SUMMARY OF CONSULTATION COMMENTS ON THE 2022 RODENTICIDES INTENTIONS PAPER

Prepared for:

Ministry of Environment and Climate Change Strategy Integrated Pest Management Program

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Prepared by:

C. Rankin & Associates

Whistler, B.C.

Summary of Consultation Comments on the 2022 Rodenticides Intentions Paper

Contents

Acronyms and Abbreviations	iii
Background to the Consultation Process	1
Ministry Intentions Paper and consultation process	1
Purpose and format of the Summary of Consultation Comments document	1
Overview of respondents	2
Respondent Comments	4
Overview of comments	4
Discussion Question comments	5
Question 1: Feedback on the proposed Essential Services list	5
Question 2: Implementing an IPM program focused on prevention and alternative control tools to rodenticides when managing rodents	8
Question 3: Feedback on proposed requirements for a site-specific IPM plan where SGARs are used	10
Question 4: Feedback on proposed short-term baiting requirements	11
Question 5: Feedback on critical wildlife areas d efined in the Intentions Paper	12
Question 6: Effect of proposed requirements on critical operations for Essential Services	13
Question 7: Feedback on how SGARs are proposed to be regulated for agricultural operators	14
Question 8: Feedback on the proposed sales restrictions and vendor requirements for the access and purchase of SGARs	16
Question 9: Feedback on any designated groups or sensitive populations that may be disproportionately impacted by the proposed requirements for SGARs	17
Question 10: Readiness or capability to meet requirements by January 2023	18
Question 11: Feedback on the proposed housekeeping amendments	18
Question 12: Additional comments	19

Acronyms and Abbreviations

Acronym	Term
AEM	Agricultural Environmental Management (Code of Practice)
B.C.	British Columbia
EHO	Environmental Health Officer
FGARs	First-generation anticoagulant rodenticides
IPM	Integrated Pest Management
IPMA	Integrated Pest Management Act
IPMR	Integrated Pest Management Regulation
PAC	Pesticide Applicator Certificate (or Certification)
PMRA	Pest Management Regulatory Authority (Health Canada)
PCO	Pest Control Operators
RAPP	Report All Poachers and Polluters
SGARs	Second-generation anticoagulant rodenticides

Background to the Consultation Process

The Ministry of Environment and Climate Change Strategy (the ministry) is reviewing the <u>Integrated Pest Management Regulation (IPMR)</u> to update the second-generation anticoagulant rodenticides (SGARs) requirements. The proposed changes will address risks and reduce rodenticide wildlife exposure by minimizing the unnecessary use of SGARs.

Ministry Intentions Paper and consultation process

The IPMR Rodenticide Intentions Paper (PDF, 1MB) was posted in May 2022. The Intentions Paper:

- Provided background information regarding the Integrated Pest Management (IPM) Regulation and use of second-generation anti-coagulant rodenticides (SGARs) in B.C.;
- Set out reasons for the proposed changes and associated key policy concepts;
- The proposed changes to the IPM regulation; and
- Provided instructions how to provide comments on the ministry's intentions.

The ministry hosted a total of five information webinars between May 10th and May 17th, 2022 for the general public (two sessions totalling 29 registrants and 19 attendees), pesticide vendors (six registrants and attendees), agricultural operators (13 registrants and ten attendees) and Indigenous Peoples (17 registrants and seven attendees). The webinars included a presentation by ministry staff, followed by time for questions from participants.

Notice of posting of the Intentions Paper and Comment Form was circulated through: email notification to Treaty Nations, non-treaty Nations, and some provincial Indigenous referral portals; the IPM news page and email notification to the IPM email list (which includes licensees, stakeholders, industry, other government and NGOs); B.C. government news release; physical mailouts; "The Compass" (Union of BC Municipalities electronic newsletter); and AGRIServiceBC E-Bulletin (Ministry of Agriculture and Food electronic newsletter).

The ministry requested submissions and comments on the ministry's intentions by June 19, 2022.

Purpose and format of the Summary of Consultation Comments document

This document has been prepared by C. Rankin & Associates, contracted by the ministry to compile and summarize comment on the proposed intentions. The summary is arranged by question topic as presented in the Intentions Paper. Emailed submissions received by July 5th, 2022 have been included in this document.

The complete set of comments and submissions received through the consultation process has been compiled and passed to the ministry for detailed review and consideration. All comments and references submitted through this process, through independent submissions and through direct consultation with stakeholders, will be reviewed and carefully considered by the ministry.

Overview of respondents

A total of 1,483 responses were received using the electronic comment form (Figure 1). More than 1,300 of the respondents self-identified as "private individuals" (Figure 1). Most of the respondents were from the south or west coast (Figure 2). Of the 102 email submissions (Figure 3), 28 were received from associations, businesses, organizations, local or provincial government and Frist Nations.

Two responding organizations also included links to signed petitions related to the consultation: (1) Rodenticide Free BC noted "a petition signed by 4,841 British Columbians demanding that the Province ban all rodenticide products"; and (2) the Vancouver Humane Society submission included reference to "2582 B.C. residents [who] signed on to a statement supporting a comprehensive ban on all rodenticides and a significant decrease in exemptions, which have been shown to threaten wildlife – the signatories include B.C.-based residents only and any duplicate signatures have been removed to ensure an accurate total."

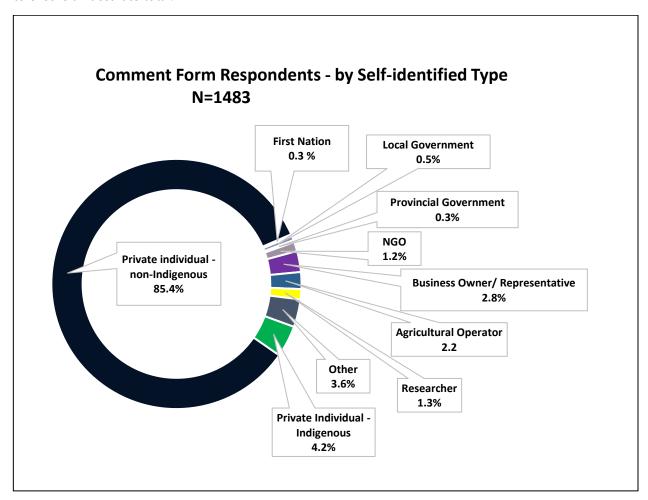


Figure 1 Comment Form Respondents by Self-identified Type

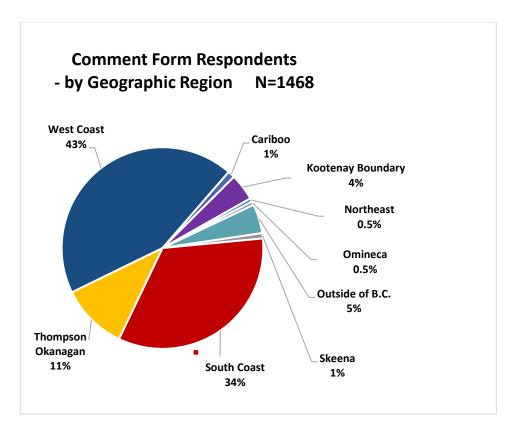


Figure 2 Comment Form Respondents by Geographic Region

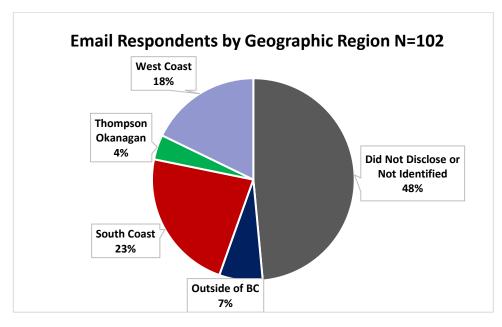


Figure 3 Email Respondents by Geographic Region

Respondent Comments

Overview of comments

Almost all of the submissions received from private individuals expressed support for "a total ban on use of rodenticides in B.C." or "restriction [on their use] to the greatest extent possible." Examples of related comments from individual respondents included:

- "Rodenticides are not a long-term solution, as they can harm and kill natural predators of rodents and cause ecosystem imbalance. Many more effective alternatives and prevention strategies exist";
- "Poisons should be banned because other animals are effected and also perish";
- "Compliance with and enforcement of the partial ban have been inconsistent; there is inadequate evidence that the government has capacity to enforce proposed restrictions or Integrated Pest Management requirements";
- "I applaud the ministry and the government for taking steps to address the problems with SGAR usage in rodent control. I am, however, still concerned that the measures don't go far enough";
- "Many dangerous poisons would still be allowed under the new regulations, including first-generation anticoagulant rodenticides and neurotoxins... bromethalin, for example, is a neurotoxin with no specific antidote";
- "The need to document purchase history and disposal process, plus bait box labelling are very important... [as this] can impact worker safety, food safety and wildlife habitat"; and
- "SGARs should not be permitted for use on residential properties. Better controls should be in place for other baits as more of these are now being used (unsuccessfully) without other controls in place."

Almost all of the Indigenous individual respondents expressed support for further restrictions on the use of rodenticides. Examples of comments in support of restrictions from Indigenous respondents included: "please consider [banning] all rodenticides"; "restriction of rodenticides is vital for ecosystem recovery"; "short-term baiting and follow-up of use is important"; and "we have a rat issue because we are a coastal port... we also had a very large horned owl population which have now dwindled due to the SGAR usage ... I would like to see live traps, collection and removal... just because we don't like them does not mean we should be using chemicals to kill them." In contrast, one Indigenous respondent, for example, commented that "small qualities consistent with home use should not be regulated."

Submissions from provincial and regional humane and environmental organizations commonly noted or reiterated "concerns regarding the sale and safe use of rodenticide products in B.C. and their impact on our wildlife, family pets and human health." Submissions from these organizations included recommendations to extend the scope of the proposed restrictions on use of rodenticides (and/or prohibiting their use in entirety), as well as narrowing the list of essential services that may be allowed to use rodenticides. For example, commenting that "the list should be further restricted, especially for any facilities with food attractants"; and "the [proposed list] excludes entities responsible for the majority of private land management across B.C., including extra-urban and wildlife preserve adjacent land where key biological systems are located."

Completed response forms and submissions from sector-specific organizations or companies (such as pest management operators and trade associations, business owners and agricultural operators) highlighted the role of rodenticides in rodent control as part of IPM. Examples of comments from these groups included: "rodenticides are necessary because of the vital need to manage rodent infestations due to the bacteria, viruses and other disease-causing pathogens that they can transmit to humans"; and "for agricultural producers, SGARs are an important tool in the management of rodents... B.C. farmers and ranchers use SGARs in a limited, careful and responsible manner."

Submissions from First Nations noted that "self-governing Treaty Nations... have jurisdiction over emergency measures and environmental protection on Treaty lands... [and] should retain the same flexibility to use SGARs if necessary as is provided to other governments." As well, the ministry "is encouraged to fully understand the services First Nations offer to ensure... financial and time burdens on essential services departments [are recognized and] will be reduced." One submission from a First Nation, for example, noted that "we have reviewed the information provided with this referral... and support the decision – however, if any new information were to arise... that indicates there may impacts on [our Nation's] aboriginal rights, title or interests, we would expect to receive notice and have an opportunity to provide comments... furthermore, nothing in this letter is intended to affect the scope of, or the opportunity to exercise, any of [our] aboriginal rights, nor is it intended to accept any infringement of same."

Submissions from regional health authorities most frequently commented on use of SGARs in food premises and/or the list of essential services proposed by the ministry. Related comments included: "we... recommend that SGAR use be a last resort due to their acute toxicity, especially in food service establishments where there is a risk of cross-contamination with food products"; and "it would be preferred that we do not include [food premises, industrial camps and water supply systems] as essential services during the transition period... environmental Health Officers (EHOs) from local health authorities in B.C. inspect the above-mentioned regulated facilities for public health and advocate the use of an IPM program when dealing with pest issues."

Responses from local government expressed general support for the policy intentions set out in the Intentions Paper, as well as specific suggestions such as clarifying definitions, and examples of experience in municipal jurisdictions. Examples of comments from local government respondents regarding the essential services list included: "clarity is needed on if urban agriculture is [included]... e.g., community gardens, rooftop gardens"; "should those licensed not be brought to a higher standard... e.g., thorough inclusion in the *Professional Governance Act*?"; "as agricultural operations occur on agricultural land inhabited be many predators that fall victim to secondary poisoning it should be removed from the list of essential services"; and "residential property owners should still be able to purchase and use SGARs... successful completion of a simple online residential pesticide course could be implemented if there is an applicator worry by the Province." Several local government respondents noted that their municipality (e.g., Coquitlam, Port Moody, Kelowna) has "already restricted the use of all rodenticides" or has implemented a "rodenticide-free, results-focused pest management system."

Discussion Question Comments

Question 1: Feedback on the proposed Essential Services list

The ministry is proposing to restrict the use of second-generation anticoagulant rodenticides (SGARs) to Essential Services, including agricultural operations. Essential Services are listed in Appendix 1 of the Intentions Paper.

1.1 General comments

Many respondents commented that the proposed list of essential services "is too broad" and "should be further restricted." Respondents suggested, for example, that "the list of essential services [should be kept] as short as possible or... a phased approach [used] as alternative methods become more widely accepted," commenting that "if the list of essential services is too broad... the use of SGARs will remain widespread." A submission from a provincial association noted that "[our society] supports the proposal to restrict SGARs to only Essential Services and agricultural operations, however, [our society] advocates for a more restrictive Essential Services list... rodenticide use needs to be strongly communicated as a last resort measure and no longer a maintenance option, even for Essential Services."

Several respondents pointed to "a problem of rats" in their local region (e.g., Vancouver Island, the Okanagan) causing damage to, for example, "stored vehicles [in an RV storage compound]" or "residential waterlines." While some respondents commented that "traps are not working [to control the problem]" others suggested, for example, that "stopping the flow of rodents into a structure and accessing resources is your first line of defense, thereafter running a targeted poison-free trapping program... is absolutely possible and effective without the use of poison."

A number of respondents suggested that "pesticides and rodenticides should... only be used by a trained professional... and only... in situations where alternatives are demonstrably not viable" or that "professionals should be able to use SGARs in certain circumstances... because it is increasingly clear that first generation products and trapping is not efficient." A submission from a professional association recommended that "all professional control measures, when considered as part of an integrated pest management program, should be considered essential services." The submission posited that "for the same reasons that... pest control services were listed as essential services for the... Covid-19 epidemic... [the] services are essential to public health, [and] should qualify as public health pest control."

Examples of general comments and suggestions for the ministry included:

- "Can the exemption list be clarified? Can we be more specific?";
- "Generally, in support of the list and definitions";
- "The use of SGARs in interior areas of both exempt and non-exempt services needs to be allowed... interior uses do not pose risk to non-target species ... [and] have the highest potential for impact on public health";
- "The essential services list should be further refined and those services most prone to experiencing conflict with rodents should be supported with implementing preventative measures and rodenticide-free alternatives";
- "[Our organization] does not support additional restrictions to those imposed by the [Pest Management Regulatory Agency] PMRA as this erodes confidence in Canada's world-class regulatory system... exemptions are not required when users adhere to PMRA-approved product labels and well-established IPM practices";
- "Any areas with abundant attractants should have further restrictions";
- "Rodenticide use needs to be strongly communicated as a last resort measure and no longer a maintenance option, even for essential services"; and
- "Supportive... provided the use of SGARs or any rodenticides are part of an IPM framework, used as a last resort, and it is accompanied by effective monitoring and oversight by the Province."

1.2 Inclusion of agricultural operations in the list of essential services

Differing comments were received specific to agricultural operations and the essential services list. Many respondents advocated removing agricultural operations from the list, while some emphasized the importance of controlling losses to rodents and the need to have a full range of rodent control options available to agricultural operators. Examples of related comments included:

- "There has to be a method for agricultural practitioners [and others] to deal with rodents";
- "As agricultural operations occur on agricultural lands inhabited by many predators that fall victim to secondary poisoning, it should be removed from the list of essential services";
- "As a farm operator, there are other equally effective management strategies";
- "Rodents are a massive issue in our agricultural and retail business, costing us thousands of dollars each year in contaminated and damaged product, chewed irrigation lines... [and] no amount of control on our own property prevents the influx from neighbouring properties";
- "Clarity [is] needed on if urban agriculture is considered agriculture";

- "As written [agricultural operations] could apply to hobby farms and small-scale backyard farms [our organization] supports use in commercial farm operations only";
- "Agricultural operators should be monitored";
- "Allowing SGARs to be used... in an agricultural setting is not taking an ecosystem-based approach unless this agriculture is indoors"; and
- "I am a farmer who feeds grain and I have an ongoing rat problem. I have tried many methods of controlling them and I have been unable to eliminate them. Rodenticides are very expensive and I worry about them going into the avian population. However, we need to do something to control rats. If you want to control rodenticides, you need to provide appropriate alternatives at a reasonable price."

1.3 Suggested changes to the list of essential services

Submissions were received from several Health Authorities commenting on IPM and use of rodenticides in food preparation or food storage areas. One detailed submission, for example, noted that "given... the fact that there are effective alternative measures for pest management... it would be preferred that we do not include the following as essential services... (a) food premises as defined in the Food Premises Regulation under the *Public Health Act...* (b) industrial camps as defined in the Industrial Camps Regulation... e.g., camps for farm workers including temporary foreign workers and fruit pickers; [and] (c) water supply systems as defined in the *Drinking Water Protection Act.*"

In contrast and for example, a detailed submission from a pest control service commented that "the exemptions for essential services are a critically important aspect of the proposal as these market segments result in the greatest impact on the public when rodent infestations occur... the descriptions of the essential services [should be expanded and clarified]... food supply, for example, should include processing, production, preparation, storage & distribution, and retail display and sale... health and health services should... include both the production of health care products and the delivery of health care services."

Specific suggestions for the ministry to consider included:

- "As self-governing Treaty Nations, [our First Nations] have jurisdiction over emergency measures and environmental protection activities delivered by [our Nations] on Treaty lands... [we] therefore request that the Regulation be drafted such that the exceptions allow emergency programs and environmental protection activities delivered by [our Nations] on Treaty lands to use SGARs in the same way as similar programs and activities delivered by B.C. and local governments";
- "The exemption to public safety and communications buildings may be too generous these buildings should be tight and their operations should not be attracting many rodents";
- "Too many exemptions food supply, transportation are logical but others look [extraneous]";
- "An exemption for rail instead of increasing their responsibility to minimize and cleanup spilled grain/products along their lines and yards seems like a missed opportunity";
- The essential services list [should include] manufacturing and other industrial sites such as factories, saw mills, pulp mills, storage yards, as well as buildings and structures associated with these sites";
- "I oppose the use of SGARs in [sanitation waste and disposal sites] there are numerous non-rodent species that are in these areas that will be directly affected by SGARs";
- "Services that are likely to interface with non-target wildlife (both rural and urban wildlife populations), e.g., food supply, agricultural production and transportation, should not be exempted"; and
- "Drilling and production, refineries processing...oil and natural and propane gas... and other fuel [facilities]... should be able to easily keep their premises clean and not require SGAR they do not need to be on the list!"

Question 2: Implementing an IPM program focused on prevention and alternative control tools to rodenticides when managing rodents

The ministry is proposing requiring the use of IPM for all SGAR use. The proposed changes include: prohibiting preventative baiting; creating and implementing a site-specific IPM plan when using SGARs; implementing and documenting preventative measures prior to SGAR use; recording when SGARs are deployed and removed; and requiring other non-chemical/physical controls to be used preceding or following SGAR use.

2.1 General comments

Respondents commenting on this topic near universally expressed support or agreement with use of IPM. Examples of supportive comments included: "IPM is an essential component of effective rodent management"; "this is one of the major strengths of the... intentions paper... I am impressed with the understanding and promotion of IPM with prevention as the best long-term solution"; "prevention is always the key and prevention strategies need to be promoted above all else"; and "alternatives and prevention should be the standard, even for agricultural operations."

Many respondents commented that "IPM is essential but this approach has been largely bypassed for quick and low-cost options." Respondents also commonly cited the need to ensure that IPM is followed, commenting, for example, that "enforcement is key"; "a law that required an IPM written plan would be important for this to work in practice"; and "compliance and enforcement of the partial ban have been inconsistent."

A number of respondents noted challenges in controlling rodent populations. Related comments included, for example:

- "Rodents are a serious problem and the most effective means of control available should be used";
- "I would love to have an alternative program to control rats I've tried everything out there and I still have rats burrowing under my buildings we need something that will control them at a reasonable cost";
- "The [proposed] controls...don't take into account the unmanageable nature of the rat populations in our area there should be a widespread cull effort on the part of government to reduce the rat population";
- "Sometimes the use of powerful second-generation rodenticides is necessary in order to quell a surge in population";
- "Factors contributing to high rodent pressure around a facility using SGARs may be out of the control of the service location, for example, rodents may be continuously introduced from an unkempt or unoccupied neighbouring property [or] utility right-of-way... the use of snap traps in exterior stations under high rodent pressure... would likely require frequent service visits... many of our clients will be reluctant to pay for [required weekly] visits, potentially leading to control failure and increasing the risk of rodent entry into structures"; and
- "Rats create their own opportunities I've seen them chew through exterior walls... deck plate boards, concrete, lead pipes and even the metal screen we commonly use to cover holes... we have to kill rats."

2.2 Clarifying intent and definitions

A number of respondents requested or suggested that definitions related to IPM be clarified, for example:

- "Please define 'rodent infestation' this term is used broadly and can be interpreted many ways";
- "Definitions for 'infestation', 'short-term baiting', 'prevention', and 'exclusion' activities must be more explicit... language such as 'move away' [from] should be more definite (such as 'end')";
- "What would be the criteria for 'rodent activity'? ...and what are the requirements for demonstrating evidence?
 Thresholds or standard monitoring protocols should be established to identify the level of activity where SGAR use could be considered";

- "Ensure that prevention activities and alternative methods are clearly defined so that these tools cannot ignore IPM":
- "Specify how IPM programs will be reviewed and approved prior to the use of SGARs submitting an annual report to the ministry does not prevent the misuse or misreporting of pesticide use"; and
- "Clear requirements [need to be set] regarding how long alternative rodent control methods must be attempted before an IPM practitioner could resort to using SGARs."

2.3 Alternatives to SGARs

Many respondents commented that alternative methods of prevention and control are available, and that a focus on these methods would greatly reduce or eliminate the need for use of SGARs. The submission from a member-based NGO, for example, recommended that "the expansion of humane and alternative products and approaches in recent years presents an opportunity for government to shift from rodenticide use, and to prioritize further research and trials around innovative and sustainable alternatives."

Comments specific to alternatives included:

- "Alternative products... [include] high-quality snap traps, captive bolt traps and other mechanical systems (e.g., Goodnature device), rodent contraceptives (e.g., Contrapest); remote monitoring technology, and measures to support the presence of natural rodent predators, such as owls, through building owl boxes";
- "Alternatives to rodenticides must be species-specific and humane, for example, glue traps and multi-catch (sealed/one way) live traps are not humane";
- "I am intrigued by the idea of rodent contraceptive drugs... have these been thoroughly tested?";
- "Pesticides and poisons don't work... our farm uses trained dogs to remove rats two to three times a year"; and
- "[A successful poison-free approach used by] a B.C.-based... pest control company... focusses on resolving attractants, structural flaws and access points."

2.4 Additional comments

Additional examples of respondent comments included:

- "This is great. I am fully supportive, with SGARs being only a last resource";
- "IPM ought to be the first step strongly support alternative control tools must be species-specific and humane":
- "[Our trade organization] supports the use of IPM in all pesticide-related activities... this includes the responsible use of SGARs as directed by the product label if the province of B.C. mandates IPM, additional restrictions should not be required which exceed those outlined on the product label";
- "Having an IPM program is fair, but asking farmers to be licensed and pay an annual fee is over reach farmers already have to participate in GAP (Horticulture), Pro-Action (Dairy) or HAACP programs (poultry), where industry already monitors and sets guidelines on rodenticide usage";
- "BC Highways' control of ground squirrel using rodenticides has indiscriminately harmed raptor and vulture species in my area";
- "This may help if managed appropriately";
- "Funding must be made available so that enforcement is a credible reality";
- "Would support it, however, how could this be managed on large tracts of hay land?";
- "Of course [use of IPM] is prudent however rodent bait is also a valuable tool for professionals";

- "Our [group's] concern is over the mechanisms in place to support and enforce an IPM program... such a program would [have to] be adequately funded and managed";
- "New townhouse developments in our community, especially the ones bordering parks or natural areas, install bait boxes as a matter of course [without] trying of alternatives or identification of a problem;" and
- "Education and support programs that incentivize both individuals and businesses is key to the success of the prevention and alternative control tools."

Question 3: Feedback on proposed requirements for a site-specific IPM plan where SGARs are used

The ministry is proposing a site-specific IPM plan as a requirement when SGARs are used.

3.1 General comments

Many respondents reiterated comments made in reference to question 2 (feedback on implementing an IPM program focused on prevention and alternative control tools to rodenticides). Repeated comments included, for example: "SGARs should only be a last-resort exception after other measures have failed"; "SGARs should be banned completely"; "good, but again no need for SGARs;" and "as outlined in Q2, greater oversight is needed to review IPM plans prior to and during the application of SGARs... without regulatory oversight there is no way to ensure the plan is appropriate or being followed appropriately."

Respondents commonly pointed to challenges in, and the importance of, implementing and enforcing the proposed requirement for site-specific IPM plans. Related comments included: "guidance may be needed to develop such plans to ensure they demonstrate proper justification and can be enforced"; "enforcing this is going to be expensive, dangerous and difficult"; "enforcement appears reactionary (site-specific plans would be provided to ministry inspectors upon request) rather than proactive (require all plans be submitted and reviewed);" and "without strong government oversight and proactive enforcement... compliance will largely be based on the honour system and the will be heavy reliance on the public to identify suspected violations." A submission from a business representative included a response that "the requirement of IPM plans... will substantially increase pest control treatment costs and will result in increased bureaucratic oversight, inspections and fines for perceived misuse – the gains for these additional requirements are questionable at best." In contrast, a submission from a provincial NGO expressed that "[our organization] strongly agrees that site-specific IPM plans be required to ensure there is no preventative baiting and that there is documented evidence that prevention and alternative management plans were implemented but not fully effective."

3.2 Additional comments

Comments relating to site-specific IPM plans provided by respondents included:

- "Clear requirements [need to be set out] surrounding how long alternative control methods need to be attempted [and]... ministerial oversight";
- "When rodenticides are used, almost all companies hire outside contractors... who have specific expertise and equipment... these companies are also usually required to have a qualified person inspect building areas and structures... for evidence of rodents and to determine if active rodent control is necessary... pest control operators [are required to] have a valid Service License and obtain Endorsements... to work on specific properties... [and] must have a Pesticide Applicator Certificate when using rodenticides";
- "Site-specific IPM plans would need to be mandatory in order to be effective";
- "This is an ideal requirement and will lay the foundation for improved circumstances across the board my main recommendation is that SGAR use dates and amounts be entered into a centralized digital database";

- "Yes and [site-specific IPM plans] should include a phase out plan [and] a requirement to test alternate strategies";
- "Extra paperwork and cost... industries that can still use SGARs will still use them while leaving smaller operators... with increased costs [for repair of damage to vehicles caused by rodents]";
- "Education and awareness, as well as incentivizing those involved, is key to... compliance... without backlash";
- "Anything that further increases my costs is not appropriate my farming operation has been under incredible
 pressure in the past few years... the heat dome, flooding, frigid winter and incredible increases in the cost of
 supplies have all impacted my bottom line... I can't afford to do more with less"; and
- "Taking a site-specific approach is practical and will provide better opportunity and efficiency in monitoring but still needs to be integrated into a larger scale approach so that cumulative effects can be avoided at the neighbourhood or landscape level."

Question 4: Feedback on proposed short-term baiting requirements

The ministry is proposing to only allow short-term baiting if using SGARs within an IPM program. Short-term baiting means baiting for less than 35 consecutive days, and less than a total of 120 days within a 12-month period. Feedback is sought on the definition of short-term baiting; and on how the use of SGARs only for short-term baiting within an IPM program might affect Essential Service operations.

4.1 General comments

Many respondents reiterated previous comments that use of SGARs (for any length of time) is not supported, as alternative prevention and control methods are available to limit impacts of rodents on human health and essential services. Responses were divided on the proposed time periods for short-term use of SGARs outlined in the Intentions Paper, with some respondents commenting that the time periods are "too long" and others that "this is reasonable... and ensures that professional pest management companies are adhering to the standards of the IPM plan."

The range of comments from respondents included:

- "This is a great way to reduce use though I feel if there are heavy infestations of rodents, users should have the ability to justify using [bait for] more than the allotted period";
- "It's not the length of time, it's the way in which the poison works";
- "Each site, its surrounding environment, and rodent pressure varies greatly putting timelines and restrictions on rodenticide use will handcuff applicators when particularly stubborn populations exist... the breeding cycle of rodents is rapid, and often it can take several months to control a population";
- "[Our Health Authority] supports prohibiting long-term baiting scenarios... the European Commission Risk Mitigation Measures for Anti-coagulant Rodenticides as Biocidal Products indicates that 'several studies have shown that complete eradication of infestations can usually be reached within 35 days'... for baiting beyond 35 days... please consider recommending [that] a pest control professional re-evaluate and improve baiting strategies and address any problematic rodents, which may be resistant to anticoagulants or [have] developed increased neophobic behaviour";
- "[Our company] already keeps a good record of rodenticide deployment... at all locations we service... we also monitor bait consumption at each station electronically... in most cases, high rodent pressure requiring extended use of a rodenticide may be localized to only a few stations/areas of a property... even with our level of record-keeping, it will be extremely challenging to keep track of the number of days an SGAR has been present in a particular bait station... to make it easier to track rodenticide days of deployment, most companies

will likely resort to deploying SGARs throughout the facility for the allowed number of days instead of the [current] targeted approach... arbitrary timeframes... are in direct conflict with IPM and should be eliminated... [and] replaced with a requirement for record-keeping [documenting any] need for continued deployment... businesses with the essential services categories will certainly experience rodent infestation beyond the restricted periods... [resulting in] increased risk to public health";

- "It might be helpful to deal with extreme circumstances but I think 120 days in a year is too much";
- "Research illustrates the efficacy of this approach in controlling outbreaks additionally, this short-term constraint... reduces habituation effects for rodents, including social learning of bait avoidance... specifically, require a period post short-term baiting before baiting may be resumed consider 60 days... entities could apply for a rapid-process exemption... where deemed appropriate"; and
- "Guidance on volume of rodenticide (or bait box per square footage) use would be helpful if only duration of use is limited, an increase to SGAR volume deployed overall is likely... unless this is also limited."

Question 5: Feedback on critical wildlife areas defined in the Intentions Paper

With the exception of government-authorized conservation projects, the ministry is proposing to prohibit the use of SGARs within any critical wildlife habitat. Feedback is sought on the critical wildlife areas defined in the Intentions Paper (a wildlife sanctuary, an ecological reserve, a bird sanctuary or other established wildlife protection areas) and on other designated critical wildlife areas that should be protected.

5.1 General comments

Many respondents commenting on this topic felt that the "definitions [of 'critical wildlife habitat'] are too vague" and "could be interpreted in many different ways." Almost all respondents expressed support for restrictions on use of SGARs to protect wildlife or wildlife areas/habitat. Numerous respondents commented that the list "should be expanded to include regional, provincial and national parks." Others suggested including "zoos and rehabilitation centres" and/or "all wildlife areas" in the list. A number of respondents recommended that use of SGARs also be restricted in "areas or communities adjacent to or around" wildlife habitat. Specific cases and questions were also cited by respondents, for example, "how have species at risk been considered in these definitions and have [Species at Risk] SAR Recovery Plans been reviewed... the Recovery Plan for the Barn Owl identifies rodenticides as a risk that needs to be assessed and mitigated... will agricultural land within the range of the barn owl be deemed as critical habitat?"

Examples of specific comments on this topic included:

- "There needs to be consensus on what constitutes critical wildlife habitat... [for example], the Fraser River estuary is a key biodiversity area but also includes a large area of Metro Vancouver's 'essential' agricultural, commercial and industrial sector activities and areas of operation";
- "The definition of 'critical habitat' should be flexible so that additional areas can be added as needed";
- "Thinking about vulnerable times of year along with wildlife habitats would be beneficial";
- "I live in the Fraser Valley, and we have over five varieties of owls and several types of eagles and hawks in our woods on our farm we [also] have several commercial poultry farms around us SGARs should not be permitted";
- "[Our provincial organization is] supportive of prohibiting the use of SGARs in wildlife habitat, although there should not be exemptions to this prohibition, including the proposed exemption for government personnel other approaches should be explored and utilized by government when managing conservation programs in critical wildlife areas... we strongly encourage the adoption of non-lethal alternatives to wildlife management";

- "[Our pest control company] agrees [with prohibiting use of SGARs in critical wildlife habitat], this is a good step to protect non-target species";
- "The impact of predator management on rodent management needs to be considered when users are granted access to use SGARs"; and
- "We have farmed up to 160 acres... there was no place where rodenticides would not impact wildlife."

5.2 Conservation programs managed by government personnel

While several submissions and respondents noted their "support [for] the exemption for conservations projects that meet the international ethical principles for wildlife control", others voiced caution or concern. Related comments included, for example: "until we have an understanding of the effects of SGARs on non-target species, I do not recommend using SGARs in any wildlife habitat"; and "more judicial use of SGARs to eradicate island rodent populations... may be warranted as new findings about SGAR sub-lethal effects on migratory birds and marine life begin to emerge."

Specific comments on this topic included:

- "Tricky one to answer because rodent baiting has saved many species in sensitive areas where rodents were destroying birds' eggs and colonies use on a case-by-case basis and [require an application] ...for use might be the answer";
- "Why only government authorized projects not fair to the public";
- "The ministry's proposal to exclude 'biodiversity protection programs', including broadly defined government-led 'environmental protection activities' is alarming... the use of rodenticides poses significant ecosystem-broad risks, as well as extreme and unnecessary pain and suffering, no matter where they are applied... we... implore the ministry to remove 'government-approved environmental protection activities' from its list of essential services";
- "As self-governing Treaty Nations, [our First Nations] have jurisdiction over emergency measures and
 environmental protection activities delivered by [our Nations] on Treaty lands... [we] therefore request that the
 Regulation be drafted such that the exceptions allow emergency programs and environmental protection
 activities delivered by [our Nations] on Treaty lands to use SGARs in the same way as similar programs and
 activities delivered by B.C. and local governments"; and
- "[Our organization] supports the exemption for conservation projects... it should also include any Indigenous government authorized projects and/or respect the laws and customs of the Indigenous nation in which the conservation projects are occurring."

Question 6: Effect of proposed requirements on critical operations for Essential Services

6.1 General comments

Most respondents commenting on this question felt that the proposed requirements would have "little change" on operations of essential services or that they "do not know" or are "unsure" of how the proposed requirements would affect critical operations for the essential services proposed in the Intentions Paper. Many respondents reiterated previous comments, for example, that "the list of 'essential services' is too long", that "essential services do not require rodenticide to control rodent populations" or that the use of SGARs should be "totally banned" in B.C. Respondents provided a number of supportive comments, for example, "it could be a positive outcome if the use of rodenticide is

restricted and those selling it are honest", and "the new requirements will hopefully create a substantial incentive to put more effort into preventative measures and encourage development of safer and more humane alternatives." Concerns expressed by respondents included, for example, "[increased] risk of food safety... and rodent transferred diseases onto farms", "more food safety incidents" and "[increased] cost in labor... having to spend more hours doing cultural treatments."

A number of specific comments on this topic were provided in submissions from associations or organizations, including:

- "Business sectors have demonstrated an ability to pivot and adapt to address changing requirements, as long as they have a reasonable amount of time to transition";
- "Rodent control is essential in municipal, industrial, commercial and residential settings due to the public health threat that commensal rodents present... more options are needed not fewer the restrictions proposed by the ministry would severely impede pest management professionals' ability to control these dangerous public health pests... application should be performed by licensed pest control companies for which all their uses should be exempted"; and
- "Based on our experience in working as Environmental Health Officers with... e.g., restaurants, fruit picking workers' camps, drinking water systems for pest management, we do not believe that the proposed requirements will negatively affect the operations of the above-mentioned facilities."

6.2 Indoor baiting

Several respondents provided specific comments on indoor baiting using SGARs. For example, a trade association submission included the recommendation that "indoor uses should not be restricted since there is no clear pathway linking indoor uses to outdoor secondary exposures.... we are not aware of a single necropsy result where bromadiolone [currently, the only SGAR registered for use outdoors] was conclusively the cause of death... The focus should be on enforcing the requirements of label... instead of restricting legal use patterns." Another respondent commented, for example, that "interior infestations have the highest potential for impact on public health and it is important that a wide range of effective tools remain available to pest control providers – we encourage the allowance for indoor use of SGARs."

Question 7: Feedback on how SGARs are proposed to be regulated for agricultural operators

The proposed change includes requiring all essential services, including agriculture, to hold pesticide applicator certification for SGAR use, and requiring all essential services using SGARs to be licensed. General licence requirements include: an annual fee of \$250 per year for pesticide application up to 50 hectares; keeping daily use records; submitting an annual report of pesticide use to the ministry; and following and implementing IPM principles.

7.1 General comments

A submission from a provincial agricultural association included the following summary comments: "For agriculture producers, SGARs are an important tool in the management of rodents. Rodents can present a serious threat to individual operations and to the entire agriculture sector. Rodents can spoil, contaminate, or damage crops, both in the field and in storage. They can also impact farm biosecurity at a time when diseases like avian influenza and African swine fever could jeopardize the livelihoods of hundreds of farming families... SGARs are a necessary rodent management tool

for farmers and ranchers, protecting not only their livelihoods but potentially also the ecological well-being of lands used in agricultural production."

Many respondents, in individual comments and separate submissions, expressed support for the proposed regulation of SGAR use in agricultural operations, commenting, for example, that limits to application of SGARs, or alternatives to rodenticides, are important, "as [currently] the agricultural sector is one of the largest users of SGARs". Respondents also suggested means to encourage or support agricultural operators recommending, for example, that: "regulation and public education are important tools"; and "new or enhanced restrictions and transition to new approaches needs to go hand in hand with assistance (subsidies, training and funding) to farmers... to incentivize compliance and support greater understanding and buy-in." One respondent, for example, recommended "a grace period at the start of the use of IPM so that entities can adapt to the new methods... however, [this should be followed by subsequent assessment, for example, after three years] on their [use of] short-term exemptions." A number of respondents self-identifying as farmers noted that they did not use rodenticides, commenting, for example, that: "[we] use no pesticides or toxins to control pests... we feel that other agricultural operators could do the same."

Some respondents expressed concern about the additional administrative or cost burden that the proposed changes would bring while still needing to address rodent control for their agricultural operation. For example, "if I understand the proposal, you are going to charge me an additional \$250 per year to have a license in order to control the rat population, but only for 35 days a year – I have a year-round rat problem – this is simply another problem and expense for the small farmer."

Examples of specific comments on this topic included:

- "Education, open discussions, support... and incentivizing programs are key to success of this endeavour policing and penalty does very little to change behaviour";
- "Farmers should be required to contract pest professionals like everyone else";
- "The inclusion of food supply and agricultural production in the list of essential services... is appreciated";
- "An automatic exemption for an agricultural operation that is harbouring safe havens for rodents in abandoned equipment, overgrown vegetation, and derelict buildings is not appropriate these products should be a last resort after due diligence has been shown to minimize habitat and attractants";
- "I think that small holdings... should be treated differently [than large agricultural concerns] when it comes to the cost of IPM plans and licensing/regulation small farmers... are squeezed from every angle, which is what leads many of us to think in the short term when it comes to reducing hazards and obstacles to profits";
- "Raptors and other prey species... are frequently drawn to agricultural areas in search of rodents exempting agricultural operators will perpetuate the exposure and risks associated with SGARs";
- "I manage a small business which grows ornamental plants as part of our garden and landscaping company we have issues with rats in our greenhouses and outdoor growing areas, however we have chosen caging materials over poison to protect our stock in the long-term it is more effective... to protect our crops";
- "Increase funding for IPM inspections to ensure compliance";
- "A centralized digital platform where plans and supporting materials are submitted may increase adherence to IPM regulations"; and
- "I am worried that this industry will push back against this regulation... please consider implementing an annual grant that agricultural producers can access for managing pests in other ways... or provide free access to a pest management professional in each region."

7.2 Certification and licensing requirements for agricultural operators

A submission from a provincial agricultural association noted that "it may be challenging for agriculture producers to comply with the [proposed] requirement... that licenses be obtained." Another respondent commented, for example, that "the [proposed] \$250 fee in combination with the training may not be palatable [to agriculturalists]." The respondent recommended a "rodent-specific course/exam... [as the] material in the [current] PAC is too much... for the specific nature of those [situations] requiring rodent certification." The provincial association submission suggested "educating farmers and ranchers about the appropriate use of SGARs... [by] strengthening the PAC process, possibly with a fourth category of courses on SGARs, and to preserve the exemption for farmers and ranchers from the pesticide user non-service license requirement."

Additional related comments included:

- "[Our provincial association] strongly supports the requirement for agricultural operators to be licensed pesticide applicators... further, the need to document purchase history and disposal process, plus bait box labelling, are very important given the scale of agricultural sites, as [SGARs] can impact worker safety, food safety and wildlife habitat"; and
- "I am glad to see that agricultural operators will need to be licensed like other professionals."

Question 8: Feedback on the proposed sales restrictions and vendor requirements for the access and purchase of SGARs

The proposed changes include: restricted access to and posting ministry signage where SGAR products are sold; requiring pesticide vendors selling SGARs to verify that purchasers hold a certificate in the appropriate category, hold a licence, and are an essential service or licensed service provider; requiring dispensers to inform customers of the risks to wildlife from SGAR use and about the new requirements for IPM, disposal and record keeping prior to each SGAR sale; and requiring pesticide vendors to keep additional records relating to the sale of SGARs.

8.1 General comments

Most respondents commenting on this topic expressed support for restrictions on sales of SGARs and proposed vendor requirements. Many respondents commented that SGARs should not be sold at all, suggesting, for example that a complete ban [would be] simpler and more effective. A number of respondents recommended that only pest management professionals and licensed applicators should be given access to SGARs and/or that they should not be available to the general market... keep them out of stores and keep them away from the general public. Some respondents commented that the proposed changes [still] leave far too much access for SGARs to remain widely used suggesting, for example, that many [residential consumers] do not read labels and misuse all baits... they also use baits that are only registered for indoors in outdoor settings and do not put the bait in Tier-1 bait stations and locked from children and pets.

Respondents provided a number of comments related to monitoring and enforcement of the proposed requirements. For example: "there needs to be a site inspection and fines laid if misuse... has been identified"; "[recommend] that compliance operations be defined to identify how sales restrictions and vendors' requirements will be enforced"; "sales

¹ It should be noted that no respondents using the electronic comment form self-identified as vendors and no submissions were received from vendors or retail associations.

restrictions are only as effective as the ability of the regulating body to enforce the restrictions"; and "without adequate oversight, these requirements may not be implemented in practice."

Examples of comments on this topic included:

- "Sales of pest control products are already too restricted we have to use a pest control company instead of refilling our bait stations as normal maintenance duties";
- "I would welcome alternatives but don't see any in your proposal";
- "Additional enforcement tools should be considered... such as audits or requirements to collect and submit additional data on the purchaser (e.g., amount purchased, intended use, copy of the IPM)";
- "Ideally, these restrictions will be accompanied by rigourous education, as well as inspections, during the initial roll-out to ensure vendors fully understand and comply with the new regulations";
- "Submission of annual sales records should be required so this becomes a routine process for vendors and provides the ministry with an inventory of vendors"; and
- "Will there be a penalty if [a vendor is] selling to non-certified people?"

8.2 Regulation of online sales

Several respondents pointed to issues with, or challenges in enforcing, the requirements restricting online sales of SGARs. Examples of related comments included:

- "Needs to be a mechanism for ensuring these requirements are communicated and apply to online retailers";
- "How do online retailers inform customers that SGARs present a risk to wildlife and other non-target animals?";
- "The same vendor licensing... and record-keeping requirements for retail sales should be applied to online sales

 the restrictions to online sales should target homeowners and non-licensed individuals rather than Pesticide

 Applicators... [homeowners] may resort to online purchases, jeopardizing the intended protection of non-target species";
- "Requiring licensees to document if a product was bought online does not appear to have any value but would create an additional recordkeeping burden... the ministry should focus efforts on restricting illegal sales online";
- "[Our trade association] supports the ministry's efforts to address online sales so that all vendors are aware of their obligation[s]... verifying that products purchased online are those approved by PMRA ensures that Canada's regulatory standards, including product use directions, are respected";
- "Further clarity regarding the definition of online sales is necessary do email purchases or purchases made through a licensed dealer's website count as an online sale, or online retailers such as Amazon?";
- "Most people have access to the internet and can continue to buy SGARs if they wish how will you know who is using them?" and
- "The greatest issues from secondary poisonings come from people buying a full bucket of brodifacoum on Amazon and throwing 2kg under their shed, not from PCOs dispensing 8oz of bromadiolone in a bait station."

Question 9: Feedback on any designated groups or sensitive populations that may be disproportionately impacted by the proposed requirements for SGARs

9.1 General comments

Several respondents commenting on this topic noted that "there are vulnerable populations of people, especially those facing housing insecurity, who experience disproportional exposure to SGARs." A submission from a provincial

association continued: "living in conditions where rodent populations thrive is a systematic failure of social support systems... the proposed restrictions to SGARs could help ensure these vulnerable populations are serviced by pest control operators with the same dignity as any other client."

Numerous respondents interpreted this question as pertaining to wildlife. Examples of such comments include: "sensitive populations include fish, amphibians, reptiles and all warm-blooded animals"; "raptors are disproportionately affected by SGARs"; and "the at-risk population of Barn Owls."

Specific comments and suggestions for the ministry on this topic, included:

- "Information and training should be provided in a variety of languages to reach non-English speaking groups";
- "Implementing the first two steps of IPM (managing attractants and incorporating exclusion measures) may be difficult for those living on limited incomes or... [those who] have cognitive or mobility challenges";
- "Any designated groups or sensitive populations and First Nations must be potentially consulted on SGAR use in their area";
- "Species protection is essential to sustaining and respecting Indigenous lifestyles and culture"; and
- "Marginalized communities currently incur a disproportionate percentage of children poisoned annually from SGARs."

Question 10: Readiness or capability to meet requirements by January 2023

10.1 General comments

Most respondents commenting on this topic expressed a readiness to meet the proposed requirements. Examples of related comments included: "we are already rodenticide free [as a business] and have been operating this way since 2016"; "my operation has never used poison baits, we use only bucket traps and do nothing to discourage foxes who do a good job on rodent control"; "we already rely on IPM, perfectly ready and capable to respond to requirements"; and "[our municipality] would be prepared to comply and follow updated regulations." One submission, for example, noted that "our [organization has] 43 facilities province-wide, many... [that are] appealing to rodents, including ample access to pet and human food... our organization is ready to meet these new requirements... [and] has evidence-based resources available to continue to help other municipalities and the public during this transition time."

Some agricultural operators and respondents with businesses affected by the proposed requirements expressed reservations or provided recommendations for the ministry to consider in moving forward. Examples of related comments included:

- "Will not be ready to implement changes in six months time... there is no way to develop an IPM program that will safely control rodents in six months";
- "We cannot let our business be continually degraded by damaging and disease-carrying rodents";
- "This... proposal does nothing to benefit the farmer and offers no useful alternatives"; and
- "Common sense [should] prevail and we need to look at the big environmental issues but also the farmer needs
 a tool to deal with this";

Question 11: Feedback on the proposed housekeeping amendments

Proposed housekeeping amendments include: potential consequential amendments to the Administrative Penalties (*Integrated Pest Management Act*) Regulation; transferring the pesticide drift restriction for agricultural operators; clarifying the role of adjuvants; and adjusting the definition of "licence year".

11.1 General comments and those related to updating the Administrative Penalties Regulation

Many respondents noted that they had "no comment" or were "unable to comment" on the proposed housekeeping amendments. Numerous respondents commented that the proposed changes are "acceptable" or "OK", or that they or their organization "supports" the amendments. While few respondents commented specifically on proposed updating of the Administrative Penalties Regulation, there were related comments provided in response to other questions. These included, for example, "compliance deterrents and enforcement powers must be significant, such as exponential fines"; and "there needs to be follow-up and enforcement to ensure the IPM plan is being carried out."

11.2 Pesticide drift

The Intentions Paper noted that "regulation of pesticide drift falls under the Code of Practice for Agricultural Environmental Management [AEM]... the proposed change would... transfer these requirements into the Integrated Pest Management Regulation, meeting previous ministry commitments."

The limited number of respondents addressing this topic noted their general support, while some provided specific comments. These included, for example, "agricultural operator is not defined under the AEM code of practice [while] agriculture operation is... I suggest that the language be changed"; and "agricultural operators [should] have to ensure that pesticide drift and/or runoff doesn't enter the watershed or cross property boundaries... this may be difficult to control in practice."

11.3 Regulation of adjuvants

While there were few specific references to the regulation of adjuvants among received responses, two respondents provided detailed comments. A submission from a provincial health authority noted that "some adjuvants (e.g., surfactants) may pose a severe environmental and public threat to humans and ecosystems²... please consider requiring, if not already in place, that the adjuvants must be handled and disposed properly to prevent any contamination to the environment, including a watercourse that may be a drinking water source." Another from a provincial industry association noted the association's "strong support [of] the proposed housekeeping amendment on clarifying the role of adjuvants" and provided detailed background on the purpose and use of adjuvants and surfactants. In conclusion, the submission stated that "classifying adjuvants as pesticides under the [Integrated Pest Management Regulation] does not increase protection of the environment or human health, but reduces the efficiency and efficacy of vegetation management programs in B.C."

11.4 Definition of "licence year"

A very limited number of respondents commented specifically on this topic, however, one submission from a provincial association noted that "[we] also support the amendment adjusting the definition of 'license year' [as] the reduction in the bottleneck for processing license applications will benefit the members of our association."

Question 12: Additional comments

Many respondents provided supplementary information (such as references to studies and documents) and amplifying information in this section of the electronic comment form or in separate submissions. The complete contents of

² The submission cited a review article published in Environmental Science and Pollution Research by S. Badmus et al., 2021 "Environmental risks and toxicity of surfactants: overview of analysis, assessment, and remediation techniques"

responses have been compiled for review and consideration by ministry staff. The summary and examples of these comments are provided below, under the following themes:

- Regulation of SGARs, FGARs and non-anticoagulant rodenticides;
- Scope of proposed changes list of essential services and areas of restricted use;
- Application of IPM and enforcement of requirements;
- Monitoring effectiveness, research, education and communication; and
- Additional comments.

12.1 Regulation of SGARs, FGARs and non-anticoagulant rodenticides

A common comment of respondents was that "the proposed changes... should be applicable to all rodenticides rather than 'just' SGARs". A number of respondents highlighted bromethalin as of concern, commenting, for example, that it is "a neurotoxin with no specific antidote."

Several submissions from professional associations and businesses commented that the province should not impose regulatory provisions specific to SGARs, as these rodenticides, as well as other pesticides "are regulated by the Pest Management Regulatory Agency (PMRA) of Health Canada under the [federal] *Pest Control Products Act*" and that additional restrictions are not required as long as "users adhere to PMRA-approved product labels and well-established IPM practices." Respondents also noted that the PMRA is intending to re-evaluate SGARs in the near future commenting, for example that "all registered pesticides must undergo a complete re-evaluation every 15 years or sooner, to ensure that they continue to meet current scientific and regulatory standards."

Specific comments on this topic included:

- "Health Canada has listed more than 50 incident reports of domestic animals ingesting bromethalin across North America... [with] the incident severity rated as 'death' for a majority of cases";
- "The PMRA is a world-renowned body that employs over 300 scientists for the sole purpose of evaluating pesticides... pesticides in Canada are one of the most stringently regulated products in commerce";
- "PMRA is already scheduled to re-evaluate SGARs in 2022 to determine if these products continue to meet current health and environmental risk assessment standards";
- "In recent years, other countries have registered new rodenticide active ingredients and formulations including alphachloralose for mice, and 4-vinylcyclohexene diepoxide / tripolide and carbon dioxide (dry ice) for rats however, these products are not currently available to Canadian pest management professionals... the structural pest control agency embraces the introduction of novel control options and encourages innovation in this arena";
- "You've missed a vital component of secondary poisoning, which is allowing bromethalin to remain on the market... it's actually worse than SGARs for risk of secondary poisoning according to most studies... and there are still domestic variants of bromethalin available, the public is using this."

12.2 Scope of proposed changes – list of essential services and areas of restricted use

In summarizing their comments many respondents reiterated their concern that the list of essential services in the Intentions Paper is "too broad" and would not lead to a significant decrease in the use of SGARs. Specific suggestions and comments are included in this summary under Question 2 (list of essential services). Similarly, a number of respondents commented that "as currently proposed, the regulations would result in a complicated patchwork of rules

for different audiences and different rodenticide products... [and instead] a complete ban on all rodenticides is strongly recommended."

Additional related comments included:

- "At the very least, the list of exempt locations should be reduced";
- "The essential services list needs to be pared down and the changes need to be applicable to all rodenticide use"; and
- "I believe that proposed regulation should go further [by] limiting access to [only] licensed professionals."

12.3 Alternatives to rodenticides

Examples of related comments on this topic included:

- "There are many more effective prevention strategies, for example, a single barn owl consumes an average of 1,000 rodents/year";
- "Prevention measures (e.g., addressing structural issues and attractants) and rodenticide-free alternatives (e.g., high-quality snap and captive bolt traps, contraceptives, natural predators) should be the top priority alternatives should be clearly defined and not include inhumane products, such as glue traps";
- "BEFORE restricting SGARs... [get] parties to invest in different methods of control... such as non-chemical
 approaches such as Goodnature's A24 mouse/rat traps... [make sure that] more options are available to reduce
 rodent activity instead of taking away one of our most valuable tools and leaving pest management
 professionals with little else";
- "I worked on a small farm that had terriers that controlled rat populations... we should consider this in 'alternative' control measures"; and
- "Alternative methods for rodent control must be humane no glue traps or multi-traps."

12.4 Application of IPM and enforcement of requirements

Many respondents commented on the importance of, or provided suggestions regarding, assuring compliance with the proposed changes. Examples of related comments included:

- "There needs to be a clear and concise enforcement and compliance strategy to go with this";
- "Compliance and enforcement is a major concern, as suspected SGAR use in banned locations was regularly found and reported to the RAPP line by members of the public during the temporary ban period";
- "Increasing fines and placing more emphasis on enforcement... will make it more likely that any potential misapplications are caught quickly and stopped"; and
- "Enforcement is also a concern surrounding the proposed IPM requirements, given that IPM is already currently required but not adequately enforced."

12.5 Monitoring effectiveness, research, education and communication

Related comments in this topic included:

- "How does the ministry plan to track and monitor compliance? How does the ministry plan to monitor success over... change in practice?";
- "What is the baseline in terms of amount/volume of SGARs sold prior to and after the changes?";

- "Monitoring for long-term impacts from SGAR to FGAR or other permitted rodenticides... there [is] ...credible
 research... indicating that these chemicals [e.g., Diphacinone] may also be contributing to secondary poisoning
 and long-term health impacts to wildlife";
- "[Our provincial association] is hopeful that... the government will also support ongoing research and education... and future regulations of pest control tools... [for example] criteria to certify/approve [snap] traps, similar to... New Zealand and the United Kingdom... [and] bans on glue traps for public use";
- "The proposed changes are not based on facts, but merely hearsay and colloquial opinions";
- "The province should work with municipalities to educate residents on preventative measures to reduce rodent populations";
- "I would recommend that more efforts be placed on education, enforcement and investment in other approaches before restricting these products... education on the importance of properly following label directions on specific products and educating the public to notify their appropriate provincial regulators when any potential pesticide misapplications [such as unsecured or unlabelled rodent bait stations] are occurring";
- "Spend the money on support and awareness of alternative measures in dealing with pest management they work and are effective and affordable"; and
- "Are any studies being done to determine the amount of by-kill from... mechanical traps [and in relation to use or changes in use of SGARs]?"

12.6 Additional comments

Additional comments included:

- "Implementation of the proposed rule should be delayed until a transparent stakeholder engagement process has been completed... [our national trade association] requests that the ministry provide full transparency regarding the decision-making process that was undertaken";
- "The proposed changes ignore the suffering that SGARs cause to rodents and wildlife, especially when there are alternative and effective methods of rodent control that do not cause suffering";
- "The Intentions Paper... [does not communicate] the high risk of severe poisoning [from ingestion of SGARs] for children (especially children under six years of age) ...are there any proposed additional protective measures to prevent exposure to children (e.g., SGARs must be placed in tamper-resistant bait stations or in locations not accessible to children?";
- "[Our professional association is] opposed to restrictions on additional certification, preventative baiting, excessive fees, excessive IPM plan reporting and disposal of dead rodents... placing additional restrictions on the industry only transfers those costly measures to the public, who are already stressed socially and economically";
- "The enhanced disposal requirements do not contribute to the goal of impacting secondary poisoning and should be removed disposal of used rodenticide should be as per label instructions... the arbitrary addition of disposal requirements is in conflict with the science-based decision-making process that establishes the labelled disposal requirements"; and
- "The Precautionary Principle must become health Canada's and subscribing agencies' rule of law."

C. Rankin & Associates 8545 Rope Tow Way Whistler B.C. V8E 0G7