

# Decision

19 August 2021

## Summary

Item	Details
Substance	Chlorothalonil
Request number	APP204221
Request type	To decide whether there are grounds for reassessment under the Hazardous Substances and New Organisms Act 1996 (“the Act”)
Applicant	Environmental Protection Authority
Purpose of the request	To determine whether there are grounds for the reassessment of chlorothalonil
Date request received	24 May 2021
Consideration Date	19 August 2021
Considered by	A Decision-making Committee of the Environmental Protection Authority (“EPA”)
Decision	Grounds exist for the reassessment of chlorothalonil

## 1. Background

- 1.1. The hazardous substance, chlorothalonil (“the substance”) was transferred into the Hazardous Substances and New Organisms Act (“the HSNO Act”) on 1 July 2006 by the Hazardous Substances (Chemicals) Transfer Notice 2006. The approval number of the substance is HSR002825.
- 1.2. The approval for chlorothalonil was reissued under clause 4 of Schedule 7 of the HSNO Act on 30 April 2021 to reflect New Zealand’s adoption of the GHS system of hazard classifications.
- 1.3. The substance is available for professional and commercial use as a fungicide across a range of crop types and use patterns, including timber treatments. The domestic and anti-fouling paint uses of chlorothalonil-containing substances were considered in previous reassessments.
- 1.4. The names and approval numbers of products containing the substance are provided in the Appendix.
- 1.5. The substance is classified as follows:
  - Acute inhalation toxicity Category 2, Serious eye damage Category 1, Skin sensitisation Category 1, Carcinogenicity Category 2, Specific target organ toxicity (repeated exposure) Category 1, Hazardous to soil organisms, Hazardous to terrestrial vertebrates, Hazardous to the aquatic environment acute Category 1, Hazardous to the aquatic environment chronic Category 1.
- 1.6. The controls that apply to the substance include default controls applicable to a substance having these hazard classifications, as well as a number of additional or varied controls.
- 1.7. The purpose of this request is to decide whether there are grounds for the reassessment of the substance.

## 2. Request process

- 2.1. The request was formally received by the EPA on 24 May 2021 and the information supplied evaluated by EPA staff.
- 2.2. The request was considered on 19 August 2021 by a Decision-making Committee of the EPA.

## 3. Legislative criteria

- 3.1. The Act specifies a number of factors that the EPA has to take into account when considering whether grounds exist for a reassessment. At least one of these factors must be present before the EPA can use its discretion to determine whether there are grounds for a reassessment.

### **Significant new information relating to the effects of the substance has become available (section 62(2)(a))**

- 3.2. The applicant in the grounds request has provided information about the adverse effects of the substance.
- 3.3. The 2013 anti-fouling paint (AFP) reassessment revoked the chlorothalonil-containing AFPs because the risks to the aquatic environment were 23 – 100 times the acceptable level (depending on location and scenario).
- 3.4. The 2017 chlorothalonil home-garden fungicides reassessment revoked (“declined”) the approvals for four substances used within the home garden and restricted the use of a fifth to commercial workplace uses only, because of the risks to human health.
- 3.5. The Committee noted that these previous reassessments related to specific substances containing chlorothalonil. The Committee consider that this information is pertinent to the grounds request to reassess chlorothalonil as a substance, as well as the other substances containing chlorothalonil still available.
- 3.6. In addition, two commercial use products were declined in 2018 and 2021 because of the risks to human health and the environment identified when evaluating the hazardous substance applications. In 2018, the EPA found that, even with full personal protective equipment and high specification respirators, the risk to those using the chlorothalonil product would be up to 22 times the acceptable level. In 2021, the EPA found that workers using a chlorothalonil product required a 50-day re-entry interval before they could go back into treated areas (even with full respiratory protective equipment). Additionally, the substance presented a risk to birds, and a 75m buffer zone was needed to protect the aquatic environment.
- 3.7. In 2019, the European Union (EU) did not renew chlorothalonil’s approval because the evaluation by the European Food Standards Agency (EFSA) could not exclude genotoxicity concerns about residues, and due to the contamination risk to groundwater from metabolites. EFSA also identified high risks for fish and amphibians.
- 3.8. The Committee considered that the information provided is “significant” because it indicates that current controls may not be sufficient to mitigate the risks associated with use of existing approved chlorothalonil-containing substances.
- 3.9. The Committee also noted that the information supplied was published between 2013 and 2021 and was therefore not available during the initial approval of the substance. Therefore, the Committee considered it to be “new” information.

### **A change in controls under the Health and Safety at Work Act 2015 (section 62(2)(aa))**

- 3.10. This factor is not relevant to this request.

### **Another substance with similar or improved beneficial effects and reduced adverse effects has become available (section 62(2)(b))**

3.11. This factor is not relevant to this request.

### **Information showing a significant change of use, or a significant change in the quantity manufactured, imported, or developed has become available (section 62(2)(c))**

3.12. This factor is not relevant to this request.

### **Other reasons for requesting a reassessment under section 62(2)**

3.11. This factor is not relevant to this request.

## **4. Achieving the purpose of the Act**

4.1. The Committee has considered all relevant matters in Part 2 of the Act in the context of determining whether there are grounds to reassess this substance. In particular, the following considerations from sections 6, 7 and 8 have been taken into account:

- the sustainability of all native and valued introduced flora and fauna
- the intrinsic value of ecosystems
- public health
- the relationship of Māori and their culture and traditions with their ancestral lands, water, sites, wāhi tapu, valued flora and fauna, and other taonga
- the economic and related benefits and costs of using a particular hazardous substance or new organism
- New Zealand's international obligations
- the need for caution in managing adverse effects where there is scientific and technical uncertainty about those effects
- the principles of the Treaty of Waitangi (Te Tiriti o Waitangi).

4.2. The Committee noted that, if this request is approved and a subsequent reassessment is applied for, these matters will also be considered in the context of that application.

## 5. Consideration

- 5.1. The Committee considered that there is significant new information relating to the effects of the substance in view of the EPA declining and previously revoking the approvals of substances containing chlorothalonil reassessments, and the European evaluation and decision.
- 5.2. Taking that into account, the Committee considered that grounds exist under section 62 of the Act for the reassessment of chlorothalonil (and substances containing chlorothalonil), on the basis that significant new information about the effects of the substance has become available (section 62(2)(a)).

Signed by		Date: 19 August 2021
Mr Tipene Wilson		 Environmental Protection Authority Te Kaitiaki Rauhi Taiao
<b>Chair, Decision Making Committee</b>		
<b>Environmental Protection Authority</b>		

## Appendix: Chlorothalonil and chlorothalonil-containing substances for which grounds for reassessment granted (indicative list)

Hazardous substance	Approval number	Classification
Chlorothalonil	HSR002825	Acute inhalation toxicity Category 2, Serious eye damage Category 1, Skin sensitisation Category 1, Carcinogenicity Category 2, Specific target organ toxicity (repeated exposure) Category 1, Hazardous to soil organisms, Hazardous to terrestrial vertebrates, Hazardous to the aquatic environment acute Category 1, Hazardous to the aquatic environment chronic Category 1
Max CI	HSR000092	Acute inhalation toxicity Category 2, Skin irritation Category 2, Serious eye damage Category 1, Skin sensitisation Category 1, Carcinogenicity Category 2, Reproductive toxicity Category 1, Specific target organ toxicity (repeated exposure) Category 1, Hazardous to soil organisms, Hazardous to terrestrial vertebrates, Hazardous to the aquatic environment acute Category 1, Hazardous to the aquatic environment chronic Category 1
Suspension concentrate containing 100 - 250 g/litre carbendazim and 250 - 450 g/litre chlorothalonil (Substance B)	HSR000146	Acute inhalation toxicity Category 2, Serious eye damage Category 1, Skin sensitisation Category 1, Germ cell mutagenicity Category 1, Carcinogenicity Category 2, Reproductive toxicity Category 1, Specific target organ toxicity (repeated exposure) Category 1, Hazardous to soil organisms, Hazardous to terrestrial vertebrates, Hazardous to the aquatic environment acute Category 1, Hazardous to the aquatic environment chronic Category 1
Suspension concentrate containing 100 g/litre chlorothalonil. Also contains ethylene glycol	HSR000606	Acute inhalation toxicity Category 3, Serious eye damage Category 1, Skin sensitisation Category 1, Carcinogenicity Category 2, Specific target organ toxicity (repeated exposure) Category 1, Hazardous to terrestrial vertebrates, Hazardous to the aquatic environment acute Category 1, Hazardous to the aquatic environment chronic Category 1

Hazardous substance	Approval number	Classification
Suspension concentrate containing 250 g/litre chlorothalonil and 250 g/litre thiophanate methyl	HSR000618	Acute inhalation toxicity Category 2, Serious eye damage Category 1, Skin sensitisation Category 1, Germ cell mutagenicity Category 2, Carcinogenicity Category 2, Specific target organ toxicity (repeated exposure) Category 1, Hazardous to soil organisms, Hazardous to terrestrial vertebrates, Hazardous to the aquatic environment acute Category 1, Hazardous to the aquatic environment chronic Category 1
Suspension concentrate containing 500 - 750 g/litre chlorothalonil (Substance A)	HSR000670	Acute inhalation toxicity Category 2, Serious eye damage Category 1, Skin sensitisation Category 1, Carcinogenicity Category 2, Specific target organ toxicity (repeated exposure) Category 1, Hazardous to soil organisms, Hazardous to terrestrial vertebrates, Hazardous to the aquatic environment acute Category 1, Hazardous to the aquatic environment chronic Category 1
Aerosol containing 10 g/kg chlorothalonil and 0.3 g/kg triadimefon	HSR000674	Aerosol Category 1, Eye irritation Category 2, Skin sensitisation Category 1, Carcinogenicity Category 2, Reproductive toxicity Category 1, Specific target organ toxicity (repeated exposure) Category 2, Hazardous to the aquatic environment acute Category 1, Hazardous to the aquatic environment chronic Category 1
Soluble concentrate containing 389 g/litre benzalkonium chloride, 21.5 g/litre chlorothalonil and 65.5 g/litre prochloraz	HSR000864	Flammable liquid Category 3, Acute oral toxicity Category 4, Acute dermal toxicity Category 4, Acute inhalation toxicity Category 4, Skin corrosion Category 1B, Serious eye damage Category 1, Skin sensitisation Category 1, Carcinogenicity Category 2, Reproductive toxicity Category 1, Specific target organ toxicity (repeated exposure) Category 2, Hazardous to the aquatic environment acute Category 1, Hazardous to the aquatic environment chronic Category 1
Suspension concentrate containing 100 - 250 g/litre carbendazim and 250 - 450 g/litre chlorothalonil (Substance A)	HSR000870	Acute inhalation toxicity Category 2, Serious eye damage Category 1, Skin sensitisation Category 1, Germ cell mutagenicity Category 1, Carcinogenicity Category 2, Reproductive toxicity Category 1, Specific target organ toxicity (repeated exposure) Category 1, Hazardous to the aquatic environment acute Category 1, Hazardous to the aquatic environment chronic Category 1

Hazardous substance	Approval number	Classification
Suspension concentrate containing 165 g/litre chlorothalonil and 167 g/litre thiocyanic acid, methylene ester	HSR000898	Corrosive to metals Category 1, Acute oral toxicity Category 4, Acute dermal toxicity Category 4, Acute inhalation toxicity Category 1, Skin corrosion Category 1B, Serious eye damage Category 1, Skin sensitisation Category 1, Carcinogenicity Category 2, Reproductive toxicity Category 2, Specific target organ toxicity (repeated exposure) Category 1, Hazardous to the aquatic environment acute Category 1, Hazardous to the aquatic environment chronic Category 1
Emulsifiable concentrate containing 40 g/litre carbendazim and 50 g/litre chlorothalonil	HSR000899	Flammable liquid Category 4, Acute inhalation toxicity Category 2, Skin irritation Category 2, Serious eye damage Category 1, Skin sensitisation Category 1, Germ cell mutagenicity Category 1, Carcinogenicity Category 2, Reproductive toxicity Category 1, Specific target organ toxicity (repeated exposure) Category 2, Hazardous to the aquatic environment acute Category 1, Hazardous to the aquatic environment chronic Category 1
Suspension concentrate containing 500 g/litre chlorothalonil (Substance A)	HSR000935	Acute inhalation toxicity Category 2, Serious eye damage Category 1, Skin sensitisation Category 1, Carcinogenicity Category 2, Specific target organ toxicity (repeated exposure) Category 1, Hazardous to the aquatic environment acute Category 1, Hazardous to the aquatic environment chronic Category 1
Cobra	HSR001672	Acute inhalation toxicity Category 2, Serious eye damage Category 1, Skin sensitisation Category 1, Carcinogenicity Category 2, Specific target organ toxicity (repeated exposure) Category 1, Hazardous to soil organisms, Hazardous to terrestrial vertebrates, Hazardous to the aquatic environment acute Category 1, Hazardous to the aquatic environment chronic Category 1
Blue Control IC	HSR002472	Acute inhalation toxicity Category 2, Serious eye damage Category 1, Skin sensitisation Category 1, Carcinogenicity Category 2, Specific target organ toxicity (repeated exposure) Category 1, Hazardous to the aquatic environment acute Category 1, Hazardous to the aquatic environment chronic Category 1



Hazardous substance	Approval number	Classification
Climax	HSR007625	Flammable liquid Category 4, Acute inhalation toxicity Category 2, Skin irritation Category 2, Serious eye damage Category 1, Skin sensitisation Category 1, Carcinogenicity Category 2, Reproductive toxicity Category 1, Specific target organ toxicity (repeated exposure) Category 1, Hazardous to terrestrial vertebrates, Hazardous to the aquatic environment acute Category 1, Hazardous to the aquatic environment chronic Category 1
TNL2165	HSR007654	Acute inhalation toxicity Category 2, Aspiration hazard Category 1, Serious eye damage Category 1, Skin sensitisation Category 1, Carcinogenicity Category 2, Specific target organ toxicity (repeated exposure) Category 1, Hazardous to soil organisms, Hazardous to terrestrial vertebrates, Hazardous to the aquatic environment acute Category 1, Hazardous to the aquatic environment chronic Category 1
Suspension concentrate containing 500 - 750 g/litre chlorothalonil (Substance B)	HSR007697	Acute inhalation toxicity Category 2, Serious eye damage Category 1, Skin sensitisation Category 1, Carcinogenicity Category 2, Specific target organ toxicity (repeated exposure) Category 1, Hazardous to soil organisms, Hazardous to terrestrial vertebrates, Hazardous to the aquatic environment acute Category 1, Hazardous to the aquatic environment chronic Category 1
Liquid containing 0.1 - 0.9 g/litre carbendazim and 10 - 17 g/litre chlorothalonil	HSR007734	Eye irritation Category 2, Skin sensitisation Category 1, Carcinogenicity Category 2, Specific target organ toxicity (repeated exposure) Category 2, Hazardous to the aquatic environment chronic Category 2
Echo 900WG	HSR007754	Serious eye damage Category 1, Skin sensitisation Category 1, Carcinogenicity Category 2, Specific target organ toxicity (repeated exposure) Category 1, Hazardous to soil organisms, Hazardous to terrestrial vertebrates, Hazardous to the aquatic environment acute Category 1, Hazardous to the aquatic environment chronic Category 1

Hazardous substance	Approval number	Classification
Folio Gold	HSR007980	Acute inhalation toxicity Category 2, Eye irritation Category 2, Carcinogenicity Category 2, Specific target organ toxicity (repeated exposure) Category 1, Hazardous to soil organisms, Hazardous to terrestrial vertebrates, Hazardous to the aquatic environment acute Category 1, Hazardous to the aquatic environment chronic Category 1
TNL2367	HSR007987	Acute inhalation toxicity Category 2, Skin irritation Category 2, Serious eye damage Category 1, Skin sensitisation Category 1, Carcinogenicity Category 2, Specific target organ toxicity (repeated exposure) Category 1, Hazardous to the aquatic environment acute Category 1, Hazardous to the aquatic environment chronic Category 1
HYSAN Ready-to-use Solution plus Antimould	HSR100074	Acute oral toxicity Category 4, Skin corrosion Category 1B, Serious eye damage Category 1, Skin sensitisation Category 1, Germ cell mutagenicity Category 1, Carcinogenicity Category 2, Reproductive toxicity Category 1, Specific target organ toxicity (repeated exposure) Category 2, Hazardous to the aquatic environment acute Category 1, Hazardous to the aquatic environment chronic Category 1
AMISTAR OPTI	HSR100361	Acute inhalation toxicity Category 4, Serious eye damage Category 1, Skin sensitisation Category 1, Carcinogenicity Category 2, Specific target organ toxicity (repeated exposure) Category 1, Hazardous to soil organisms, Hazardous to terrestrial vertebrates, Hazardous to the aquatic environment acute Category 1, Hazardous to the aquatic environment chronic Category 1
Instrata	HSR100388	Acute inhalation toxicity Category 2, Serious eye damage Category 1, Skin sensitisation Category 1, Carcinogenicity Category 2, Specific target organ toxicity (repeated exposure) Category 1, Hazardous to soil organisms, Hazardous to terrestrial vertebrates, Hazardous to the aquatic environment acute Category 1, Hazardous to the aquatic environment chronic Category 1

Hazardous substance	Approval number	Classification
Blue Control Plus Concentrate	HSR100957	Corrosive to metals Category 1, Acute inhalation toxicity Category 2, Skin corrosion Category 1C, Serious eye damage Category 1, Respiratory sensitisation Category 1, Skin sensitisation Category 1, Carcinogenicity Category 2, Specific target organ toxicity (repeated exposure) Category 1, Hazardous to the aquatic environment acute Category 1, Hazardous to the aquatic environment chronic Category 1
Blue Control Plus RTU	HSR100958	Skin corrosion Category 1C, Serious eye damage Category 1, Respiratory sensitisation Category 1, Skin sensitisation Category 1, Carcinogenicity Category 2, Hazardous to the aquatic environment acute Category 1, Hazardous to the aquatic environment chronic Category 2
Defendo 720SC	HSR101015	Acute inhalation toxicity Category 2, Serious eye damage Category 1, Skin sensitisation Category 1, Carcinogenicity Category 2, Specific target organ toxicity (repeated exposure) Category 1, Hazardous to soil organisms, Hazardous to terrestrial vertebrates, Hazardous to the aquatic environment acute Category 1, Hazardous to the aquatic environment chronic Category 1