Recent and Future Anticoagulant Rodenticide Restrictions

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DPR's Evaluation of Pesticides

- Pesticide products are subject to scientific evaluation prior to registration, and continuous evaluation after registration
- DPR's evaluation programs are as follows:
 - Pesticide Evaluation Branch (PEB)
 - Chemistry Ecotoxicology Microbiology Pest and Disease Prevention Plant Physiology
 - Environmental Monitoring (EM)
 - Air Protection Program Ground Water Protection Program Surface Water Protection
 - Human Health Assessment (HHA)
 - Exposure Toxicology
 - Worker Health and Safety (WHS)
 - Enforcement (in certain cases)

Anticoagulant Rodenticides

Mode of Action - interfere with blood coagulation resulting in a fatal hemorrhaging

Classified as either

-First-generation (FGAR) - Chlorophacinone, Diphacinone, Warfarin -Second-generation (SGAR) - Brodifacoum, Bromadiolone, Difenacoum, Difethialone

Time to death can be several days

Recent Regulatory History for Anticoagulant Rodenticides

- 2019 Reevaluation of Second Generation Anticoagulant Rodenticides (SGARs) commences
- 2021- Food and Agricultural Code (FAC) section 12978.7 revised to prohibit most uses of SGARs
- > 2023 DPR proposes Reevaluation of Diphacinone
- Ongoing Development of Mitigation Strategies for Anticoagulant Rodenticides

SGAR Reevaluation

Scientific Basis for Reevaluation:

2018, Investigation of Anticoagulant Rodenticide Data report

Findings:

-High SGAR exposure rates in wildlife, and not decreasing

-Statistically significant association between SGAR exposure and sublethal impacts

-No scientific basis for placing FGARs into reevaluation

2019, DPR placed products containing the SGARs brodifacoum, bromadiolone, difenacoum, and difethialone into reevaluation

Food and Agricultural Code (FAC) section 12978.7 revised to prohibit most uses of SGARs Assembly Bill (AB) 1788 (Chapter 250, Statues of 2020)

-Revised Food and Agricultural Code (FAC) section 12978.7 to prohibit most uses of SGARs, with some exceptions

-Prohibitions went into effect January 2021

-Prohibitions remain in effect until DPR completes its ongoing SGAR reevaluation and adopts any necessary restrictions on use.

-The statute does not limit the use of any FGARs

AB 1298 (Bloom, Chapter 479, Statutes of 2021) provided clarification of AB 1788

Food and Agricultural Code (FAC) section 12978.7 prohibits most uses of SGARs, with some exceptions

Prohibited Uses

- Residential or home uses
- Most industrial and institutional uses
 - Ex: use in and around restaurants, grocery stores, airports, offices, construction sites, transport vehicles, ports and terminal buildings, schools, shopping malls, sewers, and sewage treatment plants
- Most non-production agricultural uses
 - Ex: use around man-made structures at cemeteries, golf courses, and parks

Allowed Uses (Exemptions)

- At medical waste generators
- At FDA-registered and inspected facilities involved in commercial manufacture, preparation, compounding, etc., of drugs
- On agricultural sites producing any horticultural, viticultural, aquacultural, forestry, dairy, livestock, poultry, bee, or farm product;
- Use by Persons who are certified Vector Control Technicians employed by a vector control district or other government agency
- Use by Government agency employees protecting water supply infrastructure and facilities

- At medical waste generators
- A warehouse used to store foods for human or animal consumption;
- A food manufacturing or processing plant
- A factory, brewery, or winery
- On-farm water storage and conveyance
- On-farm storage housing rightsof-way and other transportation infrastructure materials

Diphacinone Reevaluation

Scientific Basis for Reevaluation:

Percentage of non-target wildlife with diphacinone exposure has increased in recent years

Diphacinone use has increased

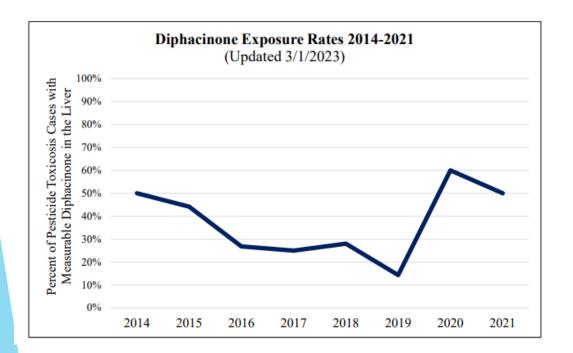
Diphacinone sales has increased

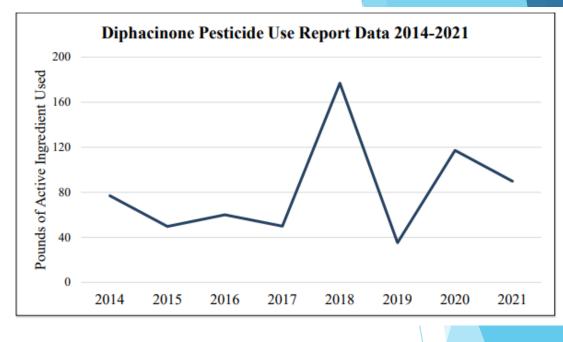
May 19, 2023, DPR proposed to begin a reevaluation of pesticide products containing the active ingredient diphacinone and its salt.

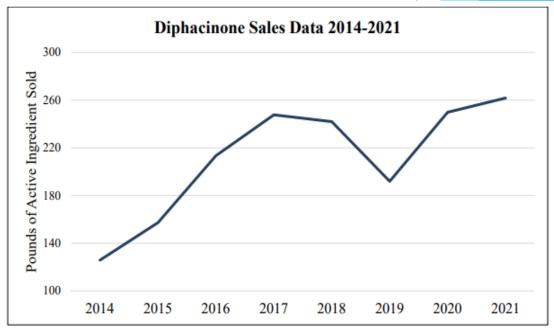
-Public comment period closed July 19, 2023

Wildlife exposure rates, use, and sales data supporting diphacinone reevalaution

*Reproduced from Notice of Proposed Decision to Begin Reevaluation of Diphacinone and Public Report PDF







Mitigation Considerations

Draft Goals

-Reduce amount of ARs released into environment/food web

-Reduce frequency at which non-targets are exposed

-Reduce non-target toxicosis cases

-Increase awareness and education

-Promote IPM/wholistic approach to rodent management

Potential Mitigation Strategies

-Restrict use sites - working with stakeholders to identify sites where use is most critical

-Reduce application duration at permitted sites

-Education requirement

-IPM-plan requirement

Next Steps

- Reviewing and will respond to comments on the proposal to place diphacinone into reevaluation
- Incorporating input from stakeholders into the draft mitigation strategies for SGARs
- Develop final draft mitigation and rulemaking if needed for SGARs



Thank you!