June 19, 2022



To: BC Ministry of Environment and Climate Change Strategy

Re: Proposed changes to BC's Integrated Pest Management Regulations (Responses to <u>Intentions Paper</u> published May 4th 2022).

On behalf of Rodenticide Free BC, we write to express our dissatisfaction with the Ministry of Environment and Climate Change Strategy's ("the Ministry") proposed changes to the Integrated Pest Management Regulation, and to reiterate our concerns regarding the sale and use of rodenticide products in British Columbia and their impact on our wildlife, family pets, and human health.

Formally <u>recognizing</u> that an unreasonable adverse effect has resulted from the use of pesticides, the Ministry introduced a new Rodenticide Action Plan including an 18-month moratorium on the sale and use of second-generation rodenticides (SGARs) accompanied by a scientific review of the root causes of secondary poisoning ("Science Review"). Hopeful that the Ministry would take more aggressive action, <u>Rodenticide Free BC</u> and its partners (collectively "RFBC"), numerous citizen advocates, as well as pest control industry professionals have:

- Participated in numerous stakeholder meetings;
- Presented decades of peer-reviewed scientific research demonstrating adverse, ecosystemwide impacts of both first and second-generation rodenticide use;
- Organized a <u>Petition</u> signed by 4,841 British Columbians demanding that the Province ban all rodenticide products;
- <u>Demonstrated</u> catastrophic failure within government agencies responsible for monitoring environmental health, wildlife protection, and the use of hazardous products; and
- Highlighted numerous non-compliance issues.

In addition to these efforts, RFBC has provided Ministry staff with extensive <u>policy memoranda</u> including a <u>detailed critique</u> of the Ministry's Rodenticide Action Plan outlining the Provincial government's obligation to eliminate the unnecessary risks posed by rodenticide products, <u>specific</u> <u>policy recommendations</u>, and suggested draft legislation that would accomplish a true rodenticide ban with relative ease.

Despite this pointed feedback, ongoing engagement, and peer reviewed science, the Ministry has proposed to make its current prohibition permanent with added exemptions and policies that will further distort the efficacy of these regulations. Limited in scope to include only three rodenticide products while allowing broad exemptions and posing challenging enforcement logistics, the proposal does little to prevent primary and secondary poisoning of BC's wildlife. As such, the proposed changes fall short of the Ministry's obligations pursuant to the Integrated Pest Management Act to protect the environment from unreasonable adverse effects caused by rodenticides.

The Ministry intends to restrict only Second Generation Anticoagulant Rodenticides ("SGAR's"), that is, only products containing the active ingredients brodifacoum, bromadiolone, and/or difethialone: just 3 of 27 active [toxic] ingredients found in rodenticides <u>currently registered in Canada</u>.



While products classified as rodenticides vary in the way they aim to kill unwanted pests (e.g., preventing normal blood clotting, causing internal hemorrhaging, or disturbing nervous system functions) ALL of these active ingredients <u>pose serious threats</u> to animals, including <u>family pets</u> and <u>wildlife species</u>, the <u>environment</u>, and <u>human health</u>, while at the same time <u>failing to control</u> rodent populations<u>over the long-term</u>. Decades of research has demonstrated that even at sub-lethal levels, rodenticide products are known to reduce the biological fitness of wildlife (See <u>California</u> <u>Department of Pesticide Regulation</u>, pg. 31).

Restricting only three rodenticides ignores serious risks posed by other products commonly used in BC, and leaves opportunity for the pest management industry to develop new products that fall outside of the proposed restrictions.

The exemptions to the proposed ban are unnecessary and overly broad.

Clearing a resident rodent population simply <u>makes space for new groups to move in</u> as <u>poisoned</u> <u>rats reproduce faster</u> to compensate for thinning numbers. Rodenticide also eliminates natural rodent control by poisoning raptors and other predators. For example, <u>a single barn owl consumes</u> an average of 1,000 rodents per year.

Allowing rodenticide use across broad categories will negate the Ministry's purported "aim to minimize the unnecessary use of SGARs to reduce accidental exposure to wildlife" (<u>Rodenticides</u> <u>Intentions Paper</u>, pg.1). Risks of rodents impacting infrastructure across these applications can and should be addressed in all cases using preventative measures and rodenticide-free alternatives ultimately leading to more permanent, cost-effective solutions in the long-term.

The Ministry's proposal to exclude "biodiversity protection programs," including broadly defined, government-led "environmental protection activities" is alarming.

Also referred to as "island conservation projects" - the programs the Ministry proposes to exempt from its rodenticide prohibition typically involve smothering sensitive island ecosystems with rodenticides in a multitude of bait boxes, or by aerial broadcast application (helicopter) for the stated purpose of "conservation" or "protection" of seabird colonies. The efficacy and consequences of such projects are difficult to predict and subject to ongoing scientific debate, but mass animal casualties in the aftermath of these projects have been reported around the globe (Video: Brodifacoum drops on Rangitoto and Motutapu Islands, 2009).

In 2009, an eradication project on Alaska's Rat Island led to the reported deaths of more than 420 birds, including 46 bald eagles (<u>Ornithological Council Report, 2009</u>). During the Alaska Rat Island project, Island Conservation—the same organization working in <u>partnership</u> with Parks Canada on the Haida Gwaii Archipelago— dropped an amount of poison that was "in excess of that recommended by an advisory panel and probably above the legal limit approved by the US Environmental Protection Agency (EPA)," according to a <u>2011 Nature article</u>. Impacts on non-target species were similarly underestimated on Lehua Island, Hawaii, where invasive rodents were <u>not</u> <u>eradicated</u> after an initial aerial application necessitating "mop-up" efforts of additional poison to effectively complete the project, resulting in the death of over 400 birds. Despite the unintended deaths, both projects were declared to be "success" stories as rodent eradication and <u>rebounded</u> <u>population</u> of the targeted island birds was accomplished.



Proponents of island eradication projects that rely on rodenticides as a means of species management refer to the consequences of toxicants as "not significant," since mass mortality will not, in most cases, destroy these species' global and/or regional population. We respectfully disagree with this analysis and implore the Ministry to remove "Government-Approved Environmental Protection Activities" from its list of essential services (#9).

The use of rodenticides poses significant, ecosystem-broad risks as well as extreme and unnecessary pain and suffering no matter where they are applied. The notion that the use of these toxic compounds should be permitted for use on ecologically sensitive offshore islands and/or as a part of "official conservation programs" managed by government personnel is illogical and should be alarming to the public. In addition to being dangerous and inhumane, the method is outdated and has proven to be ineffective. While rodenticide application may have at one time been the go-to method of removing invasive species from an island, it is no longer the only option and is no longer acceptable. Considering their standard of "success" permits/accepts the death of hundreds of individuals within multiple species targeted for protection, "biodiversity protection programs" should be subject to more regulatory parameters and scrutiny, not less.

Complexities of the proposed ban further frustrate <u>compliance issues</u> and enforcement impossibilities.

Expecting a "high level of due diligence" by IPM practitioners (persons licensed by the ministry) "when considering SGARs use" is ambitious at best. In addition to demonstrating prevention efforts and collaborating with ministry inspectors to verify IPM adoption, i.e., "a science-based decision-making system that focuses on strategies to minimize unnecessary pesticide use," (<u>Rodenticides</u> <u>Intentions Paper</u>, pg.3) users will be expected to document prevention measures, keep daily records, and develop and follow an IPM plan for each location they are using SGARs [to be provided to ministry inspectors upon request].

Rodenticides (both "first" and "second generation") cause death<u>over a period of days or weeks</u> during which the poisoned rodent can disperse into the surrounding environment or die trapped within walls or other structures, where they are not conveniently collected. Additionally, rodents are known to have hoarding tendencies and will commonly collect food to store back at their nests, including rodenticide baits (Science Review, pg. 9). Moreover, the behavior of rodents suffering from rodenticide poisoning<u>is known to make them more available</u> for consumption by predators.

Asserting that "timely clean up of waste bait and dead rodents" is possible calls to question the ministry's understanding of its own science review, and the [lack of] seriousness with which it is approaching an issue known to be affecting so many of BC's treasured species.

The Ministry's proposed changes are rooted in a flawed assumption that rodenticides are necessary and/or preferable in certain circumstances despite widely recognized science demonstrating that they are ineffective, dangerous, and inhumane.

The Ministry has a duty of care to protect, manage, and conserve BC's water, land, air, and living resources. Continuing to allow any use of rodenticides is contrary to this obligation. The only sure way to mitigate risk to humans, animals, and the environment from the toxic effect of rodenticides is to discontinue their use. This could easily be achieved by establishing a new class of prohibited



pesticides to the Integrated Pest Management Regulation prohibiting all rodenticide products known to present unreasonable risks to BC's wildlife.

Since the rodenticide action plan was introduced, wildlife impacts have only continued to <u>increase</u>; a predictable result of policies that are limited in scope and poorly enforced even <u>around the Ministry's</u> <u>own facilities (November, 2021)</u>.

Conclusion

The Environment Ministry has a duty of care to protect, manage, and conserve BC's water, land, air, and living resources. Continuing to allow any use of rodenticides is contrary to this obligation. The only sure way to mitigate risk to humans, animals, and the environment from the toxic effect of rodenticides is to discontinue their use. This could easily be achieved by establishing a new class of prohibited pesticides in the Integrated Pest Management Regulation and adding 7 identified rodenticide poisons to this list.

As a backlash to impending restrictions, the conventional pest control industry is advocating that interior rodenticide use continue to be allowed, erroneously asserting that there is no harm in that, when in fact, domestic pets and children would clearly be in danger of exposure from rodenticides indoors and dying rodents can easily escape to die outside to be eaten by prey. Effective rodent control is most successful and permanent in all cases when rodenticides are **not** utilized, as companies such as Humane Solutions have proven.

Nothing short of a complete and permanent ban on the use of rodenticides by the government will stop the tragic deaths of raptors and protect our wildlife and environment from the long-term effects of these poisons.

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