

April 17, 2024

West Kelowna Branch of the Kelowna Citizens Safety Association

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VIA EMAIL

Darrell Le Houillier, Chair

Environmental Appeal Board 4th Floor,

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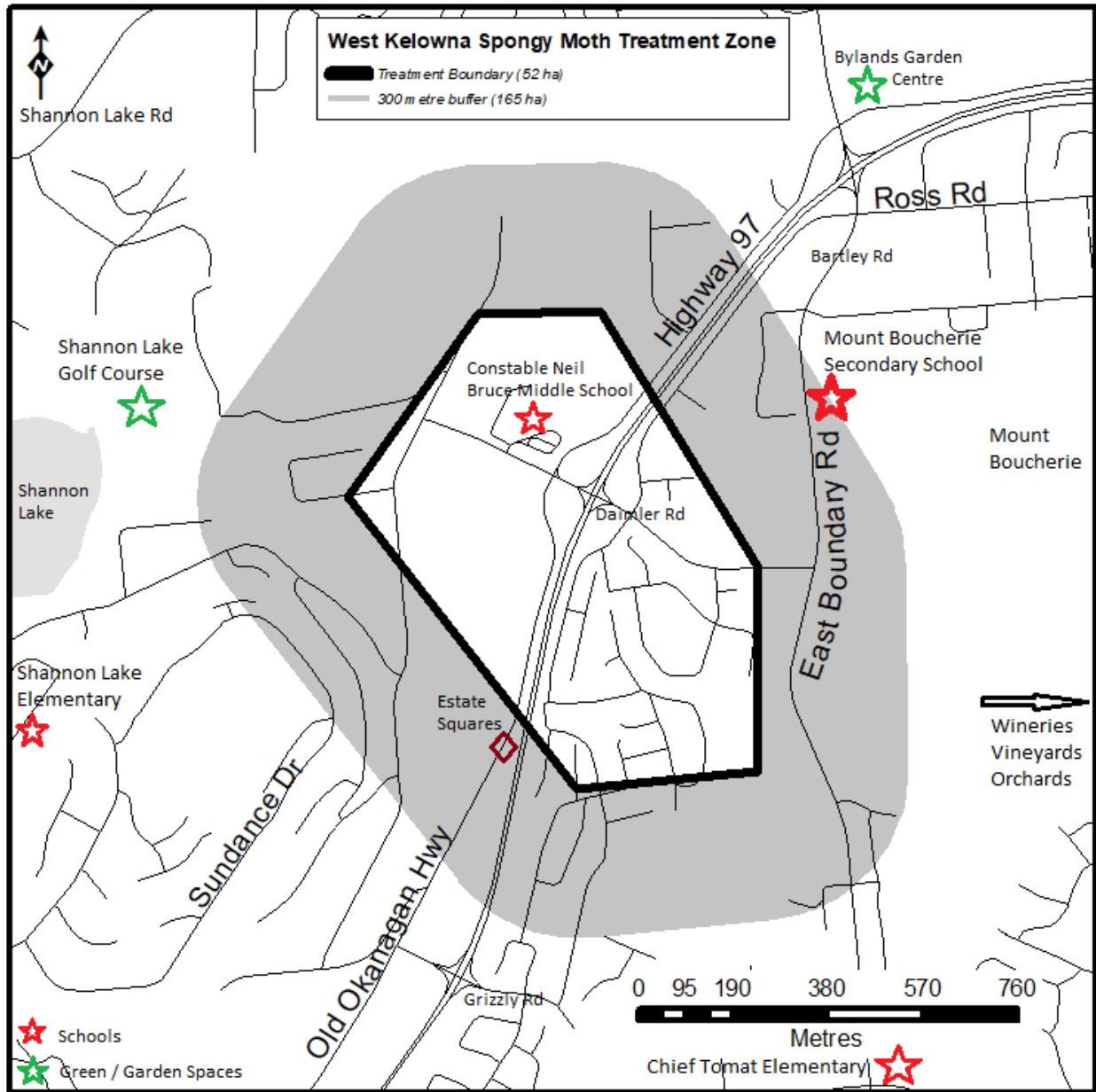
Re: Notice of appeal and application for stay of Pesticide Use Permit 738-0037-24-24 (the “PUP”)

Dear Mr. Le Houillier and Board Members:

The West Kelowna Branch of the Kelowna Citizens Safety Association (WKB/KCSA/KCSA) is appealing the decision of the Administrator appointed under the Integrated Pest Management Act, SBC 2003, c 5 (the “IPMA”) to issue the PUP to the Ministry of Forests (MOF), authorizing aerial the spraying of the pesticide Foray 48B over a 52 hectare area in West Kelowna between now and June 2024.

This letter sets out the grounds of the WKB/KCSA/KCSA appeal, followed by the basis of our application for a stay of the PUP pending the hearing of the merits of our appeal by the Environmental Appeal Board (“the Board”).

The WKB/KCSA/KCSA is a member citizens group of the Communities United For Clean Air (“CUFCA”) organization. The WKB/KCSA/KCSA endorses the STAY application submitted April 15, 2024 by CUFCA and Dr. Tynan. This is time sensitive situation and we want to ensure that the Attorney General has time to respond to the stay request instead of potentially delaying the hearing of the stay application



A. Grounds of appeal

This appeal is submitted pursuant to Section 14 of the IPMA the Board's Rule 5. The grounds for the WKB/KCSA's appeal are as follows:

(1) That the Administrator erred in concluding that the pesticide use authorized by the PUP would not cause an unreasonable adverse effect on human health, animal health and environmental health, in contravention of Section 6(3)(d) of the IPMA and without proper regard to best practices in Norway and other international jurisdictions.

(2) That the Administrator erred in issuing the permit notwithstanding deficiencies in public consultation conducted by the Ministry of Forests, including (a) false statements to the effect that Foray 48B has “no known toxic effects”, (b) failure to mail notices to residents who had opted out of Canada Post “ad mail”, despite the option of sending government mailings to all households (all of which had the effect of limiting public participation among impacted individuals), and thereby breached the duty of procedural fairness that the Administrator owed to them; and

(3) That the Administrator erred in issuing the permit notwithstanding inadequate conditions to protect human health, particularly the absence of effective mechanisms for the reporting and monitoring of adverse public-health effects to Health Canada.

(4) That the Administrator erred in issuing the permit without including the Strain of the Bt bacteria being used. This permit does not specify the strain of *Bacillus thuringiensis kurstaki* (Btk) in Foray 48B. For current use and future quality assurance purposes, the permit should be amended to specify and include a strain of bacteria used as several strains have been used in this program in the past. A strain describes organism with a unique genetic sequence and mode of action. A strain is a genetic variant of a microorganisms that belong to the same species but share certain genetic characteristics not found in other members of the species. All previous pesticide permits issued contained strains information of *Bacillus thuringiensis kurstaki* used. Additionally, the pesticide’s label, which contains a strain info is neither referenced nor is attached to the PUP.

(5) That the administrator has erred in issuing the permit with MOF in clear violation of Section 6.2 which requires the permit holder to comply with the requirements of the label. Section 1.0 of the Foray 48B label First Aid states, “If in the eyes * Hold eye open and rinse slowly and gently for 15 to 20 minutes and “Call a poison control center or doctor for treatment advice” The section of the label also includes a section entitled “HOT LINE NUMBER”. It states, “Have the product container or label with you when calling a poison control center or doctor, or going for treatment.” There is also a number and provision for emergency transport out of the spray zone. None of this health information is contained in any MoF educational outreach materials.

(6) That the Administrator erred issuing the permit in clear violation of Section 6.2 of the permit which requires the permit holder to comply with the requirements of the label.

Section 2.1 of the label states, “HAZARDS TO HUMANS AND DOMESTIC ANIMALS CAUTION” and “Causes moderate eye irritation. Avoid contact with eyes or clothing. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco or using the toilet.” This health information should be provided on the signage within the spray zone.

(7) That the Administrator erred issuing the permit in that the permit holder is not in compliance with Section 4.10 (k) (d). The Lawn sign (Exhibit A) provided by Tim Ebata, MOF does not contain the health precautions required in 4.10 (k) of the permit on the sign. The Lawn sign is also in violation of Section 4.01 (d) of the permit, in that a hand with an exclamation mark in the middle of the hand and a circle around it does not imply caution or danger. Section 4.01 (d) of the permit states, “contain a cautionary symbol, like a stop sign or a raised hand”.

(8) That the Administrator erred issuing the permit in that permit holder is not in compliance with Section 4.4 of the PUP where it states, "...People who wish to minimize their exposure may remain indoors with their windows and doors closed during the spraying and for **at least 1 hour** thereafter." The Lawn sign states, "To minimize contact with the pesticide, remain indoors with windows and doors closed during active spraying for at least **30 minutes** thereafter."

(9) That the Administrator erred issuing the permit in clear violation of Section 6.2 of the permit in not disclosing information contained in Section 2.5 Non-Agriculture Use Requirements of the label. Section 2.5 of the label states that, "Repeated exposure to high concentration of microbial proteins can cause allergic sensitization". In response to the Cranbrook Call to Action group letter Exhibit B, on April 4th 2024, Tim Ebata, MOF employee stated, "Staying indoors is a voluntary recommendation that effectively eliminates direct contact with the aerial liquid droplets which may be the cause of most cases of irritation. Exposure to the bacterium is inevitable and concentrations will be high everywhere for a short while within the spray zone but is known to be harmless to humans."

The WKB/KCSA will present evidence and provide argument during the hearing on the merits of our appeal with respect to these aforementioned grounds.

The relief that the WKB/KCSA seeks is an order from the Board setting aside the PUP and remitting the decision back to the Administrator, with direction to address the errors outlined above. The WKB/KCSA notes that it is within the authority of the Board to make any decision following the appeal that the Administrator could have made, including deciding to not issue the PUP.

The outcome that the WKB/KCSA seeks is an approach to spongy moth management in British Columbia that poses a substantially lower level of risk to human health and the environment, through the proven treatment methodologies of mass trapping and/or ground application.

B. Application for a stay of execution of the PUP.

The WKB/KCSA does not want our application to delay hearing CUFCA's STAY APPLICATION. We will be prepared to respond to the Attorney's response if allowed.

This application is made pursuant to Section 25 of the Administrative Tribunals Act, SBC 2004, c. 45 and the Board's Rule 16(1)(c), which authorizes an appellant to apply in writing for pre-hearing interim relief in the form of a stay of a decision under appeal.

The legal basis for WKB/KCSA's stay applications is provided below, applying the three-part test from *RJR-MacDonald Inc. v Canada (AG)*, [1994] 1 SCR 311, which the Board has relied on in considering stay applications since *North Fraser -Harbour Commission et al. v. Deputy Director of Waste Management*, (Appeal No. 97- WAS-05(a), June 5, 1997).

Summary of Facts

On March 18, 2024, the Administrator issued the PUP, authorizing aerial application of Foray 48B over West Kelowna in the spring of 2024. West Kelowna: 52 ha (+ 165 ha buffer); 11 moths detected in 2023); The Ministry of Forests proposes to spray Foray 48B over West Kelowna. This has the potential to expose and thousands of residents and Passerby's between now and June 2024 when spraying occurs. Countless non-target vertebrate and invertebrate species will also be impacted in the spray zone, the buffer zone and spray that escapes the buffer zone.

The Ministry of Forests has acknowledged that Foray 48B kills butterflies and other non-target Lepidoptera species in the vicinity of the spray zones for a period of approximately three years. It is impossible to estimate the effects to non-target species or the effects on water.

The spray zone also includes facilities serving vulnerable human populations, including (but not limited to):

1. Four elementary schools with the Constable Neil Bruce Middle School in the epicentre of the spray application and Mount Bouchiere on the fringe of the buffer zone with two other schools in the surrounding area as shown on the above map.
2. Seniors homes, and care facilities,
3. Spray zone is within Westbank First Nation's Territory,
4. West Kelowna City Council
4. Homeless encampments and Homeless shelter with 42 beds
5. Trailer and RV parks.

The WKB/KCSA has knowledge that in 2023, aerial application of Foray 48B by the Ministry of Forests pursuant to PUPs 738-0035-23-23, 738-0036-23-23, and 738-0032-21-24 resulted in at least one asthma attack and other respiratory symptoms, rashes and other adverse effects among members of the public. We also understand that pets can be adversely impacted. This evidence has been submitted in CUFCA's stay application.

Based on the foregoing, and the Health Canada Incident Reports submitted in the CUFCA stay application making impacts of the proposed spraying on human health and the environment clear.

Serious Issues to Be Tried

The WKB/KCSA submits that there is a serious question to be tried as to whether the PUP should have been issued. The non-compliance of Section 6.2 in the permit with respect to adhering to the label precautions has been clearly violated.

The hearing on the merits will involve oral testimony and cross examination of experts and other witnesses, so will necessarily be a de novo hearing on a standard of correctness Celandroni F et al. *Bacillus thuringiensis* membrane damaging toxins acting on mammalian cells. FEMS

microbiology letters 2014 (361) 95-103. correctness. While the onus will be on the appellants, no deference will be owed to the Administrator.

At issue in this appeal is whether the PUP should be set aside because:

- (a) the process of issuing the permit was procedurally unfair;
- (b) the Administrator failed to properly appreciate and account for the human and environmental risks associated with the spraying of Foray 48B nor ensure that the label precautions for application were incorporated into the permit;
- (c) the Administrator failed to quantify or otherwise properly assess the effectiveness of the spray program and its commercial benefits so they could be weighed against the risks that are being taken with human and environmental health;
- (d) the Administrator failed to fully consider the available alternatives to aerial spraying;

And alternatively, if the PUPs are not set aside, whether the PUPs should be amended to include terms that require:

- (e) more effective and comprehensive notice of the spraying and of the potential health risks;
- (f) comprehensive independent health monitoring and health data collection so that such data can be considered in future spraying applications; and
- (g) independent environmental monitoring and data collection relating to butterfly populations and other environmental impacts.

(h) a thorough investigation into the implementation of alternatives to the use of Pesticide given adverse events are described on the Foray 48B label. In the *Canadian EarthCare Society vs Environmental Appeal Board*, dated June 15, 1988, the BC Court of Appeal ruled that, “The Court found, however, that the Board erred in its decision that it did not have jurisdiction to consider alternatives to the pesticide. The Board was obliged to consider viable alternatives to the use of the pesticide in question once it was determined that the application of the pesticide would support adverse effects. Specifically, in considering whether these effects were unreasonable, the Board was required to inquire as to whether alternatives existed to the pesticide. The Court found that the Board failed to do this in this instance. Accordingly, the Court allowed the appeal on this ground and remitted the matter to the Board, directing it to take into account possible alternatives in its analysis as to whether the adverse effects associated with the use of the pesticide were unreasonable.”

In *RJR-MacDonald Inc. v Canada (AG)*, [1994] 1 SCR 311 at p. 335, the Supreme Court of Canada states that an adjudicator should apply “common sense and an extremely limited review of the case on the merits. ... A prolonged examination of the merits is generally neither necessary nor desirable.” Absent a frivolous or vexatious claim or a purely constitutional challenge to the validity of a statute, the adjudicator should turn to the second and third stages of the test.

This appeal is not frivolous and vexatious. Rather, it addresses a serious human health and environmental health issue that needs to be properly reviewed and considered on its merits by the Board.

Irreparable Harm

The WKB/KCSA submits that application of Foray 48B under authority granted in the PUPs will result in irreparable harm to residents, elderly, children, homeless persons, passerbys and to non-human animal species in the natural environment.

Irreparable harm is harm that cannot be compensated by money damages, or alternately, harm that cannot be quantified in monetary terms.

The WKB/KCSA notes that in *RJR-MacDonald* (at p. 344) the Supreme Court of Canada cautioned adjudicators to “reject an approach which excludes consideration of any harm not directly suffered by a party to the application.” This principle was affirmed in *British Columbia v. Carvalho v. British Columbia (Medical Services Commission)*, 2016 BCSC 1603 (at paras. 72, 74).

There is no monetary remedy available to people who suffer health impacts from the spraying of Foray 48B. Their injuries will be the product of a statutorily authorized spraying program. Similarly, there is no remedy for the negative environmental impacts of the spray program. As such, the harm is inherently irreparable.

The WKB/KCSA submits that the harm resulting from application of Foray 48B in the spray zone and buffer zone satisfies the requirements for both types of irreparable harm.

As the Board has noted in a number of decisions, harm to wildlife arising from the application of pesticides amounts to irreparable harm if proven in the substantive appeal (see, for example, *City of Port Moody*; *City of Port Coquitlam*; *City of Coquitlam v. Deputy Administrator, Pesticide Control Act* (Appeal No. 98-PES- 05(a), July 20, 1998).

The WKB/KCSA also submits that irreparable harm is indicated by a number of scientific studies that provide evidence of the effect of Bt products on human cells, and which state that further research is required before aerial application of Bt products over urban populations could be justified. We have attached expert opinion of Dr. Per Einar Granum, which demonstrates the approach taken in Norway toward Bt products.

Balance of Convenience

The WKB/KCSA submits that the balance of convenience favours the granting of a stay of the PUP pending the Board's consideration of the substantive issues raised in this appeal. Interlocutory relief in the form of a stay is a conservative remedy, aimed at preserving the status quo pending final determination of a matter.

As noted in *RJR-MacDonald (applying American Cyanamid Co. (No 1) v Ethicon Ltd., [1975] UKHL 1)*, factors which must be considered in assessing the "balance of inconvenience" are numerous and will vary in each individual case.

If the Board declines to grant a stay of the PUP pending the hearing on the merits of the appeals, the WKB/KCSA, other CUFCA members, the general public (including low-income and other marginalized persons), and non-human animal species will all be exposed to risks of adverse impacts from the aerial spraying of Foray 48B.

Unhoused and other low-income individuals — including those who have encountered substantial procedural barriers to participating in Ministry of Forests and Ministry of Environment processes that preceded the Decision, as well as barriers to Board appeal processes — would be exposed to health risks arising from aerial application of Foray 48B.

Natural ecosystems — including animal and plant species dependent on the ecological integrity of riparian and shoreline areas, particularly butterfly and other non-invasive Lepidoptera species — would also be exposed to the potential adverse impacts of the application of Foray 48B.

If people in affected areas come down with asthma attacks, food poisoning symptoms and/or eye infections, they will be effectively involuntarily, and perhaps unknowingly, paying the cost of the commercial benefits the Ministry of Forests seeks to gain by spraying. This is unacceptable.

Of particular relevance in this case is that if a stay is not granted, this appeal on the merits will be defeated because the spraying program will be complete and the appeal will likely be deemed moot by the time the appeal is heard and reasons issued by the Board. Accordingly, granting a stay in these appeals is appropriate as it will allow the matter to be properly adjudicated on its merits.

In contrast, the Ministry of Forest would suffer minimal inconvenience if the Board agrees to grant a stay of the PUP pending the appeals. The spongy moth eradication program has been ongoing since 1979 and the moth has not been eradicated. A pause in the program to adjudicate the merits of this particular permit is highly unlikely to cause the moth population to increase in a manner that is unmanageable. Not every area of British Columbia is sprayed each year, which indicates that annual spraying is not essential.

Similarly, the Ministry of Forests would suffer minimal inconvenience from an international trade standpoint if the Board agrees to grant a stay of the PUP pending the appeal. The risk of international trade implications or restrictions on the export of BC logs is negligible (and would likely result in a net benefit to workers, communities and public revenues if logs were processed in BC communities, rather than being exported to the United States).

The WKB/KCSA further submits that the precautionary principle is a factor that should be considered in weighing the balance of inconvenience. The precautionary principle states that “where there are threats of serious or irreversible damage, lack of full scientific certainty shall not be used as a reason for postponing cost-effective measures to prevent environmental degradation” (Canadian Environmental Protection Act, S.C. 1999, c. 33, s. 2(1)(a)).

There does not appear to be a scientific consensus on the impacts of Foray 48B on human health and ecological health, as noted in the attached expert reports and publications. The WKB/KCSA submits that this uncertainty supports the application of the precautionary principle when considering governmental action relating to Foray 48B, and supports the balance of convenience weighing in favour of the granting of a stay.

In 2000, Tayabali et al. from the Department of Health of the Government of Canada reported that: “Bt products have an inherent capacity to lyse human cells. . .and may also act as immune sensitizers.” They go on to state that “what is lacking is a critical understanding of conditions that might concern high-risk groups, those unable to manage microbe invasions through impaired immune responses, the very young, the elderly.”

The WKB/KCSA submits that a critical understanding is required of conditions that might concern high-risk groups — including those unable to manage microbe invasions through impaired immune responses and other physical-chemical clearance mechanisms manifested during development (for example, the very young and the elderly) and in specific genetic disorders (e.g., cystic fibrosis). To justify aerial application of spore-containing Bt products, claims of no health effects need to be addressed in light of current scientific evidence and practices.

Disruptions to the immune system of a human can have a broad range of health outcomes for individuals, including infections, allergies, autoimmunity, and malignancies. There is nothing either in the PUP nor in the Ministry of Forests’ methodology that provides for actual monitoring, reporting and analysis of health impacts of spraying Foray 48B.

Moreover, there has been no ongoing, structured short or long-term data collection and health monitoring. There are no long-term controlled studies on the effects of Foray 48B on humans. In 1999, the Capital Health Region Office of the BC Ministry of Health made very clear recommendations that are not being followed:

“Continued monitoring is needed to identify rare or unexpected effects of the exposure to the spray and to generate more information to help the 2 Tayabali AF, S. V. (2000 Oct). Human cell exposure assays of *Bacillus thuringiensis* commercial Insecticides: production of *Bacillus cereus*-like cytolytic effects from outgrowth of spores. *Environ Health Perspect*, 108(10):919-30. doi: 10.1289/ehp.00108919. PMID: 11049810; PMCID: PMC1240123. - 9 - public and the government understand the local consequences of aerial spraying of Btk. . . This needs to use a variety of scientific specialties to track the full range of possible health impacts. . . Health studies need to be planned well before any spray program begins.”

To our knowledge, there is no such plan in place, and yet the spraying is scheduled to occur again this year if the PUP is not stayed.

Granting a stay based on the facts in this appeal would be consistent with the Board's decision in *City of Parksville et al. v. Deputy Administrator, Pesticide Control Act* (Appeal No. 98-PES-07(a), October 5, 1998), *Raincoast Research Society v. Deputy Administrator, Pesticide Control Act* (Appeal No. 99-PES-09(a), August 6, 1999), *Fort Nelson First Nation v. Deputy Administrator, Pesticide Control Act* (Appeal No. 99-PES22(a), August 27, 1999), and *Resort Municipality of Whistler v. Deputy Administrator, Pesticide Control Act* (Appeal No. 2000-PES-017(b), September 14, 2000).

The WKB/KCSA submits that the balance of convenience weighs in our favour and against the Ministry of Forests, and that the Board should therefore issue a stay of the PUP pending the hearing and decision on the substantive appeals.

The WKB/KCSA notes that in both 2022 and 2023 the Ministry of Forests and the Administrator appointed under the IPMA applied to have several appeals dismissed for mootness. The WKB/KCSA therefore notes that time is of the essence and that the Board should ensure that the CUFCA stay application be heard in the most timely manner possible and to not let our application delay the process of hearing the Stay Application.

Please be advised that any references not denoted have been submitted in the CUFCA pleadings.

Sincerely yours,

On behalf of the West Kelowna Branch

Of the Kelowna Citizens Safety Association. WKB/KCSA

Lloyd Manchester

President.

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