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Re-evaluation Note

REV2020-01

Pest Management Regulatory Agency Re-evaluation and Special Review Work Plan 2020-2025

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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 2020 to 31 March 2025. The work plan is normally published every spring. However, its publication was delayed due to the measures taken for COVID-19 pandemic.

This work plan includes the proposed and final decisions published since 1 April 2020, all ongoing re-evaluations and special reviews, as well as new re-evaluations expected to be initiated in this time frame. This document replaces the previously published Re-evaluation Note REV2019-05, *Pest Management Regulatory Agency Re-evaluation and Special Review Work Plan 2019-2024*.

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 using modern assessment techniques and current scientific information. In addition, 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. A special review may also be initiated at any time if there are reasonable grounds to believe that the health or environmental risks, or the value of a pesticide are no longer acceptable. Special reviews differ from re-evaluation in that a special review is intended to examine only specific aspects of a pesticide.

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 become aware of upcoming consultations, as well as new initiations, for active ingredients by visiting the <u>Pesticides section</u> of Canada.ca.

This five-year work plan may change in response to workload and to emerging issues that require priority action; thus, 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.

Current re-evaluations and special reviews

The post-market review program workload is significant and increasing. In response, Health Canada is developing new approaches for pesticide evaluations that will support a sustainable program that makes timely science-based decisions. While program renewal is underway, Health Canada has taken a risk-based approach to prioritize re-evaluations and special reviews.

Re-evaluations of older pesticide active ingredients registered before 1995, older cyclical re-evaluations, certain neonicotinoid reviews as well as special reviews, have been prioritized for completion. As the number of re-evaluation initiations required by the *Pest Control Products Act* are high, Health Canada has implemented a risk based triaging and prioritization process for conducting the scoping and re-evaluation reviews of newer re-evaluation initiations to manage risks in a timely manner, and to manage workload in an efficient manner.

Under the current COVID-19 pandemic, Health Canada is making every effort to maintain operations. However, some ongoing scientific reviews and scoping reviews of new re-evaluation initiations are currently experiencing delays. Therefore, publication of certain decision documents are delayed.

The anticipated publication dates outlined in the work plan represent the most up-to-date information on the status of the re-evaluations or special reviews. The work plan for the post-market reviews related to pesticide active ingredients registered before 1995, cyclical active ingredients and special reviews are included in Tables 1–5. Actives to be initiated for re-evaluations in next 5 years are included in Table 6.

Table 1 Consultation status and targets for final decisions of active ingredients registered before 1995

Active Ingredient Name	Date of Consultation
Chlorothalonil (paints, coatings and related uses)	Published on 9 July 2020
Dazomet (paints, coatings and related uses)	Published on 9 July 2020
Folpet (paints, coatings and related uses)	Published on 9 July 2020
Piperonyl butoxide	Published on 17 September 2020
Pyrethrins	Published on 17 September 2020
Ziram (paints, coatings and related uses)	Published on 9 July 2020

Active Ingredient Name	Date of Final Decision
Acephate	Published on 3 April 2020
Chlorpyrifos*	December 2020
Dichlorvos	Published on 20 August 2020
Ethephon	Published on 24 September 2020
Linuron	October 2020
Mancozeb	November 2020
Phosmet	October 2020
Thiophanate methyl	December 2020

^{*} Final decision related to the environmental assessment is targeted for December 2020. The target for updating the proposed re-evaluation decision related to the human health assessment will be included in the upcoming work plan planned for publication in spring 2021.

Table 2 Targets for consultation and final decisions of neonicotinoid active ingredients

Active Ingredient Name	Date of Consultation ²
Clothianidin (special review squash bees)	Q1 (2021–2022)
Imidacloprid (special review squash bees)	Q1 (2021–2022)
Thiamethoxam (special review squash bees)	Q1 (2021–2022)
Clothianidin (general re-evaluation) ¹	Q1 (2022–2023)
Thiamethoxam (general re-evaluation) ¹	Q1 (2022–2023)
Active Ingredient Name	Date of Final Decision ²
Clothianidin (special review aquatic invertebrates)	Q1 (2021–2022)
Imidacloprid (general re-evaluation)	Q1 (2021–2022)
Thiamethoxam (special review aquatic invertebrates)	Q1 (2021–2022)

Cyclical re-evaluations of clothianidin and thiamethoxam (general re-evaluations) 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 and the timelines for the completion of the assessment of the impacts on aquatic invertebrates is in Table 2.

² Q1 (April–June); Q2 (July–September); Q3 (October–December); Q4 (January–March)

Table 3 Targets for consultation and final decisions of special reviews

Active Ingredient Name	Date of Consultation/Status ¹
Atrazine	Q4 (2021–2022)
Chlorothalonil	Q2 (2021–2022)
Dicamba	Will be included in the upcoming work plan to be published in spring 2021 (Current status: Information gathering phase)
Diodofon	Published on 9 July 2020
Glufosinate ammonium	Q1 (2022–2023)
Iprodione	March 2021
Linuron	October 2020
Metaldehyde	Published on 20 July 2020
Methyl bromide	Q1 (2022–2023)
Pentachlorophenol	Published on 30 July 2020 (consultation closed in September 2020)
Picoxystrobin	Q3 (2022–2023)
Potassium dimethyldithiocarbamate	Q3 (2021–2022)
Pymetrozine (1)	October 2020
Pymetrozine (2)	October 2020
Sodium dimethyldithiocarbamate	Q3 (2021–2022)
Active Ingredient Name	Date of Final Decision/Status ¹
Acephate	Published on 3 April 2020
Dichlorvos	Published on 20 August 2020
Metaldehyde	January 2021
Naled (1)	Q2 (2021–2022)
Naled (2)	Q2 (2021–2022)
Pentachlorophenol	Will be included in the upcoming work plan to be published in spring 2021 (consultation of the proposed special review decision completed in September 2020)
Tetrachlorvinphos	March 2021

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

Table 4 Targets for consultation and final decisions of cyclical active ingredients

Active Ingredient	Re-evaluation	Date of Consultation ¹
Name	Category	
1- or 3-Monomethylol- 5,5-dimethylhydantoin	1	Will be included in the upcoming work plan to be published in spring 2021
1,3- Bis(hydroxymethyl) - 5,5-dimethylhydantoin	1	Will be included in the upcoming work plan to be published in spring 2021
Abamectin	1	Q3(2021–2022)
Acetamiprid	1	Q4 (2021–2022)
Cymoxanil	1	February 2021
DEET plus related active toluamides	1	Q4 (2021–2022)
Difenoconazole	2	March 2021
Difethialone	3	This active ingredient will be clustered with other rodenticides (Table 6)
Dodecylguanidine hydrochloride	1	Will be included in the upcoming work plan to be published in spring 2021
(E,Z)-3,13- octadecadienyl acetate	3	This active ingredient is clustered with other pheromones (Table 5)
Fenbuconazole	1	Q1 (2022–2023)
Florasulam	1	March 2021
Flufenacet	1	January 2021
Isoxaflutole	1	January 2021
Kresoxim-methyl	1	Published on 16 July 2020
P-menthane-3,8-diol	1	Q1 (2021–2022)
S-kinoprene	1	Published on 6 August 2020
Sodium omadine (paints, coatings and related uses)	1	Published on 9 July 2020
Spinosad	1	This active will be clustered together with spinetoram (Table 5)
Tebuconazole	1	Q1 (2021–2022)
Trinexapac-ethyl	1	Q1 (2021–2022)
Triticonazole	1	February 2021
Cumulative Health Risk Assessment: N- methyl carbamates	Work plan will be published separately	

Active Ingredient Name	Re-evaluation Category	Date of Final Decision ¹
Cyromazine	1	Q2 (2021–2022)
Fenhexamid	1	February 2021
Lambda-cyhalothrin	1	March 2021
Pyriproxyfen	1	February 2021
Tebufenozide	1	January 2021

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

To direct resources for the work on priority actives, the re-evaluations of the following active ingredients are delayed. In addition, the measures taken related to the COVID19 pandemic contributed to their delay. Health Canada will include the expected timelines for their public consultation in the next updated work plan to be published in spring 2021:

Active Ingredient Name	Re-evaluation Category	Status
Azoxystrobin	1	Review phase
Cyprodinil	1	Review phase
D-cis, trans-allethrin	1	Review phase
Flucarbazone (present as flucarbazone-sodium)	1	Review phase
Picolinafen	-	Scoping phase
Pymetrozine	1	Information gathering phase
Pyraclostrobin	1	Information gathering phase
Quizalofop-p-ethyl	1	Review phase
S-metolachlor and R- enantiomer	1	Review phase
Zoxamide	1	Review phase

Re-evaluations initiated between 1 April 2019 and 31 March 2020

The number of re-evaluation initiations currently required as per the 15-year legislative requirement is high. Therefore, a risk based approach is being considered for prioritization of active ingredients for scoping and review phases of re-evaluations based on various considerations such as nature and outcome of existing assessments and overall human health and environmental risk profile, other health and environmental concerns such as information from incident reports received by Health Canada, and status in other jurisdictions (for example, decisions from other Organisation for Economic Co-operation and Development member countries), use pattern, sales and use information, knowledge of new information, new data requirements, and, possible clustering of reviews. Based on the above considerations, a weight of evidence approach is taken for prioritization, and, Health Canada has grouped the active

ingredients into higher priority and lower priority actives for the scoping and review phases. The outcome of scoping reviews will further inform prioritization of active ingredients for review phase. All active ingredients initiated for re-evaluation will be subjected to scientific review, public consultation and final decision as per the Regulatory Directive DIR2016-04, Management of Pesticides Re-evaluation Policy. However, based on the available resources, the active ingredients identified as higher priority based on the above factors will be considered first.

Active ingredients in Table 5 are in the early phase of the re-evaluation, and the status will be updated in the next upcoming work plan (2021–2026) planned to be published in spring 2021.

Table 5 Status of re-evaluations initiated between 1 April 2019 and 31 March 2020

Active Ingredient Name	Status
Higher priority	
4,5-Dichloro-2-N-Octyl-3(2H)-Isothiazolone	Information gathering phase
Boscalid	Scoping phase
Famoxadone	Scoping phase
Fenamidone	Scoping phase
Fluazinam	Scoping phase
Foramsulfuron	Information gathering phase
Glufosinate ammonium	Information gathering phase
Mecoprop cluster:	Scoping phase
Mecoprop P (Present As Acid)	
Mecoprop-P (Present As Dimethylamine Salt)	
Mecoprop-P (Present As Potassium Salt)	
Mecoprop-P (Present As Diglycolamine Salt)	
Methyl bromide	Scoping phase
Spinetoram	Information gathering phase
Trifloxystrobin	Scoping phase

Active Ingredient Name	Status
Lower priority	
Ancymidol	Scoping phase
Corn gluten meal	Scoping phase
Dried blood	Scoping phase
Imiprothrin	Scoping phase
Iodosulfuron-methyl-sodium	Scoping phase
Mustard cluster:	Scoping phase
Brassica Hirta White Mustard Seed Powder	
Sodium alpha-olefin sulfonate	
Enoic acid cluster:	Scoping phase
Octadec-9-enoic acid, methyl ester	
Octadec-9-enoic acid, ethyl ester	
Pheromones cluster:	Scoping phase
1-Dodecanol	
1-Tetradecanol	
Codlelure	
(E,Z)-9-dodecenyl acetate	
(E,Z)-11-tetradecenal	
(Z)-9-dodecenyl acetate	
(Z)-9-tetradecen-1-yl acetate	
(E,Z)-3,13-Octadecadien-1-yl acetate	
(Z)-11-tetradecenal	
(Z)-11-tetradecen-1-ol	
(Z)-11-tetradecenyl acetate	
Prallethrin	Re-evaluation closed - all products discontinued
(Z)-9-Tricosene	Scoping phase

New re-evaluation initiations

In general, 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. The re-evaluation process is described in Regulatory Directive DIR2016-04, *Management of Pesticides Re-evaluation Policy*. A complete list of all re-evaluation initiations anticipated between April 2020 and March 2025 is included in Table 6. Information related to the re-evaluation initiation will be posted to the PMRA's Public Registry.

Table 6 Re-evaluations to be initiated between 1 April 2020 and 31 March 2025

Active Ingredient	Status	
2020–2021		
1,2-Dibromo-2,4-dicyanobutane	To be initiated by December 2020	
10,10'-Oxybis(phenoxarsine)	To be initiated by March 2021	
1-Methylcyclopropene	Initiated	
2-Bromo-4'-hydroxyacetophenone	All products discontinued	
Fish toxicants cluster: 4-Nitro-3-(trifluoromethyl) phenol sodium salt Niclosamide	Initiated	
Bacillus subtilis cluster : Bacillus Subtilis (strain MBI600) Bacillus subtilis (strain QST 713)	Initiated	
Bensulide	Initiated	
Bifenazate	To be initiated by March 2021	
Capsaicin cluster: Capsaicin Related capsaicinoids	To be initiated by November 2020	
Chondrostereum Purpureum (strain: PFC2139)	To be initiated by October 2020	
Coumaphos	Initiated	
Daminozide	To be initiated by October 2020	
Hydramethylnon	All products to be discontinued	
Ipconazole	To be initiated by February 2021	
Kaolin	Initiated	
Mesotrione	To be initiated by November 2020	

Active Ingredient	Status
Methoxyfenozide	To be initiated by October 2020
Methyl nonyl ketone	Initiated
Nonylphenoxypolyethoxyethanol (adjuvant)	To be initiated by March 2021
Phorate	Initiated
Predacides	To be initiated by March
Sodium cyanide	2021
Sodium monofluoroacetate	
Strychnine	
Fatty acids cluster:	Initiated
Potassium salts of fatty acids	
Triethanolamine salts of fatty acids	
Fatty acids	
Ammonium salt of fatty acid	
Silicon dioxide cluster:	Initiated
Silica aerogel	
Silicon dioxide (present as 100% diatomaceous earth) - fresh water fossils	
Silicon dioxide (present as 100% diatomaceous earth) - salt water fossils	
Sulphur	Initiated
Tepraloxydim	All products to be discontinued
Tetrachlorvinphos	Initiated
2021–2022	
1-(3-Chloroallyl)-3,5,7-triaza-1-azoniaadamantane chloride (cis isomer)	
2-(Hydroxymethyl)-2-nitro-1,3-propanediol	
Antimicrobials cluster:	
2,2-Dibromo-3-nitrilopropionamide	
2-Methyl-4-isothiazolin-3-one	
5-Chloro-2-methyl-4-isothiazolin-3-one	
Bronopol	
Methylene bis(thiocyanate)	
4-CPA (4-chlorophenoxyacetic acid)	
6-Benzylaminopurine	
Aminopyralid	

Active Ingredient	Status
Hypochlorite cluster:	
Available chlorine, present as calcium hypochlorite	
Available chlorine, present as sodium hypochlorite	
Sodium hypochlorite	
Triazinetrione cluster:	
Available chlorine, present as sodium dichloro-s-triazinetrione	
Available chlorine, present as trichloro-s-triazinetrione	
Trichloro-s-triazinetrione	
Bacillus sphaericus	
Bis(trichloromethyl)sulfone	
Rodenticide cluster:	
Brodifacoum	
Bromadiolone	
Chlorophacinone	
Diphacinone (present in free form or as sodium salt)	
Warfarin (present in free form or as sodium salt)	
Zinc phosphide	
Bromethalin	
Bromacil (present in free form, as dimethylamine salt, or as lithium salt)	
Carbon dioxide cluster:	
Carbon dioxide gas	
Liquid carbon dioxide	
Cyazofamid	
Dichlobenil	
Diflubenzuron	
Disodium cyanodithioimidocarbonate	
Formic acid	
Gibberellins cluster:	
Gibberellic acid	
Gibberellins A4A7	
Metribuzin	
Nucleopolyhedrovirus cluster:	
Nucleopolyhedrovirus for Douglas-fir tussock moth	
Neodiprion abietis nucleopolyhedrovirus	
Paraquat	
Pinoxaden	
Polymerized butenes	

Active Ingredient	Status
Potassium bicarbonate	
Prohexadione calcium	
Putrescent whole egg solids	
Pyrimethanil	
Spirodiclofen	
Terbacil	
Topramezone	
Triclopyr (present as butoxyethyl ester)	
Verbenone	
2022–2023	
Dioxaborinanes cluster:	
2,2-(1-Methyltrimethylenedioxy)bis-(4-methyl-1,3,2-dioxaborinane)	
2,2-Oxybis(4,4,6-trimethyl-1,3,2-dioxaborinane)	
Acifluorfen (present as sodium salt)	
Agrobacterium radiobacter	
Carbendazim	
Carfentrazone-ethyl	
Di-n-propyl isocinchomeronate	
Diphenylamine	
Endothal cluster:	
Endothal	
Endothal (present as N,N-dimethylalkylamine salt)	
Etridiazole	
Fluvalinate-tau	
Naled	
Natamycin	
Novaluron	
Octenol	
Oxadiazon	
Oxyfluorfen	
Pantoea agglomerans cluster:	
Pantoea agglomerans strain C9-1	
Pantoea agglomerans strain E325 (NRRL B-21856)	
Prothioconazole	
Pyrasulfotole	
Sodium chloride	
Spiromesifen	

Active Ingredient	Status	
Sulfuryl fluoride	Status	
2023–2024		
(S)-Methoprene		
3-Methyl-2-cyclohexen-1-one		
Acequinocyl		
Ammonium bromide		
Atrazine (plus related active triazines)		
Bentazon (present as sodium salt)		
Bispyribac-sodium (KIH-2023)		
Cellulose (from powdered corn cobs)		
Chlorpropham		
Sulfonyl ureas cluster:		
Chlorsulfuron		
Cloransulam-methyl		
Ethametsulfuron-methyl		
Metsulfuron-methyl		
Nicosulfuron		
Rimsulfuron		
Thifensulfuron-methyl		
Clomazone		
Didecyldimethylammonium (present as carbonate and bicarbonate salts)		
Diuron		
EPTC		
Fenbutatin oxide		
Ferric sodium ethylenediaminetetraacetic acid		
German cockroach extract		
Metalaxyl cluster:		
Metalaxyl		
Metalaxyl-M and S-isomer		
Napropamide		
Oxamyl		
Prometryne plus related active triazines		
Pyroxsulam		
Rotenone		
Sclerotinia minor IMI 3144141		
Sethoxydim		
Streptomyces lydicus strain WYEC108		
Thiacloprid		

Active Ingredient	Status	
Triallate		
2024–2025		
1,2-Benzisothiazolin-3-one		
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)		
2-Phenylphenol and Salts cluster:2-Phenylphenol		
2-Phenylphenol (Present as Sodium Salt)		
2-Phenylphenol (Present as Potassium Salt)		
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 (5% C5-18, 61% C12, 23% C14, 11% C16) 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		
N-Alkyl (3% C12, 95% C14, 2% C16) Dimethyl Benzyl Ammonium Chloride (Or: Myristyl Dimethyl Benzyl Ammonium Chloride Dihydrate)		

Active Ingredient	Status
Bacillus thuringiensis cluster:	
Bacillus thuringiensis Berliner ssp. kurstaki Strain HD-1	
Bacillus thuringiensis Serotype H-14	
Bacillus thuringiensis ssp. tenebrionis	
Beauveria bassiana Strain HF23	
Bromoxynil	
Chlorantraniliprole	
Chlorthal (Present as Dimethyl Ester)	
Coniothyrium minitans Strain CON/M/91-08	
Cyprosulfamide	
Dicamba (Present as Acid, Amine Salt, Ester, Potassium Salt, or Sodium Salt)	
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)	
Dodine	
Ethofumesate	
Flumioxazin	
Gliocladium catenulatum	
Glutaraldehyde	
Imazapyr	
Maleic Hydrazide	
Mandipropamid	
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)	
Metaldehyde	

Active Ingredient	Status
Metarhizium anisopliae Strain F52	
Mineral Oil	
Mono- and Di-Potassium Salt of Phosphorous Acid	
Naphthalene Acetates cluster:	
Naphthalene Acetic Acid (Present as Ethyl Ester, Sodium Salt, or as Ammonium Salt)	
Naphthaleneacetamide	
Oxirane Derivatives - 50% Minimum	
Ozone	
Picloram cluster:	
Picloram (Present as Potassium Salt)	
Picloram (Present as Acid)	
Picloram (Present as Amine Salts)	
Pendimethalin	
Propylene Glycol	
Pyrazon	
Industrial Uses of Sodium Chlorite and Sodium Chlorate cluster:	
Sodium Chlorite	
Sodium Chlorate	
Spirotetramat	
Streptomycin	
Sulfentrazone	
Tetrakishydroxymethyl Phosphonium Sulphate	
Thiencarbazone-Methyl	