomato, cauliflower, broccoli, lettuce), Herbs (oregano, basil, parsley, thyme and dill), and Ornamentals (alyssum, geranium, pansy, petunia, salvia, snapdragon and tagetes; potted poinsettia and saintpaulia)

No.	Active Ingredient	End-Use Product(s)	Product Type	Registration Status	Chemical Type	Uses
7	Mandipropamid	Revus Fungicide	Fungicide	Conditional	Conventional Chemical	Brassica vegetables, bulb vegetables, cucurbits, peppers, leafy vegetables, tomatoes (field/greenhouse), tomatillos, grapes, potatoes
8	Metarhizium anisopliae (strain f52)	MET52 Granular Bioinsecticide	Insecticide	Conditional	Biopesticide	Soils where container-grown ornamentals, including flowering and foliage plants, shrubs, and shade and forest tree seedlings may be grown (outdoors and in greenhouses)
9	Mono- and di-potassium salt of phosphorous acid	Confine	Fungicide	Conditional	Biopesticide	Storage potatoes
10	Ozone	Hankin Ozone Generator	Molluscide	Full	Conventional Chemical	Cooling water - Lennox Generating Station only
11	Spirotetramat	Movento 240 SC Insecticide, Movento 150 OD Insecticide	Insecticide	Full	Conventional Chemical	Crop Group 13-07F (gooseberries, Amur river grapes, grapes, hardy kiwifruit, maypop, Schisandra berries), Crop Group 11 (Apple, Crabapples, Loquat, Medlar, Mayhaw, Pear, Oriental pear, Quince, Chinese quince, Tejocote), Crop Group 12 (Apricot, Cherry (sweet and tart), Nectarine, Peach, Plum, Plumcot, Prune plums), Crop Group 14 (Almond, Beechnut, Brazil nut, Butternut, Cashew, Chestnut, Chinquapin, Filbert (hazelnut), Hickory nut, Macadamia nut (bush nut), Pecan, Pistachio, Walnut [black and English]), hops, Crop Group 9 (chayote fruit, Chinese waxgourds, citron melons, cucumbers, West Indian gherkins, edible gourds (other than those listed in this item), balsam apples, balsam pears, Chinese cucumbers, cantaloupes, muskmelons (other than those listed in this item), pumpkins, summer squash, winter squash, watermelons), Crop Group 8 (eggplants, groundcherries, pepinos, bell peppers, non-bell peppers, pepper hybrids, tomatillos, tomatoes), Crop Group 4 (amaranth, arugula, cardoon, celery, Chinese celery, celtuce, fresh chervil leaves, edible leaved chrysanthemum, garland chrysanthemum, corn salad, garden cress, upland cress, dandelion leaves, dock, endives, fresh Florence fennel leaves and stalks, head lettuce and leaf lettuce, orach leaves, fresh parsley leaves, garden purslane, winter purslane, radicchio, rhubarb, spinach, New Zealand spinach, vine spinach, Swiss chard), Crop Group 5 (broccoli, Chinese broccoli, broccoli raab, Brussels sprouts, cabbages, bok choy Chinese cabbages, Napa Chinese cabbages, Chinese mustard cabbages, cauliflower, collards, kale, kohlrabi, mustard greens, mustard spinach, rape greens), Crop Group 1C (arracacha, arrowroot, Chinese artichokes, Jerusalum artichokes, edible canna, cassava roots, chayote roots, chufa, taro corms, ginger roots, lerens, potatoes, sweet potato roots, tanier corms, turmeric roots, yam bean roots, true yam tubers)
12	Sulfentrazone	Authority 480 Herbicide	Herbicide	Conditional	Conventional Chemical	Chickpeas
13	Tetrakis (hyroxymethyl) phosphonium sulfate	Tolcide PS75LT,	Antimicrobial	Conditional	Antimicrobial	Oilfield Operations
		Tolcide PS200	Antimicrobial	Conditional	Antimicrobial	Oilfield Operations and Evaporative Recirculating Cooling Towers
14	Thiencarbazone-methyl	AE1162464 WG63 Herbicide	Herbicide	Conditional	Conventional Chemical	Field corn
		Velocity Herbicide	Herbicide	Conditional	Conventional Chemical	Spring and Durum wheat

Re-evaluation Decisions in 2008—2009

(Table 7)

No.	Active Ingredient	Regulatory Publications	Summary of Decision or Proposed Decision (as contained in PACR, PRVD, RVD or REV Note)
1	Aliphatic Alcohols	PRVD2009-03	**Proposed Decision**: Acceptable for continued registration with new/revised label statements.
2	Alkyl dimethyl Benzyl Ammonium Chloride Cluster (ADBAC)	PRVD2008-23 RVD2009-04	**Final Decision**: Acceptable for continued registration with new/revised label statements.
3	4-Aminopyridine	REV2009-01	**Decision**: The PMRA has required new/revised label statements on 4-aminopyridine product labels to increase consistency across all end-use product labels with respect to directions for use and precautions
4	*Bacillus thuringensis* subsp. *tenebrionis*	PACR2006-09 RVD2008-18	**Final Decision**: Acceptable for continued registration with new/revised label statements.
5	*Bacillus thuringensis* subsp. *israelensis*	PACR2006-09 RVD2008-18	**Final Decision**: Acceptable for continued registration with new/revised label statements.
6	*Bacillus thuringensis* subsp. *kurstaki*	PACR2006-09 RVD2008-18	**Final Decision**: Acceptable for continued registration with new/revised label statements.
7	b-bromo-b-nitrostyrene		**Final Decision**: All uses of b-bromo-b-nitrostyrene have been discontinued.
8	Benzisothiazolin-3-one	PRVD2008-13 RVD2008-25	**Final Decision**: Acceptable for continued registration with new/revised label statements.
9	Bromoxynil present as the ester of n-octanoic acid or n-heptanoic acid	PRVD2008-07 RVD2008-21	**Final Decision**: Acceptable for continued registration with new/revised label statements.
10	Carbathiin	PRVD2008-25	**Proposed Decision**: Acceptable for continued registration of carbathiin (as a seed treatment) with new/revised label statements. Carbathiin products registered for use as a tree seedling treatment, outdoor ornamentals and residential plantscapes treatment, and as a turf treatment will be discontinued.
11	Chloroacetamide		**Final Decision**: All uses of chloroacetamide have been discontinued.
12	Chlorthal present as acid	PRVD2008-18 RVD2008-30	**Final Decision**: Acceptable for continued registration. Mitigation to include new/revised label statements to further protect workers and the environment (includes a reduction in the maximum application rate on vegetables, additional PPE, restricted REI, a runoff statement, environmental hazard and other label statements). As well, the registrant has voluntarily discontinued residential uses, late fall application on turf and use on beans, potatoes and peas.
13	Copper Pesticide	PRVD2009-04	**Proposed Decision**: Acceptable for continued registration with new/revised label statements.
14	Dialkyl (5% C12 60% C14 30% C16 5% C18) methyl benzyl ammonium chloride	PRVD2008-23	**Proposed Decision**: Acceptable for continued registration with new/revised label statements.
15	Dicamba[Lawn & Turf]	PACR2007-02RVD2008-28	**Final Decision**: Acceptable for continued registration with new/revised label statements and with the exception of the discontinuation of dicamba products containing the diethanolamine (DEA) form of dicamba.
16	Dicamba (non-turf uses)	PRVD2007-05 RVD2008-28	**Final Decision**: Acceptable for continued registration with new/revised label statements and with the exception of the discontinuation of dicamba products containing the diethanolamine (DEA) form of dicamba
17	Dichloran	PRVD2008-21 RVD2009-03	**Final Decision**: Acceptable for continued registration with new/revised label statements.

No.	Active Ingredient	Regulatory Publications	Summary of Decision or Proposed Decision (as contained in PACR, PRVD, RVD or REV Note)
18	2,4-Dichlorophenoxy acetic acid (2,4-D) and its salt and ester forms[Lawn & Turf]	REV2000-04 PACR2005-01 REV2006-11 RVD2008-11	**Final Decision**: Acceptable for continued registration with new/revised label statements and with the exception of the discontinuation of 2,4-D products applied to aquatic areas.
19	2,4-Dichlorophenoxy acetic acid (2,4-D) and its salt and ester forms (non-turf uses)	PACR2007-06 RVD2008-11	**Final Decision**: Acceptable for continued registration with new/revised label statements and with the exception of the discontinuation of 2,4-D products applied to aquatic areas.
20	1,3-Dichloropropene	REV2008-07	**Decision**: Registrants are conducting a definitive Canada-specific water monitoring study. The PMRA will consider the results of this use-site specific study and make a final decision early in the next round of re-evaluation. Regulatory action may be taken prior to study completion if warranted by interim study data.
21	Dichlorvos	REV2008-04	**Decision**: Mitigation measures have been implemented. In the next round of re-evaluation, the PMRA will finalize the risk assessment following development of relevant policy.
22	Didecyl Dimethyl Ammoniun Chloride Cluster (DDAC)	PRVD2008-27	**Proposed Decision**: Acceptable for continued registration with new/revised label statements. Note that the antisapstain uses of DDAC are being reviewed together with all antisapstain active ingredients under a separate initiative within the PMRA and are not part of this re-evaluation decision.
23	Diisobutylphenoxyethoxyethyl dimethyl benzyl ammonium chloride	PRVD2008-23	**Proposed Decision**: Acceptable for continued registration with new/revised label statements.
24	Diquat	PRVD2008-12	**Proposed Decision**: Acceptable for continued registration with new/revised label statements.
25	Dithiopyr	PRVD2009-01	**Proposed Decision**: Acceptable for continued registration with new/revised label statements.
26	Dodine	PRVD2008-11 RVD2008-22	**Final Decision**: Acceptable for continued registration with new/revised label statements.
27	Ethametsulfuron-methyl	PRVD2008-05 RVD2008-19	**Final Decision**: Acceptable for continued registration with new/revised label statements.
28	Ethofumesate	PRVD2007-12 RVD2008-14	**Final Decision**: Acceptable for continued registration with new/revised label statements.
29	Formetanate hydrochloride	PRVD2008-26	**Proposed Decision**: Acceptable for continued registration with new/revised label statements.
30	Imazamethabenz-methyl	PRVD2008-29	**Proposed Decision**: Acceptable for continued registration with new/revised label statements.
31	Imazapyr	PRVD2008-10 RVD2008-17	**Final Decision**: Acceptable for continued registration with new/revised label statements.
32	Lime Sulphur	PRVD2009-05	**Proposed Decision**: Acceptable for continued registration with new/revised label statements.
33	Maleic hydrazide	PRVD2008-24 RVD2009-01	**Final Decision**: Acceptable for continued registration with new/revised label statements.
34	MCPA[Lawn & Turf] (present as acid, amine salt, esters, and potassium or sodium salt)	PRVD2008-10 RVD2008-17	**Final Decision**: Acceptable for continued registration with new/revised label statements.

No.	Active Ingredient	Regulatory Publications	Summary of Decision or Proposed Decision (as contained in PACR, PRVD, RVD or REV Note)
35	MCPA (present as acid, amine salt, esters, and potassium or sodium salt) (non-turf uses)	PACR2006-05 RVD2008-20	**Final Decision**: Acceptable for continued registration with new/revised label statements and with the exception of the discontinuation of products containing the DEA form of MCPA.
36	Metaldehyde	PRVD2008-15 RVD2008-34	**Final Decision**: Acceptable for continued registration with new/revised label statements.
37	Metsulfuron-methyl	PRVD2008-08 RVD2008-35	**Final Decision**: Acceptable for continued registration with new/revised label statements.
38	Mineral oil	PRVD2008-19 RVD2008-32	**Final Decision**: Acceptable for continued registration with new/revised label statements.
39	N-alkyl (40% C12, 50% C14, 10% C16) dimethyl benzyl ammonium chloride	PRVD2008-23	**Proposed Decision**: Acceptable for continued registration with new/revised label statements.
40	N-alkyl (5% C12, 60% C14, 30% C16, 5% C18) dimethyl benzyl ammonium chloride	PRVD2008-23	**Proposed Decision**: Acceptable for continued registration with new/revised label statements.
41	N-alkyl (5% C5-18, 61% C12, 23% C14, 11% C16) dimethyl benzyl ammonium chloride	PRVD2008-23	**Proposed Decision**: Acceptable for continued registration with new/revised label statements.
42	N-alkyl (68% C12, 32% C14) dimethyl ethylbenzyl ammonium chloride	PRVD2008-23	**Proposed Decision**: Acceptable for continued registration with new/revised label statements.
43	Naphtalene Acetates	PRVD2008-28 RVD2009-06	**Final Decision**: Acceptable for continued registration with new/revised label statements.
44	Nicosulfuron	PRVD2008-01 RVD2008-24	**Final Decision**: Acceptable for continued registration with new/revised label statements.
45	Oxirane derivatives	PRVD2008-02 RVD2008-12	**Final Decision**: Acceptable for continued registration with new/revised label statements.
46	Oxycarboxin	PRVD2008-25	**Proposed Decision**: Acceptable for continued registration of oxycarboxin (for control of rust on ornamentals grown in enclosed commercial structures) with new/revised label statements. Oxycarboxin products registered in Canada for use as a turf treatment will be discontinued.
47	Pendimethalin	PRVD2007-07 RVD2008-23	**Final Decision**: Acceptable for continued registration with new/revised label statements.
48	2-Phenylphenol	PRVD2008-04 RVD2008-13	**Final Decision**: Acceptable for continued registration with new/revised label statements. Post-harvest treatment on fruits including apples, cantaloupes, cherries, peaches, plums, carrots, cucumbers, peppers, sweet potatoes and tomatoes will be phased out.
49	Picloram acid and related salts	PRVD2007-04 RVD2009-02	**Final Decision**: Acceptable for continued registration with new/revised label statements.
50	Propylene glycol	PRVD2008-17 RVD2008-31	**Final Decision**: Acceptable for continued registration with no label changes.

No.	Active Ingredient	Regulatory Publications	Summary of Decision or Proposed Decision (as contained in PACR, PRVD, RVD or REV Note)
51	Propyzamide	PRVD2008-20	**Proposed Decision**: Acceptable for continued registration with new/revised label statements.
52	Pyrazon (chloridazon)	PRVD2007-15 RVD2008-15	**Final Decision**: Acceptable for continued registration with new/revised label statements.
53	Quintozene	PRVD2009-02	**Proposed Decision**: Acceptable for continued registration of certain uses with new/revised label statements. Proposed mitigation measures include phase-out of all uses on turf (including residential, commercial, turf farms and golf courses) and all ornamentals (except bulb dip treatment). For remaining uses on cole crops and as bulb dip, new/revised label statements are proposed to further protect workers and the environment.
54	Rimsulfuron	PRVD2008-06 RVD2008-29	**Final Decision**: Acceptable for continued registration with new/revised label statements.
55	Sodium chlorate	PRVD2008-09 RVD2008-16	**Final Decision**: Acceptable for continued registration with no label changes.
56	Sodium chlorite	PRVD2008-09 RVD2008-16	**Final Decision**: Acceptable for continued registration with no label changes.
57	Sodium o-phenylphenate (present as tetrahydrate)	PRVD2008-04 RVD2008-13	**Final Decision**: Acceptable for continued registration with new/revised label statements. Post-harvest treatment on fruits including apples, cantaloupes, cherries, peaches, plums, carrots, cucumbers, peppers, sweet potatoes and tomatoes will be phased out.
58	Streptomycin present as sulphate	PRVD2008-16 RVD2008-26	**Final Decision**: Acceptable for continued registration with new/revised label statements.
59	Thifensulfuron methyl	PRVD2008-03 RVD2008-33	**Final Decision**: Acceptable for continued registration with new/revised label statements.
60	Trichlorfon	PRVD2008-14 RVD2008-27	**Final Decision**: Some uses were found to be acceptable for continued registration with mitigation and data requirements as outlined in the PRVD. These uses include ground application on Balsam fir and spruce trees in farm woodlots, rights-of way and Christmas tree plantations as well as uses on beef and non-lactating dairy cattle. The remaining uses were to be phased-out because of risks to human health and/or the environment. Following the decision document, the registrant chose to discontinue registration of all existing trichlorfon end-use products.
61	Trifluralin	PRVD2008-22	**Proposed Decision**: Acceptable for continued registration with new/revised label statements. The PMRA has not made a final determination of the status of trifluralin under the federal Toxic Substances Management Policy at this time. Additional field data addressing bioaccumulation are required to complete this assessment.

Notes

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