Province of
British Columbia

Ministry of
Environment

ENVIRONMENTAL APPEAL BOARD
Victoria
British Columbia
V8V 1X5

Appeal No. 83/05 PES

J U D G E M E N T

Appeal against Pesticide Control Act Special Use and Restricted Permit No. 125-23*SPL-83/87 for the use of Sodium monofluoroacetate (Compound 1080) Predacide (P.C.P. Act Reg. No. 17664) for reactive control of coyotes and wolves for protection of domestic livestock and human safety, selected wildlife management units within British Columbia

APPELLANTS

Association for the Protection of Fur Bearing Animals

B.C. Society for the Prevention of Cruelty to Animals

Greenpeace Foundation of Canada

Lifeforce

Sierra Club of Western Canada

Society Promoting Environmental Conservation

PERMIT DETAILS

See Appendix "A" for copy of Permit 125-23*SPL-83/87

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DECISION

The Panel of the Environmental Appeal Board -

(a) has considered all of the evidence submitted to it in the appeal hearing on Special Use and Restricted Permit No. 125-23*SPL-83/87 for the use of Sodium monofluoroacetate (Compound 1080) Predacide (P.C.P.Act Reg. No. 17664) for reactive control of coyotes and wolves for protection of domestic livestock and human safety in selected Wildlife Management Units within British Columbia, issued to the Director, Fish & Wildlife Branch, Ministry of Environment, and

(b) has decided that the implementation of the program will not cause an unreasonable adverse effect to man and/or the environment, and, therefore,

(c) dismisses the appeals against Special Use and Restricted Permit No. 125-23*SPL-83/87.

In coming to this decision, the Panel is of the opinion that the predator control program which has been developed by the Fish & Wildlife Branch since 1980 using Compound 1080

- has been proven effective in reducing livestock losses;
- is well managed and carefully controlled by Ministry of Environment officials;
- does resolve problem wildlife incidents in a highly selective and site-specific manner;
- is more economically feasible and problem-animal specific than other methods of predator control;
- is gaining the support of the Livestock Associations of the British Columbia Federation of Agriculture;
- introduces only minuscule quantities of Compound 1080 into the environment;
- was not found to have caused any unreasonable adverse effect to man and/or the environment;

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The Panel could not find adequate, unequivocal evidence to support a recommendation that the Fish & Wildlife Branch should consider implementing taste aversion conditioning techniques even though their use might reduce livestock losses by non-lethal methods of control.

It is the Panel's view that, on balance, the Province's present predator control program is a good one. It provides an excellent livestock management tool with no unreasonable adverse environmental impact. The Permit required as part of the program provides that the maximum quantity of Sodium monofluoroacetate (Compound 1080) permitted to be used in any one year is 6.5 grams (i.e. less than 1/4 ounce). It is significant to note that a substantial percentage of this amount, when actually used in bait preparation, is ultimately retrieved by the Fish & Wildlife Branch and destroyed.

The program has another important advantage. It precludes livestock producers and other members of the public from coming into contact with the poison. Its use is restricted to only a few Fish & Wildlife Branch officials, and occurs only in reactive response to a specific, reported and confirmed instance of livestock loss or harassment from wolves or coyotes. In addition, the highly selective baiting method used under the program is reported to be achieving an excellent incidence of success in eliminating only the wolf or coyote responsible for the attack.

The program anticipates the removal of up to a maximum of 250 problem wolves annually should the need arise to provide a reactive response to proven attacks on livestock. In the case of wolves, Permit 125-23*SPL-83/87 authorizes the placement of a maximum of 400 small bait preparations annually, commencing in 1984. (200 in 1983) If the same bait pickup rate by wolves as that experienced under the former permit is maintained, the 400 small bait preparations authorized under the Permit will annually result in the removal of a maximum of 185 problem wolves through the use of Compound 1080.

The Panel is of the view that the officials of the Fish & Wildlife Branch charged with the responsibility of providing effective problem wildlife control programs would immediately implement a more humane method of removing problem wolves and coyotes should an equally effective new method become available before the permit's term expires.

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The Panel, therefore, will not order that the number of baits or the term of the Permit be reduced.

The Panel acknowledges the sincerity of the views expressed by the Appellants that the use of poison baits is not a humane method to use to kill an animal. If death of a predator is indicated, an instantaneous method is obviously more desirable and should be used whenever practical. Unfortunately, no such method has been proven realistically attainable in developing an effective and economically viable, province-wide livestock predator control program. While the use of poison baits may not be the most humane method of predator control, the evidence presented to the Panel indicated that death from ingestion of Compound 1080 is not lingering or prolonged, but generally occurs less than 2 to 3 hours following the onset of early symptoms.

The Panel also considered an application for a stay on the operation of Special Use and Restricted Permit 125-23*SPL-83/87, made on behalf of the Association for the Protection of Fur Bearing Animals and the Greenpeace Foundation of Canada, until such time as a decision is handed down by the Federal Court of Canada, Trial Division, in the matter of the validity of the registration of Compound 1080. The Panel considered the application and has decided that no stay in the operation of the Permit should be imposed. (See Summary - Pages 27/28)

J.O. Moore
Panel Chairman
Environmental Appeal Board

Victoria, B. C.
September 22nd, 1983

S U M M A R Y

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.

J.O. Moore
Panel Chairman
Environmental Appeal Board

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HEARING DETAILS:

The hearing was held by a Panel of the Board in Victoria, B. C. in the Conference Room, First Floor, 810 Blanshard Street, on June 14th and 15th, and on July 14th, 1983. The Panel sat from 9:00 a.m. until 5:30 p.m. on June 14th, from 9:00 a.m. until 9:30 p.m. on June 15th, and from 9:00 a.m. until 4:30 p.m. on July 14th, 1983.

The Panel of the Board in attendance were:

J. O. Moore (Tax Consultant)	Chairman
H.D.C. Hunter (Lawyer)	Member
A.J. Lynch (Environment Consultant)	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 the issuance of Pesticide Use Permit No. 125-23*SPL-83/87 for use of Sodium monofluoroacetate (Compound 1080) Predacide for Reactive Control of Coyotes and Wolves for protection of domestic livestock and human safety within selected wildlife management units in British Columbia, issued by the Administrator of the Pesticide Control Act on March 16, 1983, for the following reasons:

(1) The increase in the number of wolf baits from 250 to 400 is not justified or warranted by the experience gained during the past three years under the original permit.

(2) Too many non-target animals are taking the pesticide.

(3) The use of large coyote baits seems designed for population reduction rather than control of offending animals.

(4) The 1978 moratorium prohibiting the use of poisons in predator control was in effect far too short a time for alternatives to poisoning to be tried and their effectiveness determined.

(5) Compound 1080 is a cruel and lingering poison.

(6) The Permit has been issued for too long a term.

(7) The number of wolves allowed to be killed during the term of the Permit could endanger the wolf population in the Province.

(8) The use of Compound 1080 on canids is an inhumane method of predator control.

(9) The use of Compound 1080 during the past three years has resulted in an unreasonable adverse effect on non-target wildlife.

(10) Certain provisionsof the permit exceed the current registered use pattern for Compound 1080 under the Pest Control Products Act (R.S.C. 1970).

(11) The leaving of baits in the field for 21 days unreasonably increases the hazard to non-target species.

(12) The large coyote bait preparations are too dangerous to non-target species.

(13) The increase in the amount of Compound 1080 permitted to be used under the new Permit is not justified.

(14) The number of wolf and coyote bait preparations allowed to be used annually under the new Permit has been increased without reasonable justification.

(15) The term of the new Permit has been extended to 4 1/2 years without reasonable justification.

(16) The expression "reactive control" referred to in the Permit is not sufficiently defined.

(17) The use of Compound 1080 will cause unreasonable adverse effects and damage to non-target organisms due to its non-selective nature and secondary poisoning characteristics.

(18) Alternatives to the use of Compound 1080 exist and should be tested before its use is permitted.

(19) The conditions of the Permit do not adequately provide for the safeguarding and monitoring of possible adverse effects arising out of the use of Compound 1080.

(20) Neither wolves or coyotes are "pests" within the meaning of the Pesticide Control Act and the Permit is, therefore, invalid.

(21) Paragraphs 1,4,7,9,10,14 and 23 of the Permit are too vague to be capable of enforcement.

(22) Certain statutory requirements for the issuance of the Permit have not been met.

(23) The Permit encompasses areas of the Province in which no threat, past or present, existed or exists to domestic livestock or human safety.

(24) Either no, or insufficient, evidence exists to justify the use of a reactive control program for the protection of domestic livestock and human safety.

(25) The use of Compound 1080 in the Lower Mainland poses a hazard to humans and domestic animals.

APPELLANTS' REPRESENTATIVES:

(1) Association for the Protection of Fur Bearing Animals,
1316 East 12th Avenue,
Vancouver, B. C.
- Mr. Geo. Clements, Spokesman

(2) B.C. Society for the Prevention of Cruelty to Animals,
Room 218, 470 Granville Street,
Vancouver, B. C.
- Mr. Albert Hickey Spokesman

(3) Greenpeace Foundation of Canada,
2623 West Fourth Avenue,
Vancouver, B. C.
- Mr. C.F. Easton, Barrister & Solicitor, Victoria, B. C. Spokesman

(4) Lifeforce,
Box 3117, Main Post Office,
Vancouver, B. C.
- Peter Hamilton, Spokesman

(5) Sierra Club of Western Canada,
Room 312 - 620 View Street,
Victoria, B. C.
- Mr. L.R. Fast, Barrister & Solicitor, Victoria, B. C. Spokesman
- Dr. Carl Gustavson, Dept. of Psychology, North Dakota State University, Fargo, North Dakota, USA Expert Witness

(6) Society Promoting Environmental Conservation,
2150 Maple Street,
Vancouver, B. C.
- Mr. J. Erkiletian, Spokesman

PERMIT HOLDER'S REPRESENTATIVES:

Fish & Wildlife Branch,
Ministry of Environment,
Victoria, B. C.
- Mr. Wm. Pearce, Counsel, Ministry of Attorney-General Spokesman
- Dr. Frank Tompa, Staff Specialist, Carnivore & Problem Wildlife Management Witness

PERMIT HOLDER'S REPRESENTATIVES: (Con'd)

Mr. Gerhardt Trolitsch,
Wildlife Control Officer,
- Witness

Mr. Wm. Sedgwick,
Cattle Rancher and
Director,
B.C. Cattlemen's Assoc'n.,
- Witness

ADMINISTRATOR OF PESTICIDE CONTROL ACT'S REPRESENTATIVES:

No one appeared on behalf of the Administrator, Pesticide Control Act.

B.C. FEDERATION OF AGRICULTURE'S REPRESENTATIVES:

Pursuant to the provisions of Section 11 (10) of the Environment Management Act, the Panel invited the B.C. Federation of Agriculture and its livestock producer associations to appear before it at the hearing.

The invitation was accepted and the following representatives were present:

Mr. H. Allison,
Chairman, B.C. Federation of Agriculture,
Problem Wildlife Committee.

- Spokesman

Mr. S. Thomson,
Asst. General Manager,
B.C. Federation of Agriculture.

- Alternate Spokesman

EXHIBITS:

Ex. "A" Letter from Dr. F.S. Tompa to the Environmental Appeal Board, dated May 13, 1983, concerning official labelling information for Sodium Monofluoroacetate

Filed by Mr. C.F. Easton for Greenpeace Foundation

Ex. "B" File folder containing correspondence between the Association for the Protection of Fur Bearing Animals and the Ministry of Environment from 1981 to 1983.

Filed by Mr. G. Clements for the Association

Ex. "C" Typewritten statement of appeal by B. C. Society for the Prevention of Cruelty to Animals, dated June 3, 1983.

Filed by Mr. A. Hickey, for the Society.

Ex. "D" Typewritten statement of appeal to the Environmental Appeal Board of British Columbia by the Lifeforce Foundation, and Publication entitled "1080 - The case against poisoning our wildlife", and Publication entitled "Lifeforce - A respect for all life".

Filed by Mr. P. Hamilton for the Foundation.

Ex. "E" Photocopy of typewritten statement entitled "Taste Aversion" and photocopy of publication entitled "Coyote Predation on Sheep, and Control by Aversion Conditioning in Saskatchewan", and photocopy of publication entitled: "A 3-year Evaluation of Taste Aversion Coyote Control in Saskatchewan".

Filed by Mr. L.R. Fast for the Sierra Club of Western Canada

Ex. "F" Letter to Ministry of Environment dated April 6, 1983, from Mr. Jim Erkiletian for the Society Promoting Environmental Conservation, setting out reasons for appealing issuance of Permit.

Filed by Mr. Erkiletian for the Society

Ex. "G" Statement of the B.C. Federation of Agriculture relative to Permit 125-23*SPL-83/87

Filed by Mr. H. Allison for the Federation

Ex. "H1" Problem Wildlife Complaint Form Fish & Wildlife Branch

Ex. "H2" Ministry of Environment - Memorandum of Minister, dated June 28, 1979, relative to Predator Control Program.

Ex. "H3" Fish & Wildlife Branch Statement "Arguments Against Reason for Appeal".

Ex. "H4" Fish & Wildlife Branch - Article "Problem Wolf Management in British Columbia: Conflict and Program Evaluation" by Frank S. Tompa.

Ex. "H5" Letter to F.S. Tompa, Fish & Wildlife Branch, from Ministry of Agriculture and Fisheries, New Zealand, dated May 23, 1983.

Filed by Wm. Pierce for the Fish & Wildlife Branch, Ministry of Environment

Ex. "I" Vita - Carl R. Gustavson, dated July, 1983.

Ex. "J" Article - "Coyote Predation Aversion With Lithium Chloride: Management Implementation and Comments" - Richard J. Burns.

Ex. "K" Report - "United States Environmental Protection Agency Before the Administrator" FIFRA Docket No. 502.

Ex. "L" Initial Decision by United States Environmental Protection Agency - FIFRA Docket No. 502.

Ex. "M" Article "Hazards and Adverse Effects of Lithium"

PRELIMINARY APPLICATION FOR ADJOURNMENT:

At the commencement of the hearing on June 14, 1983, an application for adjournment was made by Mr. C.F. Easton on behalf of the Association for the Protection of Fur Bearing Animals, Greenpeace Foundation of Canada, and Lifeforce. The adjournment was requested because documents had been filed earlier that day in the Federal Court of Canada, Trial Division, Vancouver, B.C., on behalf of the Greenpeace Foundation of Canada, and the Association for the Protection of Fur Bearing Animals, naming as Respondents the Minister of Agriculture for Canada, and the Canada Department of Agriculture, seeking two remedies.

The first remedy sought is a Writ of Certiorari to quash the Federal Registration under the Pest Control Products Act, Registration Number 17664, which was issued by Mr. George Laidlaw on April 29, 1983, and to quash the amended Registration also issued by Mr. George Laidlaw on the same date, under Number 17664.

The alternate remedy sought is a declaratory order that the registration of Compound 1080, sodium monofluoroacetate, was made without compliance with the Pest Control Products Act.

In support of the application for adjournment, the Panel's attention was drawn to the March 31, 1982 amendment to the Pest Control Products Act (Canada) making that Statute binding on Her Majesty in the right of Canada, or a province and any agency thereof, and to paragraph 15 of Permit No. 125-23*SPL-83/87. which indicates the concern of the Administrator, Pesticide Control Act, that the Permit Holder make compliance with Federal Regulations under the Pest Control Products Act (Canada). It was the position of the applicant for adjournment that if the Permit Holder and Agriculture Canada have not fulfilled the requirements of the Pest Control Products Act (Canada), then that is a matter for the Courts to decide, and it if is so held that the Permit is a nullity as it contravenes the Pest Control Products Act (Canada),then the Permit Holder is precluded from utilizing Compound 1080,as the Administrator of the Pesticide Control Act cannot issue a permit for its use.

Counsel for the Ministry of Environment, Mr. Wm. Pearce, opposed the application on the ground that the outcome of the Court action initiated by the applicant for adjournment of the Board hearing would not affect the use of Compound 1080 under the Permit. Reference was made to the Permit authorizing the use of Compound 1080 only to the extent permitted under the restriction of the registered use pattern established under the Pest Control Products Act (Canada) and to the fact that the definition of "Pesticide" in the Pesticide Control Act did not require registration of the chemical under the Pest Control Products Act (Canada) in order for its use to be approved by permit validly issued by the Administrator under the Pesticide Control Act. Moreover, it was not the responsibility or duty of the Environmental Appeal Board to concern itself with matters pertaining to alleged violations under Federal Statutes. It was pointed out that the Permit before the Panel of the Board was valid and in order, and that, accordingly, the Panel should reject the application for adjournment and proceed with the hearing.

Counsel for the Sierra Club of Western Canada, Mr. L. R. Fast, supported the application for adjournment, but suggested the period of adjournment be limited to one month.

The Panel of the Board recessed briefly to consider the position it would take on the application, but on reconvening the hearing, announced that it would not grant the application as the Panel was of the view that its jurisdiction would be unaffected by the outcome of the action initiated by the applicant in the Federal Court.

The applicant recorded his objection to the Panel's decision not to grant the application for adjournment and to the question of the jurisdiction of the Panel to proceed with the hearing of the appeal.

SUMMARY OF POINTS ALLEGED IN EVIDENCE OF APPELLANTS:

(A) ASSOCIATION FOR THE PROTECTION OF FUR BEARING ANIMALS.

(1) The permit should be revoked because the Fish and Wildlife Branch failed to comply with the terms and conditions of the permit to use Compound 1080 in 1980.

(2) The Fish and Wildlife Branch are using poison bait as a primary rather than a last resort measure of control contrary to the intent announced in 1980.

(3) The use of the poison bait program at all seasons of the year may be adversely affecting wolf and coyote populations when, in fact, the permit allows use of Compound 1080 only on offending animals in specific instances where repeated losses of livestock have occurred.

(4) The six-month reports on the use of Compound 1080 during the past three years compiled by the Fish and Wildlife Branch clearly indicated that the terms of the permit to use Compound 1080 are not being complied with, and that Compound 1080 was being handled by the Fish and Wildlife Branch in a manner causing unreasonable adverse effects.

(5) There is no effective avenue of review if violations in the terms and conditions of the permit are detected through examination of the operations records completed by the Fish and Wildlife Branch.

(6) The operations records of the Fish and Wildlife Branch clearly showed that the terms and conditions of Permit 125-15-80/83 have been violated to the extent that several poison baits were not picked up within the 14-day time limit allowed, and that the number of baits placed in certain instances far exceeded what realistically could be regarded as a reactive control measure.

(7) The use of a large number of poison baits at any one site suggests that, contrary to the terms of the permit, population control measures are being practiced by the Fish and Wildlife Branch.

(8) Violation of the terms and conditions of the permit to use Compound 1080 greatly increases the chances of unintentional poisoning of non-target animals.

(9) The Fish and Wildlife Branch records on the number of non-target animals accidently poisoned through the use of Compound 1080 are incomplete and understated.

(10) The chances of secondary poisoning of non-target animals increase substantially in those instances where a large number of poison baits are placed at a single site, and where the bait is left beyond the 14-day limit for untaken bait retrieval.

(11) The method of reporting of the operations concerned with the use of Compound 1080 vary from one Wildlife officer to another, and from district to district.

(12) The maximum period for checking poison baits placed under Permit 125-15-80/83 was exceeded in a large number of cases notwithstanding repeated assurances that all reasonable efforts would be made to adhere to this condition of the permit.

(13) The condition of Permit 125-15-80/83,limiting the use of Compound 1080 to reactive control of coyote and wolf in specific, reported and confirmed cases of problem coyote or wolf killing, damaging or harassing livestock, is not being met where use of the predicide is planned ahead.

(14) Increase in the number of non-target poisonings occurred even after assurances were received from the Fish and Wildlife Branch that modification in bait techniques would reduce the incidence of non-target animals being poisoned accidentally.

(15) More stringent enforcement of permit terms and conditions will serve to reduce the number of non-target animals removing the bait, and thereby minimize the possibility of unnecessary risks to the environment.

(16) The Fish and Wildlife Branch is not exhausting the use of alternate predator control methods before resorting to the use of poison bait techniques.

(17) The use of large coyote baits appears to be directed towards population reduction rather than reactive predator control involving specific problem animals.

ADDITIONAL POINTS WHICH AROSE IN CROSS-EXAMINATION OF THE REPRESENTATIVE OF THE ASSOCIATION FOR THE PROTECTION OF FUR-BEARING ANIMALS.

(1) The use restriction recommended for Compound 1080 in the U.S.A. by the E.P.A. allows poison baits to be left at the site of placement for a maximum period of 30 days. This item of the use restriction is not endorsed by the Association.

(2) The reporting procedures followed by the Fish and Wildlife Branch in recording field operations relative to problem animals could be improved through standardizing the recording procedures and by ensuring that all relevant information is consistently included in a uniform way by all Wildlife officers.

(3) The appellants involved in the appeal of Permit 125-15-80/83 did not receive notice when that Permit was amended to include an additional wildlife management area.

(4) The public are not adequately informed in advance that a poison is to be used in this area.

(B) BRITISH COLUMBIA SOCIETY FOR THE PREVENTION OF CRUELTY TO ANIMALS

(1) Alternatives to the use of poisons for predator control should be tried and their effectiveness proven before the use of Compound 1080 is approved.

(2) Compound 1080 is a cruel and lingering poison.

(3) The period for which Permit 125-23*SPL-83/87 has been issued is too long and should be reduced.

(4) The B.C. Veterinary Medical Association concluded from the examination of clinical symptoms arising from the experimental use of Compound 1080 that it can not be considered a humane method of destroying any animal. The clinical symptoms include frenzy, seizures, respiratory distress, convulsions, exhaustion and pain. Death after respiratory failure occurs within 2 to 12 hours after onset of symptons.

(5) The Society endorses the findings of the American Humane Society that Compound 1080

(a) is a highly toxic poison;

(b) if widely used will pose a hazard to non-target wildlife, pets, and humans;

(c) was not effective in reducing livestock losses to predators when it had been used;

(d) should not be used, and that any government efforts to assist farmers should emphasize the use of herders, guard dogs, predator-resistant fencing, and taste aversion programs.

(6) Control of problem wolves and coyotes should be effected on a site-specific basis by trained wildlife conservation officers in a manner designed to minimize stress and ensure minimal harm to non-target species.

(7) It is ethically and morally wrong to poison an animal. Shooting is more humane. Expand trapping systems, if indicated, and conduct effectiveness testing of taste aversion programs.

ADDITIONAL POINTS WHICH AROSE IN THE CROSS-EXAMINATION OF THE SOCIETY'S REPRESENTATIVE:

(1) The Society is opposed to the use of any poison as a means of killing any animal and is specifically opposed to the use of Compound 1080 because of the adverse findings of studies on its use, conducted by the American Humane Society.

(2) The Society is not against predator control using means other than poisoning.

(3) There is no evidence that the use of Compound 1080 under the terms and conditions of the Permit will cause secondary poisoning in British Columbia although intensive studies conducted by the American Humane Society in the U.S.A. strongly suggest that it will occur.

(4) The terrain and topography, and forest cover in certain areas of the Province,preclude the effective use of predator control methods other than Compound 1080.

(5) The conclusion that the use of Compound 1080 is an inhumane means of predator control is based on clinical observations.

(C) LIFEFORCE

The Lifeforce representative recommended that an independent committee be established to define the problems that are created by humans encroaching on wildlife habitats and that the committee meet regularly to consider such problems as endangered wildlife species, poisoning of non-target animals, non-lethal alternatives to poison, and the use of poison in populated areas.

As part of the evidence, a film produced by the Animal Poison Control Centre, University of Illinois, on Compound 1080 toxicosis was shown.

(1) Compound 1080 is highly toxic to all species.

(2) Compound 1080 acts rapidly on the central nervous and cardiovascular systems with cardiac effects.

(3) Secondary poisoning is occurring in a number of non-target carrion-eating birds and mammals.

(4) Effective non-chemical alternatives to the use of Compound 1080 exist.

(5) Non-chemical alternatives to the use of Compound 1080 are more costly than predator controls using poisons.

(6) Low temperature and hunger increase an animal's susceptibility to Compound 1080.

(7) Clinical symptoms on the use of Compound 1080 observed by the B.C. Veterinary Medical Association lead to the conclusion that the use of Compound 1080 was not humane.

(8) The number of farm animals killed or mauled by wolves or coyotes in a two-year period was less than300.

(9) The type of non-target species reported poisoned by Compound 1080 include foxes, black bears, martens, small mammals, ravens, and several other types of birds.

(10) Compound 1080 should not be placed in populated areas.

The following points arose from cross-examination of the Lifeforce representative:

(1) No evidence was presented in support of the claim that accidental poisoning of humans with Compound 1080 has or may occur in British Columbia under the strictly controlled program used by the Wildlife Branch.

(2) The statistics on losses of farm animals due to predators in British Columbia are based on

Wildlife Branch reports for the periods February, 1981 through February, 1983.

(3) Compound 1080 received more general use in the United States of America prior to its ban in 1972 than the highly selective program of use planned under this Permit; hence, the risk of accidental poisoning of humans occurring in B. C. is extremely remote.

(4) Studies conducted in the United States on the use of Compound 1080, which resulted in the ban on its use being implemented, appear to have been related only to coyote control on Federal lands, using techniques different from those employed in B.C. The studies did provide documentation in support of the appellant's contention that the use of Compound 1080 is not humane, and that its use is harmful to the environment including humans, domesticated animals, and wildlife.

(D) GREENPEACE FOUNDATION OF CANADA

The representative of the Foundation did not present any evidence but instead outlined the concerns and recommendations of the Foundation as set out in their Grounds for Appeal.

(E) SIERRA CLUB OF WESTERN CANADA

The representative of the Sierra Club did not present any evidence during the first two days of the hearing, but, instead, submitted material describing the merits of taste aversion techniques as a viable method of controlling coyote predation on sheep.

The Sierra Club position is that a taste aversion program may well be a less expensive, more economical approach to predator control in that it would involve lower expenditures of government funds.

The representative of the Sierra Club requested that the evidence of an expert witness, who could not attend the hearings on June 14th and 15th, be heard by the Panel at a later date before it rendered its decision.

(F) SOCIETY PROMOTING ENVIRONMENTAL CONSERVATION

(1) Compound 1080 is lethal to all vertebrates.

(2) The risk of secondary poisoning from Compound 1080 makes it impossible to determine how many different animals and birds are destroyed in any program.

(3) The 1-kilometer bait-free zone around residences is unsafe when the high risk of secondary poisoning from poisoned animals capable of travelling up to forty miles after ingestion of Compound 1080 is considered.

(4) No known antidote to Compound 1080 poisoning presently exists.

(5) The specific roles the wolf and coyote play in the balance of the wildlife ecosystem are not fully understood.

(6) Rodent control has become a major industry in parts of the United States since the near elimination of the coyote by poisoning. Similar conditions may develop in B.C. if the use of Compound 1080 under the Permit is approved.

(7) Poisoning programs should not be allowed until it is proven that it is cheaper to control predators than it is to compensate livestock owners for their losses to predators.

(8) The long-term effects of minute amounts of Compound 1080 on the environment and on living organisms are not known at this time as the chemical has only been in existence since 1935.

(9) Because Compound 1080 is such a deadly and dangerous poison, its use under the Permit should only be permitted under the strictest of safeguards involving the least number of people.

(10) The possibility of deliberate or accidental misuse of Compound 1080 by officials having access thereto will be a continuing threat if the Permit is approved.

(11) The use of Compound 1080 on such an important totem animal as the wolf poses a threat to the health and survivability of man.

(12) A large percentage of the residents of Northern Vancouver Island oppose the use of poison on wolves.

(13) A number of questions need to be answered before any wolf control program is allowed in B.C., including:

- how the program provides for the health of the ungulate population relative to disease, excess parasitism, old age, and overgrazing in the absence of wolf predation.
- what changes in the total ecosystem will be caused by the reduction in wolf population.
- in what way does removal of the wolf serve to enhance or protect the integrity of the ecosystem.
- why are other alternatives to poison not applicable.
- what other alternatives to poison are available.

(14) The use of poison against wildlife is cruel and inhumane.

BRITISH COLUMBIA FEDERATION OF AGRICULTURE

Prior to the hearing, the Panel determined that the matter being appealed was of particular interest to livestock producers throughout the Province, and issued an invitation to the British Columbia Federation of Agriculture and its livestock producer associations to appear before the Panel pursuant to Section 11 (10) of the Environment Management Act.

Section 11 (10) provides that in an appeal, the Board or Panel may hear any person the Board invites to appear before it.

The principal points made by the Federation's representatives were:

(1) The continued availability of the program authorized under the Permit is essential to livestock producers.

(2) Animal losses attributable to wolf and coyote predation represent a serious economic burden for many individual livestock producers.

(3) The Province has not acted on the Federation's recommendation for a compensation program to cover losses due to problem wildlife.

(4) A reactive predator control program is required even if a compensation program were introduced in future.

(5) The disallowance of the Permit could have serious implications and could pose a greater threat to wildlife and the environment than the former program.

(6) Without the Permit, livestock owners would likely implement their own individual predator program to protect their animals from wolves and coyotes. This action is not encouraged or condoned by the Federation as it is illegal and might cause an unnecessary level of predator control.

(7) Ranchers support the program of predator control authorized under the Permit and are prepared to co-operate in ensuring that it is well managed and effective.

(8) The terms and conditions of the Permit provide for the implementation of a safe, effective, and useful program.

(9) The predator control program authorized under the former permit did not appear to have had any serious overall adverse effect on either wildlife or the environment, but did protect livestock producers from unreasonable losses from predators.

Federation members require an effective predator control program. If one is not provided by the Province, they will have to consider

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other alternatives.

Livestock losses are not confined to predators. Federation members favour compensation for losses attributable to predators, and an effective predator control program. The method of control is not of great consequence as long as it is effective.

The Federation's members would be willing to co-operate with Ministry of Environment personnel in implementing predator controls, utilizing methods other than poisoning if the alternatives are effective in reducing losses. This would include taste aversion tests.

SUMMARY OF POINTS ALLEGED IN EVIDENCE OF THE PERMIT HOLDER

Mr. Sedgewick

(1) Problem wolves killed three yearlings and six calves on his ranch, north of Kamloops, during 1975 and 1976. The pack size was estimated to be 15. Control measures taken included shooting, leg-hold traps, snaring and the use of poison baits.

(2) The wolves also harassed the cattle, making range management of the herd more difficult. This lead to localized overgrazing as the cattle tended to congregate in large groups, and to breeding problems because the bulls were unable to move around freely.

(3) Compensation as an alternative to a predator control program has not been seriously considered. However, such a program could work against the best interests of livestock producers who are primarily interested in maintaining a viable industry.

(4) No predator problems occurred on the ranch after 1976. The Fish & Wildlife Branch used poison bait on the ranch during the winter of 1976/77 in an attempt to reduce pack size. There were two confirmed kills of wolves as a result of the program, and no further predator problems have occurred since that time, even though evidence of wolves in the area still exists.

(5) For the most part, wildlife, including black bears and coyotes, have presented few problems on the ranch and are permitted to roam freely provided they do not present any predator problems.

(6) Members of the Stockmen's Association support the Fish & Wildlife Branch's predator control program, and want it to continue.

(7) During the period when the poison bait program was suspended, many ranchers had to implement their own predator control programs.

(8) The implementation of the moratorium on the poison bait predator control program resulted in many ranchers losing confidence in the Fish & Wildlife Branch.

(9) Predator control should be exclusively the responsibility of the Fish & Wildlife Branch as they possess the necessary expertise and are in the best position to objectively evaluate the problem and implement realistic control measures.

Mr. Trolitsch:

(1) The preparation area in which Compound 1080 poison baits are made is a securely double-locked room, with barred outside windows.

(2) Access to the bait preparation room and knowledge of the combination to the metal safe in which Compound 1080 is stored are severely restricted.

(3) The quantities of Compound 1080 used in the poison baits are carefully and precisely measured.

(4) The Compound 1080 poison baits are accurately labelled and stored in a locked deep-freezer after preparation.

(5) All baits leaving the room are identified and listed in an Operations Record maintained by the Fish & Wildlife Officer. Shipments to other persons in the Fish & Wildlife Branch authorized

to use the poison baits are carefully recorded and handled by special delivery air or ground service. Confirmation of receipt of the shipment is required to be made the following day.

(6) Before any poison baits are placed on a property, a written consent to do so is required to be obtained from the landowner.

(7) After the baits are placed, warning signs are posted at all points of access to the area. The signs remain posted during the entire period the baits are present.

(8) All requests for assistance under the predator control program received by the Wildlife Officer are carefully investigated before any reactive control measures are implemented.

(9) Bait placements are carefully made and recorded on a sketch map. All wolf baits are buried.

(10) The area of bait placement is carefully examined for signs of tracks in an attempt to determine what type of animal took the bait.

(11) All baits not taken during the period of exposure permitted are returned and recorded.

(12) The intervals between return of wolves to the site of a kill suggest that the maximum period permitted for a poison bait to be exposed should be increased from 14 to 21 days.

(13) The probability of a non-problem wolf pack being unintentionally exposed to placed poison baits is highly improbable because of the territorial characteristics of each pack.

(14) In almost all cases, one reactive control treatment has corrected the predator problem in the Williams Lake Wildlife Management Area.

DR. TOMPA

(1) Careful use of Compound 1080 and strict adherence to the Permit's conditions are insisted upon by the officials responsible for its administration.

(2) When the previous permit was first issued, a number of technical violations occurred which resulted in corrective steps being taken, and more explicit instructions being issued.

(3) Wildlife officers initiate reactive control measures in all but a few instances of confirmed kills.

(4) The reason the new Permit authorizes the use of an increased quantity of Compound 1080 and number of baits reflects the prohibition in the reuse of baits not taken and baits consumed by non-target species. It does not reflect any change from the objective of the former permit to provide a means of controlling up to a maximum of 250 problem wolves in each year should the need to do so arise.

(5) The policy of the Fish & Wildlife Branch continues to require the use of alternate methods of predator control, wherever practicable, before using poison baits.

(6) The five large coyote baits authorized annually under the Permit are not to be used for population reduction purposes. Instead, they will be used in winter to reduce coyote predation on sheep in areas where the geographic conditions tend to channel the coyotes into sheep pastures.

(7) Large baits are prepared in a different manner in British Columbia, reducing the concentration of Compound 1080 to approximately half of that used elsewhere. The lower concentration reduces the effect on non-target animals.

(8) Birds feeding on the large coyote baits authorized under the Permit would be unaffected by the amount of Compound 1080 consumed and the probability of an eagle consuming a fatal dose of the poisoned bait would be practically nil.

(9) The consumption of a small coyote bait by a squirrel, marten or other small animal would likely be fatal.

(10) Aversion conditioning has not been recommended by the Fish & Wildlife Branch for introduction in British Columbia because expert opinion on its effectiveness is currently divided, and its viability under range conditions has not been satisfactorily proven.

(11) If aversion conditioning is ultimately proven effective as a method of wolf and coyote predator control under range conditions, possible implementation of an aversion program in British Columbia will again be reconsidered.

ADDITIONAL POINTS STRESSED BY THE APPELLANTS IN THE CROSS-EXAMINATION OF THE PERMIT HOLDER'S REPRESENTATIVES:

(1) The use of Compound 1080 to kill a wolf is a cruel means of predator control.

(2) Different means of predator control are practised in the various Wildlife Management Areas to meet local condition needs.

(3) Increasing the bag limit for wolves would not correct predator problems.

(4) Earlier consideration of a taste aversion program was turned down by the Fish & Wildlife Branch on the basis of technical errors in the operational research permits.

(5) If taste aversion conditioning were used and proved ineffective in an overall predator control program, alternative means of reactive control would have to be utilized.

(6) Stockmen would be prepared to co-operate in the implementation of a taste aversion program if it is proved to be an effective method of predator control.

(7) No record of the value of losses due to predators is maintained by the Fish & Wildlife Branch.

(8) The effectiveness and cost-efficient characteristics of the present program of predator control lead the Fish & Wildlife Branch to apply for renewal

of the Permit to use Compound 1080 as a method for reactive predator control.

(9) Compound 1080 will not be used for population reduction of wolves and coyotes.

(10) From a wildlife management viewpoint, there has to be a reduction in the number of breeding animals to produce a population reduction. Young animals are not tallied.

(11) Livestock husbandry is an important part of any predator control program. The Fish & Wildlife Branch endeavour to bring about improvement in husbandry practices through consultation with livestock organizations, co-operation with Ministry of Agriculture, and direct contact with ranchers.

(12) The use of poison bait is more likely to remove the problem wolf than the use of a firearm because of the territorial nature of the wolf and the fact that the bait is placed in a highly site-specific manner close to the location of the kill.

(13) The use of Lithium Chloride in taste aversion conditioning studies was considered by the Fish & Wildlife Branch prior to making their first application for a permit to use Compound 1080.

(14) The Fish & Wildlife Branch did not proceed with studies to determine whether Lithium Chloride taste aversion conditioning should be introduced in British Columbia because of increasingly more evidence from international literature that the method has not been proven effective,and the conditions under which the studies promoting its use were carried out were not applicable to British Columbia conditions. In addition, the program is not economical to the ranchers and the chemical used is hazardous to non-target animals. Its use is still not recommended for British Columbia.

(15) The use of the predator control program to eliminate problem animals has had no adverse effect on the wolf population of the Cariboo region.

(16) It is the view of the Fish & Wildlife Branch that taste aversion programs do not lend themselves to general use in British Columbia because ranching and environmental conditions are very different to those found in Saskatchewan, including ranch size, predator systems, livestock-wildlife management interfaces, and the location and composition of available summer native range areas. In addition, the use of taste aversion programs involves all ranches, whereas a reactive control program involves only the ranches on which predator problems arise.

(17) The tests conducted on the effectiveness of taste aversion conditioning are suspect because of the lack of adequate experimental controls.

ADJOURNMENT:

The hearing was adjourned to July 14th, 1983. It reconvened at 9:00 a.m., at which time an application was made on behalf of The Association for the Protection of Fur Bearing Animals, and Greenpeace Foundation of Canada, for a stay on the operation of the Permit until a decision is handed down by the Federal Court of Canada, Trial Division, in the matter of the validity of the registration of Compound 1080.

The Panel heard the application and advised the representative of the Plaintiffs that as the decision not to impose a stay on the operation of the Permit pending the Panel's decision had already been made, that the application for a stay until the Federal Court had rendered its decision would be considered by the Panel during its deliberations.

The Panel considered the application and concluded that the request for a stay on the operation of Special Use and Restricted Permit 125-23*SPL-83/87 should not be granted as it would leave the Province without an effective reactive livestock predator control program for an indeterminate period of time. Such a situation would clearly not be in the best interests of the Province and its livestock industry.

The Panel is also aware that the outcome of the appeal by the two Plaintiffs to the Federal Court may not have any effect on the use of Compound 1080 in the reactive predator control program presently in effect in the Province, by virtue of the definitions of "pesticide"

and "restricted use pesticide" contained in the Pesticide Control Act, and the fact that no unreasonable adverse effect on man or the environment was found to have occurred as a result of its use during the three-year period covered by the former permit.

PRINCIPAL POINTS ALLEGED IN THE PRESENTATION OF THE SIERRA CLUB OF WESTERN CANADA - July 14, 1983

(1) The ban on the use of Compound 1080 imposed in the United States in 1972 included prohibition of its use on Federal lands and of its interstate commerce and transportation.

(2) Learned food aversions occur when an animal consumes a food and becomes ill, that animal will reject that food in future. The flavour and palatability change from good to bad.

(3) Carnivores, such as coyotes and wolves, can be trained using conditional food aversion techniques to avoid consuming food having a specified flavour, and in the result, to stop killing the animals from which that food originates.

(4) In studies involving coyote/sheep problems, taste aversion conditioning has been proven to be an effective method of predator control.

(5) The use of taste aversion conditioning techniques has resulted in quantities of Compound 1080 required for predator control purposes being substantially reduced or eliminated.

(6) Taste aversion conditioning techniques can be used to effectively eliminate cattle harassment by wolves.

(7) There are no known reasons why taste aversion techniques could not be effectively applied in British Columbia.

Additional points arising out of the cross-examination of Dr. Gustavson included:

(1) Bait placements required in taste aversion conditioning programs in Saskatchewan generally occur in the spring of the year. The ranchers are advised to place the bait in the same manner as they would otherwise use to trap a coyote.

(2) A taste aversion conditioning program to be fully effective necessitates the consumption of one bait by each coyote in the area.

(3) Once the bait is placed in an operational taste aversion conditioning program, it need not be checked.

(4) A substantial number of Saskatchewan ranchers who have tried taste aversion conditioning techniques have not remained with the program,

(5) Taste aversion conditioning programs are not intended to replace other means of predator control, including the use of Compound 1080.

(6) The Initial Decision in the Hearing by the United States Environmental Protection Agency on the Application to Use Sodium monofluoroacetate (Compound 1080) FIFRA Docket No. 502, concluded that the effectiveness of aversion conditioning agents as a method of predator control has not been established. (Section 21 - pages 15/16)

(7) The surface placement of large number of baits used for taste aversion conditioning purposes provides much greater exposure for consumption of the Lithium Chloride by a broad range of non-target animals than the highly site-specific buried Compound 1080 wolf baits.

(8) Lithium Chloride is a toxic substance and, if wrongly used, can be very dangerous.

(9) Distribution of Lithium Chloride to ranchers for use in bait preparation creates a potential for misuse or accidental exposure not evident

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in poison predator control programs administered by the Fish & Wildlife Branch.

(10) Taste aversion can be established in laboratory test animals by one or two (not more than three) exposures to Lithium Chloride.

End of Summary