



Notice of Objection Submission Number: PEP-7004-1714940362924-E-N

May 15, 2024

Margherita Conti
Director General
Value Assessment and Re-evaluation Management Directorate
Pest Management Regulatory Agency
Health Canada

RE: Health Canada – Re-evaluation Decision (RVD2024-04) - Predacide Uses of Strychnine and Sodium Monofluoroacetate and their Associated End-use Products (7 March 2024)

Dear Margherita:

Alberta Environment and Protected Areas (AEPA) has reviewed Health Canada's re-evaluation decision (RVD2024-04). Thank you for the opportunity to review this document.

AEPA will not object to Health Canada's decision to cancel the use of strychnine.

AEPA has filed a Notice of Objection regarding the current content of the Re-evaluation Decision Document referred to hereafter as the "Decision Document". We have identified content in the Decision Document which has limited or no supporting evidence and which isn't suited to profile/draw conclusions from in a science-based review. In addition, aspects of the Decision Document represent inaccuracies or misrepresentations that should be clarified. By way of our Notice of Objection, we are seeking revisions to the Decision Document. It is AEPA's position that discussion with Health Canada would be advantageous to consider and address our comments and concerns.

Our assessment is that aspects of the Decision Document unfairly denigrates Alberta's caribou conservation program, which as federally mandated, is attempting to forestall woodland caribou population extirpation in a responsible manner. The content in question could also contribute to ongoing denigration (by outside of government entities) of the conduct and professional integrity of Alberta's woodland caribou program personnel. While we support a science-based approach to the re-evaluation decision, we request that certain unempirical content in the Decision Document is not considerate of Alberta's responsibilities nor our adherence to Health Canada's requirements or responsiveness to information requests.

We also provide comments and recommended revisions to the provisions listed in the Decision Document for potential future deployment of sodium monofluoroacetate.

The following content of the Decision Document is of concern to AEPA, of which we have provided comments and recommendations to address:

1. AEPA is concerned that in many cases the Decision Document does not differentiate between AEPA's woodland caribou conservation program and toxicant delivery by other entities in Alberta, notably Alberta's livestock protection program, which the bulk of records provided by the identified non-governmental organizations are in reference to. We request greater clarity in the Decision Document to differentiate the woodland caribou conservation program from other programs. We feel that this is important given the distinctly different program goals and objectives, management approaches, and methods of delivery, including Alberta's federally mandated responsibility to avoid woodland caribou extirpation.
2. Page 1 - ***Strychnine is a toxicant registered as a restricted class end-use product used to kill predators and skunks in Alberta. It is applied...to kill wolves, coyotes or bears in order to prevent predation of wildlife populations (for example, woodland caribou populations) threatened with extirpation...*** Similarly, Label 20410 states that wolves, coyotes, or bears are target species.
 - a. Throughout the Decision Document, coyotes are typically reported as, or implied to be, a non-target species. We seek adjustments to clarify that coyotes are a target species for the woodland caribou conservation program.
 - b. Page 15 – ***It is only used to control wolves in the Government of Alberta's woodland caribou recovery.... and Strychnine has not been used to control coyotes and black bear in Alberta since at least 2005.*** These statements are incorrect in relation to woodland caribou program delivery, as coyotes are a target species. Correction is needed.
3. Page 5 – ***...potential threat to species at risk...*** AEPA asserts that there has been no demonstrated or potential risk to species at risk populations in relation to delivery of the woodland caribou conservation program. We seek removal of this statement in context of the woodland caribou program.
4. Page 6 – ***Affected populations have the potential to recover... and The presence of unaffected non-target animals in areas where sodium monofluoroacetate is not being used will further facilitate recovery since unaffected organisms can move back into areas where effects may have occurred.*** The woodland caribou conservation program has never, and could never, have population-level effects on non-target species. These statements are not based on evidence and are unfairly applied. We seek removal of these statements.
5. Page 9 - ***When evaluating the health and environmental risks of a pesticide and determining whether those risks are acceptable, subsection 19(2) of the Pest Control Products Act requires Health Canada to apply a scientifically-based approach.*** In contrast to the commitment to a science-based approach, the Decision Document references, seemingly as evidence, input received as a result of the public consultation process. AEPA submits the associated assertions are non-scientifically gathered. These assertions should be removed from the Decision Document, including:
 - a. Page 18 - ***Anecdotally, a trapper reported reduced numbers of canids, ravens and other scavengers in the areas of strychnine bait sites over the years. Furthermore, the trapper noted that wolverine, which were once plentiful in the area, appeared to have disappeared in the last decade despite no industrial development in the area.***

- i. There is no evidence to justify these assertions, which are not supported through observations made during AEPA's annual field work in the Little Smoky woodland caribou range. In addition, C. Seip (2022, MSc Thesis, University of British Columbia) demonstrated that delivery of the Little Smoky woodland caribou/wolf program did not effect meso-predators.
 - ii. Environment Canada has documented that the Little Smoky caribou range contains more industrial disturbances than any other boreal woodland caribou range in Canada – the Little Smoky range has a very high level of industrial development. Environment Canada's own documentation is counter to the anecdotal information provided by the trapper.
 - b. Page 20 - ***During the consultation, the International Fund for Animals (IFAW) noted that there is documented evidence that strychnine was being used on waterways in the Little Smoky region during the winter of 2018. IFAW states that it is impossible to tell how many baits have been left behind at the end of the poisoning program to fall into the river system after the ice thaws and expressed concern that the Athabasca River rainbow trout (Oncorhynchus mykiss) population may be exposed.***
 - i. AEPA has not deployed strychnine onto watercourses during caribou program delivery. Inferring bait site locations from GPS location data would not enable such a fine-scale determination of exact bait placement locations. This statement should be removed from the Decision Document.
 - ii. Athabasca rainbow trout occurrence is limited to the Athabasca watershed, which is a small portion of the Little Smoky woodland caribou range. The predominance of toxicant deployment for caribou conservation occurred outside of the Athabasca rainbow trout range.
6. Pages 14 and 16 - It is unclear why Health Canada is specifically recognizing the advocacy groups Wolf Awareness and Animal Justice? Particularly since these are organizations which advocate against any and all wolf management actions to protect woodland caribou. We recommend reconsideration of references to these advocacy groups in the Decision Document.
- a. AEPA is disappointed that PMRA did not directly request from AEPA records for program delivery prior to 2010. Those records would have been willingly provided, with associated context and commentary, that would have provided necessary clarification between the records associated with Alberta's livestock protection program (the bulk of the records provided by these groups) and Alberta's woodland caribou conservation program. Please refer to Point 1, above.
7. Section 3.1 – Referring to records submitted by Wolf Awareness and Animal Justice, Health Canada states that ***The records all show high levels of potential non-compliance with label directions, the lack of proper records, and a higher number of non-target animals killed than target animals.***
- a. These are strong and prejudicial allegations, which we submit aren't appropriate to appear within this science-based re-evaluation Decision Document. We feel that any concerns with potential non-compliance with label directions, lack of proper records, or other aspects of program delivery, should be communicated directly to AEPA to enable a response and resolution. This would include the potential for associated enforcement action if Health Canada determines that to be necessary. We seek removal of the above noted statement from the Decision Document.

- b. Section 3.1 reports a discrepancy between the records provided by Wolf Awareness and Animal Justice and those records provided by Hervieux et al. The records provided by Wolf Awareness and Animal Justice (including those related to the Little Smoky caribou program) originated from a different branch of the Alberta Government that was not responsible for delivery of the caribou conservation program. Additionally, the records in question were not prepared or substantiated by the caribou conservation program area. The records provided previously by Hervieux et al represent the official AEPA record of animals killed through Alberta's caribou conservation program area during 2006-2009.
 - c. The occurrence of animal tracks at draw bait sites does not translate to animals ingesting toxicant. We seek clarifying statements in the Decision Document.
 - d. Please refer to comment below on our assessment of the ratio of non-target to target animal kills. We seek removal or clarification of assertions regarding the ratio of non-target to target animal mortalities.
 - e. In reference to the comment that not all strychnine drop baits were recovered at site closure during the first years of program delivery, we realized that improved field delivery procedures were needed during the removal/searching of snow piles. Improvements were adopted for the subsequent years of the program. AEPA agrees it was important to recover drop baits, and program improvements were made in an attempt to improve program delivery.
8. Pages 14, 15 and 17 – AEPA submits that, within reason, the ratio of non-target to target animal mortalities is a misleading metric. Some level of non-target animal mortality is unavoidable when using toxicants, as noted on Page 31 of the Decision Document. Since wolves naturally occur at very low population densities, the number of wolves removed would always be relatively small in comparison to unavoidable by-catch of species which demonstrate orders of magnitude greater abundance (e.g., ravens). We assess that the number of individual animals of non-target species that were killed during caribou program delivery was not excessive, and could not/did not result in population-level effects. We seek removal or clarification of assertions regarding the ratio of non-target to target animal mortalities.
9. Page 15 – **...McKinnon et al., 2002 (PMRA# 3051153), McKinnon and Mineau, 2004 (PMRA# 3051152))...** AEPA does not have access to these documents, however, we expect that the referenced studies are not applicable in relation to the efforts of AEPA to address the collection of animal carcasses of target and non-target animals during caribou program delivery. Alberta's caribou conservation program only deploys baits during snow cover conditions, which allows for tracking of animals that may have consumed drop baits. We recommend adjusted context be provided in relation to the listing of these reports.
10. Page 15 and Page 17 - **...two grizzly bears...** If one of those bears is associated with the 2018 incident report (see below), it is our position that there is no evidence for this alleged mortality. Through materials submitted to Alberta's Public Interest Commissioner, the complainants involved in the 2018 incident report provided a photograph of a person's hand holding some type of mammal hair, which the complainants purported to be grizzly bear hair. No hair samples were retained or submitted to determine species, and there was no supporting evidence that this material was found at a caribou site. Further, mammal hair can be found throughout the forest. The caribou program did result in the mid-winter death of one grizzly bear. We seek removal of references in the Decision Document to a second grizzly bear.

11. Page 16 – ***Harris and Armstrong (2021)***. We believe that it isn't appropriate to compare Alberta's woodland caribou program delivery to toxicant application that occurred 60 to 70 years ago, given the absence of reasonable management practices and regulations during those years. During those earlier years, an abundance of toxicant was typically placed in draw-bait carcasses, which would unavoidably result in a very high level of animal mortalities. We request removal of this reference in context of our woodland caribou program delivery.
12. Page 16 – ***...the number of gray jay deaths...*** Caribou program drop baits are deeply buried in snow mounds. It is not credible that the caribou program would have resulting in multiple gray jay deaths. We recommend removal of this content in relation to the caribou program.
13. Page 16 and 17 – We note that American badger and swift fox do not occur in the woodland caribou conservation program area. These species are found in geographic parts of Alberta at great distance from the caribou program area. The Decision Document notes that Alberta's livestock protection program no longer uses strychnine. We request that these circumstance are recognized in the Decision Document, and reference our earlier concern regarding the need for the Decision Document to clarify and differentiate between the caribou conservation program and other Alberta programs. Please refer to Points 1 and 6, above.

Wolverine distribution does overlap with the caribou conservation program area, however, over the full period of the Little Smoky woodland caribou program there have been no wolverine mortalities, or evidence of wolverines consuming drop baits. AEPA submits that the risk to wolverines has been extremely low. We request that this be recognized in the Decision Document.

14. Page 17 – ***...loss of biodiversity...*** There is no evidence of risk to, or loss of, biodiversity through delivery of the woodland caribou conservation program. We request removal of this content.
15. Page 17 - ***In 2018, an incident report provided evidence of the deaths of at least 18 non-target animals (at least eight ravens, five foxes, two coyotes, a lynx, a grizzly bear and a great gray owl) at strychnine bait sites over the course of June-July when no toxicant was supposed to be present. Fox scat around the carcasses was also observed, without the retrieval of fox carcasses. This indicates that additional animals may have been poisoned but were not found. This incident report also shows that deaths of many non-target organisms can occur for months after the closure of a strychnine bait site if the toxicant and poisoned carcasses are not completely removed. The incident report resulted in enforcement action on the Alberta Government in 2019. Health Canada's subsequent inspections did not identify any instance of non-compliance.***
 - a. AEPA **strongly objects** to the inclusion of this content. It is defamatory, and based on unsubstantiated assertions made by complainants with a long history of objecting to all aspect of wolf management to conserve caribou. Inclusion of these allegations in the Decision Document is inappropriate - this material needs to be removed from the document. If not removed, AEPA requests an opportunity to have our rebuttal comments to these allegations formally included in the Decision Document.
 - b. In response to a submission by these complainants, the above noted assertions are currently under review by the Alberta Public Interest Commissioner. AEPA

has submitted many detailed materials, observances, and responses to the Commissioner on the matter. As listed in those AEPA submissions, our Department asserts that the allegations made by the complainants are without associated evidence and largely without merit. We are concerned that various aspects of the allegations were fabricated and we noted indications that some of the sites were staged to enable photographs designed to falsely incriminate the caribou program.

- c. Previous communications from Health Canada to AEPA did not validate the assertions made in the above noted statement and, as noted, the 2019 communication from Health Canada did not identify any instance of non-compliance. As such the above noted content on Page 17 is unfairly stated and an inaccurate portrayal of the correspondence provided to AEPA by Health Canada.
- d. The statement ***...when no toxicant was supposed to be present...*** implies program non-compliance with Label conditions, even considering the subsequent statement that ***Health Canada's subsequent inspections did not identify any instance of non-compliance.*** This framing is inaccurate and needs to be removed with the rest of the content regarding this incident report.
- e. Health Canada is referring to correspondence sent to Alberta Environment and Parks (AEP) on April 16, 2019 wherein Health Canada provided a warning to AEP, resulting from our inability to be in full compliance with the 7 day site visit provision for a small number of bait sites. As described in our subsequent written response to Health Canada, this non-compliance was responsive to our need to comply with federal aircraft/flying regulations related to dangerous weather conditions, and to the imperative to maintain the safety of program personnel. The wording listed in the Decision Document implies that enforcement action was related to toxicant and carcass removal, which is an inaccurate portrayal. Further, AEPA is unclear how these statements are relevant to the re-evaluation decision. We seek deletion of this content.

16. Page 21 and Page 31- ***It is expected that the cancellation of strychnine will have minimal impact in predator and skunk management because both lethal and non-lethal approaches to manage these animals are available.*** AEPA disagrees with Health Canada making such an assertion without consultation with AEPA, and we submit that Health Canada does not have adequate knowledge or subject matter expertise of Alberta's systems pertaining to woodland caribou conservation to make this determination in relation to the AEPA woodland caribou program. Further, this statement challenges the standing of AEPA's caribou program - if the dis-use of strychnine will have minimal impact, then why did AEPA deliver a strychnine-based program at all and why did Health Canada enable use of this compound? We suggest that the above noted assertion does not fairly frame the circumstance of toxicant use for caribou conservation, and does not acknowledge the high risk of caribou population extirpation without access to practical and effective wildlife management tools. We seek associated significant adjustments to the context and assertions listed on Pages 21 and 31 in relation to implications for woodland caribou program delivery.

- a. The critical value of the toxicant program has been to remove wolves that were not removed/could not be removed through aircraft-based tracking and shooting. An inability to annually remove essentially all wolves in the program area prior to the caribou calving period, including the wolves removed through toxicant application, risks failure to achieve caribou vital rate objectives, resulting in negative population growth for endangered caribou populations.

- b. We note that trapping and snaring cannot manage wolf populations. Further, we have documented that third party trapping and snaring activities result in large numbers of non-target animals being killed, including occurrences of caribou being snared and killed.
- c. While aircraft-based operations have been the primary means to achieve program objectives, effective delivery of this method faces many challenges and impediments (e.g., inadequate tracking snow conditions) which can compromise achievement of program objectives for wolf abundance and caribou vital-rates.
- d. **...restoration and protection of habitat in conservation programs.** Restoration and protection of habitat will not address the high near-term risk of caribou extirpation.
- e. AEPA chose to not base the caribou program on sodium monofluoroacetate since it is generally difficult or impossible to find and retrieve the carcasses of animals killed with that compound. AEPA determined that it was key to understand and be able to report on the number of target and non-target animals killed during program delivery. Our concern has been that an inability to find and report on animal mortalities could challenge the assessment of program effectiveness and public perceptions of the work.

Comments on the Listed Provisions for Sodium Monofluoroacetate

AEPA appreciates the opportunity provided by Health Canada for the continued use of Sodium Monofluoroacetate. To date, this compound has never been used during the caribou conservation program delivery due to the difficulty or inability to locate associated animal carcasses. AEPA may, however, choose to use this compound in the future, given the cancellation of all uses of strychnine.

We seek Health Canada consideration of amendments to the provisions, listed in the Decision Document, for sodium monofluoroacetate use:

1. Page 3 and 48 – ***Submit reports of non-target deaths...*** We again note that it is generally very difficult or impossible to locate the carcasses of animals killed after ingesting this compound. This circumstance should be acknowledged in the Decision Document.
2. Page 4 and 48 – ***...remove and destroy all baits within 15 days of initial placement...*** Draw bait sites for the woodland caribou conservation program are typically maintained for more than 15 days. Abandoning a draw bait site within 15 days would result in a waste of the associated draw bait carcasses and limit program achievements, since it takes time for wolves and coyotes to locate the bait sites. Alternatively, retaining the draw bait site and removing/destroying and reapplying new drop baits seems to be of unclear value. We are unclear as to the rational for this requirement and seek clarification or revisions.
3. Page 4 and 48 – ***...inspect poisoned bait at least every seven days...*** AEPA supports the importance of inspecting baits regularly, and is in agreement with the seven day criteria. However, as we have experienced during the delivery of the caribou conservation program since 2005, and as previously described to Health Canada, dangerous winter weather conditions can at times make it impossible to achieve this requirement. The woodland caribou program can only be delivered with the use of rotary wing aircraft, and it is both unsafe and unlawful to fly during inclement winter weather conditions, which can last for consecutive days. AEPA will fail to achieve the seven day provision on occasion and therefore be in a position of non-compliance with the Label. As an alternative we propose retaining the seven day requirement, with explicit acknowledgement of (limited) flexibility in response to dangerous weather conditions.

We are appreciative of Health Canada providing AEPA the opportunity to review the re-evaluation Decision Document. We would like to contribute to making the re-evaluation Decision Document as accurate as possible.

Please advise if Health Canada is in agreement with a dialogue with AEPA in relation to the comments and recommendations we have provided, and to potential revisions of the Decision Document relative to Alberta's woodland caribou conservation program. We would be very pleased to meet at your earliest convenience

Sincerely,



Sue Cotterill
Executive Director

cc: Tom Davis – Assistant Deputy Minister, Resource Stewardship Division, AEPA
KayeDon Wilcox – NW Region Fish and Wildlife Director, AEPA
Dave Hervieux – Provincial Caribou Management Coordinator, AEPA
Lynn Lee – Health Canada, Re-evaluation Coordinator