



Charting a new course

Navigating future crop protection bans and
mitigating its impact
(Acknowledgements: CropLife)

villa 

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Global Drivers of Regulatory environment



CMR Properties: CMR properties include Carcinogenic, Mutagenic, and Reprotoxic, which have significant potential to harm human health and the environment



Factors influencing the ban include human health risks, environmental impact, precautionary principle, irreversible and long-term effects, and public and worker safety

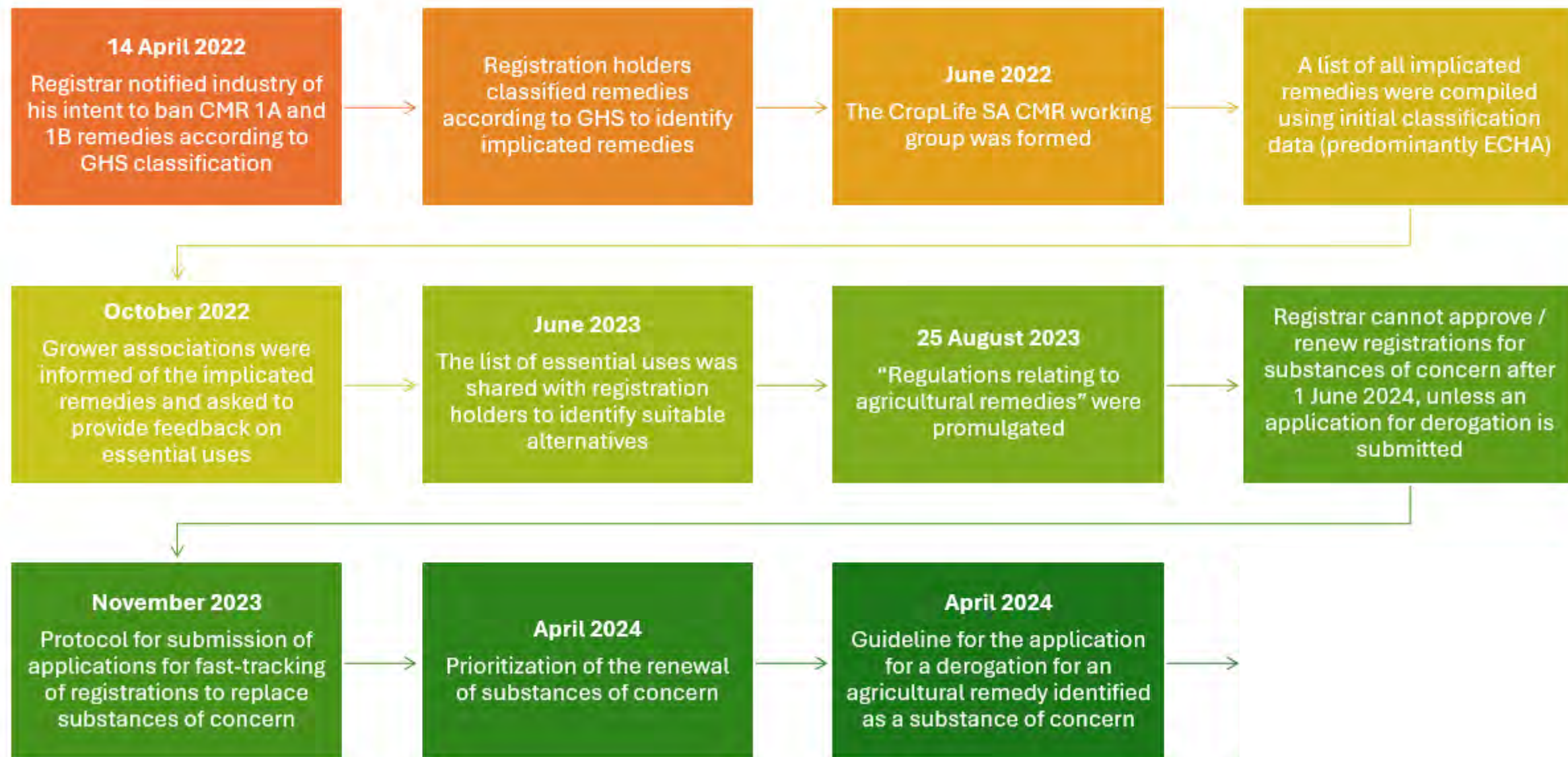


Risk-Based Approach: Challenges of a risk-based approach include complexity of risk assessment, exposure uncertainty, limitations in risk management, cumulative and synergistic effects, and ethical considerations



Regulatory bodies aim to prioritize public health and environmental safety by banning pesticides with CMR properties and adhering to a more precautionary and ethical approach to chemical management

Sequence of events leading up to today



What is GHS Classification and Labelling requirements

Once a product has been classified, the label must reflect the relevant hazards and associated precautions to be taken according to a template.



Colour band replaced by



GHS pictograms, signal words and statements added.

SUBSTANCES OF CONCERN

Notwithstanding regulation 8(1)(d), in exceptional circumstances, where there are no other agricultural remedy, the Registrar may grant registration of an implicated agricultural remedy when the following conditions are met:

The risk to humans, animals or the environment from exposure to the active substance in an agricultural remedy, under realistic worst-case conditions of use, is negligible.

There is evidence that the active substance is essential to prevent or control a serious danger to human health, animal health or the environment.

Not approving the active substance would have a disproportionate negative impact on society when compared with the risk to human health, animal health or the environment arising from the use of the substance

In this case, approval of an agricultural remedy may be granted for a **specified period**, and for **restricted uses** following publication of the risk assessment report for public comment by the applicant.

Companies can mitigate the expected restrictions or extension of CMRs

Scenario 1

- No risk assessment, no derogation only renewal until May 2025 to **phase-out stock**

Scenario 2

- Risk assessment followed by request for **derogation** for restricted use:

Scenario 3

- Product is deemed a substance of concern due to co-formulants and can be rectified through **minor formulation amendment**:
- Submission for amendments must have been done by May 2025

What is a derogation?

- **An exemption from or relaxation of a law.**
- The Department of Agriculture has allowed for applicants to apply for derogation of the active ingredients listed as CMR's, but with the following conditions 
- "The intention of a registration holder to defend a molecule for a specific use, does not imply that it will remain on the market. The risk assessment, public participation process and derogation application should all have favourable outcomes for the remedy to remain on the market." *(CropLife SA, 10 May 2023)*

- ✓ No alternative products available.
- ✓ Only claims identified as 'essential uses' will be considered.
- ✓ Risk assessment required to mitigate the risks.
- ✓ Sent out for public comment.
- ✓ Submitted to be considered for derogation, but if approved will only be on specific uses and for a certain amount of time.



**Which
active
ingredients
are
affected?**

AGRICULTURAL REMEDIES CLASSIFIED AS CMR 1A AND 1B IN SOUTH AFRICA

Formal list of active ingredients classified as CMR 1A or 1B, as composed by DALRRD, was circulated to industry on 17 October 2023.

There were some discrepancies (the inclusion of quizalofop-p-terfuryl and thiodicarb, and the omission of difethialone).

Classifications may be different depending on the data used (source of data i.e. ECHA)



agriculture, land reform
& rural development

Department:
Agriculture, Land Reform and Rural Development
REPUBLIC OF SOUTH AFRICA

LIST OF ACTIVE INGREDIENTS PESTICIDE FORMULATIONS THAT MEET THE CRITERIA OF CARCINOGENICITY, MUTAGENICITY AND REPRODUCTIVE (CMR) TOXICITY CATEGORIES 1A OR 1B OF THE GLOBALLY HARMONIZED SYSTEM (GHS) OF CLASSIFICATION AND LABELLING OF CHEMICALS.

ACTIVE INGREDIENT	TYPE	INTENDED USE
Benomyl	Fungicide	Agriculture
Brodifacoum	Rodenticide	Rodenticide
Calcium arsenate	Plant Growth Regulators	Agriculture
Carbendazim	Fungicide	Agriculture
Coumatetralyl	Rodenticide	Rodenticide
Cyproconazole	Fungicide	Agriculture
Difenacoum	Rodenticide	Rodenticide
Dimethomorph	Fungicide	Agriculture
Epoxiconazole	Fungicide	Agriculture
Ethylene dibromide	Insecticide	Agriculture
Fluorochloridone	Herbicide	Agriculture
Flusilazole	Fungicide	Agriculture
Glufosinate ammonium	Herbicide	Agriculture
Halosulfuron-methyl	Herbicide	Agriculture
Ipconazole	Fungicide	Agriculture
Linuron	Herbicide	Agriculture
Mancozeb	Fungicide	Agriculture
Mineral oil (hydrotreated light paraffinic)	Insecticide, Adjuvant	Agriculture
Propiconazole	Fungicide	Agriculture
Quizalofop-P-tefuryl	Herbicide	Agriculture
Spirodiclofen	Insecticide	Agriculture
Thiacloprid	Insecticide	Agriculture
Thiodicarb	Insecticide	Agriculture
Topramezone	Herbicide	Agriculture
Triadimenol	Fungicide	Agriculture
Boric Acid /Borax	Fungicide	Wood preservative
Chromium trioxide	Fungicide	Wood preservative
Arsenic acid	Fungicide	Wood preservative

Active Ingredients Affected



Fungicides

Mancozeb

Benomyl

Propiconazole

Flusilazole

Carbendazim

Ipconazole

Epoxiconazole

Triadimenol

Cyproconazole

Dimethomorph



Herbicides

Glufosinate ammonium

Halosulfuron-methyl

Flurochloridone

Linuron

Quizalofop-P-terfuryl

Topramezone



Insecticides

Thiacloprid

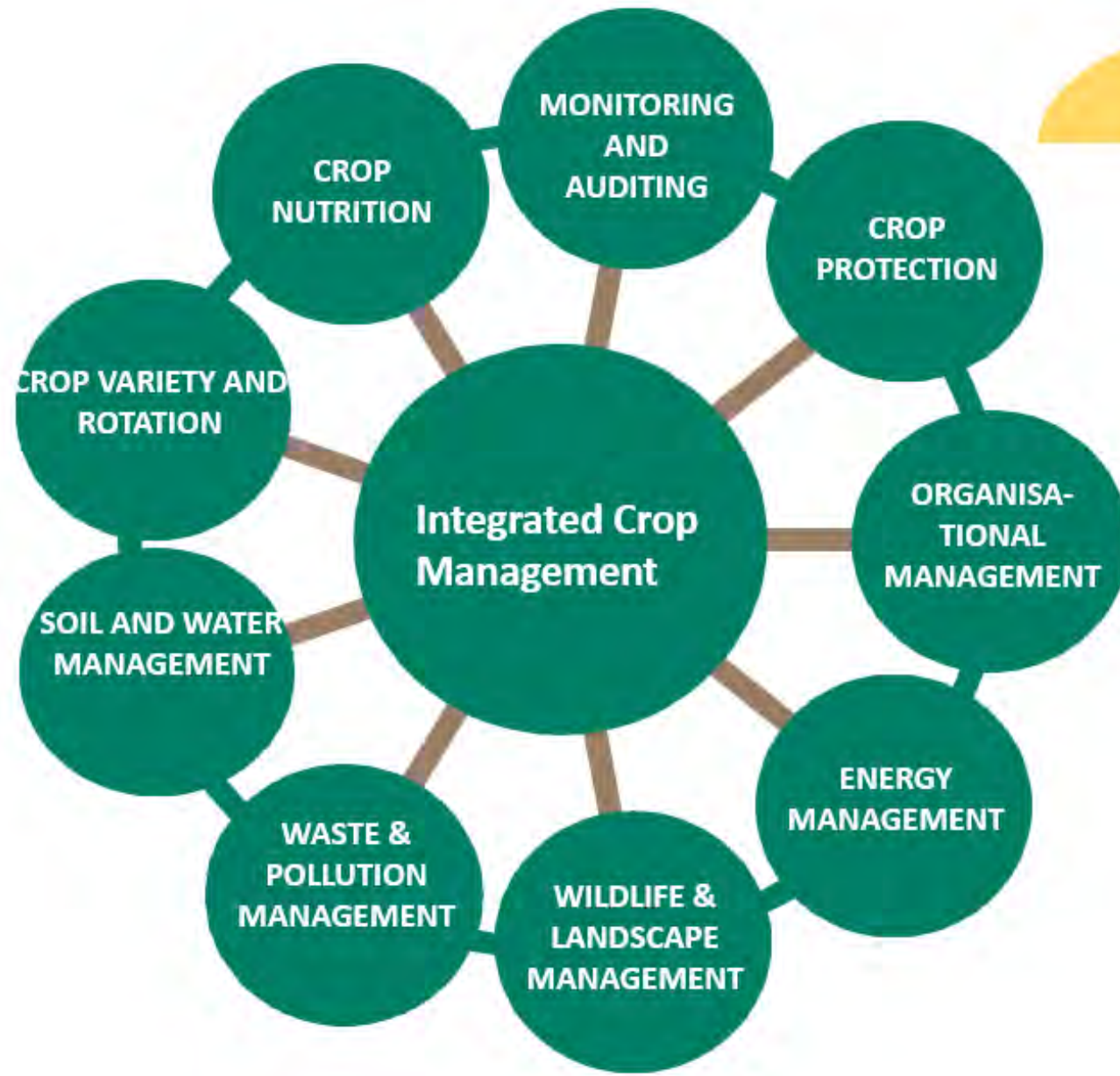
Spirodiclofen

EDB



Where to from here?

Principles of Good Agricultural Practises



Integrated Pest Management



Source: ECPA

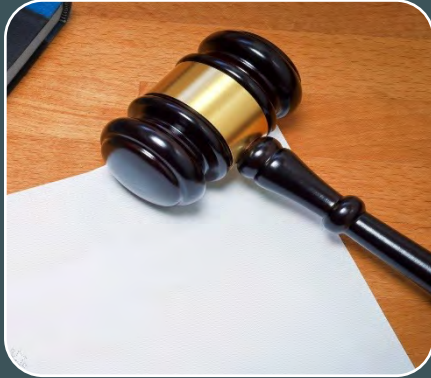
Other ways to mitigate impact?

"If products are used precisely according to label instructions with the accompanying of personal protective clothing, then the harm to humans is mitigated."

Elriza Theron
Advocacy and Communications Manager –
CropLife SA



How to mitigate the impact



Derogation
OR
Reclassification



Use
registered
alternatives



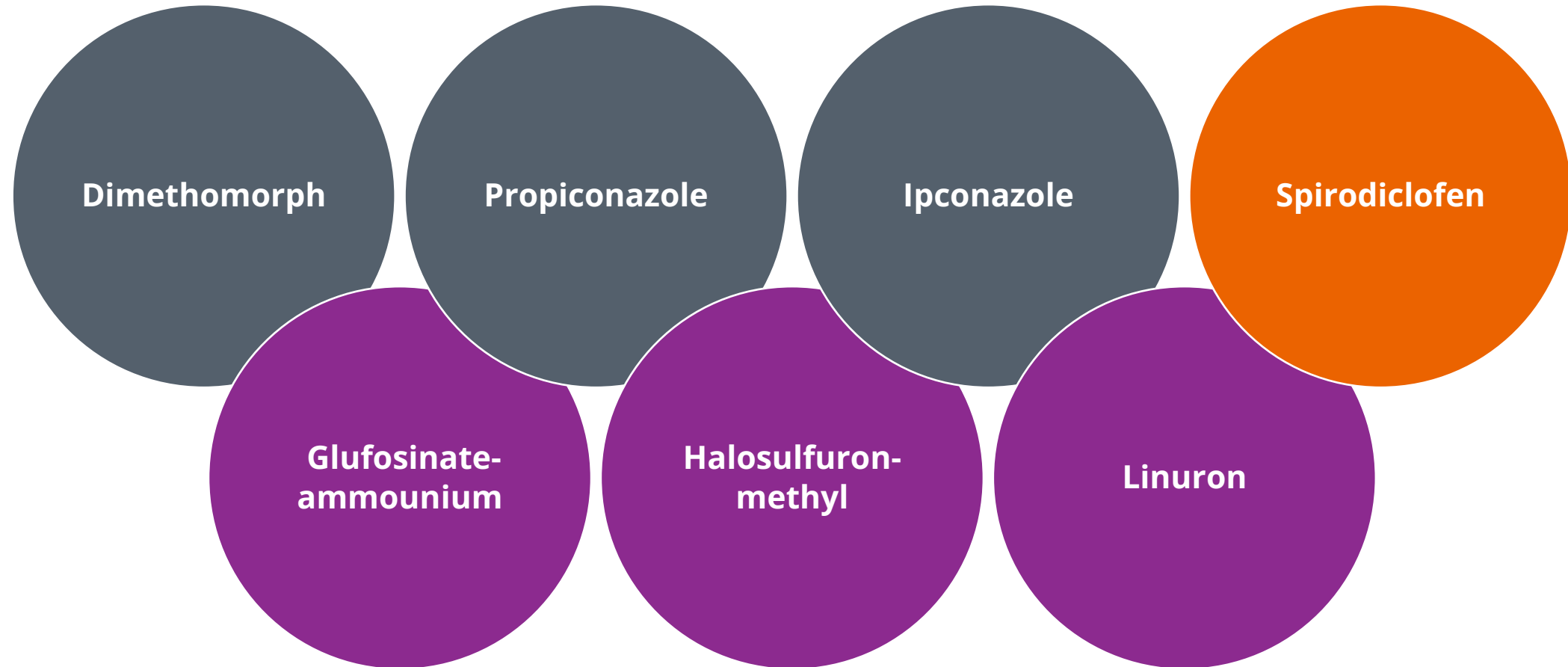
Formulation
Change



Develop
New
Alternatives

Derogation Groups Formed

- Fungicides
- Insecticides
- Herbicides



Reclassifications

● Fungicides

● Herbicides

Mancozeb

Epoxiconazole

Dimethomorph

Propiconazole

Cyproconazole

Quizalofop-p-
tefuryl

Formulation Change

- If an inert ingredient (solvent, emulsifier, surfactant, etc.) is classified as a CMR, then the formulation of a product can be changed to replace the CMR inert with a safer alternative.

Minor Formulation Change

- Inert makes up **less than 10%** of the total formulation.
- Application includes a new GHS classification of the new formulation.

Major Formulation Change

- Inert makes up **more than 10%** of the total formulation.
- Application includes a new storage stability study, physical and chemical properties report, efficacy trial data, phytotoxicity data and residue data.

Alternatives? (Consider also repositioning)

Dithianon, Captan, Copper Oxychloride, Copper Hydroxide, Fluazinam, Folpet

Bupirimate, Cyprodinil, Kresoxim-methyl, Myclobutanil, Penconazole, Difenoconazole, Pyrimethanil, Pyrimethanil/Trifloxy, Boscalid/Dithianon, Fluxapyroxad

Flumioxazin, Glyphosate

Paraquat, Carfentrazone-ethyl, Glufosinate-P, Saflufenacil

Acephate, Acetamiprid, Alpha-cypermethrin, Carbaryl, Cypermethrin, Emamectin Benzoate, Indoxacarb, Lambda-cyhalothrin, Methoxyfenozide, Novaluron, Chlorantraniliprole

Develop New Alternatives



Explore new
end uses for
existing Als

Develop Als
not
registered in
SA, but in
other
countries

Biologicals
used in IPM
programmes

Precision Farming

- Weather data
- Improved crop health
- Application technology improvements

Thank you



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