

Re-evaluation Summary Table

Disclaimer: Table 1 provides a summary of the proposed and/or final decisions made with respect to re-evaluation of active ingredients. For detailed mitigation measures and specific wording of label statements please refer to the appropriate regulatory publications for which links are provided in the table. This table does not summarize data requirements.

Table 1 Active Ingredients for Which Re-evaluation Has Been Initiated

Active Ingredient	CAS Number	Type	Status	Regulatory Publications	Summary of Decision or Proposed Decision (as contained in PACR, RRD or REV Note)	Discontinuation/ Phase-out Timeframe (discontinue date, expiry date)
Insecticides/Acaracides						
Acephate	30560-19-1	Insecticide, acaricide	<p>Initiated: 29/06/1999</p> <p>PACR: 22/10/2004</p> <p>Interim Measures: 02/02/2007</p> <p>Publication of RRD pending methamidophos decision</p>	<p>REV99-01</p> <p>PACR2004-40</p> <p>REV2007-02</p>	<p>Proposed Measures: Acceptable for continued registration pending information to refine postapplication worker exposure assessment. Measures specific to the postapplication worker concern to include maximum agronomically feasible re-entry intervals (REIs), protective clothing for re-entry workers, availability of wash stations, reducing application rate, limiting number of applications per season and a product stewardship program to minimize re-entry worker exposure that includes double notification of REIs.</p> <p>Remaining changes to include new/revised label statements to further protect workers (personal protective equipment [PPE], engineering controls), bystanders (restrict number of applications on residential outdoor ornamentals) and the environment (buffer zones, environmental hazard statements); and a preharvest interval (PHI) increase from 0 to 75 days on cranberries and from 7 to 21 days on peppers is proposed to ensure that residues on treated commodities do not exceed the maximum residue limit (MRL).</p> <p>Interim Measures: The PMRA has reviewed comments received in response to PACR2004-40 as well as refined the risk assessment. The registrant applied to register a new pellet formulation that will reduce worker exposure and may replace the need for water soluble packaging of the soluble powder product proposed in the PACR. Buffer zones proposed in the PACR have been revised using the PMRA's current model. The REIs have been revised based on additional toxicological and exposure data and on the rate reductions proposed by the registrant.</p> <p>These changes have resulted in the revision of the label statements proposed in PACR2004-40 and the recommendation to implement interim mitigation measures.</p>	

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Aldicarb	116-06-3	Insecticide, acaricide	Announced/ Completed: 24/07/2003	REV2003-05	Final Decision: Not supported by registrant, no further action. All uses of aldicarb have been discontinued.	Expiry date of last registered product: 31/12/1996
Allethrin	584-79-2	Insecticide	Announced/ Completed: 04/04/2005	REV2005-02	Final Decision: Not supported by registrant, no further action. All uses of allethrin have been discontinued. Note that d-cis allethrin and d-trans allethrin remain registered; only products with unspecified isomers of allethrin have been discontinued.	Expiry date of last registered product: 21/12/2000
Azinphos-methyl	86-50-0	Insecticide acaricide,	Initiated: 29/06/1999 PACR: 31/03/2003 Completed: 29/03/2004 Latest Update: 17/07/2007	REV99-01 PACR2003-07 RRD2004-05 REV2006-04 REV2007-08	Final Decision: All uses to be phased out in light of risks to workers. The PMRA received new worker exposure data after publication of RRD2004-05. The submitted studies have been reviewed and the review did not result in significant changes to the risk assessment outlined in RRD2004-05. The PMRA acknowledges significant challenges involved in transitioning from azinphos-methyl to safer alternatives and will, therefore, extend the last date of use for critical uses (i.e. apples, crab apples, apricots, blackberries, cherries, cranberries, grapes, pears, peaches, plums, prunes, raspberries) of azinphos-methyl products to 2012. The PMRA will monitor compliance with stewardship program requirements. Risks to workers do not meet current standards and are of concern; these risks will continue to be managed to the extent possible by measures discussed in the RRD. The PMRA has begun work to facilitate the development of a transition strategy for the phase out of azinphos-methyl. This process will address challenges encountered by growers as they move toward alternative pest control methods. Through stakeholder involvement, the PMRA will facilitate the move away from the use of azinphos-methyl, while attempting to minimize impacts on growers. Registrants have ceased sale in Prince Edward Island to mitigate possible environmental concerns.	Phase-out dates for uses for which alternatives exist (alfalfa, clover, rye, quince, potatoes, tomatoes, rutabagas, turnips, cabbages (including tight heading varieties of Chinese cabbage), broccoli, Brussels sprouts, cauliflowers, cucumbers, strawberries, boysenberries, loganberries, walnuts, melons, pumpkins, blueberries, outdoor ornamentals, nursery plants, forest trees and shade trees) • Last date of sale by registrants: 31/08/2004 • Last date for use of product: 31/12/2005 Revised phase-out dates for remaining uses (apples, crab apples, apricots, blackberries, cherries, cranberries, grapes, pears, peaches, plums, prunes, raspberries) as per REV2007-08: • Last date of sale by registrants: 31/12/2010 • Last date of sale by retailers: 31/12/2011 • Last date of use of product by users: 31/12/2012
<i>Bacillus thuringiensis</i> subsp. <i>tenebrionis</i>	N/A	Insecticide	Initiated: 21/11/2003 PACR: 16/11/2006 End of comment period: 15/01/2007	PACR2006-09	Proposed Decision: Acceptable for continued registration. Proposed mitigation to include new/revised label statements to further protect workers, bystanders and the environment (includes precautionary statements, PPE, first aid statements, resistance management statement, a prohibition to use by any type of irrigation system, aerial application instructions, environmental hazard statements, revised direction for use statements for domestic products and other statements).	

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<i>Bacillus thuringiensis</i> subsp. <i>israelensis</i>	N/A	Insecticide	Initiated: 21/11/2003 PACR: 16/11/2006 End of comment period: 15/01/2007	PACR2006-09	Proposed Decision: Acceptable for continued registration. Proposed mitigation to include new/revised label statements to further protect workers, bystanders and the environment (includes precautionary statements, PPE, first aid statements, resistance management statement, a prohibition to use by any type of irrigation system, aerial application instructions, environmental hazard statements, revised direction for use statements for domestic products and other statements).	
<i>Bacillus thuringiensis</i> subsp. <i>kurstaki</i>	N/A	Insecticide	Initiated: 11/09/2003 PACR: 16/11/2006 End of comment period: 15/01/2007	PACR2006-09	Proposed Decision: Acceptable for continued registration. Proposed mitigation to include new/revised label statements to further protect workers, bystanders and the environment (includes precautionary statements, PPE, first aid statements, resistance management statement, a prohibition to use by any type of irrigation system, aerial application instructions, environmental hazard statements, revised direction for use statements for domestic products and other statements).	
Bendiocarb	22781-23-3	Insecticide	Announced: 29/08/2002 Completed: 16/07/2004	REV2002-06 REV2004-03	Final Decision: Not supported by registrant, no further action. All uses of bendiocarb have been discontinued.	Expiry date of last registered product: 31/12/2008
Carbaryl ^{Lawn & Turf}	63-25-2	Insecticide, acaricide, plant growth regulator	Initiated (turf uses): 27/09/2000 Initiated (uses other than turf): 29/08/2002 Update: 13/08/2003	REV2000-04 REV2002-06 REV2003-06	^{Lawn & Turf} Re-evaluation of turf uses is proceeding at same time as non-turf assessments. Update: Voluntary risk mitigation measures proposed by registrant [voluntary discontinuation of the broadcast application of liquid formulations to residential lawns (excluding golf courses and sod farms) pending the outcome of pharmacokinetics data that the registrant is voluntarily generating to refine postapplication risks associated with this use scenario; the use of liquid formulations on residential lawns would be limited to spot treatments only; limitations on packaging of dust products; discontinuation of pet care use products (dusts and sprays); various mitigation measures for ornamental uses].	

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Carbofuran	1563-66-2	Insecticide	Announced: 29/08/2002	REV2002-06	Granular formulations as well as uses on alfalfa, turnip, rutabaga, cereals, headlands, pastures and roadsides of liquid formulations were discontinued in 1997 as a result of a special review focussing on the risk to birds and other invertebrates. Other restrictions to the remaining crops included reduction of number of applications, limit to the maximum application rate, applications by ground equipment only and by air to corn fields greater than 5 hectares only (Decision Document E95-05 , Carbofuran. 22 December 1995).	
Chlorpyrifos ^{Lawn & Turf}	2921-88-2	Insecticide, acaricide	Initiated: 29/06/1999 PACR: 18/03/2003 Update: 05/01/2007	REV99-01 REV2000-01 REV2000-05 PACR2003-03 REV2007-01	^{Lawn & Turf} Re-evaluation of lawn and turf uses was completed in Phase I. Phase 1: Phase-out of all Domestic Class products with the exception of containerized low-concentration ant baits. Removal of residential uses, both indoor and outdoor (including all public areas such as schools, playgrounds and restaurants) from Commercial Class products. Uses inside and outside commercial buildings including warehouses, railroad boxcars and industrial plants are retained. Reduction of maximum application rate to sod farms and golf courses to 1 kg/ha. Phase-out of use on tomatoes and an MRL of zero being established to prevent import of chlorpyrifos treated tomatoes; lower MRLs for apples and grapes for import purposes (no apple or grape use in Canada); addition of REIs to labels for agricultural workers entering treated areas; phase-out after 2005 of certain product use patterns for controlling termites. Phase 2: Proposed Measures: Discontinuation of uses on corn, filberts, lentils, oats, peppers, sugar beet and tobacco. Discontinuation of uses on peaches and nectarines in 2006 with interim mitigation for workers and the environment. Additional mitigation measures required for certain uses including canola, barley, carrot, flax, potato, wheat, strawberry, radish, Asian radish, celery, cucumber, cole crops, garlic, sunflower seeds, and rutabaga. Mitigation measures include a reduction of the number of applications per season, restrict aerial application to wheat and canola only, buffer zones to protect aquatic ecosystems, implementation of engineering controls and PPE for workers, establishment of REIs for postapplication workers. Update: The PMRA has reviewed comments received in response to PACR2003-03. Based on the review of currently available information and the comments received, the PMRA is requiring that interim mitigation measures be implemented. To further protect workers, paintbrush applications for indoor uses have been discontinued, use of high-pressure handwand equipment has been discontinued, engineering	Phase-out date for Domestic Class products: • Last date of sale by retailer 31/12/2001 Phase-out date for Commercial Class products with claims for uses in and around residences and other areas where children may be exposed: • Last date of sale by retailer 31/12/2001 Phase-out date for use for termite control: • Last date of sale by retailer 31/12/2005. Phase-out date for use on tomatoes: • Last date for use: 31/12/2000

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					<p>controls and/or additional PPE will be required. Also, postapplication workers must observe established REIs. To further protect the environment, buffer zones have been established and precautionary statements regarding hazards to bees must be added to the labels of all products with agricultural uses. The maximum number of applications permitted per season per crop has also been limited.</p> <p>Some uses proposed for discontinuation in PACR2003-03 will be maintained for a variety of reasons relating to the value of the product. Continuing registration of use on peaches/nectarines, use as a mosquito larvicide, and aerial uses are acceptable in the short term, but will be revisited by the end of 2008.</p> <p>Phase 3: Final decision on active ingredient pending a refined environmental risk assessment in 2008.</p>	
Codling moth pheromone	33956-49-9 112-53-8 112-72-1	Insecticide	Initiated: 01/01/2003 Completed: 16/03/2004	RRD2004-02	Final Decision: Acceptable for continued registration with no label changes.	
Coumaphos	56-72-4	Insecticide, acaricide	Initiated: 29/06/1999 PACR: 31/03/2003 Completed: 29/07/2004	REV99-01 PACR2003-04 RRD2004-21	Final Decision: Acceptable for continued registration with data requirements as outlined in the PACR. The registrants chose to discontinue registration of all existing coumaphos end-use products. All uses of coumaphos have been discontinued.	<p>K.R.S. Spray Foam with Co-Ral, Registration No. 15103</p> <ul style="list-style-type: none"> • Last date for use: 31/12/2003 <p>Co-Ral Animal Insecticide 25% Wettable Powder, registration no. 6857 and Co-Ral Animal Insecticide 1% Shaker Can, Registration No. 13466</p> <ul style="list-style-type: none"> • Last date for use: 31/12/2005 <p>Cattle Bag Dust, Registration No. 16772</p> <ul style="list-style-type: none"> • Last date of sale by registrant: 31/12/ 2005 • Last date of sale by retailer or distributor: 31/12/2006 • Last date for use: 31/12/2007

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Di-n-propyl isocinchomeronate (non-repellent uses) *See also under the heading Personal Insect Repellent	3737-22-2	Insecticide	Initiated: 20/12/2004 PACR: 13/04/2006 Completed: 16/06/2006	PACR2006-04 RRD2006-22	Final Decision: Acceptable for continued registration. Mitigation to include new/revised label statements to further protect human health and the environment including a prohibition of use on horses intended for slaughter, a statement stating that animals must be removed from their quarters before treating premises and to ventilate the area before re-admitting animals, limit use to horse stables and barns and an environmental hazard statement; a requirement to update labels as per DIR2002-02, <i>Canadian Label Improvement Program for Pesticides Used on Companion Animals</i> and clarify directions of use and application rates for some product labels. In addition, use on cattle and as a surface spray or fog of their quarters as well as a space spray or fog in any farm buildings are no longer being supported.	
Diazinon ^{Lawn & Turf}	333-41-5	Insecticide, acaricide	Initiated: 29/06/1999 Preliminary: 30/06/2005 End of comment period: 29/08/2005	REV99-01 REV2000-07 REV2000-08 REV2005-06	^{Lawn & Turf} Re-evaluation of lawn uses is completed and these have been phased out. Update: Phase-out of all indoor uses and non-agricultural outdoor uses of diazinon, including all uses on lawns and turf, as a result of voluntary action by registrants. Preliminary Assessment: The preliminary risk assessment of the remaining uses indicated a level of concern for workers and the environment. The PMRA solicited information (from 30/06/2005 to 29/08/2005) that may be used to refine these preliminary assessments and/or mitigate risks. The PMRA will review the information received, revise the risk and value assessments as necessary and propose regulatory action. In addition, the following uses are not supported by the registrant and will be proposed for discontinuation: greenhouse (tomato, pepper and ornamentals); seed treatment (onion, radish, sugarbeet and potato seed pieces); feed crops (clover, grass, pastures, rangeland and green forage or hay from crop margins); non-crop areas (wastelands, roadsides, ditch banks, fence rows and barrier strips); certain food crops (field pepper, salsify, potato, tobacco (field), plums, prunes); structural (farm buildings, food processing plants, poultry houses).	Phase-out dates for residential and commercial products for indoor uses: • Sales will virtually end in 2001 with provision for a small amount of carryover into 2002. Phase-out dates for Domestic Class products for use by homeowners on lawns: • Sales will virtually end in 2002 with provision for a small amount of carryover into 2003. Phase-out dates for Commercial Class products for use by pest control operators on residential and other lawns: • Sales will virtually end in 2003 with provision for a small amount of carryover into 2004. NOTE: the amount of product offered for sale for use on lawns and turf will be reduced by 25% in 2002 and by 50% in 2003. Product stewardship measures to be implemented for the remainder of the time that these products are available.
Dichlorvos	62-73-7	Insecticide, acaricide	Announced: 29/06/1999 PACR in preparation	REV99-01		

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Diflubenzuron	35367-38-5	Insecticide, insect growth regulator	Initiated: 18/03/2003 PACR: 09/08/2004 Completed: 14/03/2006	PACR2004-35 RRD2006-10	Final Decision: Acceptable for continued registration. Mitigation includes new/revised label statements to further protect workers, bystanders and the environment (includes PPE, REI for greenhouse use, buffer zones and other statements); aerial application to be limited to helicopters only. Refer to RRD for final wording of required label statements, because some wording was revised (e.g., buffer zone and wording regarding temporary pools).	
Dimethoate	60-51-5	Insecticide, acaricide	Announced: 29/06/1999	REV99-01	All Domestic Class products have been voluntarily removed from the marketplace as of December 31, 2004. The re-evaluation of other uses continues.	Expiry date of last registered Domestic product: 01/31/2004
Disulfoton	298-04-4	Insecticide	Announced: 29/06/1999 Completed: 24/07/2003	REV99-01 REV2003-05	Final Decision: Not supported by registrant, no further action. All uses of disulfoton have been discontinued.	Expiry date of last registered product: 01/07/2006
9-Dodecyl acetate	16974-11-1 20711-10-8	Insecticide	Initiated: 01/01/2003 Completed: 18/03/2004	RRD2004-03	Final Decision: Acceptable for continued registration with no label changes.	
Endosulfan	115-29-7	Insecticide acaricide	Announced: 09/08/2002 PACR: 25/06/2004 End of comment period: 24/08/2004	REV2002-04 PACR2004-21	Proposed Interim Measures: Proposal to implement certain measures in advance of completing a full re-evaluation, as a precautionary approach to mitigate potential dietary risk (discontinue use on succulent beans, succulent peas, spinach and grapes) and worker and environmental risks (engineering controls, PPE, REIs, rate reductions, restrict number of applications per season, buffer zones). In addition, the registrants have withdrawn support for the use of endosulfan on alfalfa, clover, field corn, sunflower, sugarbeet, greenhouse ornamentals as well as for residential uses. These uses of endosulfan will be phased out.	
Ethion	563-12-2	Insecticide	Initiated: 29/06/1999 Completed: 19/10/2001	REV99-01 REV2001-03	Final Decision: Not supported by registrant, no further assessment. All uses of ethion have been discontinued.	Expiry date of last registered product: 31/12/2003

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Ethyl parathion	56-38-2	Insecticide	Initiated: 29/06/1999 Completed: 19/10/2001	REV99-01 REV2001-02	Final Decision: Not supported by registrant, no further assessment. All uses of ethyl parathion have been discontinued.	Expiry date of last registered product: 31/12/2003
Fenbutatin oxide	13356-08-6	Acaricide	Initiated: 18/03/2003 PACR: 19/02/2007 End of Comment Period: 05/04/2007	PACR2007-03	Proposed Decision: Acceptable for continued registration. Proposed mitigation includes new/revised label statements to further protect workers (PPE and REI) and the environment (buffer zones and environmental hazard statements).	
Fenitrothion	122-14-5	Insecticide	Initiated: 29/06/1999 PACR: 14/07/2003 Completed: 28/05/2004	REV99-01 PACR2003-08 RRD2004-13 REV2006-01	Final Decision: Acceptable for continued registration. Mitigation includes new/revised label statements to further protect workers, bystanders and the environment; all uses will be Restricted uses; maximum application rate reduced to 210 g a.i./ha. However, fenitrothion was discontinued by the registrant on 20/08/2004 after completion of the re-evaluation (see REV2006-01).	Expiry date of last registered product: 20/08/2004
Fenthion	55-38-9	Insecticide	Initiated: 29/06/1999 PACR: 31/03/2003 Completed: 13/05/2004	REV99-01 PACR2003-05 RRD2004-10	Final Decision: Acceptable for continued registration. However, rather than address the requirements to support continuing registration as outlined in the PACR, the registrant decided it would no longer support the registered uses and discontinue registration of all existing fenthion end-use products. All uses of fenthion have been discontinued.	Revised phase-out dates for all uses of fenthion: • Last date of sale by retailers: 31/12/2007 • Last date of use: 31/12/2008
Fenvalerate	51630-58-1	Insecticide	Announced/ Completed: 26/01/2006	REV2006-01	Final Decision: Not supported by registrant, no further action. All uses of fenvalerate have been discontinued.	Expiry date of last registered product: 19/05/2005

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Fonofos	944-22-9	Insecticide	Initiated: 29/06/1999 Completed: 12/06/2000	REV99-01 REV2000-03	Final Decision: Not supported by registrant, no further assessment. All uses of fonofos have been discontinued.	Expiry date of last registered product: 31/10/2000
Formetanate hydrochloride	23422-53-9	Insecticide, acaricide	Announced: 29/08/2002	REV2002-06		
Gum resin	N/A	Insecticide	Initiated: 22/09/2003 Completed: 09/03/2006		Final Decision: One registered product that no longer needs registration under the <i>Pest Control Products Act</i> . No further review is required.	
Hydramethylnon	67485-29-4	Insecticide	Initiated: 24/03/2003 PACR: 24/10/2003 Completed: 30/06/2004	PACR2003-11 RRD2004-16	Final Decision: Acceptable for continued registration. Mitigation includes new/revised label statements to further protect workers (PPE) and the general public including children and pets (i.e., placement of bait stations).	
Hydrogen cyanide	N/A	Insecticide	Announced/ Completed: 30/06/2003	REV2003-04	Final Decision: Not supported by registrant, no further action. All uses of hydrogen cyanide have been discontinued.	Expiry date of last registered product: 31/12/1997
2-Hydroxyethyl n-octyl sulfide plus related active compounds	3547-33-9	Synergist with insecticides	Announced/ Completed: 11/05/2004	REV2004-02	Final Decision: Not supported by registrant, no further action. All uses of 2-hydroxyethyl n-octyl sulfide plus related active compounds have been discontinued.	Expiry date of last registered product: 31/12/2004
Kinoprene (racemic)	37882-31-8	Insecticide	Announced/ Completed: 16/07/2004	REV2004-03	Final Decision: Not supported by registrant, no further action. All uses of kinoprene (racemic) have been discontinued.	Expiry date of last registered product: 31/12/2001

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Lindane	58-89-9	Insecticide, acaricide, Fungicide	Announced: 15/03/1999 Completed: 05/04/2002	SRA99-01 REV2002-02 Information Note April 06 Information Note Dec 06	Final Decision: Currently, there are no end-use products registered for use. Update 26/04/2006: A follow-up review has been initiated. Update 22/12/2006: The target completion date for the follow-up review has been postponed to spring 2007 pending receipt of a new occupational exposure study.	Expiry date of last registered product: 31/12/2004
Malathion ^{Lawn & Turf}	121-75-5	Insecticide, acaricide	Initiated: 29/06/1999 PACR: 05/09/2003 End of comment period: 04/11/2003	REV99-01 REV2000-06 REV2003-03 PACR2003-10	Decision (adulticide use in residential mosquito abatement programs: Acceptable for continued registration for large-scale application in residential areas for control of adult mosquitos. Mitigation includes removal of non-ULV (non ultra-low volume) uses in residential areas, rate reduction for aerial ULV applications in residential areas to a maximum of 260 g a.i./ha and revised PPE for operators. ^{Lawn & Turf} Through voluntary action by the registrant, the following uses have been discontinued: broadcast turf (i.e., residential yard) as well as residential indoor uses (including pet treatments, treatment of pet quarters, indoor broadcast and spot treatments and matress applications). The PMRA will continue with the re-evaluation of the remaining uses for malathion.	Removal of all malathion non-ULV use for mosquito control in residential areas (e.g., higher rate of application, spray, thermal fog) to be removed from the label by the 2003 spray season.
Methamidophos	10265-92-6	Insecticide	Announced: 29/06/1999 REV in preparation	REV99-01		

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Methidathion	950-37-8	Insecticide	Initiated: 29/06/1999 Completed: 19/10/2001	REV99-01 REV2001-01	Final Decision: Not supported by registrant, no further assessment. All uses of methidathion have been discontinued.	Expiry date of last registered product: 31/12/2002
Methomyl	16752-77-5	Insecticide	Announced: 29/08/2002 PACR in preparation	REV2002-06		
Methoxychlor	72-43-5	Insecticide	Announced/ Completed: 16/07/2004	REV2004-03	Final Decision: Not supported by registrant, no further action. All uses of methoxychlor have been discontinued.	Expiry date of last registered product: 31/12/2005
Naled	300-76-5	Insecticide, acaricide	Initiated: 29/06/1999 PACR: 06/08/2004 Completed: 27/06/2006	REV99-01 REV2003-02 PACR2004-33 RRD2006-24	Final Decision (Residential Uses): Phase-out of pet collar products and other uses of naled in residential areas as a result of the PMRA review. Final Decision (Commercial Uses): Acceptable for continued registration with respect to dietary and drinking water risks; risks to workers during mixing, loading and application with groundboom, low-pressure handwand, high-pressure handwand, airblast, aerial, backpack, greenhouse vapour treatment and by fogging; and risks to the environment. New/revised label statements to further protect workers (including PPE, engineering controls, REI) and the environment (including buffer zones). For aerial application, closed mixing/loading systems must be used; for high-pressure handwand, the specified PPE must be worn and workers must not handle more than 1000 L of diluted product per day. Refer to RRD2006-24 for final revised label statements.	Phase-out dates for domestic class products (pet collars) • Last date of sale by registrants: 31/12/2002 • Last date of sale by retailers: 31/12/2003 Phase-out dates for commercial class products labelled for use on turf and residential areas (e.g., homes, lawns, parks, school grounds and playing fields): • Last date of sale by registrants: 31/08/2003 • Last date of sale by retailers: 31/12/2003 • Last date of use by product users: 31/08/2004
Nuclear polyhedrosis virus of red-headed pine sawfly	N/A	Insecticide	N/A	N/A	Final Decision: Technical product expired as of 31 March 2006. No end-use products currently registered.	

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Oxamyl	23135-22-0	Insecticide, acaricide, nematocide	Initiated: 29/08/2002 PRVD: 09/07/2007 End of comment period: 07/09/2007	REV2002-06 PRVD2007-02	Proposed Decision: Acceptable for continued registration. Proposed mitigation includes new/revised label statements to further protect workers (PPEs, REIs, closed mix/load equipment for custom application on potatoes and closed cab ground application equipment when handling more than 110 kg a.i./day, and restrictions to the number of applications for potatoes and non-bearing apple trees), drinking water (reduce maximum application rate for foliar application to non-bearing apples to 1.68 kg a.i./ha) and the environment (additional label statements including environmental hazards and buffer zones to protect sensitive habitats).	
Oxydemeton methyl	301-12-2	Insecticide	Announced: 29/06/1999 Completed: 16/07/2004	REV99-01 REV2004-03	Final Decision: Not supported by registrant, no further action. All uses of oxydemeton methyl have been discontinued.	Expiry date of last registered product: 31/12/2001
Phorate	298-02-2	Insecticide, acaricide	Initiated: 29/06/1999 PACR: 24/01/2003 Completed: 13/05/2004 Update: 05/06/2007	REV99-01 PACR2003-01 RRD2004-11 REV2007-07	Final Decision: Phase-out of all uses of phorate, except potatoes, due to environmental concerns. Continued registration for use on potatoes acceptable until 31 December 2006 due to lack of available alternatives for control of wireworm on potatoes, with interim mitigation to protect workers (engineering controls and PPE) and environment (statement indicating high toxicity to birds, small mammals, fish and aquatic invertebrates required on label). Update: The phase-out dates for the remaining use of phorate on potatoes has been extended due to a continuing extensive wireworm problem and the lack of adequate alternative management strategies.	Phase-out dates for uses for which alternatives exist (corn lettuce, beans and rutabagas): • Last date of sale by registrants: 31/08/2004 • Last date for use of product: 31/12/2004 Phase-out dates for remaining use on potatoes: • Last date of sale by the registrant: 31/12/2007 • Last date of sale by distributors or retailers: 01/05/2008 • Last date for use by end-users: 01/08/2008
Phosalone	2310-17-0	Insecticide acaricide	Initiated: 29/06/1999 PACR: 13/06/2005 End of comment period: 01/10/2007	REV99-01 PACR2005-02 REV2006-13	Proposed Decision: It is proposed that uses of phosalone on apple, cherry, grape, peach, pear, plum and prune plum crops be phased out in light of identified worker and residential postapplication risks unless further data are provided to demonstrate acceptable risk.	

Active Ingredient	CAS Number	Type	Status	Regulatory Publications	Summary of Decision or Proposed Decision (as contained in PACR, RRD or REV Note)	Discontinuation/ Phase-out Timeframe (discontinue date, expiry date)
Phosmet	732-11-6	Insecticide, acaricide	Initiated: 29/06/1999 PACR: 01/10/2004 End of comment period: 30/11/2004 REV Note expected in 2007	REV99-01 PACR2004-38	Proposed Interim Measures: Mitigation on the sites supported by the registrant (i.e., the registrant does not support use of high-pressure spray application on beef cattle and hogs and domestic/homeowner use of phosmet) pending information to refine postapplication worker exposure assessment (required by 1 December 2006) with interim measures specific to the postapplication worker concern to include maximum agronomically feasible REIs, protective clothing for re-entry workers, availability of wash stations, reducing maximum application rate on apples for control of codling moth in British Columbia from 1875 to 1625 g a.i./ha, limiting number of applications per season, and a product stewardship program to minimize re-entry worker exposure that includes double notification of REIs. Remaining changes to include new/revised label statements to further protect workers (PPE) and the environment (buffer zones, environmental hazard statements).	Phase-out dates for domestic class product: • Last date of sale by registrant: 29/11/2002 • Last date of sale by retailers: 29/11/2002
Pirimicarb	23103-98-2	Insecticide, acaricide, fungicide	Announced/ Completed: 26/01/2006	REV2006-01	Final Decision: Not supported by registrant, no further action. All uses of pirimicarb have been discontinued.	Expiry date of Pirimor 50DF Dry Flowable Insecticide (Registration No. 22792): 31/12/2009 Expiry date of Pirliss 50-DF Dry Flowable Insecticide (Registration No. 22793): 31/12/2007 Expiry date of C-I-L Insecticide-fungicide for Roses & Flowers Flortect (Registration No. 22921): 08/03/2007 Expiry date of Wilson Floritect Insecticide-Fungicide for Roses & Flowers (Registration No. 24876): 21/12/2006
Polyhedral inclusion bodies (PIBs) of <i>Orgyia pseudotsugata</i> (Douglas fir tussock moth) nucleopolyhedroviruses (OpNPVs)	N/A	Insecticide	Initiated: 16/06/2004 PACR: 06/08/2004 Completed: 31/03/2006	PACR2004-32 RRD2006-18	Final Decision: Acceptable for continued registration. Mitigation includes new/revised label statements to further protect workers (includes PPE and other statements).	

Active Ingredient	CAS Number	Type	Status	Regulatory Publications	Summary of Decision or Proposed Decision (as contained in PACR, RRD or REV Note)	Discontinuation/ Phase-out Timeframe (discontinue date, expiry date)
Propargite	2312-35-8	Acaricide	Announced/ Completed: 16/07/2004	REV2004-03	Final Decision: Not supported by registrant, no further action. All uses of propargite have been discontinued.	Expiry date of last registered product: 31/12/2002
Propetamphos	31218-83-4	Insecticide	Initiated: 29/06/1999 Completed: 16/01/2003	REV99-01 REV2003-01	Final Decision: Acceptable for continued registration. Mitigation (limiting use to crack and crevice applications only; removing from the label reference to pests controlled through spot treatment; removing residential use sites from labels with the exception of food service areas; allowing use in food service areas of residential structures only when food is covered or removed prior to treatment; and limiting use to the more dilute spray concentration of 0.5%).	
Propoxur	114-26-1	Insecticide, insect growth regulator, acaricide	Announced: 29/08/2002	REV2002-06		
Proprietary mixture of scented oils	N/A	Insecticide	Announced/ Completed: 30/06/2003	REV2003-04	Final Decision: Not supported by registrant, no further action. All uses of the proprietary mixture of scented oils have been discontinued.	Expiry date of last registered product: 31/12/2001
Silicon dioxide and silica gel	N/A 7631-86-9	Insecticide	Initiated: 07/01/2004 PACR: 28/04/2004 Completed: 16/07/2004	PACR2004-09 RRD2004-20	Final Decision: Acceptable for continued registration. Mitigation includes new/revised label statements to further protect workers (PPE); registrants of end-use products containing silicon dioxide, which are used for the treatment of fleas, carpet beetles or bed bugs, are required to use a technical grade active ingredient source that contains less than 1% crystalline silica. (i.e., switch to alternate source or remove these uses from label); registrants of all end-use products are strongly encouraged to use a source of technical silicon dioxide containing less than 1% crystalline silica (if continue to use source containing >1% crystalline silica may be required to generate use-specific exposure data by the next round of re-evaluation).	

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S-methoprene	65733-16-6	Insecticide, insect growth regulator, acaricide	Initiated: 25/11/2004 PACR: 03/01/2007 End of comment period: 17/02/2007	PACR2007-01	Proposed Decision: Acceptable for continued registration. Proposed mitigation includes new/revised label statements to further protect workers (PPE) and the environment (environmental hazard statements and wording changes to briquet product label statements regarding application of product). For all domestic class end-use products registered for use on cats and dogs, labels must comply with Regulatory Directive DIR2002-01 , <i>Canadian Label Improvement Program for Pesticides Used on Companion Animals</i> .	
Soap salts (includes potassium, alkanolamine and ammonium salts of fatty acids)	N/A	Insecticide, acaricide	Initiated: 06/08/2003 PACR: 07/04/2004 Completed: 03/09/2004	PACR2004-04 RRD2004-26	Final Decision: Acceptable for continued registration. Mitigation includes a label statement indicating toxicity to aquatic organisms to further protect the environment, the modification of labels for products used on companion animals to comply with Regulatory Directive DIR2002-01 , <i>Canadian Label Improvement Program for Pesticides Used on Companion Animals</i> , and identification of the type of soap salts in the active ingredient statement on the labels for technical grade and end-use products.	
Sodium fluosilicate	16893-85-9	Insecticide	Announced/ Completed: 24/07/2003	REV2003-05	Final Decision: Not supported by registrant, no further action. All uses of sodium fluosilicate have been discontinued.	Expiry date of last registered product: 31/12/2005
Sulcofuron-sodium (Mitin FF)	24019-05-4	Insecticide	Initiated: 05/08/2003 PACR: 18/06/2004 Completed: 22/09/2004	PACR2004-19 RRD2004-27	Final Decision: Acceptable for continued registration. Mitigation includes new/revised label statements to further protect workers and the environment (includes engineering control, PPE, environmental hazard statement and other statements). After completion of re-evaluation Mitin FF was discontinued by the registrant.	Discontinued: 02/12/2005 Last product expires: 31/12/2008
Sulfotep	3689-24-5	Insecticide	Initiated: 29/06/1999 Completed: 26/10/2001	REV99-01 REV2001-04	Final Decision: Not supported by registrant, no further assessment. All uses of sulfotep have been discontinued.	Expiry date of last registered product: 31/12/2004

Active Ingredient	CAS Number	Type	Status	Regulatory Publications	Summary of Decision or Proposed Decision (as contained in PACR, RRD or REV Note)	Discontinuation/ Phase-out Timeframe (discontinue date, expiry date)
Tau-fluvalinate	29409-94-54	Insecticide, acaricide	Initiated: 06/03/2006 Completed: 27/06/2006	N/A	Final Decision: Acceptable for continued registration with no label changes.	
Temephos	3383-96-8	Insecticide	Announced/ Completed: 30/06/2003	REV2003-04	Final Decision: Not supported by registrant, no further action. All uses of temephos have been discontinued.	Expiry date of last registered product: 19/12/2002
Terbufos	13071-79-9	Insecticide	Initiated: 29/06/1999 PACR: 24/01/2003 Completed: 23/03/2004	REV99-01 PACR2003-02 RRD2004-04	Final Decision: Phase-out of all uses of terbufos, except with sugarbeets, as a result of the PMRA review due to worker risks and risks to the environment. The PMRA has accepted continued use on sugarbeets until 31 December 2009 due to lack of available alternatives. Identified risks to workers from using terbufos on sugar beets can be effectively mitigated by ensuring engineering controls and requirements regarding additional PPE and clothing are implemented.	Phase-out dates for uses for which alternatives exist: Counter 5-G Soil Insecticide, Registration No. 17037 (canola and mustard) • Last date of sale by registrant: 30/06/2003 • Last date of sale by retailers, wholesalers or seed blenders: 31/05/2004 • Last date for use: 30/06/2004 Counter 15-G Lock 'n Load Soil Insecticide Granular, Registration No.15268 (corn and rutabaga) • Last date of sale by registrant: 31/12/2003 • Last date of sale by retailers or distributors: 01/05/2004 • Last date for use: 31/12/2004 Phase out dates for use on sugar beets • Last date of sale by registrant: 31/08/2007 • Last date of sale by retailers or distributors: 31/08/2008 • Last date for use: 31/12/2009

Active Ingredient	CAS Number	Type	Status	Regulatory Publications	Summary of Decision or Proposed Decision (as contained in PACR, RRD or REV Note)	Discontinuation/ Phase-out Timeframe (discontinue date, expiry date)
Tetrachlorvinphos	22248-79-9	Insecticide, acaricide	Initiated: 29/06/1999 PACR: 05/09/2003 Completed: 25/06/2004	REV99-01 PACR2003-09 RRD2004-14	Final Decision: Acceptable for continued registration. Mitigation includes new/revised label statements to further protect workers (PPE, restrict low pressure handwands for wettable powder applications to spot treatment in poultry facilities); domestic class dust formulations restricted to no more than 2 grams of powder per kilogram body weight for cats and dogs, and restriction of these products to bedding used by pets only; and removal of use for tick control in outdoor living areas.	Voluntary removal from the label by registrant of the use for tick control in outdoor living areas (campgrounds, backyards, picnic areas, recreational areas, etc.).
Trichlorfon	52-68-6	Insecticide	Announced: 29/06/1999 Preliminary risk assessment: 17/05/2007 Comment period ends: 16/07/2007	REV99-01 REV2007-05	Preliminary Risk Assessment: Only uses supported by the registrant were considered in the health and environmental risk assessments of trichlorfon. The registrant of the technical grade active ingredient indicated that it intended to discontinue all uses except for those on Balsam fir and spruce trees in farm woodlots, rights-of-way, Christmas tree plantations and municipal parks, uses on beef and non-lactating dairy cattle as well as the uses on ornamentals. For residential uses (municipal parks), the calculated margins of exposure (MOEs) are less than the target MOEs. The PMRA is, therefore, proposing to phase out this use. The preliminary assessment also indicates a level of concern for workers and, as such, the PMRA is requesting further data/ information from all interested parties to refine the occupational exposure assessment and/or mitigate risks. The PMRA will review the information received, revise the assessment as necessary and propose regulatory actions in a future Proposed Re-evaluation Decision document.	
(Z)-9-tricosene	27519-02-4	Insecticide	Initiated: 01/01/2003 PACR: 24/10/2003 Completed: 30/03/2004	PACR2003-12 RRD2004-06	Final Decision: Acceptable for continued registration. Mitigation includes new/revised label statements to further protect workers (PPE) and the environment (when using in areas accessible to birds use a bait station).	

Active Ingredient	CAS Number	Type	Status	Regulatory Publications	Summary of Decision or Proposed Decision (as contained in PACR, RRD or REV Note)	Discontinuation/ Phase-out Timeframe (discontinue date, expiry date)
Personal Insect Repellent						
Citronella oil and related compounds (for use as personal insect repellents)	8000-29-1	Personal insect repellent	Initiated: 01/06/1990 PACR: 17/09/2004 Update: 17/06/2005 Revised Re-evaluation Note in preparation	A90-01 PACR2004-36 REV2005-05	Final Decision (artificial essential oil blend and citronellal): Not supported by registrant, no further action. All uses of artificial essential oil blend and all uses of citronellal have been discontinued. Proposed Decision (oil of citronella, citronella terpene, and mixture of citronella oil, citrus oil, eucalyptus oil, and pine oil): Phase-out of existing end-use products unless registrants commit to provide further data by 21 January 2005 addressing deficiencies that would allow the PMRA to make a conclusion regarding risk to human health. Update (oil of citronella, citronella terpene, and mixture of citronella oil, citrus oil, eucalyptus oil, and pine oil): Additional information to refine the risk assessment was not provided nor was there a commitment to generate the required data. However, comments were provided relating to the perceived safety of citronella oil based on its natural source, its history of use and limited record of adverse effects. The PMRA has convened an independent scientific panel to review the basis for the decision proposed in PACR2004-36, prior to finalizing its decision. The panel report has been received and is under consideration.	Artificial essential oil blend (Chemfree Deflector Insect Repellent) Expiry date of last registered product: 16/12/2003 Citronellal (Walkabout Personal Insect Repellent) Expiry date of last registered product: 31/12/2004
Personal insect repellents containing DEET (N,N-diethyl-m-toluamide and related compounds)	134-62-3	Personal insect repellent	Initiated: 01/06/1990 Completed: 15/04/2002	A90-01 RRD2002-01	Final Decision: Acceptable for continued registration. Mitigation includes the following: <ul style="list-style-type: none"> • For children 6 months to 2 years, the use of one application of DEET may only be considered for this age group in situations where a high risk of complications from insect bites exist. • For children between 2–12 years, the least concentrated product (10% DEET or less) should be used and should not be applied more than 3 times per day. • For adults and individuals 12 years and older, products containing DEET at concentrations above 30% will no longer be acceptable for registration, based on a human health risk assessment that considered daily application of DEET over a prolonged period of time. • Based on incomparable methods of application (i.e., apply DEET sparingly but apply sunscreen liberally) DEET + sunscreen combination products will no longer be acceptable for registration. • the reapplication interval must be on the labels of all products; claims to repel fleas must be deleted; and vague, ambiguous or incorrect names must be removed. 	Phase-out dates for existing products containing >30% DEET: <ul style="list-style-type: none"> • Last date of sale by registrants: 31/08/2002 • Last date of sale by retailers: 31/12/2004 Phase-out dates for existing combination DEET + sunscreen products: <ul style="list-style-type: none"> • Last date of sale by registrants: 31/08/2002 • Last date of sale by retailers: 31/12/2003

Active Ingredient	CAS Number	Type	Status	Regulatory Publications	Summary of Decision or Proposed Decision (as contained in PACR, RRD or REV Note)	Discontinuation/ Phase-out Timeframe (discontinue date, expiry date)
Personal insect repellents containing di-n-propyl isocinchomeronate (MGK Repellent 326) *See also under the heading Insecticides		Personal insect repellent	Initiated: 01/06/1990 Completed: 12/12/2001	A90-01 RRD2001-01	Final Decision: Not supported by registrant. In addition, available data showed that MGK 326, which is always used in combination with DEET and MGK 264, does not increase efficacy of those products. All uses of MGK 326 for use in personal insect repellents have been discontinued.	Phase-out dates for existing products containing MGK 326 for use in personal insect repellents: • Last date of sale by registrants: 31/08/2002 • Last date of sale by retailers: 31/12/2002
Personal insect repellents containing n-octyl bicycloheptene dicarboximide (MGK Synergist 264)		Personal insect repellent	Initiated: 01/06/1990 Completed: 12/12/2001	A90-01 RRD2001-02	Final Decision: Phase out as a result of the PMRA review, due to potential synergistic effects of MGK 264 on DEET in humans (MGK 264 is always found in combination with DEET) and due to lack of increased efficacy over products containing DEET alone.	Phase-out dates for existing products containing MGK 264 for use in personal insect repellents: • Last date of sale by registrants: 31/08/2002 • Last date of sale by retailers: 31/12/2002
Oil of lavender	8000-28-0	Personal insect repellent	Announced/ Completed: 11/05/2004	REV2004-02	Final Decision: Not supported by registrant, no further action. All uses of oil of lavender have been discontinued.	Expiry date of last registered product: 31/03/2007
Herbicides						
Acifluorfen	62476-59-9	Herbicide	Initiated: 02/11/2004 PACR: 20/03/2006 Completed: 31/05/2006	PACR2006-02 RRD2006-20	Final Decision: Acceptable for continued registration. Mitigation includes new/revised label statements to further protect workers and the environment (including REI, terrestrial buffer zone and other label statements).	
Asulam	3337-71-1	Herbicide	Announced: 29/08/2002 Completed: 24/07/2003	REV2002-06 REV2003-05	Final Decision: Not supported by registrant, no further action. All uses of asulam have been discontinued.	Expiry date of last registered product: 19/12/2002

Active Ingredient	CAS Number	Type	Status	Regulatory Publications	Summary of Decision or Proposed Decision (as contained in PACR, RRD or REV Note)	Discontinuation/ Phase-out Timeframe (discontinue date, expiry date)
Atrazine	1912-24-9	Herbicide	Initiated: June 1988 Health PACR: 19/11/2003 Health Completed: 25/05/2004 Environment PACR: 22/05/2007 End of comment period: 21/07/2007	PACR2003-13 RRD2004-12 PACR2007-05	Final Decision (human health): Acceptable for continued registration, for use on corn only (all other uses will be phased out (e.g., lowbush blueberries, atrazine-tolerant canola, industrial and residential uses). Mitigation includes new/revised label statements to further protect workers and the general population. These label changes include engineering controls, PPE, buffer zones from any body of water, limit application timing to pre- or postemergence only as well as PHIs of 45 days and 60 for sweet corn and field corn, respectively. As a result of comments to the PACR, the rate and number of applications was revised to a maximum application rate of 1.5 kg a.i./ha and up to 2 applications per year, but the maximum amount of atrazine used in a year cannot exceed 1.5 kg a.i./ha. Proposed Decision (environment): Acceptable for continued registration. Mitigation measures include buffer zones to protect non-target terrestrial and aquatic habitats from spray drift and precautionary measures on end-use product labels to minimize the risk of aquatic contamination from surface runoff and to mitigate the downward movement of atrazine through soil, thereby reducing groundwater contamination. The registrants have voluntarily requested amendment of the atrazine label to remove use in British Columbia.	Phase-out date for uses of atrazine on all uses other than corn (lowbush blueberries, atrazine-tolerant canola, industrial and residential uses): • products with existing labels can continue to be sold and distributed by the registrant within 18 months of the publication of the RRD (25/05/2004), after which all products sold or distributed by registrants must bear the new label requirements (i.e., for use on corn only).
Bensulide	741-58-2	Herbicide	Initiated: 29/06/1999 PACR: 31/03/2003 Completed: 03/08/2004	REV99-01 PACR2003-06 RRD2004-22	Final Decision: Acceptable for continued registration. Mitigation includes measures to further mitigate worker risks from turf use (prohibit backpack sprayer for turf uses, prohibit treatment of large turf areas, such as parks, with the exception of golf courses, limit golf course use to tees and greens and prohibit low pressure turf gun for this use); to mitigate residential risks (all bensulide formulations must be watered in); restrict agricultural use to field cucumbers only and add plantback interval of 120 days; further measures to mitigate risk to the environment with addition of buffer zones and prohibition to spray when bees are present.	
Bentazon	25057-89-0	Herbicide	Initiated: 28/07/2005 PACR expected in 2007			

Active Ingredient	CAS Number	Type	Status	Regulatory Publications	Summary of Decision or Proposed Decision (as contained in PACR, RRD or REV Note)	Discontinuation/ Phase-out Timeframe (discontinue date, expiry date)
Bromacil	314-40-9	Herbicide	Initiated: 17/03/2003 PACR: 23/06/2004 Completed: 08/03/2006	PACR2004-22 RRD2006-07	Final Decision: Acceptable for continued registration. Mitigation includes new/revised label statements to further protect workers, bystanders and the environment (includes PPE, prohibition of use in residential areas, buffer zones); amend labels to limit the maximum application rate to 13.5 kg a.i./ha per year, to include timing of application, number of applications per year, and to remove all references to use on ditch banks, wellheads and bridge approaches.	
Bromoxynil present as the ester of n-octanoic acid or n-heptanoic acid	1689-99-2	Herbicide	Initiated: 09/09/2003 PACR expected in 2007			
Butylate	2008-41-5	Herbicide	Announced/ Completed: 11/05/2004	REV2004-03	Final Decision: Not supported by registrant, no further action. All uses of butylate have been discontinued.	Expiry date of last registered product: 25/03/2003
Chloramben	mixture	Herbicide	Announced/ Completed: 24/07/2003	REV2003-05	Final Decision: Not supported by registrant, no further action. All uses of chloramben have been discontinued.	Expiry date of last registered product: 31/12/2000
Chlorpropham	101-21-3	Herbicide, plant growth regulator	Announced: 29/08/2002 PACR: 26/03/2007 End of Comment Period: 25/05/2007	REV2002-06 PACR2007-04	Proposed Decision: Acceptable for continued registration. Proposed mitigation includes new/revised label statements to further protect workers including PPEs and REIs as well as the requirement to install a shield around the conveyor belt to prevent spray mist drifting when chlorpropham is applied by spray on a conveyor belt.	
Chlorsulfuron	64902-72-3	Herbicide	Initiated: 02/02/2006 PACR expected in 2007			

Active Ingredient	CAS Number	Type	Status	Regulatory Publications	Summary of Decision or Proposed Decision (as contained in PACR, RRD or REV Note)	Discontinuation/ Phase-out Timeframe (discontinue date, expiry date)
Chlorthal present as acid	1861-32-1	Herbicide	Initiated: 21/07/2005 PACR expected in 2007			
<i>Colletotrichum gloeosporioides</i> f.sp. <i>malvae</i>	N/A	Herbicide	Initiated: N/A Completed: 27/06/2006	REV2006-10	Final Decision: Acceptable for continued registration. Mitigation includes new/revised label statements to further protect workers and the environment. However, <i>Colletotrichum gloeosporioides</i> f.sp. <i>malvae</i> was discontinued by the registrant on 18/09/2006 after completion of the re-evaluation.	Expiry date of last registered product: 18/09/2006
Cyanazine	21725-46-2	Herbicide	Announced/ Completed: 24/07/2003	REV2003-05	Final Decision: Not supported by registrant, no further action. All uses of cyanazine have been discontinued.	Expiry date of last registered product: 31/12/2004
Cycloate	1134-23-2	Herbicide	Announced: 29/08/2002 Completed: 11/05/2004	REV2002-06 REV2004-03	Final Decision: Not supported by registrant, no further action. All uses of cycloate have been discontinued.	Expiry date of last registered product: 31/12/2002
Dicamba ^{Lawn & Turf}	1918-00-9	Herbicide	Initiated: 17/11/2004 PACR: 19/02/2007 End of Comment Period: 20/04/2007	PACR2007-02	Proposed Decision: Acceptable for continued registration. Proposed mitigation for lawn and turf uses of dicamba to include new/revised label statements to further protect workers and the environment (includes limitation of 2 broadcast applications per season for commercial products, buffer zones for commercial products applied by tractor-pulled sprayers to protect surrounding broadleaf vegetation and other label recommendations and improvements) and label statements relating to value. Registered products containing diethanolamine (DEA) form of dicamba are proposed for discontinuation because adequate data to evaluate the potential health effects of the DEA form were not provided. The PMRA will make a final decision regarding the continued acceptability of lawn and turf uses of dicamba when a final decision on all this active ingredient's uses, including agricultural uses, is made.	

Active Ingredient	CAS Number	Type	Status	Regulatory Publications	Summary of Decision or Proposed Decision (as contained in PACR, RRD or REV Note)	Discontinuation/ Phase-out Timeframe (discontinue date, expiry date)
Dicamba (non-turf uses)	1918-00-9	Herbicide	Initiated: 17/11/2004 PACR in preparation			
Dichlobenil	1194-65-6	Herbicide	Initiated: 01/01/2005 PACR: 25/10/2005 Completed: 29/03/2006	PACR2005-10 RRD2006-14	Final Decision: Acceptable for continued registration. Mitigation includes new/revised label statements to further protect workers (PPE, REIs), domestic handlers (precautionary statements) and the environment (environmental hazard statements); label amendment to limit the maximum application rate to 11.0 kg a.i./ha; and amend commercial labels to identify specific areas where dichlobenil is used for nutsedge control.	

Active Ingredient	CAS Number	Type	Status	Regulatory Publications	Summary of Decision or Proposed Decision (as contained in PACR, RRD or REV Note)	Discontinuation/ Phase-out Timeframe (discontinue date, expiry date)
2,4-Dichlorophenoxy acetic acid (2,4-D) and its salt and ester forms ^{Lawn & Turf}	94-75-7	Herbicide	Initiated: 27/09/2000 PACR: 21/02/2005 REV Note: 16/08/2006	REV2000-04 PACR2005-01 REV2006-11	<p>Proposed Decision: Acceptable for continued registration. Proposed mitigation to include new/revised label statements to further protect workers and the environment (includes limitation of 2 broadcast applications per season, buffer zones and other statements); and new/ revised label statements related to value (includes limitations on maximum application rates [1.75 kg a.e./ha for solid products; 1.55 kg a.e./ha for liquid products containing 2,4-D alone; and 1.25 kg a.e./ha for liquid products containing 2,4-D coformulated with other active ingredients] and other statements).</p> <p>Interim Measures: Comments and information received by the PMRA in response to PACR2005-01 were reviewed. Additional data were also reviewed. As a result, the following changes were made: - statements indicating the most effective timing of application are now required on product labels; - environmental precautions statements have been modified to increase their relevancy to all products; - proposed buffer zones for commercial products were altered; and - data on microcontaminants present at extremely low levels must be submitted to the PMRA.</p> <p>Registered products containing diethanolamine (DEA) form of 2,4-D must be discontinued because adequate data to evaluate the potential health effects of the DEA form were not provided.</p> <p>The PMRA will make a final decision regarding the continued acceptability of lawn and turf uses of 2,4-D when a final decision on all this active ingredient's uses, including agricultural uses, is made.</p>	

Active Ingredient	CAS Number	Type	Status	Regulatory Publications	Summary of Decision or Proposed Decision (as contained in PACR, RRD or REV Note)	Discontinuation/ Phase-out Timeframe (discontinue date, expiry date)
2,4-Dichlorophenoxy acetic acid (2,4-D) and its salt and ester forms (non-turf uses)	94-75-7	Herbicide	Initiated: 18/11/2004 PACR: 19/06/2007 End of comment period: 18/08/2007	PACR2007-06	Proposed Decision: The agricultural, forestry and industrial site uses of 2,4-D are acceptable for continued registration with the exception of the following: (1) registered products containing diethanolamine (DEA) form of 2,4-D has been discontinued because adequate data to evaluate the potential health effects of the DEA form were not provided; (2) the butyl ester form of 2,4-D will be discontinued and the only registered product is no longer available in the marketplace; and (3) application of 2,4-D to aquatic areas must be discontinued, unless data are provided to refine the risk assessment with respect to applicator exposure and swimmer exposure. Proposed mitigation includes new/revised label statements to further protect workers (toxicological information statement, REIs, various PPE requirements based on formulation and use combination, closed system or closed cab requirements for certain use scenarios, limitation on amount handled per day for certain use scenarios, maximum application rate in non-cropland [IPA, TIPa, BEE forms] is limited to 2.24 kg a.e./ha) and the environment (additional label statements including environmental hazard statements, buffer zones to protect sensitive habitats, reduction in maximum label rates for some sites).	
2,4-Dichlorophenoxy acetic acid (2,4-D) present as sodium salt	2702-72-9	Herbicide	Announced/ Completed: 04/04/2005	REV2005-02	Final Decision: Not supported by registrant, no further action. All uses of 2,4-D present as sodium salt have been discontinued. Other forms of 2,4-D remain registered; only the sodium salt form has been discontinued.	Expiry date of last registered product: 01/06/2005
Difenzoquat	43222-48-6	Herbicide	Announced/ Completed: 11/05/2004	REV2004-03	Final Decision: Not supported by registrant, no further action. All uses of difenzoquat have been discontinued.	Expiry date of last registered product: 31/12/2009
Dinoseb	88-85-7	Herbicide	Announced/ Completed: 24/07/2003	REV2003-05	Final Decision: Not supported by registrant, no further action. All uses of dinoseb have been discontinued.	Expiry date of last registered product: 31/12/2000
Diquat	2764-72-9	Herbicide	Initiated: 23/10/2003 PACR in preparation			

Active Ingredient	CAS Number	Type	Status	Regulatory Publications	Summary of Decision or Proposed Decision (as contained in PACR, RRD or REV Note)	Discontinuation/ Phase-out Timeframe (discontinue date, expiry date)
Diuron	330-54-1	Herbicide	Initiated: 02/11/2004 PACR: 31/10/2006 End of comment period: 15/12/2006	PACR2006-07	Proposed Decision: Acceptable for continued registration. Proposed mitigation to include new/revised label statements to further protect workers, bystanders and the environment (includes PPE, REI, statements for the protection of bystanders in residential areas, buffer zones, ground water advisory and environmental hazard statements and other statements). The Canadian registrants of the technical grade active ingredient have indicated that the use of diuron on ponds and dugouts will no longer be supported in Canada and will be phased out. End-use products formulated as a wettable powder must be phased out.	
Endothall	145-73-3	Herbicide	Announced: 09/03/2006 Completed: 31/05/2006	REV2006-06	Final Decision: Acceptable for continued registration. Mitigation includes new/revised label statements to further protect workers (48-hour REI, treated crops to be harvested by mechanical means only), the environment (buffer zones and environmental hazard statements) and the general public (do not feed treated forage to dairy animals or animals intended for slaughter).	
EPTC	759-94-4	Herbicide	Announced: 29/08/2002 PACR in publication process	REV2002-06		
Ethametsulfuron-methyl	97780-06-8	Herbicide	Initiated: 14/09/2005 PACR expected in 2007			
Ethofumesate	67293-74-7	Herbicide	Initiated: 27/04/2006 PACR expected in 2007			
Flamprop-m-methyl	52756-25-9	Herbicide	Announced/ Completed: 26/01/2006	REV2006-01	Final Decision: Not supported by registrant, no further action. All uses of flamprop-m-methyl have been discontinued.	Expiry date of last registered product: 31/12/2007

Active Ingredient	CAS Number	Type	Status	Regulatory Publications	Summary of Decision or Proposed Decision (as contained in PACR, RRD or REV Note)	Discontinuation/ Phase-out Timeframe (discontinue date, expiry date)
Fluazifop-butyl (racemic mix)	069806-50-4	Herbicide	Announced/ Completed: 24/07/2003	REV2003-05	Final Decision: Not supported by registrant, no further action. All uses of fluazifop-butyl have been discontinued.	Expiry date of last registered product: 19/12/2002
Fosamine ammonium	25954-13-6	Herbicide	Initiated: 18/03/2003 PACR: 16/04/2004 Completed: 12/07/2004	PACR2004-05 RRD2004-18	Final Decision: Acceptable for continued registration. Mitigation includes new/revised label statement to further protect workers, bystanders and the environment (includes PPE, prohibition of use in residential areas, environmental hazard statements and other statements); limiting use to one application per season and restructuring of maximum application rates to 17.9 kg a.i./ha for low shrubs and brushes and 21.6 kg a.i./ha for tall, dense, woody species with very heavy foliage.	
Hexazinone	51235-04-2	Herbicide	Initiated: 25/11/2004 PACR in preparation			
MCPA ^{Lawn & Turf} (present as acid, amine salt, esters, and potassium or sodium salt)	94-74-6	Herbicide	Initiated: 27/09/2000 PACR: 28/04/2006 End of comment period: 27/06/2006	REV2000-04 PACR2006-05	Proposed Decision: The use of MCPA on residential, recreational and commercial turf is acceptable for continuing registration. Proposed mitigation to include a reduction in the maximum application rate to 1.7 kg a.e./ha; an REI of one day for harvesting and transplanting treated turf following application on sod farms; phasing out of the diethanolamine (DEA) form of MCPA, unless further data are provided; adding buffer zones to commercial products applied by tractor-pulled sprayers to protect sensitive terrestrial and aquatic areas; limit of two broadcast applications per season; and other label statements to further protect workers and the environment. The PMRA will make a final decision regarding the continued acceptability of lawn and turf uses of MCPA when a final decision on all this active ingredient's uses, including agricultural uses, is made.	

Active Ingredient	CAS Number	Type	Status	Regulatory Publications	Summary of Decision or Proposed Decision (as contained in PACR, RRD or REV Note)	Discontinuation/ Phase-out Timeframe (discontinue date, expiry date)
MCPA (present as acid, amine salt, esters, and potassium or sodium salt) (non-turf uses)	94-74-6	Herbicide	Initiated: 05/11/2004 PRVD: 03/07/2007 End of comment period: 01/07/2007	PRVD2007-01	Proposed Decision: The agricultural, forestry and industrial uses of MCPA are acceptable for continuing registration. Proposed mitigation includes new/revised label statements to further protect workers (toxicological information statement, REIs, PPEs, limitation of number of application per season for certain use scenarios, limitation on amount handled per day for certain use scenarios) and the environment (additional label statements including environmental hazard statements and buffer zones to protect sensitive habitats). With respect to dietary risk, PHIs are required for some use scenarios. With respect to value, reduced maximum application rates have been proposed for various use sites. The MCPA Task Force III has indicated it does not support the DEA form of MCPA, and all registrants have agreed to phase out or to reformulate their affected products.	
Mecoprop (racemic) and associated salts and esters ^{Lawn & Turf}	1929-86-8 93-65-2	Herbicide	Initiated: 27/09/2000 Completed: 13/05/2004	REV2000-04 RRD2004-09	Final Decision: Phase-out as a result of the PMRA review. Rather than generate the new data that would have been required for racemic mecoprop, the registrants have chosen to discontinue sales of racemic mecoprop and its associated salts and esters, and to reformulate products with a related chemical, mecoprop-p, which is being supported with new data.	Phase-out dates for all uses of racemic mecoprop: <ul style="list-style-type: none"> • Last date of sale by registrants of manufacturing end-use products (technical or manufacturing concentrates): 31/12/2004 • Last date of sale by registrants of end-use products: 31/12/2005 • Last date of sale by retailers: 31/12/2009 • Last date of use of product by users: 31/12/2009
Metobromuron	3060-89-7	Herbicide	Announced/ Completed: 24/07/2003	REV2003-05	Final Decision: Not supported by registrant, no further action. All uses of metobromuron have been discontinued.	Expiry date of last registered product: 31/12/2005

Active Ingredient	CAS Number	Type	Status	Regulatory Publications	Summary of Decision or Proposed Decision (as contained in PACR, RRD or REV Note)	Discontinuation/ Phase-out Timeframe (discontinue date, expiry date)
Metribuzin	21087-64-9	Herbicide	Initiated: 26/09/2003 PACR: 30/08/2005 Completed: 30/03/2006	PACR2005-07 RRD2006-15	Final Decision: Acceptable for continued registration. Mitigation includes new/revised label statements to further protect workers (PPE, REI and other statements) and the environment (buffer zones, environmental hazard statements). Refer to the RRD for revised label amendments.	
Metsulfuron-methyl	74223-64-6	Herbicide	Initiated: 28/10/2004 PACR expected in 2007			
Monolinuron	1746-81-2	Herbicide	Announced/ Completed: 11/05/2004	REV2004-03	Final Decision: Not supported by registrant, no further action. All uses of monolinuron have been discontinued.	Expiry date of last registered product: 31/12/2003
Monosodium methane arsonate	2163-80-6	Herbicide and insecticide	Announced/ Completed: 24/11/2005	REV2005-07	Final Decision: Not supported by registrant, no further action. All uses of monosodium methane arsonate have been discontinued.	Expiry date of last registered product: 31/12/2008
Napropamide	15299-99-7	Herbicide	Initiated: 24/03/2006 PACR expected in 2007			
Naptalam present as acid or sodium salt	132-66-1 132-67-2	Herbicide	Initiated: 02/09/2005 PACR expected in 2007			
Nicosulfuron	111991-09-4	Herbicide	Initiated: 28/10/2004 PACR expected in 2007			

Active Ingredient	CAS Number	Type	Status	Regulatory Publications	Summary of Decision or Proposed Decision (as contained in PACR, RRD or REV Note)	Discontinuation/ Phase-out Timeframe (discontinue date, expiry date)
Oxadiazon	19666-30-9	Herbicide	Initiated: 04/07/2005 Completed: 27/06/2006	N/A	Final Decision: Acceptable for continued registration with no label changes.	
Oxyfluorfen	42874-03-3	Herbicide	Initiated: 17/03/2003 PACR: 30/06/2005 Completed: 05/05/2006	PACR2005-03 RRD2006-19	Final Decision: Acceptable for continued registration. Mitigation includes new/revised label statements to further protect workers and the environment (includes PPE, REI, buffer zones and other statements). Refer to RRD for final revised wording of required label statements because external comments resulted in changes to the label statements with respect to buffer zones.	
Paraquat dichloride	4685-14-7	Herbicide	Initiated: 07/08/2003 PACR: 22/10/2004 Completed: 29/03/2006	PACR2004-41 RRD2006-13	Final Decision: Acceptable for continued registration. Mitigation includes new/revised label statements to further protect workers and the environment (includes PPE, buffer zones and other statements); registrants are required to remove references to use in aquatic non-food sites, forest and woodlots (for conifer control and control of mixed stands of conifers and deciduous brush), industrial and domestic vegetation control non-food sites (including chemical mowing); and Turf from the end-use product labels as these uses have been discontinued. In addition, all domestic products for paraquat have been discontinued.	Expiry date of last registered Domestic product: 31/12/2005
Pebulate	1114-71-2	Herbicide	Announced: 29/08/2002 Completed: 11/05/2004	REV2002-06 REV2004-03	Final Decision: Not supported by registrant, no further action. All uses of pebulate have been discontinued.	Expiry date of last registered product: 31/12/2002
Pendimethalin	40487-42-1	Herbicide	Initiated: 18/03/2003 PACR in preparation			

Active Ingredient	CAS Number	Type	Status	Regulatory Publications	Summary of Decision or Proposed Decision (as contained in PACR, RRD or REV Note)	Discontinuation/ Phase-out Timeframe (discontinue date, expiry date)
Picloram acid and related salts	1918-02-1	Herbicide	Initiated: 23/09/2005 PACR expected in 2007			
Prometryn	7287-19-6	Herbicide	Initiated: 25/11/2004 PACR: 01/05/2006 End of comment period: 20/12/2006	PACR2006-06 REV2006-12	Proposed Decision: Acceptable for continued registration. Proposed mitigation to include new/revised label statements to further protect workers and the environment (includes PPE, REI, buffer zones, rotational crop restrictions, surface water and ground water advisory statements and other statements).	
Propanil	709-98-8	Herbicide	Announced/ Completed: 04/04/2005	REV2005-01	Final Decision: Not supported by registrant, no further action. All uses of propanil have been discontinued.	Expiry date of last registered product: 31/12/2007
Propyzamide	23950-58-5	Herbicide	Initiated: 17/03/2003 PACR in preparation			
Pyrazon (chloridazon)	1698-60-8	Herbicide	Initiated: 20/01/2006 PACR expected in 2007			
Pyridate	55512-33-9	Herbicide	Announced/ Completed: 04/04/2005	REV2005-01	Final Decision: Not supported by registrant, no further action. All uses of pyridate have been discontinued.	Expiry date of last registered product: 30/03/2005
Rimsulfuron	122931-48-0	Herbicide	Initiated: 28/10/2004 PACR expected in 2007			

Active Ingredient	CAS Number	Type	Status	Regulatory Publications	Summary of Decision or Proposed Decision (as contained in PACR, RRD or REV Note)	Discontinuation/ Phase-out Timeframe (discontinue date, expiry date)
Sethoxydim	74051-80-2	Herbicide	Initiated: 07/04/2006 PACR expected in 2007			
Sodium metaborate tetrahydrate	10555-76-7	Herbicide	Announced/ Completed: 11/05/2004	REV2004-02	Final Decision: Not supported by registrant, no further action. All uses of sodium metaborate tetrahydrate have been discontinued.	Expiry date of last registered product: 31/12/2004
TCA	76-03-9	Herbicide	Announced/ Completed: 24/07/2003	REV2003-05	Final Decision: Not supported by registrant, no further action. All uses of TCA have been discontinued.	Expiry date of last registered product: 31/12/2006
Terbacil	5902-51-2	Herbicide	Initiated: 17/03/2003 PACR: 30/06/2005 Completed: 10/02/2006	PACR2005-04 RRD2006-04	Final Decision: Acceptable for continued registration. Mitigation includes new/revised label statements to further protect workers and the environment (includes REI, buffer zones and other statements); as result of comments to PACR2005-04, the use on raspberries will be extended to all Canadian provinces (i.e., was registered in British Columbia only).	
Thifensulfuron methyl	79277-27-3	Herbicide	Initiated: 28/10/2004 PACR expected in 2007			
Triallate	2303-17-5	Herbicide	Announced: 29/08/2002 PACR in preparation	REV2002-06		
Triasulfuron	82097-50-5	Herbicide	Announced/ Completed: 26/01/2006	REV2006-01	Final Decision: Not supported by registrant, no further action. All uses of triasulfuron have been discontinued.	Expiry date of last registered product: 31/12/2008

Active Ingredient	CAS Number	Type	Status	Regulatory Publications	Summary of Decision or Proposed Decision (as contained in PACR, RRD or REV Note)	Discontinuation/ Phase-out Timeframe (discontinue date, expiry date)
Triclopyr	55335-06-3	Herbicide	Initiated: 17/03/2003 PACR: 22/09/2004 Completed: 10/02/2006	PACR2004-37 RRD2006-02	Final Decision: Acceptable for continued registration. Mitigation includes new/revised label statements to further protect workers and the environment (includes a 12-hour REI for broadcast treatment, prohibition of broadcast use in residential areas, limits maximum application rate to 2.24 kg a.e./ha and one application per growing season for use on ranges, pastures and sites where cattle can be grazed, environmental hazard statement, PHI for grass hay and other statements).	
Trifluralin	1582-09-8	Herbicide	Initiated: 10/01/2005 PACR expected in 2007			
Vernolate	1929-77-7	Herbicide	Announced: 29/08/2002 Completed: 24/07/2003	REV2002-06 REV2003-05	Final Decision: Not supported by registrant, no further action. All uses of vernolate have been discontinued.	Expiry date of last registered product: 19/12/2002
Water soluble dyes registered as pesticides	N/A	Herbicide, algicide	Completed: 31/12/2004	N/A	Final Decision: Not supported by registrant, no further action. All uses of water soluble dyes registered as pesticides have been discontinued.	Expiry date of last registered product: 31/12/2004
Plant Growth Regulators						
Ancymidol	12771-68-5	Plant growth regulator	Initiated: 17/03/2003 PACR: 19/02/2004 Completed: 28/06/2004	PACR2004-01 RRD2004-15	Final Decision: Acceptable for continued registration. Mitigation includes new/revised label statements to further protect workers and the environment (PPE, REI, environmental hazard statement).	

Active Ingredient	CAS Number	Type	Status	Regulatory Publications	Summary of Decision or Proposed Decision (as contained in PACR, RRD or REV Note)	Discontinuation/ Phase-out Timeframe (discontinue date, expiry date)
6-Benzylaminopurine	1214-39-7	Plant growth regulator	Initiated: 02/11/2004 PACR: 25/10/2005 Completed: 17/02/2006	PACR2005-11 RRD2006-06	Final Decision: Acceptable for continued registration. Mitigation includes new/revised label statements to further protect workers and the environment (includes PPE, REI, PHI for apples, environmental hazard statement and other statements).	
Chlorflurecol-methyl	2536-31-4	Plant growth regulator	Announced/ Completed: 30/06/2003	REV2003-04	Final Decision: Not supported by registrant, no further action. All uses of chlorflurecol-methyl have been discontinued.	Expiry date of last registered product: 31/12/2001
4-Chlorophenoxy-acetic acid	122-88-3	Plant growth regulator	Initiated: 02/11/2004 PACR: 21/07/2005 Completed: 08/03/2006	PACR2005-05 RRD2006-08	Final Decision: Acceptable for continued registration with no label changes.	
Daminozide	1596-84-5	Plant growth regulator	Initiated: 17/03/2003 PACR: 06/07/2004 Completed: 18/10/2004	PACR2004-24 RRD2004-29	Final Decision: Acceptable for continued registration. Mitigation includes new/revised label statements to further protect workers and the environment (includes PPE, REI, restriction of use to greenhouses and shade houses, environmental hazard statement as well as other statements).	
Dichlorflurecol methyl	21634-96-8	Plant growth regulator	Announced/ Completed: 30/06/2003	REV2003-05	Final Decision: Not supported by registrant, no further action. All uses of dichlorflurecol methyl have been discontinued.	Expiry date of last registered product: 31/12/2001
Diphenylamine	122-39-4	Plant growth regulator	Initiated: 05/08/2003 Completed: 27/06/2006	N/A	Final Decision: Acceptable for continued registration with minor label changes.	

Active Ingredient	CAS Number	Type	Status	Regulatory Publications	Summary of Decision or Proposed Decision (as contained in PACR, RRD or REV Note)	Discontinuation/ Phase-out Timeframe (discontinue date, expiry date)
Ethoxyquin	91-53-2	Plant growth regulator	Announced/ Completed: 04/04/2005	REV2005-01	Final Decision: Not supported by registrant, no further action. All uses of ethoxyquin have been discontinued.	Expiry date of last registered product: 11/01/2005
Flurecol-methyl	N/A	Plant growth regulator	Announced/ Completed: 16/07/2004	REV2004-03	Final Decision: Not supported by registrant, no further action. All uses of flurecol-methyl have been discontinued.	Expiry date of last registered product: 31/12/2001
Gibberellin A ₄ A ₇ and gibberellic acid	468-44-0 510-75-8 77-06-5	Plant growth regulator	Initiated: 28/10/2004 PACR: 07/10/2005 Completed: 15/02/2006	PACR2005-09 RRD2006-05	Final Decision: Acceptable for continued registration. Mitigation includes new/revised label statements to further protect workers and the environment (includes PPE, REI, PHIs, and other statements).	
Pruning Paint						
Asphalt solids	8052-42-4	Pruning paint	Initiated: 26/08/2003 Completed: 17/03/2006		Final Decision: Products no longer need registration under the <i>Pest Control Products Act</i> and are discontinued.	
Fungicides						
Anilazine	101-05-3	Fungicide	Announced/ Completed: 24/07/2003	REV2003-05	Final Decision: Not supported by registrant, no further action. All uses of anilazine have been discontinued.	Expiry date of last registered product: 31/12/2006
Benomyl	17804-35-2	Fungicide	Announced/ Completed: 24/07/2003	REV2003-05	Final Decision: Not supported by registrant, no further action. All uses of benomyl have been discontinued.	Expiry date of last registered product: 31/12/2004
Carbathiin	5234-68-4	Fungicide	Initiated: 19/09/2005 PACR expected in 2007			

Active Ingredient	CAS Number	Type	Status	Regulatory Publications	Summary of Decision or Proposed Decision (as contained in PACR, RRD or REV Note)	Discontinuation/ Phase-out Timeframe (discontinue date, expiry date)
Carbendazim	10605-21-7	Fungicide	Initiated: 10/11/2004 Completed: 13/04/2006	REV2006-03	Final Decision: Acceptable for continued registration with no significant label changes.	
Carbendazim-phosphate	52316-55-9	Fungicide	Announced/ Completed: 24/07/2003	REV2003-05	Final Decision: Not supported by registrant, no further action. All uses of carbendazim-phosphate have been discontinued.	Expiry date of last registered product: 31/12/2000
Chinomethionat	2439-01-2	Fungicide	Announced/ Completed: 04/04/2005	REV2005-01	Final Decision: Not supported by registrant, no further action. All uses of chinomethionat have been discontinued.	Expiry date of last registered product: 31/12/2005
Dichlone	117-80-6	Fungicide	Announced/ Completed: 24/07/2003	REV2003-05	Final Decision: Not supported by registrant, no further action. All uses of dichlone have been discontinued.	Expiry date of last registered product: 31/12/2001
Dienochlor	2227-17-0	Non-crop fungicide	Announced/ Completed: 30/06/2003	REV2003-04	Final Decision: Not supported by registrant, no further action. All uses of dienochlor have been discontinued.	Expiry date of last registered product: 19/12/2002
Dodemorph-acetate	31717-87-0	Fungicide	Initiated: 17/03/2003			
Etridiazole	2593-15-9	Fungicide	Initiated: 06/01/2005 PACR: 21/03/2006 Completed: 14/06/2006	PACR2006-03 RRD2006-21	Final Decision: Acceptable for continued registration. Mitigation includes new/revised label statements to further protect workers and the environment (including REI, PPE, limitation of 2 applications per season and minimum of 10 days between applications, buffer zones and other label statements); the Canadian registrant has indicated that the use of etridiazole on sod farms will no longer be supported in Canada and will be phased out.	
Metalaxyl and metalaxyl-m	57837-19-1 70630-17-0	Fungicide	Initiated: 28/09/2005 PACR expected in 2007			

Active Ingredient	CAS Number	Type	Status	Regulatory Publications	Summary of Decision or Proposed Decision (as contained in PACR, RRD or REV Note)	Discontinuation/ Phase-out Timeframe (discontinue date, expiry date)
Oxycarboxin	5259-88-1	Fungicide	Initiated: 19/09/2005 PACR expected in 2007			
Sulphur	7704-34-9	Fungicide, insecticide, acaricide, rodenticide	Initiated: 27/08/2003 PACR: 07/05/2004 Completed: 16/07/2004	PACR2004-10 RRD2004-19	Final Decision: Acceptable for continued registration. Mitigation includes new/revised label statements to further protect workers and the environment (PPE, REI, buffer zones, environmental hazard statements and other statements); limitation of no more than 8 applications per season for use on field crops.	
Thiabendazole	148-79-8	Fungicide	Initiated: 23/09/2005			
Thiophanate-methyl	23564-05-8	Fungicide, insecticide, acaricide	Initiated: 03/11/2004 Preliminary risk assessment in preparation			
Thiram	137-26-8	Fungicide, animal repellent	Announced: 29/08/2002	REV2002-06		
Vinclozolin	50471-44-8	Fungicide	Initiated: 24/01/2005 PACR expected in 2007			
Zineb	12122-67-7	Insecticide, fungicide	Announced: 29/08/2002	REV2002-06		
Ziram	137-30-4	Fungicide, material preservative	Announced: 29/08/2002	REV2002-06		

Active Ingredient	CAS Number	Type	Status	Regulatory Publications	Summary of Decision or Proposed Decision (as contained in PACR, RRD or REV Note)	Discontinuation/ Phase-out Timeframe (discontinue date, expiry date)
Fumigants (structural and soil)						
Aluminum phosphide and magnesium phosphide	20859-73-8 12057-74-8	Insecticide, animal toxicant, Rodenticide	Initiated: 18/03/2003 PACR: 26/11/2004 REV Note: 01/06/2007	PACR2004-43 REV2007-06	Proposed Decision: Acceptable for continued registration. Proposed mitigation to include new/revised label statements to further protect workers and the environment (includes safety recommendations, placarding of fumigated areas, environmental precaution statements and other statements); reduction of the phosphine gas exposure limit from 0.3 ppm to 0.03 ppm; addition of a buffer zone of 150 m around all treated sites during fumigation and aeration until the concentration of phosphine gas in the buffer zone is within permitted limits. Any registered end-use products that contain phosphine gas as the main active ingredient for use as a fumigant are also subject to these regulatory actions. Interim Measures: Based on a review of currently available information, additional data are required to conduct a refined human health risk assessment to allow for the determination of data-based buffer zones and an adequate re-entry/monitoring level. As it is anticipated that several years may be required to generate these data, interim measures are proposed to mitigate potential health risks until such time as a refined risk assessment can be completed. These interim measures include development of a product stewardship program, in consultation with the PMRA, stipulating that a fumigation management plan is required from users prior to any fumigation with metal phosphides or phosphine gas, the re-entry level must be lowered to the lowest practical level and label amendments.	
Carbon dioxide	124-38-9	Fumigant, insecticide, rodenticide	Initiated: 18/03/2003 PACR: 06/08/2004 Completed: 22/07/2005	PACR2004-31 RRD2005-10	Final Decision: Acceptable for continued registration. Mitigation includes new/revised label statements to further protect workers (includes instructions for ventilation, acceptable CO ₂ levels, PPE, requirement to placard or post signs and other statements). Due to training requirements, carbon dioxide was reclassified as a restricted product.	

Active Ingredient	CAS Number	Type	Status	Regulatory Publications	Summary of Decision or Proposed Decision (as contained in PACR, RRD or REV Note)	Discontinuation/ Phase-out Timeframe (discontinue date, expiry date)
1,3-Dichloropropene	542-75-6	Nematicide soil fumigant	Initiated: 18/03/2003 PACR: 09/08/2004 End of comment period: 08/10/2004	PACR2004-34	Proposed Interim Decision: Acceptable for continued registration pending assessment of exposure from drinking water based on Canadian specific drinking water monitoring data with changes to include new/revised label statements to further protect workers, bystanders and the environment (PPE, increased REI, buffer zones from occupied structures and drinking water wells, groundwater advisory and other statements); add instructions to end-use product labels on closed-loading requirements, application procedure to discontinue the practice of continuously pumping 1,3-dichloropropene when the application rig is lifted out of the ground at row-turns, improved soil sealing methods; injection depth (increase to a min. of 31 cm), placement of injection shanks, soil conditions and soil moisture requirements; and soil preparation requirements; reduction of maximum application rates as per reductions in the United States, depending on the crop; change end-use product classification to "Restricted Class" to be used only by certified applicators who have received training on the proper use of soil fumigants and have obtained an appropriate provincial permit.	
Methyl isothiocyanate	556-61-6	Fungicide, herbicide, insecticide, nematicide	Announced/ Completed: 26/01/2006	REV2006-01	Final Decision: Not supported by registrant, no further action. All uses of methyl isothiocyanate have been discontinued.	Expiry date of Vorlex plus Liquid Soil Fumigant (Registration No. 18353): 31/08/2007 Expiry date of Vorlex plus CP Liquid Soil Fumigant (Registration No.18354): 31/12/2005
Methyl bromide	74-83-9	Insecticide acaricide, fungicide, rodenticide, nematicide, herbicide	Initiated: 27/10/1980 Completed: 09/03/2004	RRD2004-01	Final Decision: Methyl bromide consumption is being phased-out through implementation of the Ozone Depleting Substances Regulations under the <i>Canadian Environmental Protection Act</i> . Extensive label improvements have been put in place (see RRD). As of 1 January 2005, methyl bromide will only be manufactured, used, sold, offered for sale, imported or exported for purposes set out in the Ozone Depleting Substances Regulations. Exempt from the Ozone Depleting Substances Regulations is methyl bromide that was imported or that is recovered, recycled or reclaimed prior to 2005. Critical use exemptions will require approval by Environment Canada and the Parties to the Montreal Protocol. Emergency uses will require immediate approval by Environment Canada, but will be reviewed subsequently by the Parties to the Montreal Protocol. Quarantine and preshipment applications will continue to be allowed as set out in the Ozone Depleting Substances Regulations Regulations.	

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Bird, Animal, Fish Toxicants and Rodenticides						
Brodifacoum	56073-10-0	Rodenticide	Initiated: 22/10/2003 and 23/10/2003 PACR: 14/07/2004 Completed: 14/03/2006 Update: 29/03/2007	PACR2004-27 RRD2006-11 REV2007-04	Final Decision: Acceptable for continued registration. Mitigation includes new/revised label statements to further protect workers, domestic handlers, children, pets and the environment (restriction of bait placement in tamper-resistant bait stations or in locations not accessible to children, pets or livestock, restriction of commercial products for use by certified pest control operators, farmers and persons authorized by government-approved pest control programs, PPE for domestic and commercial handlers, restriction of brodifacoum to indoor use, and other statements). Refer to the RRD for final revised wording of required label statements, because external comments resulted in changes to the label statements and the PMRA further revised the proposed label statements found in the PACR. Update: The USEPA has released a proposed risk mitigation decision for nine rodenticides (brodifacoum, bromadiolone, difethialone, chlorophacinone, diphacinone, warfarin, zinc phosphide, bromethalin and cholecalciferol) for public comment. The PMRA is considering including similar mitigation measures as part of an overall mitigation strategy for these nine rodenticides in Canada.	
Bromadiolone	28772-56-7	Rodenticide	Initiated: 22/10/2003 and 23/10/2003 PACR: 14/07/2004 Completed: 14/03/2006 Update: 29/03/2007	PACR2004-27 RRD2006-11 REV2007-04	Final Decision: Acceptable for continued registration. Mitigation includes new/revised label statements to further protect workers, domestic handlers, children, pets and the environment (restriction of bait placement in tamper-resistant bait stations or in locations not accessible to children, pets or livestock, restriction of commercial products for use by certified pest control operators, farmers and persons authorized by government-approved pest control programs, PPE for domestic and commercial handlers). Refer to the RRD for final revised wording of required label statements, because external comments resulted in changes to the label statements and the PMRA further revised the proposed label statements found in the PACR. Update: The USEPA has released a proposed risk mitigation decision for nine rodenticides (brodifacoum, bromadiolone, difethialone, chlorophacinone, diphacinone, warfarin, zinc phosphide, bromethalin and cholecalciferol) for public comment. The PMRA is considering including similar mitigation measures as part of an overall mitigation strategy for these nine rodenticides in Canada.	

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Chlorophacinone	3691-35-8	Rodenticide	Initiated: 22/10/2003 and 23/10/2003 PACR: 14/07/2004 Completed: 14/03/2006 Update: 29/03/2007	PACR2004-27 RRD2006-11 REV2007-04	Final Decision: Acceptable for continued registration. Mitigation includes new/revised label statements to further protect workers, domestic handlers, children, pets and the environment (restriction of bait placement in tamper-resistant bait stations or in locations not accessible to children, pets or livestock, restriction of commercial products for use by certified pest control operators, farmers and persons authorized by government-approved pest control programs, PPE for domestic and commercial handlers). Refer to the RRD for final revised wording of required label statements, because external comments resulted in changes to the label statements and the PMRA further revised the proposed label statements found in the PACR. Update: The USEPA has released a proposed risk mitigation decision for nine rodenticides (brodifacoum, bromadiolone, difethialone, chlorophacinone, diphacinone, warfarin, zinc phosphide, bromethalin and cholecalciferol) for public comment. The PMRA is considering including similar mitigation measures as part of an overall mitigation strategy for these nine rodenticides in Canada.	
3-Chloro-1,2-propanediol	96-24-2	Rodenticide	Initiated: 30/10/2003			
Diphacinone	82-66-6	Rodenticide	Initiated: 22/10/2003 and 23/10/2003 PACR: 14/07/2004 Completed: 14/03/2006 Update: 29/03/2007	PACR2004-27 RRD2006-11 REV2007-04	Final Decision: Acceptable for continued registration. Mitigation includes new/revised label statements to further protect workers, domestic handlers, children, pets and the environment (restriction of bait placement in tamper-resistant bait stations or in locations not accessible to children, pets or livestock, restriction of commercial products for use by certified pest control operators, farmers and persons authorized by government-approved pest control programs, PPE for domestic and commercial handlers). Refer to the RRD for final revised wording of required label statements, because external comments resulted in changes to the label statements and the PMRA further revised the proposed label statements found in the PACR. Update: The USEPA has released a proposed risk mitigation decision for nine rodenticides (brodifacoum, bromadiolone, difethialone, chlorophacinone, diphacinone, warfarin, zinc phosphide, bromethalin and cholecalciferol) for public comment. The PMRA is considering including similar mitigation measures as part of an overall mitigation strategy for these nine rodenticides in Canada.	

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Ergocalciferol	50-14-6	Rodenticide	Announced/ Completed: 30/06/2003	REV2003-04	Final Decision: Not supported by registrant, no further action. All uses of ergocalciferol have been discontinued.	Expiry date of last registered product: 31/12/2005
Niclosamide	50-65-7	Fish toxicant	Initiated: 18/11/2003 Completed: 21/04/2004	RRD2004-07	Final Decision: Acceptable for continued registration with no further regulatory action required at this time.	
Pindone	83-26-1	Rodenticide	Announced/ Completed: 04/04/2005	REV2005-02	Final Decision: Not supported by registrant, no further action. All uses of pindone have been discontinued.	Expiry date of last registered product: 09/03/2004
Sodium cyanide	57-12-5	Animal toxicant	Initiated: 07/07/2004 PACR: 16/03/2006 Completed 26/06/2006	PACR2006-01 RRD2006-23	Final Decision: Acceptable for continued registration. Mitigation includes new/revised label statements to further protect workers, bystanders and the environment (includes precaution to carry antidote kit, precaution statements to protect bystanders and pets and environmental hazard statements to protect wildlife including endangered species). Refer to RRD2006-23 for revised label amendments.	
Sodium monofluoroacetate	62-74-8	Animal toxicant	Initiated: 01/08/2003 PACR: 18/06/2004 Completed: 19/04/2005	PACR2004-20 RRD2005-05	Final Decision: Acceptable for continued registration with no further regulatory action required at this time.	

Active Ingredient	CAS Number	Type	Status	Regulatory Publications	Summary of Decision or Proposed Decision (as contained in PACR, RRD or REV Note)	Discontinuation/ Phase-out Timeframe (discontinue date, expiry date)
Strychnine	57-24-9	Bird toxicant, animal toxicant, rodenticide	Initiated: 15/10/2003 PACR: 26/09/2005 Update: 01/03/2007	PACR2005-08 REV2007-03	Final Decision (for control of Northern pocket gophers, skunks, pigeons, wolves, coyotes and black bears): Acceptable for continued registration. Mitigation includes new/revised label statements to further protect workers, the general public including children and pets, and the environment (includes requirement to store products under lock and key, PPE, directions to collect spilled bait, environmental precautions statements and other statements). Interim Measures (for control of ground squirrels): Acceptable for continued registration for the short term in light of environmental concerns. Interim mitigation to include new/revised label statements to further protect workers and the environment pending implementation of a Richardson's ground squirrel pest management strategy. This use of strychnine will be reviewed in 2008 upon completion of the Richardson's ground squirrel pest management strategy.	
Sulfaquinoxaline	59-40-5	Rodenticide	Announced/ Completed: 24/11/2005	REV2005-07	Final Decision: Not supported by registrant, no further action. All uses of sulfaquinoxaline have been discontinued.	Expiry date of Poulin's Rat & Mouse Poison (Registration No. 8718): 31/12/2010 Expiry date of Wilson Prolin Concentrate (Registration No. 8699): 31/12/2009 Expiry date of Co-op Warfarin Rat Killer Rodenticide Pellets (Registration No. 11164): 31/12/2008
3-Trifluoromethyl-4-nitrophenol	88-30-2	Fish toxicant	Initiated: 18/11/2003 PACR: 14/05/2004 Completed: 18/10/2004	PACR2004-11 RRD2004-28	Final Decision: Acceptable for continued registration. Mitigation includes new/revised label statements to further protect workers and the environment (includes PPE, environmental hazards statements, notification requirements, and other statements).	

Active Ingredient	CAS Number	Type	Status	Regulatory Publications	Summary of Decision or Proposed Decision (as contained in PACR, RRD or REV Note)	Discontinuation/ Phase-out Timeframe (discontinue date, expiry date)
Warfarin	81-81-2	Rodenticide	Initiated: 22/10/2003 and 23/10/2003 PACR: 14/07/2004 Completed: 14/03/2006 Update: 29/03/2007	PACR2004-27 RRD2006-11 REV2007-04	Final Decision: Acceptable for continued registration. Mitigation includes new/revised label statements to further protect workers, domestic handlers, children, pets and the environment (includes restriction of bait placement in tamper-resistant bait stations or in locations not accessible to children, pets or livestock, restriction of commercial products for use by certified pest control operators, farmers and persons authorized by government-approved pest control programs, PPE for domestic and commercial handlers). Refer to the RRD for final revised wording of required label statements, because external comments resulted in changes to the label statements and the PMRA further revised the proposed label statements found in the PACR. Update: The USEPA has released a proposed risk mitigation decision for nine rodenticides (brodifacoum, bromadiolone, difethialone, chlorophacinone, diphacinone, warfarin, zinc phosphide, bromethalin and cholecalciferol) for public comment. The PMRA is considering including similar mitigation measures as part of an overall mitigation strategy for these nine rodenticides in Canada.	
Zinc phosphide	1314-84-7	Rodenticide	Initiated: 17/02/2005 PACR: 08/11/2006 Completed: 28/06/2007 Update: 29/03/2007	PACR2006-08 RVD2007-01 REV2007-04	Final Decision: Acceptable for continued registration. Mitigation includes new/revised label statements to further protect workers, domestic handlers, children, pets and the environment (includes restriction of bait placement in tamper-resistant bait stations or in locations not accessible to children, pets or livestock, restriction of commercial products for use by certified pest control operators, farmers and persons authorized by government-approved pest control programs, PPE for handlers, statements to protect non-target organisms including species at risk and other statements). Update: The USEPA has released a proposed risk mitigation decision for nine rodenticides (brodifacoum, bromadiolone, difethialone, chlorophacinone, diphacinone, warfarin, zinc phosphide, bromethalin and cholecalciferol) for public comment. The PMRA is considering including similar mitigation measures as part of an overall mitigation strategy for these nine rodenticides in Canada.	

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Animal/Bird Repellent						
Azacosterol hydrochloride	1249-84-9	Bird repellent	Announced/ Completed: 30/06/2003	REV2003-04	Final Decision: Not supported by registrant, no further action. All uses of azacosterol hydrochloride have been discontinued.	Expiry date of last registered product: 31/12/2001
Capsaicin	404-86-4	Animal repellent	Initiated: 29/10/2003 PACR: 21/04/2004 Completed: 05/11/2004	PACR2004-08 RRD2004-30	Final Decision: Acceptable for continued registration. Mitigation includes new/revised label statements to further protect users, the general public and domestic animals (includes PPE and precaution statements). As result of comment to PACR, requirement for rubber gloves when using domestic products with <1% capsaicin was removed.	
Cedar leaf oil	N/A	Animal repellent	Announced/ Completed: 24/11/2005	REV2005-07	Final Decision: Not supported by registrant, no further action. All uses of cedar leaf oil have been discontinued.	Expiry date of last registered product: 31/12/2003
Methyl nonyl ketone	112-12-9	Animal repellent	Initiated: 12/08/2003 PACR: 21/04/2004 Completed: 12/07/2004	PACR2004-06 RRD2004-17	Final Decision: Acceptable for continued registration. Mitigation includes new/revised label statements to further protect users, bystanders, pets and the environment (includes restriction to only apply in areas adjacent to buildings, PPE, precaution statements, environmental hazard statements and other statements).	
Polybutene	9003-28-5 2 9003-28-5 3 25249-55	Bird repellent	Initiated: 18/03/2003 PACR: 30/03/2004 Completed: 27/01/2006	PACR2004-03 RRD2006-01	Final Decision: Acceptable for continued registration. Mitigation includes new/revised label statements to further protect workers, domestic handlers and the environment (PPE, environmental hazard statement with respect to small birds and other statements).	

Active Ingredient	CAS Number	Type	Status	Regulatory Publications	Summary of Decision or Proposed Decision (as contained in PACR, RRD or REV Note)	Discontinuation/ Phase-out Timeframe (discontinue date, expiry date)
Putrescent whole egg solids	N/A	Animal Repellent	Initiated: 01/01/2004 PACR: 15/03/2004 Completed: 06/05/2005	PACR2004-02 RRD2005-07	Final Decision: Acceptable for continued registration. Mitigation includes new/revised label statements to further protect user (includes precautionary statements regarding egg allergies and potential sensitization).	
Antimicrobials						
1-(3-chloroallyl)-3,5,7-triaza-1-azonia adamantane chloride (CTAC)	4080-31-3	Material preservative, slimicide	Initiated: 15/09/2003 PACR: 10/06/2004 Completed: 15/04/2005	PACR2004-17 RRD2005-03	Final Decision: Acceptable for continued registration. Mitigation includes new/revised label statements to further protect workers and the environment (includes PPE, precautionary statement regarding potential formaldehyde release, environmental hazards statements and other statements).	
10,10'-Oxybis (phenoxarsine)	58-36-6	Material preservative, fungicide	Initiated: 26/08/2003 PACR: 04/06/2004 Completed: 08/03/2005	PACR2004-14 RRD2005-02	Final Decision: Acceptable for continued registration. Mitigation includes new/revised label statements to further protect workers and the environment (PPE, precautionary statement regarding potential arsenic release and environmental hazard statement).	
1,2-Dibromo-2,4-dicyanobutane	35691-65-7	Material preservative, slimicide	Initiated: 20/03/2003 PACR: 15/07/2004 Completed: 06/12/2004	PACR2004-29 RRD2004-31	Final Decision: Acceptable for continued registration. Mitigation includes new/revised label statements to further protect workers and the environment (includes PPE, environmental hazard statement, and requirement to package powder formulation in water soluble bags).	
1,3-Dichloro-5-ethyl-5-methylhydantoin	89415-87-2	N/A	N/A	N/A	Discontinued because it is no longer an active ingredient.	

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1,4-Bis (bromoacetoxy)-2-butene	20679-58-7	Material preservative, slimicide	Initiated: 27/10/2005 PACR expected in 2007			
2 (p-hydroxyphenyl) Glyoxylohydroxymoyl chloride	34911-46-1	Slimicide	Announced/ Completed: 30/06/2003	REV2003-04	Final Decision: Not supported by registrant, no further action. All uses of 2 (p-hydroxyphenyl) glyoxylohydroxymoyl chloride have been discontinued.	Expiry date of last registered product: 31/12/2001
2-(hydroxymethyl)-2-Nitro-1,3-propanediol	126-11-4	Material preservative, slimicide	Initiated: 07/08/2003 PACR: 06/07/2004 Completed: 20/05/2005	PACR2004-23 RRD2005-08	Final Decision: Acceptable for continued registration. Mitigation includes new/revised label statements to further protect workers and the environment (includes PPE and precautionary statement regarding potential formaldehyde release). As a result of comments to the PACR, the statement "This product is toxic to fish and other aquatic organisms" was no longer required. Similarly, the restriction of use in oil field flooding to terrestrial oil wells was no longer considered necessary.	
2,2'-(1-methyltrimethylene dioxy)bis-(4-methyl-1,3,2-dioxaborinane)	2665-13-6	Material preservative, slimicide	Initiated: 15/10/2003 Completed: 26/06/2006	REV2006-08	Final Decision: Acceptable for continued registration. Mitigation includes label statement to further protect workers (PPE).	
2,2-oxybis(4,4,6-trimethyl-1,3,2-dioxaborinane)	14697-50-8	Material preservative, slimicide	Initiated: 15/10/2003 Completed: 26/06/2006	REV2006-08	Final Decision: Acceptable for continued registration. Mitigation includes label statement to further protect workers (PPE).	

Active Ingredient	CAS Number	Type	Status	Regulatory Publications	Summary of Decision or Proposed Decision (as contained in PACR, RRD or REV Note)	Discontinuation/ Phase-out Timeframe (discontinue date, expiry date)
2,2-Dibromo-3-nitrilopropionamide (DBNPA)	63619-09-0	Material preservative, slimicide, algicide	Initiated: 15/10/2003 PACR: 04/06/2004 Completed: 29/03/2006	PACR2004-16 RRD2006-12	Final Decision: Acceptable for continued registration. Mitigation includes new/revised label statements to further protect workers and the environment (PPE, environmental hazard statements, and other statements); registrants of dual classified products must submit an application to register a separate commercial end-use product if they want to retain the commercial uses and a second application is also required to amend labels of technical or manufacturing use products to remove references to commercial uses. With respect to the recommendation in PACR2004-16 to amend labels to indicate that secondary biological effluent treatment is required for all uses of DBNPA with the exception of secondary oil recovery systems, the PMRA will review data submitted by the registrant; therefore, it will not require a label statement on secondary biological treatment at this time. The PMRA will revisit the issue after reviewing the data and may require further label changes.	
5-Chloro-2-methyl-3(2H)-isothiazolone and 2-methyl-3(2H)-isothiazolone	26172-55-4 2682-20-4	Material preservative, slimicide	Initiated: 26/09/2003 and 10/10/2003 PACR: 19/10/2004 Completed: 06/10/2005	PACR2004-39 RRD2005-11	Final Decision: Acceptable for continued registration. Mitigation include new/revised label statements to further protect workers and the environment (includes PPE, environmental hazard statements and other statements). Registrants of some Canadian end-use products containing IST/ISL registered for use at maximum application rates higher than those registered in the United States were required to submit a rationale to support these maximum application rates or to lower their rates on the label.	
<i>Agrobacterium radiobacter</i>	N/A	Crop bactericide	Initiated: 21/07/2005 Completed: 26/06/2006	N/A	Final Decision: Acceptable for continued registration with minor label changes.	
Barium metaborate	13701-59-2	Material preservative	Initiated: 17/11/2003 PACR: 17/06/2004 Completed: 14/03/2006	PACR2004-18 RRD2006-09	Final Decision: Acceptable for continued registration. Mitigation includes new/revised label statements to further protect workers (engineering controls and PPE).	

Active Ingredient	CAS Number	Type	Status	Regulatory Publications	Summary of Decision or Proposed Decision (as contained in PACR, RRD or REV Note)	Discontinuation/ Phase-out Timeframe (discontinue date, expiry date)
Benzoic acid	65-85-0	Slimicide	Completed: 28/02/2006	N/A	Final Decision: Benzoic acid is no longer registered as an active ingredient. No further review is required.	
Bis (trichloromethyl) sulfone	3064-70-8	Material preservative, slimicide, fungicide	Initiated: 15/10/2003 PACR: 18/05/2004 Completed: 19/04/2005	PACR2004-12 RRD2005-06	Final Decision: Acceptable for continued registration. Mitigation includes new/revised label statements to further protect workers and the environment (PPE, environmental hazard statement and other statements).	
Boric acid and its salts (disodium octaborate tetrahydrate, borax pentahydrate, borax, borax, anhydrous and zinc borate)	10043-35-3 12280-03-4 11130-12-4 1303-96-4 1330-43-4 12447-61-9	Acaricide, algicide, hard surface disinfectant, fungicide, material preservative, slimicide, insecticide, swimming pool algicide	Initiated: 13/07/2004		Reviews have been prepared. Further consultation on toxicology to be conducted. Note that disodium octaborate tetrahydrate and borax were also reviewed with respect to antisapstain uses (refer to section on antisapstain wood preservatives in this document).	
Bromohydroxy-acetophenone	2491-38-5	Material preservative, slimicide	Initiated: 11/08/2003 PACR: 21/04/2004 Completed: 13/08/2004	PACR2004-07 RRD2004-24	Final Decision: Acceptable for continued registration. Mitigation includes new/revised label statements to further protect workers and the environment (PPE, environmental hazard statement and other statements).	

Active Ingredient	CAS Number	Type	Status	Regulatory Publications	Summary of Decision or Proposed Decision (as contained in PACR, RRD or REV Note)	Discontinuation/ Phase-out Timeframe (discontinue date, expiry date)
Bronopol	52-51-7	Material preservative, slimicide, sanitizer	Initiated: 15/09/2003 PACR: 24/08/2005 Completed: 30/03/2006	PACR2005-06 RRD2006-16	Final Decision: Acceptable for continued registration. Mitigation includes new/revised label statements to further protect workers and the environment (PPE, precautionary statement regarding possible formaldehyde release, requirement of metering pump for cooling water system use, environmental hazard statement and other statements).	
Chloroacetamide	79-07-2	Material preservative	Initiated: 24/04/2003			
Copper triethalolamine	7440-50-8	Algicide	Announced/ Completed: 30/06/2003	REV2003-04	Final Decision: Not supported by registrant, no further action. All uses of copper triethalolamine have been discontinued.	Expiry date of last registered product: 31/12/2002
Cresylic acid	Mixture	Farm disinfectant	Announced/ Completed: 24/07/2003	REV2003-05	Final Decision: Not supported by registrant, no further action. All uses of cresylic acid have been discontinued.	Expiry date of last registered product: 31/12/2000
Dialkyl (8% C ₈ , 9% C ₁₀ , 47% C ₁₂ , 18% C ₁₄ , 8% C ₁₆ , 10% C ₁₈) dimethyl ammonium chloride	N/A	Material preservative	Announced/ Completed: 30/06/2003	REV2003-04	Final Decision: Not supported by registrant, no further action. All uses of dialkyl (8% C ⁸ , 9% C ₁₀ , 47% C ₁₂ , 18% C ₁₄ , 8% C ₁₆ , 10% C ₁₈) dimethyl ammonium chloride have been discontinued.	Expiry date of last registered product: 31/12/2000
Disodium cyano-dithioimidocarbonate	138-93-2	Slimicide	Initiated: 30/09/2003 PACR: 15/07/2004 Completed: 15/04/2005	PACR2004-28 RRD2005-04	Final Decision: Acceptable for continued registration. Mitigation includes new/revised label statements to further protect workers and the environment (includes PPE, precautionary statement regarding potential hydrogen cyanide release, requirement of metering pump for cooling tower system use, and environmental hazards statement).	

Active Ingredient	CAS Number	Type	Status	Regulatory Publications	Summary of Decision or Proposed Decision (as contained in PACR, RRD or REV Note)	Discontinuation/ Phase-out Timeframe (discontinue date, expiry date)
Hexahydro-1,3,5-triethyl-s-triazine	7779-27-3	Material preservative	Initiated: 18/03/2003 PACR: 04/06/2004 Completed: 19/08/2004	PACR2004-13 RRD2004-25	Final Decision: Acceptable for continued registration. Mitigation includes new/revised label statements to further protect workers and the environment (includes PPE, engineering controls, statement regarding potential formaldehyde release, environmental hazard statement and other statements).	
Hydantoins: halobrom and halane	16079-88-2 118-52-5	Air sanitizer, algicide, hard surface disinfectant, sanitizer, slimicide, swimming pool algicide and bactericide	Initiated: 21/12/2005 PACR expected in 2007			
Lithium hypochlorite	13840-33-0	Swimming pool algicide and bactericide	Initiated: 12/08/2003 PACR: 19/07/2004 Completed: 13/01/2005	PACR2004-30 RRD2005-01	Final Decision: Acceptable for continued registration with no further regulatory action required at this time.	
Methiocarb	2032-65-7	Molluscicide	Announced/ Completed: 24/07/2003	REV2003-05	Final Decision: Not supported by registrant, no further action. All uses of methiocarb have been discontinued.	Expiry date of last registered product: 05/09/2000

Active Ingredient	CAS Number	Type	Status	Regulatory Publications	Summary of Decision or Proposed Decision (as contained in PACR, RRD or REV Note)	Discontinuation/ Phase-out Timeframe (discontinue date, expiry date)
Methylene bis(thiocyanate)	6317-18-6	Material preservative, slimicide	Initiated: 28/08/2003 PACR: 09/07/2004 Completed: 10/02/2006	PACR2004-26 RRD2006-03	Final Decision: Acceptable for continued registration. Mitigation includes new/revised label statements to further protect workers and the environment (includes PPE, environmental hazards statement and other statements); in addition there is a metering pump requirement for liquid product formulations applied to cooling water systems treating > 15 000 L; reference to use in log/thaw ponds must be removed. Precautionary statements regarding potential hydrogen cyanide and/or formaldehyde release no longer required as result of comments to PACR2004-26.	
Mixture of slimicide compounds known as DDI	Mixture	Slimicide	Announced/ Completed: 04/04/2005	REV2005-02	Final Decision: Not supported by registrant, no further action. All uses of DDI (i.e., Formula 3434 slimicide) have been discontinued.	Expiry date of last registered product: 07/10/2003
n-Alkyl (50% C ₁₂ , 30% C ₁₄ , 17% C ₁₆ , 3% C ₁₈) dimethyl benzyl ammonium chloride	68391-01-5	Slimicide	Announced/ Completed: 04/04/2005	REV2005-02	Final Decision: Not supported by registrant, no further action. All uses of n-alkyl (50% C ₁₂ , 30% C ₁₄ , 17% C ₁₆ , 3% C ₁₈) dimethyl benzyl ammonium chloride have been discontinued.	Expiry date of last registered product: 31/12/2002
N-A-(1-nitroethyl benzyl) ethylenediamine	14762-38-0	Slimicide	Announced/ Completed: 30/06/2003	REV2003-04	Final Decision: Not supported by registrant, no further action. All uses of N-A-(1-nitroethyl benzyl) ethylenediamine have been discontinued.	Expiry date of last registered product: 01/01/2004
o-Benzyl-p-chlorophenol	120-32-1	Hard surface disinfectant sanitizer	Initiated: 18/11/2003 Completed: 2006		Pest control uses are discontinued. Remaining uses are regulated by the Health Canada's Therapeutic Products Directorate.	Expiry date of last end-use product: 31/12/2006
Phosphoric acid	7664-38-2	Hard surface disinfectant	Announced/ Completed: 30/06/2003	REV2003-04	Final Decision: Not supported by registrant, no further action. All uses of phosphoric acid have been discontinued.	Expiry date of last registered product: 28/08/2001
Pimaricin	7681-93-8	Material preservative	Initiated: 24/04/2003 Completed: 27/06/2006	REV2006-09	Final Decision: Acceptable for continued registration with no label changes.	

Active Ingredient	CAS Number	Type	Status	Regulatory Publications	Summary of Decision or Proposed Decision (as contained in PACR, RRD or REV Note)	Discontinuation/ Phase-out Timeframe (discontinue date, expiry date)
Pine oil	8002-09-3	Hard surface disinfectant	Completed: 2006	N/A	There are no end-use products registered containing pine oil (only technical grade active ingredients). Therefore, no re-evaluation is required.	
Poly (hydroxyethelene [dimethyliminio] ethylene [dimethyl iminio] methylene dichloride	N/A	Antimicrobial	Announced/ Completed: 04/04/2005	REV2005-02	Final Decision: Not supported by registrant, no further action. All uses of poly(hydroxyethelene [dimethyliminio] ethylene [dimethyl iminio] methylene dichloride have been discontinued.	Expiry date of last registered product: 23/12/2003
Potassium N-hydroxymethyl-N-methyl-dithiocarbamate	51026-28-9	Material preservative, slimicide	Initiated: 27/06/2006 Completed: 31/07/2006	N/A	Final Decision: Not supported by registrant, no further action. All uses of potassium N-hydroxymethyl-N-methyl-dithiocarbamate have been discontinued.	
S-(2-hydroxypropyl) thiomethane sulfonate	29803-57-4	Slimicide	Announced/ Completed: 24/11/2005	REV2005-07	Final Decision: Not supported by registrant, no further action. All uses of S-(2-hydroxypropyl) thiomethane sulfonate have been discontinued.	Expiry date of last registered product: 31/12/2005
Sodium salt of 2-mercaptobenzo thiazole	2492-26-4	Material preservative slimicide	Initiated: 20/03/2003 PACR: 04/06/2004 Completed: 10/08/2004	PACR2004-15 RRD2004-23	Final Decision: Acceptable for continued registration. Mitigation includes new/revised label statements to further protect workers and the environment (PPE and environmental hazard statement).	
Sodium dodecylbenzene sulfonate	25155-30-0	Hard surface disinfectant, slimicide	Announced/ Completed: 30/06/2003	REV2003-04	Final Decision: Not supported by registrant, no further action. All uses of sodium dodecylbenzene sulfonate have been discontinued.	Expiry date of last registered product: 31/12/2001

Active Ingredient	CAS Number	Type	Status	Regulatory Publications	Summary of Decision or Proposed Decision (as contained in PACR, RRD or REV Note)	Discontinuation/ Phase-out Timeframe (discontinue date, expiry date)
Sodium dichloro-s-triazinetrione and trichloro-s-triazinetrione	2893-78-9 87-90-1	Swimming pool algicide and bactericide, hard surface disinfectant, laundry additive, sanitizer, slimicide	Initiated: 22/09/2003 and 05/11/2003 PACR: 30/06/2004 Completed: 30/03/2006	PACR2004-25 RRD2006-17	Final Decision: Acceptable for continued registration. Mitigation includes new/revised label statements to further protect workers, domestic handlers and the environment (includes PPE and an environmental hazard statement).	
Sodium bromide	7647-15-6	Algicide, hard surface disinfectant, molluscicide, sanitizer, slimicide, swimming pool algicide and bactericide	Initiated: 12/09/2003		Additional information is required to complete the re-evaluation. Pending the information, interim measures comprising label changes are required to further protect the environment (environmental hazard statement for commercial class product labels).	
Sodium and calcium hypochlorite	7681-52-9 7778-54-3	Swimming pool algicide and bactericide, hard surface disinfectant, laundry additive, sanitizer, slimicide, fungicide, air sanitizer	Initiated: 04/09/2003 PACR: 22/10/2004 Completed: 17/06/2005	PACR2004-42 RRD2005-09	Final Decision: Acceptable for continued registration. Mitigation includes new/revised label statements to further protect workers and the environment (REI, PPE, environmental hazard statement); any reference to disinfectant uses must be removed from pest control product labels and registrants are encouraged to contact the Therapeutic Products Directorate regarding registration of these uses Sodium and calcium hypochlorite can be used for "water treatment" or "waste water treatment". However, no claim is made on labels of currently registered end-use products other than "ask your technical distributor for assistance". Based on this, these uses could not be re-evaluated.	
Zinc 2-mercapto-benzothiazole	155-04-4	Material preservative	Announced/ Completed: 30/06/2003	REV2003-04	Final Decision: Not supported by registrant, no further action. All uses of zinc 2-mercapto benzothiazole have been discontinued.	Expiry date of last registered product: 31/12/2001

Active Ingredient	CAS Number	Type	Status	Regulatory Publications	Summary of Decision or Proposed Decision (as contained in PACR, RRD or REV Note)	Discontinuation/ Phase-out Timeframe (discontinue date, expiry date)
Heavy Duty Wood Preservatives, Remedial Wood Preservatives and Antisapstain Wood Preservatives						
Antisapstain uses of 2-(thiocyanomethyl thio) benzothiazole (TCMTB), copper-8-quinolinolate, borax and disodium octaborate tetrahydrate		Antisapstain wood preservative	Initiated: 02/07/1992 Completed: (occupational risk) 28/04/2004	A92-01 RRD2004-08	Interim Decision* (Occupational Risk): Acceptable for continued registration. Additional chemical-specific data are required to refine the occupational risk assessment and a product stewardship program (with follow-up monitoring) to be developed and implemented to reduce exposure to workers. * This interim decision will be revisited in light of the assessment of the additional data that are required.	
Azaconazole	60207-31-0	Antisapstain wood preservative	Announced/ Completed: 11/05/2004	REV2004-02	Final Decision: Not supported by registrant, no further action. All uses of azaconazole have been discontinued.	Expiry date of last registered product: 21/12/2006
CCA (chromated copper arsenate)	1303-28-2 7738-94-5 1344-70-3	Heavy duty wood preservative	Initiated: 02/07/1992 Updates: 03/04/2002 13/11/2003 17/03/2004 Label Guidance: 02/06/2006	A92-02 REV2002-03 REV2003-07 REV2004-01 REV2006-07	Update: CCA is under cooperative re-evaluation involving the PMRA and the USEPA. A preliminary risk assessment on children's exposure to CCA treated wood was released for public comment November 2003. Wood preservative manufacturers voluntarily phased out CCA treated wood for residential uses by 31/12/2003. A USEPA preliminary sealant efficacy study was released in May 2005. Preliminary occupational and environmental risk assessments were released for public comment March 2004. The PMRA notified wood treatment facilities of upgrades to PPE suggested by those reviews. Once comments have been considered and the assessments finalized, risk management/ mitigation options will be developed. In Canada, voluntary upgrades to wood treatment facilities that further increase protection of wood treaters and the environment were implemented by December 2005 as part of an agreement negotiated with all stakeholders through the <i>Canadian Environmental Protection Act</i> strategic options process. Label Guidance: The purpose of REV2006-07 is to supplement the product labels with additional guidance for the treated wood industry and other interested stakeholders regarding the permitted uses of CCA for treatment of wood for industrial use.	Phase-out dates for CCA-treated wood for residential uses (e.g., play-structures, decks, picnic tables, landscaping timbers, residential fencing, patios, walkways and boardwalks): • last date for treatment of lumber for the residential market: 31/12/2003 Remaining stocks of wood treated prior to 31/12/2003 can still be sold in stores and be used for construction. Already-built structures are not affected by this action.
Coal tar acid	108-95-2	Remedial wood preservative	Announced/ Completed: 24/11/2005	REV2005-07	Final Decision: Not supported by registrant, no further action. All uses of coal tar acid have been discontinued.	Expiry date of last registered product: 31/12/2005

Active Ingredient	CAS Number	Type	Status	Regulatory Publications	Summary of Decision or Proposed Decision (as contained in PACR, RRD or REV Note)	Discontinuation/ Phase-out Timeframe (discontinue date, expiry date)
Creosote	8001-58-9	Heavy duty wood preservative and remedial wood preservative	Initiated: 02/07/1992	A92-02 REV2003-09	<p>Update: Creosote is under a cooperative re-evaluation involving the PMRA and the USEPA. Preliminary occupational and environmental risk assessments were released for public comment in December 2003. The PMRA notified wood treatment facilities of upgrades to PPE suggested by those reviews. Risk management/ mitigation options will be developed following the publication of the final risk assessments.</p> <p>All product labels have been amended limiting use of creosote to pressure treat wood and brush-on use for treating the cut ends of wood used in marine construction. All other uses and domestic products have been discontinued.</p> <p>In Canada, voluntary upgrades to wood treatment facilities that further increase protection of wood treaters and the environment were implemented by December 2005 as part of an agreement negotiated with all stakeholders through the <i>Canadian Environmental Protection Act</i> strategic options process.</p>	Phase-out dates for domestic uses: <ul style="list-style-type: none"> Last date of sale by registrants: 01/04/2005 Last date of sale by retailers: 01/04/2008
Dinitrophenol	51-28-5	Remedial wood preservative	Announced/ Completed: 24/11/2005	REV2005-07	<p>Final Decision: Not supported by registrant, no further action. All uses of dinitrophenol have been discontinued.</p>	Expiry date of last registered product: 31/12/2005
Pentachlorophenol	87-86-5	Heavy duty wood preservative	Initiated: 02/07/1992	A92-02 REV2004-04 REV2005-03	<p>Update: Pentachlorophenol is under cooperative re-evaluation involving the PMRA and the USEPA. A preliminary risk assessment (PRA) for pentachlorophenol was released for public comment November 2004 and a PRA for contaminants of pentachlorophenol (HCB, dioxin and furans) was released 30 March 2005. The PMRA notified wood treatment facilities of upgrades to PPE suggested by those reviews. Once comments have been considered, and the assessments finalized, risk management/ mitigation options for pentachlorophenol and its contaminants will be developed.</p> <p>In Canada, voluntary upgrades to wood treatment facilities that further increase protection of wood treaters and the environment were implemented by December 2005 as part of an agreement negotiated with all stakeholders through the <i>Canadian Environmental Protection Act</i> strategic options process.</p>	
Potassium dichromate	7778-50-9	Remedial wood preservative	Announced/ Completed: 24/11/2005	REV2005-07	<p>Final Decision: Not supported by registrant, no further action. All uses of potassium dichromate have been discontinued.</p>	Expiry date of last registered product: 31/12/2005