



September 20, 2017

Via Electronic Submission: [pmra.infoserv@hc-sc.gc.ca](mailto:pmra.infoserv@hc-sc.gc.ca)

Publications  
Pest Management Regulatory Agency  
Health Canada  
2720 Riverside Drive  
Ottawa, Ontario K1A 0K9

Re: PRD2017-03: Proposed Registration Decision, Lambda-Cyhalothrin

To Whom it May Concern,

The Canadian Pest Management Association (CPMA) – the only national trade group for professional pest management companies – appreciates the opportunity to provide comments on the *PRVD2017-03: Proposed Registration Decision, Lambda-Cyhalothrin*, published June 23, 2017.

Founded in 1943, CPMA’s more than 400 member companies manage structural pests, such as rodents, including rats and mice, ants, bed bugs, stored product pests, cockroaches, mosquitoes, spiders, stinging insects, termites and other wood destroying pests. Through our mission, we engage in the protection of public health and structures in countless commercial, residential and institutional settings every day.

CPMA is alarmed with the proposed decision by Health Canada’s Pest Management Regulatory Agency (“PMRA”) to cancel *all* indoor residential<sup>1</sup> use patterns of lambda-cyhalothrin by commercial applicators. CPMA believes that PMRA has not adequately considered the value of lambda-cyhalothrin, PMRA relied on inaccurate data and skewed assumptions of exposure with regards to the structural pest management industry and lastly CPMA is disappointed that as an industry we were not involved in this reevaluation decision sooner.

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<sup>1</sup> Residential areas, defined by PMRA includes virtually any place where structural pest management services are performed to protect public health, “any use site where the general public, including children, could be exposed during or after application. For structural uses, in residential site, this includes homes, schools, restaurants, public buildings or any other areas where the general public including children may potentially be exposed.”

Health Canada Pest Management Regulatory Agency, *Proposed Registration Lambda-Cyhalothrin*, PRVD2017-03, p. 28 (June 23, 2017)

## I. Value and Benefits to Society of Lambda-Cyhalothrin

Lambda-cyhalothrin is one of the most widely used pesticides within the structural pest management industry to protect public health and structural pests. To protect public health, the structural pest management industry uses lambda-cyhalothrin indoors (crack & crevice ONLY) or on the exterior periphery of buildings. When used in this manner, lambda-cyhalothrin poses almost no risk of exposure or harm to people, pets, non-target wildlife, aquatic invertebrates or pollinators; while offering a tremendous benefit to society, throughout Canada, to preserve our food supply and in and around homes and businesses to promote a thriving commerce and protect public health.

Lambda-cyhalothrin is used to remediate the following structural pests: ants, centipedes, cluster flies, crickets, firebrats, German cockroaches, millipedes, sowbugs and bed bugs. All of the listed pests can pose mild to dramatic problems for people, their homes and their businesses. Specifically, the impact of German cockroaches and bed bugs can be devastating and pose serious threats to public health.

*Cockroaches* - Suppression and eradication is vital to health care facilities, homes, and sites where food is prepared or served. Cockroaches contaminate food and spread filth by walking through contaminated areas. They commonly carry disease causing pathogens like staphylococci, streptococcus, coli-form, molds, salmonella, yeasts, and clostridia.

*Bed bugs* - Bed bugs cause anxiety, emotional distress, and insomnia in people. Not only are bed bugs a horror in the daily lives for those citizens that have an infestation but the economic impact of bed bugs can be crippling. A recent study showed that on average, a single report of bed bugs in online traveler reviews lowers the value of a hotel room by \$38 and \$23 per room per night for business and leisure travelers respectively.<sup>2</sup> Additionally, bed bug treatments are made inside structures, pose no risk to non-target organisms, and help keep hospitals, hotels, nursing homes, and other important places bed bug free. Lastly, without adequate tools like lambda-cyhalothrin we continue to see uninformed individuals dangerously attempt to eradicate bed bugs through “home remedies” and gross misapplications of other synthetic and natural products.

Lambda-cyhalothrin use patterns have a comparatively low mammalian toxicity making them well suited for indoor residential and commercial uses, especially considering they are currently only approved for crack and crevice applications indoors. Lambda-cyhalothrin is more efficient than predecessor chemistries and few if any alternatives for their specific use patterns exist. Pyrethroids, like lambda-cyhalothrin, have gained increased importance since the cancellation of many organophosphate insecticides’ structural use patterns. Other valuable alternative

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<sup>2</sup> Carl Nathe, "Bed Bugs 'bite' the Wallet of Hotel Owners," *ScienceDaily*, July 14, 2015, <http://www.sciencedaily.com/releases/2015/07/150714101145.htm>.

insecticide classes are under continuous review by PMRA and the structural pest management industry is becoming increasingly concerned that PMRA decisions will seriously inhibit our ability to effectively use pesticides to protect public health. We believe if PMRA truly endorses integrated pest management and understands persistent resistance issues, the Agency cannot afford to limit any use patterns for lambda-cyhalothrin.

The *Pest Control Products Act*, requires PMRA to take into account the value of a pesticide. We believe we have demonstrated this incredible value, and it also appears that PMRA has acknowledged this value in the decision:

“Lambda-cyhalothrin has one of the broadest registered use patterns for the synthetic pyrethroids and is widely used in Canadian agricultural and structural pest management. It is also one of the main alternatives to organophosphates and neonicotinoids, and it is a valuable tool in resistance management. . . Lambda-cyhalothrin has a role in an Integrated Pest Management approach to manage pests in structural sites. It is used by professional pest control applicators in residential settings to treat bedbugs, cockroaches, and ants.”<sup>3</sup>

Unfortunately, PMRA seems unpersuaded by their own statement and instead decided to cancel all indoor residential uses. We take this opportunity to request that PMRA reconsider the value of lambda-cyhalothrin to our industry and society.

## **II. Residential Exposure Findings**

In the Residential Postapplication Exposure and Non-Cancer Risk Assessment, PMRA assessed indoor structural applications for band/ spot, bed bug and crack and crevice treatments. In the absence of Canadian data, PMRA has relied on the U.S. Environmental Protection Agency (“EPA”) Residential Standard Operating Procedures (“SOPs”) and found the following: 1.) no inhalation risks, 2.) dermal risks for band/spot and bed bug and 3.) hand-to-mouth risks associated with all indoor treatments.

After examining tables 1 -7 in Appendix VII it appears that the exposure scenario for crack and crevice meet or exceed all targeted MOE, except in a very narrow exposure scenario. In tables 6 and 7, PMRA determines that crack and crevice treatment pose hand-to-mouth exposure risk to children ( $1 < 2$ ) when applied on carpets, but does not pose a risk to children when applied on hard surfaces. PMRA defines crack and crevice as:

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<sup>3</sup> Canada Pest Management Regulatory Agency, *Proposed Registration Lambda-Cyhalothrin*, PRVD2017-03, p. 8 (June 23, 2017)

“an application of pesticides with the use of a pin stream nozzle, into cracks and crevices in which pests hide or through which they may enter a building. It does not permit the treatment of surfaces.”<sup>4</sup>

This definition raises the question of how would one apply a crack and crevice treatment directly to a carpet? A crack and crevice treatment is generally applied into an area that a pest may hide, not a broadcast or perimeter application to a carpet. Crack and crevice treatments are of tremendous value to our industry, used to reach inaccessible areas where pests harbour and breed. CPMA would request the opportunity to work with PMRA on possible mitigation measures or further label definitions to avoid areas that may expose children (1<2) to perceived risks, while maintaining the ability to make crack and crevice treatments in residential settings.

CPMA is also concerned that PMRA relied on EPA SOPs, rather than Canadian data. Use patterns are different in Canada compared to the United States and relying solely on this data does not provide a complete assessment of how we use lambda-cyhalothrin in Canada. In 2014, CPMA provided PMRA with data that provided application rates and assessments for indoor and exterior uses of pyrethroids, did PMRA reference this data? CPMA would be happy to work with our member companies to further refine this data, specifically relating to lambda-cyhalothrin.

### **III. Cancer Findings**

PMRA determined that lambda-cyhalothrin poses cancer risks when used in structural residential indoor settings. PMRA’s carcinogenic determination seems to depart from findings by other leading international evaluations and contradict reliance on EPA data which is heavily relied upon in other areas of the assessment, E.g. the EPA SOP.

EPA issued its first set of principles to guide evaluation of human cancer potential in 1976. In 1986, EPA issued updated guidance, which included a letter system (A-E) for designating degree of carcinogenic potential. In 2004 EPA released updated guidance and a list of Chemicals Evaluated for Carcinogenic Potential<sup>5</sup>. Included in the list is lambda-cyhalothrin, which is classified as a chemical in “Group D - Not Classifiable as to Human Carcinogenicity: Agents without adequate data either to support or refute human carcinogenicity.” EPA is continuously reviewing pesticides under statutorily mandated registration review. Currently, synthetic pyrethroids including lambda-cyhalothrin are undergoing registration review and to date there has not been any data published by EPA in their human health and ecological risk assessments that suggests evidence of cancer risks associated with lambda-cyhalothrin.

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<sup>4</sup> Canada Pest Management Regulatory Agency, *Proposed Registration Lambda-Cyhalothrin*, PRVD2017-03, p. 28 (June 23, 2017)

<sup>5</sup> U.S. Environmental Protection Agency Office of Pesticide Program, *Chemicals Evaluated for Carcinogenic Potential* (2004) [https://a816-healthpsi.nyc.gov/ll37/pdf/carcclassJuly2004\\_1.pdf](https://a816-healthpsi.nyc.gov/ll37/pdf/carcclassJuly2004_1.pdf)

In addition to EPA, the State of California Environmental Protection Agency Office of Environmental Health Hazard Assessment, mandated by a 1986 ballot initiative known as “proposition 65,” is required to maintain and update a list<sup>6</sup> of chemicals known to the state to cause cancer or reproductive toxicity. Lambda-cyhalothrin remains absent from this list and is not considered to pose a cancer risk.

Due to the conflicting findings of EPA and the State of California, and the reliance by PMRA to use EPA data; CPMA would respectfully request further clarification on how the PMRA cancer finding differs.

#### **IV. Next Steps**

While we are disappointed in the proposed decision on lambda-cyhalothrin, we are encouraged that this is not a final decision and hope that PMRA will reevaluate this decision based on public comment and continued efforts to further review the data and mitigation alternatives. We would appreciate the opportunity to work with PMRA through:

- Hosting application demonstrations for PMRA staff in the field, to better provide necessary context and information on actual use patterns by the structural pest management industry
- Discussing label alternatives to maintain specific and critical residential use patterns for lambda-cyhalothrin
- Exploring stewardship opportunities and increased training specifically for lambda-cyhalothrin
- Establishing national certification and training standards to ensure only competent applicators are using pesticides

We view these as merely a starting point and hope to have a productive dialogue with PMRA throughout the duration of the final review of lambda-cyhalothrin by PMRA. We respectfully request PMRA to reconsider the decision to ban all indoor residential applications of lambda-cyhalothrin.

#### **V. Conclusion**

Thank you for the opportunity to provide comments to on the proposed *PRVD2017-03: Proposed Registration Decision, Lambda-cyhalothrin*. In conclusion, we urge the Agency to

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<sup>6</sup> State of California Environmental Protection Agency Office of Environmental Health Hazard Assessment, *Chemicals Known to the State to Cause Cancer or Reproductive Toxicity* (July 7, 2017) <https://oehha.ca.gov/media/downloads/cmr/p65single07072017.pdf>

carefully consider the comments presented here in light of the impact that eliminating indoor residential use patterns of lambda-cyhalothrin will have on the ability of the structural pest management industry to provide much needed protection from pests, including the important role of protecting public health from the threats posed by arthropod pests.

Sincerely,

A handwritten signature in blue ink, appearing to read 'A. Bray', with a stylized flourish at the end.

Andrew Bray  
Executive Director  
Canadian Pest Management Association