Re-evaluation Note REV2023-01

Pest Management Regulatory Agency Re-evaluation and Special Review Work Plan 2023-2028

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Background

The purpose of this document is to inform registrants, pesticide regulatory officials and the Canadian public of the re-evaluation and special review work planned by Health Canada's Pest Management Regulatory Agency (PMRA) from 1 April 2023 to 31 March 2028.

This work plan includes the proposed and final decisions published since 1 April 2023, all open re-evaluations and special reviews, as well as new re-evaluations expected to be initiated in this time frame (1 April 2023 to 31 March 2028). This document presents updates to the information last published in Re-evaluation Note REV2022-01, *Pest Management Regulatory Agency Re-evaluation and Special Review Work Plan 2022-2027*.

Health Canada regulates pesticides in Canada, with the primary objective of protecting the health of Canadians and the environment. A pesticide may only be sold or used in Canada if it has been registered or otherwise authorized under the authority of the *Pest Control Products Act*. Health Canada uses a rigorous science-based risk assessment approach to ensure that the product meets health and environmental protection standards and has value.

As part of the post-market program, registered pesticides are re-evaluated on a cyclical basis to determine their continued acceptability. Pesticides may also be re-evaluated as a result of changes in the information required or the procedures used by Health Canada to determine that the pesticide meets current health, environment and value standards.

The re-evaluation process is described in Regulatory Directive DIR2016-04, *Management of Pesticides Re-evaluation Policy*. In addition, a special review may be initiated at any time to address the identified aspect(s) of concern, and a special review is triggered only under certain circumstances. Special reviews differ from re-evaluation in that a special review is intended to examine only specific aspects of a pesticide. Additional information on special reviews can be found in the PMRA Guidance Document, *Approach to Special Reviews of Pesticides.*

As required under the *Pest Control Products Act*, Health Canada publishes all post-market proposed decisions for public consultation. Following consultation, comments and information submitted by the public and other stakeholders are considered before Health Canada issues a final decision. Stakeholders are encouraged to stay informed of upcoming consultations, and new initiations, for active ingredients by visiting the Pesticides section of Canada.ca.

This five-year work plan may change in response to workload and emerging issues that require priority action. While this work plan will be updated annually, during the course of the year interested stakeholders can monitor the PMRA's Public Registry to view the announcement of new re-evaluations and special reviews, as well as the publication of proposed and final decisions.

Part A – Current re-evaluation and special review work plan (Tables 1–3)

The post-market review program workload remains significant and Health Canada acknowledges the need for transformation. In response, Health Canada is developing new and modern business approaches for pesticide evaluations throughout the regulatory life-cycle that will support a sustainable, more efficient and more predictable program that maintains Canada's high standards of environmental and human health protection and will improve its timely science-based decisions.

During the period, 1 April 2022 to 31 March 2023, Health Canada focussed its resources on the completion of the remaining older pesticide active ingredients registered before 1995. Health Canada introduced the risk based prioritization for the re-evaluation program in 2020 (REV2020-01), and ongoing efforts to streamline the re-evaluation processes for lower priority actives resulted in the completion of majority of lower priority actives. The re-evaluation reviews of several higher priority actives have been delayed due to the demands of focusing resources on completing the re-evaluations of older pesticides, and other priorities including responding to ongoing and increasing litigation, as well as notices of objection, and the scientific complexity associated with certain pesticide reviews. The number of re-evaluation initiations currently required as per the 15-year legislative requirement continues to be high and given the current resource capacity considerations, the backlog is growing.

As part of its Transformation Agenda (PMRA Transformation), Health Canada will continue its work in 2023-2024 to modernize business processes to strengthen human health and environmental protection through a continuous oversight and a proportional effort approach that will focus Health Canada efforts on areas that present the highest risk to health and safety of Canadians and the environment. The new processes will be consulted upon publicly this Fall/Winter 2023/24 to seek the input of experts, partners and stakeholders on the development of these policies. During the post-market review program, when necessary, Health Canada will seek independent scientific advice through Science Advisory Committee (Science Advisory Committee) to better inform its evidence-based decisions.

Part A, Table 1 Targets for consultation and final decisions of special reviews

Active ingredient name	Target date of consultation[1]
Chlorpropham	Q3 (2025–26)
Desmedipham	Q4 (2027–28)
Dicamba	February 2024
Ethofumesate	Q3 (2025–26)
Fosetyl aluminum	November 2023
Glufosinate ammonium	Q1 (2026–27)
Iodocarb	Q3 (2024–25)
MCPA - MCPA (present as acid) - MCPA (present as amine salts: diethanolamine,	Q3 (2024–25)

Active ingredient name	Target date of consultation[1]
dimethylamine, or mixed amines) - MCPA (present as esters) - MCPA (present as potassium salt or as sodium salt)	
Methyl bromide	February 2024
Propiconazole	Q4 (2025–26)
Pydiflumetofen	Q3 (2024–25)
Thiacloprid	Q3 (2027–28)
Active ingredient name	**Target date of final decision[1]**
Atrazine	Q1 (2024–25)
Chlorothalonil	Q1 (2024–25)
Picoxystrobin	June 2023
Potassium dimethyldithiocarbamate	February 2024
Sodium dimethyldithiocarbamate	All end use products Discontinued. Special review closed.
Pentachlorophenol plus related active chlorophenols	All end use products Discontinued. Special review closed.

[1] Q1 (April–June); Q2 (July–September); Q3 (October–December); Q4 (January–March)

Part A, Table 2a Targets for consultation and final re-evaluation decisions

Active ingredient name	Re-evaluation category	Target date[1]
Proposed re-evaluation decisions		**Target date of consultation**
6-Benzylaminopurine	1	Q4 (2025–26)
Acetamiprid	1	Q4 (2025–26)
Agrobacterium radiobacter strain K84 and K1026	3	August 2023
Azoxystrobin	1	June 2023
Carbon dioxide cluster: - Carbon dioxide gas - Liquid carbon dioxide	2	October 2024
Clothianidin general re-evaluation[2]	1	Q3 (2024–25)
Cyprodinil	1	Q4 (2025–26)
D-cis, trans-allethrin	1	Q3 (2025–26)
DEET plus related active toluamides	1	Q1 (2024–25)
Famoxadone	1	Q2 (2024–25)
Fatty Acid cluster: - Potassium Salts of Fatty Acids - Triethanolamine Salts of Fatty Acids - Fatty Acids - Ammonium Salt of Fatty Acid	2	Q2 (2024–25)
Fenamidone	1	Q1 (2024–25)
Fluazinam	1	Q4 (2024–25)
Foramsulfuron	3	March 2024
Gibberellins cluster: - Gibberellic acid - Gibberellins A4A7	3	Q2 (2024–25)

Active ingredient name	Re-evaluation category	Target date[1]
Glufosinate ammonium	1	Q1 (2026–27)
Mecoprop cluster: - Mecoprop-P (present as Acid) - Mecoprop-P (present as Dimethylamine Salt) - Mecoprop-P (present as Potassium Salt)	1	Q2 (2024–25)
Methyl bromide	1	February 2024
Methoxyfenozide	1	Q4 (2026–27)
Naled	3	Q1 (2024–25)
Natamycin	3	December 2023
Nonylphenoxypolyethoxyethanol	3	December 2023
Octenol	3	November 2023
Phorate	2	Q3 (2026–27)
Picolinafen	1	Q3 (2026–27)
Potassium bicarbonate	2	Q2 (2024–25)
S-metolachlor and R-enantiomer	1	February 2024
Sodium chloride	3	June 2023
Spinetoram	1	Q4 (2024–25)
Spinosad	1	Q4 (2024–25)
Sulphur	2	Q4 (2024–25)
Thiamethoxam general re-evaluation[2]	1	Q3 (2024–25)
Cumulative Health Risk Assessment: N-Methyl Carbamates[3]	1	Q2 (2025–26)
Cumulative Health Risk Assessment: Organophosphates[4]	1	January 2024 (publication of work plan)
Final re-evaluation decisions		**Target date of final decision**
1 or 3-Monomethylol-5,5-dimethyhydantoin and 1,3 bis(hydroxymethyl)-5,5-dimethyhydantoin	1	December 2023
1-Methylcyclopropene	3	September 2023
Abamectin	1	Consultation started 28 February 2023
Bacillus sphaericus	3	October 2023
Bacillus subtilis cluster*:* - *Bacillus Subtilis* (strain MBI600) - *Bacillus subtilis* (strain QST 713)	3	January 2024
Chondrostereum purpureum (Strain: PFC2139)	3	July 2023
Dodecylguanidine hydrochloride	1	January 2024
Hypochlorite cluster: - Available chlorine, present as calcium hypochlorite - Available chlorine, present as sodium hypochlorite - Sodium hypochlorite	3	August 2023

Active ingredient name	Re-evaluation category	Target date[1]
Flufenacet	1	Q1 (2024–25)
Nucleopolyhedrovirus cluster: - Nucleopolyhedrovirus for Douglas-fir tussock moth - *Neodiprion abietis* nucleopolyhedrovirus	3	June 2023
Predacides cluster: - Sodium monofluoroacetate - Strychnine	1	February 2024
Silicon dioxide cluster: - Silica aerogel - Silicon dioxide (present as 100% diatomaceous earth) fresh water fossils	3	November 2023
Quizalofop-p-ethyl	1	February 2024
Tebuconazole	1	Q1 (2024–25)
(Z)-9-Tricosene	3	July 2023
Di-n-proyl isocinchomeronate	1	All end use products discontinued. Re-evaluation closed.
Fenbuconazole	1	Registrants notified intent to voluntarily discontinue all end use products. Re-evaluation to be closed once the cancellation process is completed.
Hydramethylnon	1	All end use products discontinued. Re-evaluation closed.
Oxadiazon	1	Registrants notified intent to voluntarily discontinue all end use products. Re-evaluation to be closed once the cancellation process is completed.
Pantoea Agglomerans C9-1	3	All end use products discontinued. Re-evaluation closed.

[1] Q1 (April–June); Q2 (July–September); Q3 (October–December); Q4 (January–March)

[2] Cyclical re-evaluations of clothianidin and thiamethoxam were initiated in 2016 to assess their value, as well as human health and environmental risks other than impacts on pollinators and aquatic invertebrates. The assessment of the impacts on pollinators was completed in 2019. Special reviews of clothianidin and thiamethoxam related to aquatic invertebrates were completed in March 2021. Special reviews of clothianidin, thiamethoxam and imidacloprid related to squash bees were completed in February 2022.

[3] Work plan is published separately (REV2021-01: Project Plan for Cumulative Health Risk Assessment - N-Methyl Carbamates)

[4] The cumulative risk assessment of the organophosphates: Since the cumulative assessment was initiated, all diazinon products have been voluntarily discontinued by registrants and will expire in December 2023. Therefore, this active ingredient is no longer part of this cumulative assessment.

Part A, Table 2b Status of other active ingredients (currently in early part of re-evaluation process)

The re-evaluations of the following active ingredients are in the early part of the re-evaluation process, and Health Canada will provide an updated status in the next work plan to be published in spring 2024:

Active ingredient name	Current status
1,2-Dibromo-2,4-Dicyanobutane	Scoping phase completed
2-(Hydroxymethyl)-2-nitro-1,3-propanediol	Scoping phase completed
2-(Thiocyanomethylthio)benzothiazole	Scoping phase
10,10'-Oxybis (Phenoxarsine)	Scoping phase completed
Acifluorfen, present as sodium salt	Scoping phase
Dioxaborinanes cluster: - 2,2-(1-Methyltrimethylenedioxy)bis-(4-methyl1,3,2-dioxaborinane) - 2,2-Oxybis(4,4,6-trimethyl-1,3,2-dioxaborinane)	Scoping phase
Aminopyralid - Aminopyralid - Aminopyralid triisopropanolamine salt - Aminopyralid potassium salt	Scoping phase
Antimicrobials cluster: - 2,2-Dibromo-3-nitrilopropionamide - 2-Methyl-4-isothiazolin-3-one - 5-Chloro-2-methyl-4-isothiazolin-3-one - 4,5-Dichloro-2-N-Octyl-3(2H)-Isothiazolone - Bronopol - Methylene bis(thiocyanate)	Scoping phase
Triazinetrione cluster: - Available Chlorine, present as Sodium Dichloro-S-Triazinetrione - Available Chlorine, present as Trichloro-S-Triazinetrione - Trichloro-S-Triazinetrione	Scoping phase
Bensulide	Scoping phase completed
Bifenazate	Scoping phase completed
Boscalid	Scoping phase completed
Bromacil (present in free form, as dimethylamine salt, or as lithium salt)	Scoping phase
Carbendazim	Scoping phase
Carfentrazone-ethyl	Scoping phase
Cyazofamid	Scoping phase
Dichlobenil	Scoping phase
Daminozide	Scoping phase completed
Diflubenzuron	Scoping phase
Diphenylamine	Scoping phase

Active ingredient name	Current status
Endothal cluster: - Endothal - Endothal, present as N,N-dimethylalkylamine salt	Scoping phase
Etridiazole	Scoping phase
Fish toxicants cluster: - 4-Nitro-3-(trifluoromethyl) phenol sodium salt - Niclosamide	Scoping phase completed
Fluvalinate-tau	Scoping phase
Iodosulfuron-methyl-sodium	Scoping phase completed
Ipconazole	Scoping phase completed
Mesotrione	Scoping phase completed
Metribuzin	Scoping phase
Novaluron	Scoping phase
Oxyfluorfen	Scoping phase
Pinoxaden	Scoping phase
Prohexadione calcium	Scoping phase
Prothioconazole	Scoping phase
Pyrimethanil	Scoping phase
Pyraclostrobin	Scoping phase completed
Pyrasulfotole	Scoping phase
Rodenticide Cluster: - Brodifacoum - Bromadiolone - Bromethalin - Chlorophacinone - Diphacinone (present in free form or as sodium salt) - Warfarin (present in free form or as sodium salt) - Zinc phosphide - Difethialone	Scoping phase
Spirodiclofen	Scoping phase
Spiromesifen	Scoping phase
Sulfuryl fluoride	Scoping phase
Terbacil	Scoping phase
Tetrachlorvinphos	Scoping phase completed
Thiacloprid	Scoping phase
Topramezone	Scoping phase
Triclopyr (present as butoxyethyl ester)	Scoping phase
Trifloxystrobin	Scoping phase completed

Part A, Table 3 Re-evaluation Initiations between 1 April 2023 and 31 March 2024

Active ingredient	Initiation dates
Higher priority actives	
(S)-Methoprene	To be initiated October 2023
Acequinocyl	To be initiated July 2023
Ammonium Bromide	To be initiated August 2023
Atrazine (plus related active Triazines)	To be initiated December 2023
Bentazon cluster: - Bentazon (present as Sodium Salt) - Bentazone	To be initiated February 2024
Bispyribac-Sodium (KIH-2023)	To be initiated March 2024
Chlorpropham	To be initiated January 2024
Clomazone	To be initiated September 2023
Didecyldimethylammonium (present as Carbonate and Bicarbonate Salts)	To be initiated September 2023
Diuron	To be initiated October 2023
EPTC	To be initiated February 2024
Fenbutatin Oxide	To be initiated December 2023
Metalaxyl cluster: - Metalaxyl - Metalaxyl-M and S-Isomer	To be initiated January 2024
Napropamide	To be initiated February 2024
Oxamyl	To be initiated February 2024
Prometryne Plus Related Active Triazines	To be initiated August 2023
Pyroxsulam	To be initiated January 2024
Rotenone	To be initiated January 2024
Sethoxydim	To be initiated March 2024
Sulfonyl Ureas cluster: - Chlorsulfuron - Ethametsulfuron-Methyl - Metsulfuron-Methyl - Nicosulfuron - Rimsulfuron - Thifensulfuron-Methyl	To be initiated February 2024
Triallate	To be initiated February 2024
Lower priority actives	
3-Methyl-2-Cyclohexen-1-One	To be initiated June 2023
Cellulose (from Powdered Corn Cobs)	To be initiated June 2023
Ferric Sodium Ethylenediaminetetraacetic Acid	To be initiated February 2024
German Cockroach Extract	To be initiated January 2024
Streptomyces lydicus Strain WYEC108	To be initiated November 2023

Part B – Re-evaluation initiations anticipated between April 2024 and March 2028

The initiation date of the re-evaluation of a particular active ingredient is based on the date of its initial registration, or the date of the last completed re-evaluation.

Part B, Table 1 Future re-evaluation initiations between 1 April 2024 and 31 March 2028

1 April 2024 to 31 March 2025	
1,2-Benzisothiazolin-3-one	Maleic Hydrazide
2,4-D cluster: - 2,4-D (present as Acid) - 2,4-D (present as Amine Salts: Dimethylamine Salt, Diethanolamine Salt, or Other Amine Salts) - 2,4-D (present as Low Volatile Esters) - 2,4-D (present as choline salt)	MCPA cluster: - MCPA (present as Acid) - MCPA (present as Amine Salts: Diethanolamine, Dimethylamine, or Mixed Amines) - MCPA (present as Esters) - MCPA (present as Potassium Salt or as Sodium Salt)
2-Phenylphenol and Salts cluster: - 2-Phenylphenol - 2-Phenylphenol (present as Sodium Salt) - 2-Phenylphenol (present as Potassium Salt)	Metaldehyde
Alkyl Dimethyl Benzyl Ammonium Chloride Cluster (ADBAC): - N-Alkyl (25% C12, 60% C14, 15% C16) Dimethyl Benzyl Ammonium Chloride - N-Alkyl (40% C12, 50% C14, 10% C16) Dimethyl Benzyl Ammonium Chloride - N-Alkyl (68% C12, 32% C14) Dimethyl Ethylbenzyl Ammonium Chloride - N-Alkyl (5% C12, 60% C14, 30% C16, 5% C18) Dimethyl Benzyl Ammonium Chloride - N-Alkyl (67% C12, 25% C14, 7% C16, 1% C18) Dimethyl Benzyl Ammonium Chloride - Diisobutylphenoxyethoxyethyl Dimethyl Benzyl Ammonium Chloride - N-Alkyl (40% C12, 50% C14, 10% C16) Dimethyl Benzyl Ammonium Saccharinate - N-Dialkyl (5% C12, 60% C14, 30% C16, 5% C18) Methyl Benzyl Ammonium Chloride	*Metarhizium anisopliae* Strain F52
Bacillus thuringiensis cluster: - *Bacillus thuringiensis* Berliner ssp. *kurstaki* Strain HD-1 - *Bacillus thuringiensis* Serotype H-14 - *Bacillus thuringiensis* ssp. *tenebrionis*	Mineral Oil
Beauveria bassiana Strain HF23	Mono- and Di-Potassium Salt of Phosphorous Acid

Bromoxynil	Naphthalene Acetic Acid (present as Ethyl Ester, Sodium Salt, or as Ammonium Salt)
Chlorantraniliprole	Oxirane Derivatives - 50% Minimum
Chlorthal (present as Dimethyl Ester)	Ozone
Cloransulam-Methyl	Pendimethalin
Coniothyrium minitans Strain CON/M/91-08	Picloram cluster: - Picloram (present as Potassium Salt) - Picloram (present as Acid) - Picloram (present as Amine Salts)
Cyprosulfamide	Propylene Glycol
Dicamba (present as Acid, Amine Salt, Ester, Potassium Salt, or Sodium Salt)	Pyrazon
Didecyl Dimethyl Ammonium Chloride Cluster (DDAC): - Didecyl Dimethyl Ammonium Chloride – Other - Dioctyl Dimethyl Ammonium Chloride - Octyl Decyl Dimethyl Ammonium Chloride Oxydiethylene Bis(Alkyl Dimethyl Ammonium Chloride)	Industrial Uses of Sodium Chlorite and Sodium Chlorate cluster: - Sodium Chlorite - Sodium Chlorate
Dodine	Spirotetramat
Ethofumesate	Streptomycin
Flumioxazin	Sulfentrazone
Gliocladium catenulatum	Tetrakishydroxymethyl phosphonium sulphate
Glutaraldehyde	Thiencarbazone-Methyl
Imazapyr	Mandipropamid
1 April 2025 to 31 March 2026	
Beauveria Bassiana Strain Gha	N-Decanol N-Octanol
Bifenthrin	*Nosema Locustae Canning* (spore of)
Carbathiin	Oxycarboxin
Chlormequat Chloride	Phenmedipham
Desmedipham	Propyzamide
Diazinon	*Pseudomonas Fluorescens* A506
Dimethenamid-P	Tribenuron-Methyl
Dithiopyr	Trifluralin
Formetanate Hydrochloride	R-(-)-1-Octen-3-Ol
Hexazinone	Saflufenacil
Imazamethabenz-Methyl	Simazine Plus Related Active Triazines
Lime Sulphur Or Calcium Polysulphide	*Verticillium Albo-Atrum*, Isolate Wcs850

N-Coco-Alkyltrimethylene Diamines present as: - Monobenzoate Salt - Alkyl-1,3-Propylene Diamine Acetates - 1-Alkylamino-3-Aminopropane (Alkyl Groups As Derived From Coconut Oil Fatty Acids)	
1 April 2026 to 31 March 2027	
Diquat	Iodocarb
Iron (present as FeHEDTA)	Tralkoxydim
Tembotrione	Thiabendazole
Naphthalene	1,4-Dimethylnaphthalene
Animal repellent cluster: - Castor Oil - Dried Eggs - Fish Meal Mixture - Fish Oil Mixture - Garlic Oil - Meat Meal Mixture - Wintergreen Oil	Diclorprop cluster: - Dichlorprop-P - Dichlorprop-P (present as Dimethylamine Salt) - Dichlorprop P-Isomer (present as 2-Ethylhexyl Ester)
Pseudomonas Syringae - Strain Esc-10	Thymol
Lactobacillus Casei Strain Lpt-111	*Lactobacillus Rhamnosus* Strain Lpt-21
Lactococcus Lactis Ssp. Lactis Strain Ll64/Csl	*Lactococcus Lactis Ssp. Cremoris* Strain M11/Csl
Lactococcus Lactis Ssp. Lactis Strain Ll102/Csl	Imazethapyr
Lactic Acid	Sodium Fluoride
Citric Acid	3-(Trimethoxysilyl)-Propyldimethyloctadecyl Ammonium Chloride (trimethoxysilsyl quats)
Mesosulfuron-Methyl	3-(Trimethoxysilyl)-Propyldimethyloctadecyl Ammonium Chloride (trihydroxysilyl quats)
Metrafenone	Diodofon
Butoxypolypropylene Glycol	Hexahydro-1,3,5-Tris(2-Hydroxyethyl)-S-Triazine
Paradichlorobenzene	Oxalic Acid Dihydrate
Tefluthrin	D-Limonene
Flonicamid	Saponins Of Chenopodium Quinoa
Acibenzolar-S-Methyl	
1 April 2027 to 31 March 2028	
Arsenic Acid	Formaldehyde
Available Bromine present as 1-Bromo-3-Chloro-5,5-Dimethylhydantoin and Related Hydantoins	Icaridin
Available Chlorine present as 1,3-Dichloro-5,5-Dimethylhydantoin and 1,3-Dichloro-5-Ethyl-5-Methylhydantoin	Indaziflam
Available Chlorine present as 1-Bromo-3-Chloro-5,5-Dimethylhydantoin and Related Hydantoins	Metofluthrin
Available Chlorine present as 1-Bromo-3-Chloro-5,5-Dimethylhydantoin, 1,3-Dichloro-5,5-Dimethylhydantoin, 1,3-Dichloro-5-Ethyl-5-Methylhydantoin and Related Hydantoins	Oriental Mustard Seed Meal

Bacillus Firmus I-1582	*Paecilomyces Fumosoroseus* Strain Fe 9901
Chromic Acid	Paraformaldehyde
Clopyralid	Penflufen
Copper (present as Basic Copper Carbonate)	Penthiopyrad
Copper (present as Copper 8-Quinolinolate)	Phoma Macrostoma
Copper (present as Copper Naphthenate)	Propiconazole
Creosote	*Trichoderma Asperellum* Strain T34
Cydia Pomonella Granulovirus (Strain M)	Zinc (present as Zinc Oxide)
Extract of *Reynoutria Sachalinensis*	Zinc as Elemental (present as Zinc Naphthenate)
Fluopicolide	