

# Environmental Appeal Board

Fourth Floor 747 Fort Street Victoria British Columbia **Telephone:** (250) 387-3464 **Facsimile:** (250) 356-9923

Mailing Address: PO Box 9425 Stn Prov Govt Victoria BC V8W 9V1

## APPEAL NO. 2002-PES-003(b)

In the matter of an appeal under section 15 of the *Pesticide Control Act*, R.S.B.C. 1996, c. 360.

BETWEEN:	Ingmar Lee		APPELLANT
AND:	Deputy Administrator, Pesticide Control Act		RESPONDENT
AND:	University of Victoria		THIRD PARTY
BEFORE:	A Panel of the Environmental Appeal Board Alan Andison, Chair		
DATE OF HEARING:	Conducted by written submissions concluding on October 18, 2002		
APPEARING:	For the Appellant: For the Respondent: For the Third Party:	Ingmar Lee Conrad Bérubé Paul J. Pearlman, Cou	unsel

#### APPEAL

Ingmar Lee appeals the March 15, 2002 decision of Conrad Bérubé, Deputy Administrator, Pesticide Control Act ("Deputy Administrator"), to issue and endorse Pesticide Control Service Licence No. 1601 (the "Licence") to the University of Victoria ("UVic") for the period from April 1, 2002 to April 1, 2003.

The Licence is endorsed pursuant to section 10(2) of the *Pesticide Control Act Regulation* (the *"Regulation"*) to allow UVic to apply landscape pesticides to public land under its existing pesticide management plans.

The Environmental Appeal Board has the authority to hear the appeal under section 11 of the *Environment Management Act*, R.S.B.C. 1996, c. 118, and section 15 of the *Pesticide Control Act* (the *"Act"*). Section 15(7) of the *Act* provides:

- **15** (7) On an appeal, the appeal board may
  - (a) send the matter back to the person who made the decision being appealed, with directions,
  - (b) confirm, reverse or vary the decision being appealed, or

(c) make any decision that the person whose decision is appealed could have made, and that the board considers appropriate in the circumstances.

The Appellant requests that the Licence be rescinded.

#### BACKGROUND

On February 21, 2002, the Ministry of Water, Land and Air Protection (the "Ministry") received an application for a pest control service licence from UVic for the provision of landscape pest control services on campus grounds. The licence was sought to allow annual pesticide treatments under UVic's existing pest management plans for the purpose of controlling broadleaf weeds, fungi and insects on turf and ornamentals, general vegetation, and molluscs such as slugs.

To comply with section 10(2) of the *Regulation*, UVic requires a public land "endorsement" on a licence in order to use pesticides on public lands. (There is no dispute that UVic is a "public land" as defined in section 1 of the *Regulation*.) The Ministry has an "Endorsement Policy", which directs that a regional manager may authorize pesticide use on public lands by annually endorsing certain service licences for the purpose of landscape and garden maintenance, if the total public land area to be treated annually is less than 20 hectares. UVic seeks to treat an area of land under 20 hectares.

On March 14, 2002, the Deputy Administrator completed a Pesticide Service Licence Endorsement Technical Report (the "Technical Report"), which concluded that an endorsement of the licence should be approved.

On March 15, 2002, the Licence was issued and endorsed, subject to the following conditions:

- All treatments carried out on public land must be done under a Pest Management Plan (PMP) complying to the attached "IPM [Integrated Pest Management] Standards for Landscapes on Public Land." The endorsement is restricted to the following locales: Sites described in the University of Victoria's PMPs.
- 2. A working copy of the PMP(s) under which you are working should be kept with your application records and should be consulted before any pesticide applications occur to ensure that prospective applications are done in accordance with the PMP. Please be advised that, on public lands, any pesticide treatments not approved under provincial authority or made in violation of the protocols outlined in an approved PMP, may result in fines, revocation of Service Licences and Applicators certificates and/or imprisonment.
- 3. The licensee shall adhere to the February 28, 2001 version of "*Guidelines for Pesticide Treatments in Public Use Areas*" produced by the Ministry of Water, Land and Air Protection....

4. Unless written authorization has been received from a representative of the Integrated Pest Management department in Nanaimo, application of non-exempted pesticides are restricted to the following compounds:

Safer's Slug Bait [ferric phosphate], dormant oil, methoxychlor, Malathion 50% EC [malathion], Orthene [acephate], Roundup or Wrangler or equivalent [glyphosate], Amitrol T [Amitrol, simazine], Casoron [dichlobenyl], methoxone amine 500 [MCPA], TriKill or Trillion or equivalent [dicamba, 2, 4 D, mecoprop], Funginex [triforine], Dipel WP or equivalent [*Bacillis thuringiensis*], and Bravo [chlorothalonil]

[bold in original]

On April 10, 2002, the Appellant filed a Notice of Appeal of the Licence and the endorsement, and requested a stay pending the decision on the merits.

On May 17, 2002, the Board denied the Appellant's application for a stay (see 2002-PES-003(a)).

The Appellant requests that the Licence be rescinded on the grounds that UVic's pesticide applications on public land will have an adverse effect on human health and the environment.

UVic argues that the Appellant has failed to discharge his burden of showing that the Deputy Administrator erred in issuing the Licence. UVic submits that the decision of the Deputy Administrator to issue the Licence should be upheld and the appeal dismissed.

The Deputy Administrator did not make submissions to the Board in relation to this appeal.

## **RELEVANT LEGISLATION AND CASE LAW**

The relevant portions of the *Act* include:

- **1** In this Act:
  - "adverse effect" means an effect that results in damage to humans or the environment;
  - ...
  - "pesticide" means a micro-organism or material that is represented, sold, used or intended to be used to prevent, destroy, repel or mitigate a pest, and includes
  - (a) a plant growth regulator, plant defoliator or plant desiccant,
  - (b) a control product under the *Pest Control Products Act* (Canada), other than a device that is a control product, and

(c) a substance that is classified as a pesticide by regulation;

- 4 (1) Except as provided in the regulations, a person who does not hold a licence must not
  - (a) carry on, or represent that the person is available to carry on, the business of selling pesticides, applying pesticides or providing any service respecting pesticides, or
  - ...

. . .

- (3) The administrator may
  - (a) issue a licence if satisfied that the applicant meets the prescribed requirements, and
  - (b) include requirements, restrictions and conditions as terms of the licence.
- •••
- **12** (2) The administrator has the powers necessary to carry out this Act and the regulations and, without limiting those powers, may do any of the following:
  - (a) determine in a particular instance what constitutes an unreasonable adverse effect;
  - ...

The relevant portions of the *Regulation* include:

- **1** (1) In this Regulation:
  - "public land" means land, whether covered by water or not, that is owned or controlled by
  - •••
  - (e) a university, or the University Council, as defined in the University Act,
  - ...

"service licence" means a pest control service licence authorizing the licensee, his agent, assistant or employee to offer, sell or provide a service;

- ...
- **2** (1) Subject to subsection (2), no person shall

...

(2) No term or condition of a licence, certificate or permit shall require the holder of it to do anything that would result in the creation of an unreasonable adverse effect, and no person shall be liable in a prosecution for contravening subsection (1) if he proves that the unreasonable adverse effect primarily resulted from compliance with a term or condition of a licence, certificate or permit in question issued to him.

...

**10** (2) No person shall use a pesticide

(a) on public land,

...

unless that person has received a use permit or the applicator certificate or service licence of that person is endorsed to permit the use.

...

The British Columbia Court of Appeal has ruled that the Board can consider a registered pesticide to be generally safe when used in accordance with the manufacturer's label (*Canadian Earthcare Society* v. *Environmental Appeal Board* (1988), 3 C.E.L.R. (N.S.) 55). However, it is also clear that the fact that a pesticide is federally registered does not mean that it can never cause an unreasonable adverse effect.

Justice Legg, in *Islands Protection Society* v. *British Columbia Environmental Appeal Board* (1988), 3 C.E.L.R. (N.S.) 185 (B.C.S.C.), found that, in making its decision, the Board should engage in a two-step process to determine whether a pesticide application would cause an unreasonable adverse effect. The first stage is to inquire whether there is any adverse effect at all. If the Board decides that an adverse effect exists, then, in the second stage, the Board has to undertake a risk-benefit analysis to ascertain whether that adverse effect is reasonable.

The Court of Appeal decision in *Canadian Earthcare Society* supported Justice Lander's finding in the court below that:

Should the Board find an adverse effect (i.e. some risk) it must weigh that adverse effect against the intended benefit. Only by making a comparison of risk and benefit can the Board determine if the anticipated risk is reasonable or unreasonable. Evidence of silvicultural practices will be relevant to measure the extent of the anticipated benefit. Evidence of alternative methods will also be relevant to the issue of reasonableness. If the same benefits could be achieved by an alternative risk free method then surely the use of the risk method would be considered unreasonable.

It is clear that the test for "unreasonable adverse effect" is site specific and application specific. For the Appellant to be successful, he must show that, at a specific site, the application of the pesticides by UVic will cause an unreasonable adverse effect to human health or the environment.

The Appellant also referred to the "precautionary principle" in his Notice of Appeal although he did not argue it further in his submissions. The Board recently found in *Josette Wier* v. *Deputy Administrator, Pesticide Control Act* (2001-PES-003(a), July 23, 2002), [2002] B.C.E.A. No. 43 (Q.L), that neither the administrator nor the Board are obligated to apply the "precautionary principle" when determining whether a pesticide may cause an adverse effect on human health or the environment.

## ISSUE

Whether the Licence should be rescinded on the grounds that UVic's landscape pesticide applications on public land will cause an adverse effect on human health or the environment, and, if so, whether that adverse effect is unreasonable in the circumstances.

## **DISCUSSION AND ANALYSIS**

Without the benefit of submissions from the Deputy Administrator, the case before the Panel consists of the Deputy Administrator's March 15, 2002 decision, the Technical Report, and the arguments and information provided by the Appellant and UVic.

The Appellant raises issues concerning the Licence that can be broadly categorized as concerns for health and the environment. However, some of his concerns go beyond the specific decision at issue before the Panel. For instance, the Appellant takes issue with the level of planning in UVic's pesticide program and the lack of consultation by Facilities Management with the university community in relation to decisions about pesticide use. He notes that many communities are now restricting their use of pesticides as a result of the Supreme Court of Canada decision *114957 Canada Ltée. (Spraytech, Société d'arrosage)* v. *Hudson (Town)*, [2001] S.C.J. 42. The Appellant also alleges that the national pesticide regulatory body, Health Canada's Pest Management Regulatory Agency, is in a conflict of interest. These matters are beyond the Board's jurisdiction in this appeal, which is confined solely to the issuance of this particular Licence and its endorsement.

The Appellant also objects to UVic's use of rodenticides. As the application of rodenticides is conducted under pesticide licence No. 1266, which is not the Licence that is the subject of this appeal, the Board has no jurisdiction over these matters.

The Appellant's evidence and argument with respect to the subject Licence and its endorsement are summarized as follows:

- environment. These include possible links to cancer, human health and the environment. These include possible links to cancer, human immune deficiency, and allergies. The Appellant provided the Panel with copies of draft position statements of various medical and public health associations, which call for a reduction of pesticide use in Canadian society.
- 2. Even if pesticides are approved for use and deemed "safe" by the regulatory agencies, there are still scientific concerns about the toxicity of "inert" ingredients that are not listed on the pesticides' Material Safety Data Sheets. The Appellant asserts that inert ingredients constitute the bulk of the ingredients in most pesticides, and provided the Panel with an article from the "Pesticide Education Network" in support of this assertion.
- 3. Herbicides are randomly sprayed at UVic to treat weeds on sidewalks and sports fields. The Appellant submits that UVic's random use of pesticides, solely for cosmetic purposes, is dangerous to human health and the environment, and provided the Panel with articles that show a trend in many communities towards banning the use of pesticides for cosmetic purposes. The Appellant notes that the "Canadian Cancer Society" has taken a public stance against the cosmetic use of pesticides.
- 4. Non-target species may be killed because of pesticides at UVic. The Appellant argues that rabbits have been killed by pesticide applications at the Sedgewick Building, and provided the Panel with articles describing how pesticides have been linked to population decreases in non-target species.
- 5. The Appellant further argues that people have become sick because of exposure to pesticides applied at UVic. He provided the Panel with a copy of an anonymous email describing its writer's illness after attending a conference at the campus. The email refers to physical reactions that the writer and her child had as a result of contact with permethrin, which had been used to treat an ant problem on campus.

The Appellant also takes issue with UVic's record-keeping and lack of public notice of its pesticide applications. The Appellant submits that UVic regularly applies pesticides during class hours and without notice, and that people have become sick as a result.

In response, UVic submits that the Appellant has failed to adduce any compelling evidence to challenge the long-term safety of the products used under its Licence. UVic submits that the pesticides authorized by the Licence are readily available household products. It also contends that there is no evidence of site-specific features or other issues affecting its certified applicators' ability to apply the pesticides in a safe manner under the terms of the Licence. UVic states that the Appellant's claim about inert ingredients in pesticides is a claim about the safety of pesticides at large and is, therefore, beyond the scope of this appeal.

UVic submits that it no longer uses pesticides for cosmetic horticultural purposes. In support of this assertion, UVic provided the affidavit of Tony James, Facilities Management Grounds Manager, sworn on August 16, 2002. The affidavit details the current use of pesticides on the campus, and states that UVic has substantially reduced its use of pesticides under the Licence. UVic submits that pesticides are now only applied for the maintenance of localized problem areas. For example, UVic submits that Roundup is no longer used for crack and crevice work, and, as a result, weeds are noticeable along campus paths and walkways. UVic submits that other cost-effective methods of pest control are being investigated (e.g. experiments using household vinegar on sports fields). However, until a costeffective substitute for pesticides is found, UVic wishes to retain the Licence for maintenance activity such as using insecticides to eliminate wasps' nests, or fungicides to control mildew.

UVic submits that it has no knowledge of any harm sustained by non-target species. It acknowledges that dead rabbits were found underneath the Sedgewick Building, but submits that they likely died after becoming trapped in crawl spaces, not as a result of pesticides.

UVic submits that none of its departments, including the organizers of the conference, have any knowledge of the incident described in the anonymous email referred to by the Appellant. Further, UVic submits that the email writer acknowledges that neither she nor her child can claim a "causative factor" for their illness after the conference. The email states that the writer has an immune related illness and chemical sensitivity.

Regarding the use of permethrin, UVic submits that it has been used on the campus to control an ant infestation in an area that is not accessible by the public. UVic contends that permethrin is a chemical common in soaps and shampoos used to treat head lice, and because this was an international children's conference, it is likely the writer came into contact with permethrin from one of these hygiene products.

Finally, UVic submits that most of its pesticide applications do not require posting pursuant to the February 2001 *Guidelines for Pesticide Treatments in Public Areas* (the *"Guidelines"*). However, when posting is required, UVic submits that it is always done. UVic submits that it conducts its applications in accordance with the Licence, in a safe manner, and that applications occur only when there is minimal public traffic and during appropriate weather conditions.

## The Panel's Findings

As noted above, the Board applies a two-step legal test in appeals of licences issued under the *Act*. First, the Board determines whether the use of the pesticide in accordance with the licence will cause an adverse effect on human health or the environment. If so, the Board considers whether that adverse effect is unreasonable in the circumstances. The legal test is site specific. For example, the

Board may consider evidence of whether the pesticide can be used safely at a particular site.

In *Canadian Earthcare Society*, the Court of Appeal ruled that the Board can consider registered pesticides safe when used in accordance with manufacturer's labels and when there is no evidence that the pesticide cannot be used safely at a particular site.

The Deputy Administrator provided the Panel with a copy of the Licence and endorsement, as well as the Technical Report. These documents indicate that UVic's pesticide use under the Licence is limited to the registered, non-exempted pesticides listed in condition 4 of the Licence endorsement letter, unless UVic has prior written approval from the Integrated Pest Management department to use other pesticides. The authorized pesticides include:

Safer's Slug Bait [ferric phosphate], dormant oil, methoxychlor, Malathion 50% EC [malathion], Orthene [acephate], Roundup or Wrangler or equivalent [glyphosate], Amitrol T [Amitrol, simazine], Casoron [dichlobenyl], methoxone amine 500 [MCPA], TriKill or Trillion or equivalent [dicamba, 2, 4 D, mecoprop], Funginex [triforine], Dipel WP or equivalent [*Bacillis thuringiensis*], and Bravo [chlorothalonil]

The Panel notes that the Appellant has objected to the use of diazinon, benomyl, and malathion. However, the Appellant did not provide the Panel with specific evidence illustrating the location, frequency, or volume of applications of these pesticides at UVic, nor did he provide evidence of the direct impact that these particular pesticides have on public health and the environment at UVic. Further, condition 4 of the Licence does not authorize the application of either diazinon or benomyl and, therefore, these two pesticides are not within the scope of this appeal.

The Panel notes that the Technical Report further states:

No solid scientific information has been put forward that would challenge the long-term safety of these products, when used according to provincial restrictions—as verified by registration under the [federal *Pest Control Products Act*]... The products authorized under the terms of the endorsement are the same as those which could be purchased over-thecounter by homeowners...

The Panel finds that the pesticides that are permitted under the Licence are widely available for public use and are deemed safe for that use when applied in accordance with their labels, as verified by their registration under the *Pest Control Products Act*. The Panel finds that the Appellant failed to provide any site-specific evidence that the pesticides authorized by the Licence pose an adverse health or environmental threat at the campus.

The Panel finds that the Appellant's scientific and public interest articles point to health concerns related to pesticides in general, and he did not provide sufficient evidence to establish, on a balance of probabilities, that the pesticides allowed under the Licence are not safe – despite their registration pursuant to the *Pest Control Products Act.* 

The Panel also notes that the Deputy Administrator wrote in the Technical Report that there was no indication that UVic would use the pesticides authorized by the Licence in, "a manner contrary to the intent or restrictions of either the labels or registration." Further, the Panel notes that condition 3 of the Licence is that UVic must adhere to the *Guidelines*. Included in the *Guidelines* are rules on posting and notification, as well as appropriate times for applications. The Deputy Administrator noted in the Technical Report that there is "no evidence that [UVic] would not be able to apply the pesticides in a safe manner and in accordance with other authorization requirements."

UVic has also provided the Panel with evidence illustrating its safe and limited use of pesticides on campus grounds. This includes the evidence that pesticides are applied by certified applicators, in accordance with the *Guidelines*, and only in localized problem areas for maintenance purposes.

The Panel finds that the Appellant did not provide any evidence to suggest that UVic will not follow the label directions, or that it will fail to adhere to the conditions of the Licence. Therefore, the Panel has no reason to find that UVic's use of the pesticides authorized in condition 4 of the Licence will create a danger for public health or the environment.

Regarding the Appellant's claim of toxic "inert" ingredients in all registered pesticides, the Panel finds that this evidence is not sufficiently specific to address the toxicity of the pesticides specifically approved for application under the Licence.

UVic applied for the Licence and endorsement for maintenance purposes. The Appellant questions whether there really is a difference between "cosmetic" and "maintenance" purposes. The Panel has applied the usual definition of "cosmetic," and finds that the claim that UVic uses pesticides for random cosmetic treatments is not supported by the evidence. The articles submitted by the Appellant only show broad social trends against the use of pesticides for cosmetic purposes, and do not provide any evidence that UVic actually uses pesticides for cosmetic treatments. Therefore, these articles are not relevant to this appeal. Conversely, the affidavit of Tony James illustrates that UVic has reduced its use of pesticides, and now only applies pesticides for maintenance purposes in problem areas. Further, although the Appellant is concerned that pesticide reduction is difficult to quantify, the Panel finds that pesticide reduction is not relevant to the central issue in this appeal. That is, whether pesticide applications under the Licence may create an adverse effect on public health or the environment.

The Panel finds that the Appellant has provided no direct evidence to support the claim that non-targeted species are being killed on the campus because of pesticide applications. The Appellant did not provide any evidence that links the rabbit deaths to pesticides, and, although he argues that UVic did not provide evidence to prove the deaths *were not* the result of pesticides, the Panel notes that it is the Appellant who has the burden in this appeal. Further, even if the rabbits were

killed as a result of rodenticides applied near the Sedgewick Building, the application of rodenticides is not conducted under the Licence that is the subject of this appeal.

The Panel also finds that the Appellant has provided insufficient evidence to support the claim that people have become sick as a result of UVic's use of pesticides. He did not provide evidence illustrating specific instances of pesticide-related illness, resulting from exposure to pesticides as alleged. Although the allegation in the email is serious, the Panel is unwilling to give the email weight because it was sent anonymously, and to an unidentified person who was not part of the conference's organizing committee. Further, the Panel finds that an application of permethrin would not have been conducted under the Licence and is, therefore, not within the scope of this appeal.

The Panel notes that the Appellant submitted new evidence in his closing comments in the form of further documents. Despite the Board's direction that new evidence not be provided, the Panel has considered this material and finds that the campus map and the invoices from "Victoria Pest Control Ltd." refer to rodenticide and other pesticide applications under Licence No. 1266, which is not the Licence at issue in this appeal. Further, the Board is unwilling to give weight to the typed transcript of the Appellant's meeting with Facilities Management because it is not an official transcript, and there is no indication that the people present have approved the contents of the transcript as accurate.

In conclusion, the Panel finds that the Appellant is genuinely concerned about pesticide use in our society, but he has failed to fulfil the burden of showing that pesticide use at UVic, under the Licence, will cause an adverse effect on human health or the environment. Despite the Appellant's concerns and the current social and scientific trend towards reducing pesticide use, the use of pesticides is permitted pursuant to the *Act* and *Regulation*. After a careful review of the Appellant's submissions, the Panel can find no legal or factual basis for rescinding UVic's Licence and its endorsement for landscape pesticide use on public land.

Given that the Panel is unable to find that UVic's pesticide use will create an adverse effect on human health or the environment, it does not need to discuss the second stage of the analysis.

## DECISION

In making this decision, the Panel of the Environmental Appeal Board has considered all of the evidence before it, whether or not specifically reiterated here.

The appeal is dismissed.

Alan Andison, Panel Chair Environmental Appeal Board

November 20, 2002