



Province of
British Columbia

Ministry of
Environment

ENVIRONMENTAL APPEAL BOARD
Victoria
British Columbia
V8V 1X5

APPEAL: 84/17 PES

J U D G E M E N T

Appeal against Pesticide Control Act Pesticide Use Permit No. 103-154-84/86, issued to British Columbia Forest Products Limited for truck mounted, manually directed powerhose application of Forestamine (2,4-D Amine) for control of red alder for access road maintenance within British Columbia Forest Products, Koksilah Division: Tree Farm #68.

APPELLANT

ARROWSMITH ECOLOGICAL ASSOCIATION

DECISION

The Panel of the Environmental Appeal Board has considered all of the evidence submitted to it in the appeal hearing on Pesticide Control Act Pesticide Use Permit No. 103-154-84/86, issued to British Columbia Forest Products Limited, for truck mounted, manually directed powerhose application of Forestamine (2,4-D Amine) for control of red alder for access road maintenance within British Columbia Forest Products Koksilah Division: Tree Farm #68, and has decided that the implementation of the program, in accordance with the terms and conditions specified in the Permit, will not cause an unreasonable adverse effect to man and/ or the environment.

The Panel of the Board share the view expressed by the Appellant that human health and the environment must be safeguarded at all times. It is clear from the evidence that the Permittee's planned application of Forestamine was requested and authorized only after careful consideration by qualified representatives of the Permittee and responsible Government agencies. The Permit's terms and conditions, and the Permittee's planned pesticide treatment program, provide adequate safeguards to ensure the interests of the public and those directly involved in applying the chemical have been carefully considered and properly provided for.

The Panel rejects the recommendation of the Appellant that the size of the pesticide free zones adjacent to waterworks water supply sources be increased from 10 to 50 meters. No evidence was submitted in support of the reason for recommending the change, or to demonstrate how it would lessen the likelihood of meaningful contamination of water sources.

The Appellant also recommended that the Panel make certain other amendments to the Permit (See Item 18 of the Summary - pages 5-6). The proposed amendments seek to clarify a number of the Permit's details, and to introduce additional safeguards and monitoring procedures. It is evident to the Panel that the changes the Appellant seeks to have made and the current policies and practices of the Permittee are not far apart, or are already part of the Permit by way of the application made by the Permittee to use the pesticide. It is regrettable that the information contained in the application for the Permit and the details of the Permittee's pesticide use policies and practices were not made available to the Appellant prior to the hearing. Had it been, certain of the recommendations for change may not have been made, or could have been

found to already exist by direct communication between the parties rather than through the appeal process. The Permittee clearly stated its willingness to allow the Appellant to monitor the treatment areas both before and after the pesticide application, and to co-operate in arranging such inspection. In this regard, the Panel need not concern itself further.

The Appellant alleged that the Permit is in violation of the Pesticide Control Act Regulation 1981, Section 17, because it failed to show "the applicator's name and certificate number" and "the rate of application".

Section 17 of the Regulations (B.C. Reg. 319/81, states that:

17. (1) A permit shall specify, as may be appropriate and available -
- (a) the permittee's name and address.
 - (b) the applicant's name and certificate number.
 - (c) the location and area where the pesticide is to be used.
 - (d) the periods of validity of the permit.
 - (e) the name of the pest or purpose for using the pesticide.
 - (f) the common or trade name and formulation of the pesticide, and its registration number under the Pest Control Products Act (Canada).
 - (g) the method and rate of application and total quantity of pesticide to be used, and
 - (h) the precautionary measures or other terms that are considered necessary by the administrator under section 6 of the Act.

The words "as may be appropriate and available" appear to afford the Administrator, Pesticide Control Act, some degree of discretion in deciding what information need be shown in the permit. This discretion is exercised in the knowledge that the information set out on the permit application form is considered to be a part of the permit.

The application for Pesticide Use Permit No. 103-154-84/86 dated April 27, 1984, showed -

"B.T. Wallis to be the person responsible for the

project and Pesticide Applicator Certificate
No. 04716A-6-Forestry" and

"a rate of application of 3.5 kg/ha".

The Panel of the Board recommends that, notwithstanding that the application is held to be a part of the permit, in future, the information required to be specified in a permit under Section 17 of the Regulation (BC Reg.319/81) be shown on the permit in such a way that it is complete and readily available to all interested parties.

The Panel directs the Administrator, Pesticide Control Act, to review the "Duration" of Pesticide Use Permit 103-154-84/86 with the Permittee and, if requested, to change the final date specified in Section 1 of the amendment to the Permit, dated June 8, 1984, to read "September 30, 1987" in recognition of the fact that the appeal process resulted in no treatment occurring in 1984 under the Permit.



J.O. Moore
Panel Chairman
Environmental Appeal Board

Victoria, B. C.
November 5th, 1984.

SUMMARY

The following pages of this Judgement contain a summary of the hearing details and principal points advanced in the testimony of the parties to the appeal.

A handwritten signature in dark ink, appearing to read 'J. Moore', is positioned above the printed name.

J.O. Moore
Panel Chairman
Environmental Appeal Board

November 5th, 1984

HEARING DETAILS:

The hearing was held by a Panel of the Board in Nanaimo, B.C., at the Harbour View Motor Inn, on September 20th, 1984.

The Panel of the Board in attendance were:

J.O. Moore	-	Chairman
Dr. Wm. Godolphin	-	Member
Ian Hayward, P.Eng.	-	Member

Miss Shirley Mitchell, Secretary to the Board, acted as Recorder of the Proceedings.

SUMMARY OF PRINCIPAL REASONS FOR APPEAL:

The appeal was taken under Section 15 of the Pesticide Control Act against Pesticide Use Permit No. 103-154-84/86 for the use of Forestamine (2,4-D Amine) by British Columbia Forest Products Limited for control of red alder for access road maintenance within British Columbia Forest Products Koksilah Division, Tree Farm #68, issued by the Administrator of the Pesticide Control Act on June 1, 1984, and amended June 8, 1984, on the following grounds:

1. The Permit is in violation of the Pesticide Control Act.
2. Under the terms of the Act, the application cannot be carried out as proposed.
3. Alternative methods of alder control are available.

APPELLANT'S REPRESENTATIVE:

Arrowsmith Ecological Association -

Mr. Wm. Spira -	Spokesman
Mrs. Joan Spira -	Witness

PERMIT HOLDER'S REPRESENTATIVES:

British Columbia Forest Products Limited

Mr. B.T. Wallis, R.P.F. - Spokesman
Area Forester,
Crofton Logging Group

R. P. Willingdon, R.P.F. - Witness
Head, Resource Planning,
Crofton Logging Group

Alan Chatterton, R.P.F. - Witness
Pedologist, Resource Planning,
Crofton Logging Group

ADMINISTRATOR'S REPRESENTATIVE:

R. G. Mullett, P. Ag.,
Regional Manager
Vancouver Island Region

EXHIBITS FILED:

EX."A" Decision of the United States Court of Appeals
re Spraying of Herbicides on United States Forest
Service and Bureau of Land Management - Lands:
filed January 27, 1984.

EX."B" Appeal of Arrowsmith Ecological Association against
British Columbia Forest Products Limited

In addition, the following was tabled by the Appellant for
information only:

" Promac Industries Ltd.
P.O. Box 566,
2940 Jacob Road, Duncan, B.C. V9L 3X9

This Company markets a 36" brushcutter which
cuts up to 4" alder.

Fits on to a backhoe
Costs about \$6500 - \$7000.

They are preparing a video tape of their machine
for school purposes.

"

PRINCIPAL POINTS ALLEGED IN THE EVIDENCE OF THE APPELLANT:

At the commencement of its presentation of evidence before the Panel of the Board, the Appellant sought a ruling as to the validity of P.U.P. 103-154-84/86. It was contended that the Permit was in violation of Section 17 of the Pesticide Control Act Regulation (BC Reg. 319/81) in that it failed to show "the applicator's name and certificate number" (Section 17 (1) (b) and the "rate of application" (Section 17 (1) (g)).

The Appellant requested that the Panel of the Board provide an immediate ruling as to whether the omissions of the applicator's name and certificate number and the rate of application from the Permit rendered it invalid.

The Panel of the Board declined to provide an immediate ruling but undertook to examine the validity of the Permit on the ground that it was in violation of Section 17 of the Pesticide Control Act Regulation (BC Reg. 319/81), because of the omissions and to include their findings on this in their decision.

The Appellant then proceeded with the presentation of the following points of evidence:

- 1) The use of a truck mounted, manually directed powerhose as the method of application under the Permit is inappropriate for purposes of controlling red alder for access road maintenance.
- 2) The use of the powerhose method of application will result in the treatment of non-target species including salmonberry and huckleberry.
- 3) The use of the powerhose method of application is environmentally irresponsible, ineffective, and unsafe for workers.
- 4) The use of herbicides for access road maintenance has been discontinued by some companies in the forest industry. Mechanical methods have been substituted.
- 5) The Ministry of Highways now uses only mechanical brushcutters for roadside maintenance.
- 6) The Permittee has used the Federal Government's Employment Bridging Assistance Program to hire men to manually cut down undesirable vegetation alongside roadsides.

- 7) The Permittee is using chemical treatment methods for control of alder in access road maintenance because it is part of a predetermined 5-year management plan rather than for any demonstrated need to use herbicides for access road maintenance.
- 8) Truck mounted manually directed powerhose treatment of vegetation cannot be applied sparingly and discriminately.
- 9) The nozzles of manually operated backpack sprayers can be controlled more effectively than nozzles on power-hoses.
- 10) The use of powerhose applications gives rise to greater chance of herbicide drift and prevents rapid adjustments in the amounts of herbicide used when variation in vegetation densities are encountered by applicators.
- 11) The Permittee should be compelled to use mechanical and manual means to clear access roads as the use of herbicides for this purpose is completely unnecessary and unjustified.
- 12) The use of manually operated backpack sprayers will reduce the risk of unreasonable adverse effect to the environment over the powerhose method approved in the Permit.
- 13) The Appellant is opposed to all improper and unnecessary use of pesticides.
- 14) It is not possible to prove conclusively that it is safe to use herbicides.
- 15) A good deal of doubt exists at the present time as to the safety of pesticides.
- 16) The federal forest herbicide program on the west coast of the United States of America (Oregon) has been suspended by the Courts because the safety of most forest use herbicides is uncertain due to the fact that registration by the federal agency does not constitute proof of their safety and that the validity of whatever data are available as to the safety of their use is questionable.
- 17) Forest companies and regulatory agencies in British Columbia have failed to consider adequately the effects of their spraying programs.

- 18) The Appellant recommended the following amendments to make to the terms and conditions of P.U.P. 103-154-84/86:

AMENDMENTS

At the top of the permit, after Pesticide, add:

Rate of Application: Not to exceed a rate of application of 3.5 kg. a.i. per hectare, or manufacturer's label, whichever is less.

Public Notification:

Add 3. Notification shall be given to residents living adjacent to the areas to be sprayed two weeks prior to the operation - by the most expeditious method.

Add 4. The company will post signs not less than 3' x 2'6" in a prominent position at the beginning of each access road that is to be sprayed, giving the date on or about when the spraying is to take place, and giving the name of the herbicide. These signs should be posted even if the gates are closed and locked. Such signs should also be placed on any pathways that lead from parks or from public roads on to access roads, where there is a reasonable expectation that hikers might enter.

The next two points then become 5 and 6.

Change and Add to 6. (Restrictions)

6. (a) A 10-metre pesticide-free zone shall be maintained on all waterbodies.

(b) A 10-metre pesticide free zone shall be maintained along road ditches with water in them.

(c) If any of the following waterworks water sources are within BCFP's proposed treatment areas, a 50-metre pesticide free zone shall be maintained along them:

Goldstream River
 Shawnigan Lake
 Cobble Hill Spring
 Duncan City Waterworks
 Nanaimo River
 Sunset Beach Waterworks
 William Spring at Nanoose Bay
 Englishman River
 French Creek
 Qualicum River
 Little Qualicum River
 Nile Creek
 Olympic Spring near Horne Lake Road
 Cowie Creek
 Cherry Creek
 Beaver Creek

If additional waterworks water sources come to the attention of either party, these shall be added to the list.

(d) A 50-metre pesticide-free zone shall be maintained adjacent to all residential properties, schools, playgrounds, public buildings and parks.

(e) The boundaries of all the pesticide-free zones shall be clearly marked before pesticide application.

In the spirit of the federal Access to Information Act, we point out that the public has the right to know. We want not only that the company do the right thing, but that it be known that they have done the right thing. Therefore, I propose the following amendments to be added to the permit. This would be Number 8.

- 8.(a) A joint tour of representatives from BCFP Crofton Division and AEA shall take place before application of herbicide in order to spot check the marking and the sign posting. The AEA representative will decide where such spot checks shall take place.
- (b) Notification shall be given to AEA to minimum of two weeks prior to the spray operation with an approximate operational schedule attached.
- (c) A second tour shall take place not more than three weeks after the spraying in any one

block to confirm that the borders indicated by the markers were maintained.

(d) BCFP will facilitate these inspections.

(e) The AEA waives any right to hold BCFP responsible for any accidental injuries which might occur during such inspections.

- 19) The implementation of the amendments to the Permit recommended by the Appellant will serve to reduce the amount of any unreasonable adverse effect the use of the herbicides approved under the Permit may cause.

THE FOLLOWING POINTS CAME OUT OF THE CROSS-EXAMINATION OF THE APPELLANT'S REPRESENTATIVES:

- 1) Neither of the appellant's representative has had experience utilizing a backpack sprayer or in doing roadside spraying.
- 2) The rate of application of 3.5 kg/ha. specified in the amendments proposed by the Appellant is not the actual rate at which the Permittee may in fact apply the pesticide along the various access roads.
- 3) The rate of application recommended by the Appellant should be the rate directed on the manufacturer's label, or 3.5 kg/ha, whichever is the lesser.
- 4) The application required to be made for a pesticide use permit is available to interested members of the public, upon request.
- 5) Signing of the treatment areas will occur following application of the pesticide.
- 6) Inclusion of all details relative to the terms and conditions of a permit as evidence by the permit and the application, therefore, should be incorporated into all permits issued by the Administrator so that the public will be aware of all the safeguards and restrictions under which treatment has been approved.

- 7) The 50-meter pesticide free zone recommended by the Appellant along all waterworks supply sources and adjacent to all residential properties, schools, playgrounds, public buildings and parks, originated through discussions of reasonable safeguard procedures between representatives of C.P. Rail and the Arrow-smith Ecological Association.
- 8) The Appellant and the Permittee met prior to the date of the appeal hearing to discuss the time and conditions of the Permit and to make suggestions to reduce the possibility of adverse effects to man and the environment.
- 9) The Appellant was unaware that a copy of the application for the Permit would be made available to the Arrow-smith Ecological Association, upon request.

PRINCIPAL POINTS ALLEGED IN THE EVIDENCE OF THE PERMITTEE:

- 1) The control of red alder for access road maintenance is an integral part of the management program of Tree Farm 68. It is necessary to ensure access to the Permittee's properties at all times for forestry and fire protection purposes and to provide good visibility for those using the road.
- 2) The Permittee uses both manual mechanical and chemical methods to achieve good access to its properties.
- 3) The Permittee, prior to commencement of spraying operations, carefully selects and flags the section of road on which treatment will be made. Maps identifying the sections of the road to be treated are prepared.
- 4) The Permittee follows the practice of posting the Permit, the Application for the Permit, and the maps, so that interested members of the public can inform themselves fully of the Company's treatment program. An information sheet setting out the details of the program is also posted. It shows, amongst other things, the concentration of chemical in the spray mixture.
- 5) The Permittee posts signs to inform persons entering the treatment area that a pesticide has been, or is being applied.

- 6) All pesticide storage facilities of the Permittee are clearly marked to warn employees and others of the presence of potentially dangerous chemicals.
- 7) The truck-mounted manually directed powerhose sprayer was selected over the backpack sprayer because it creates less fine mist fogging, uses smaller quantities of pesticide to achieve the desired result, and is less hazardous to applicators.
- 8) The 10-metre pesticide-free zone provides adequate protection for waterbodies where the pesticide application is made using a manually directed powerhose spray equipment.
- 9) Salmonberry, huckleberry, and other similar plant species found along forest roadways present no problem in access road maintenance, hence, the use of highly selective forestamine to control the red alder.
- 10) The Permittee respects the rights of those government agencies conducting inspection of treatment areas before and after pesticide applications, and imposes few restrictions on access by members of the public at large who wish to monitor its pesticide use programs.
- 11) The Permittee provides protective clothing, equipment, and other safeguards to ensure that its applicators are properly protected at all times while working with pesticides.
- 12) The Permittee employs specialists within the Company who provide an in-house review and evaluation of all requests to use pesticides prior to an application being filed with the Administrator, Pesticide Control Act.

The following additional points arose out of the cross-examination of the Permittee's representative:

- 1) In the course of obtaining and using each pesticide-use permit, the Permittee generally receives one or two visits from the representatives of the Administrator,

Pesticide Control Act and Ministry of Fisheries
and Oceans Canada.

- 2) The Appellant does not accept that inspections made by government agencies adequately or protect all members of the public and particularly members of the Arrowsmith Ecological Association.
- 3) The lengths of access roads being treated with pesticides under the Permit is unaffected by works completed by the Permittee under the federal governments Employment Bridging Assistance Program.
