

June 21, 2024

Officer Responsible for Notice of Objection
Pest Management Regulatory Agency
Health Canada - Government of Canada

RE: PEP-17149403629245-E-N

To the Officer Responsible;

Alberta is submitting this correspondence in response to the May 22, 2024 email provided by the Health Canada - Pest Management Regulatory Agency (PMRA), which advised that Alberta did not adequately provide citations/evidence to support our Notice of Objection to Re-evaluation Decision (RVD2024-04). Please accept our supplementary responses listed below as a resubmission, based on the points contained in our Notice of Objection Submission Number: PEP-17149403629245-E-N (May 15, 2024).

Alberta is concerned that in various cases the PMRA is requesting citations or evidence for our responses to statements made in the Re-evaluation Decision, which we consider to be assertions or referencing public commentary that lacked supporting validation, citation or evidence. We suggest that the unsupported content included in the Re-evaluation Decision is not consistent with the stated scientific basis of the Re-evaluation Decision.

Alberta remains interested in discussing our submissions with the PMRA as soon as possible.

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 were the bulk of records provided by the identified non-governmental organizations. 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.

Supplementary Response - No citations or evidence to provide. The Decision Document identifies that the Government of Alberta used strychnine for both the woodland caribou conservation and livestock protection programs. Health Canada indicates that the objectives of each program are different. However, in consideration of the environmental impacts of strychnine, Health Canada does not differentiate the potential impacts of each program, even though there were distinctly different program goals and objectives, management approaches, and circumstance affecting delivery.

Documentation regarding Alberta's federally and provincially mandated responsibility to avoid woodland caribou extirpation and achieve woodland caribou conservation and recovery includes:

- *Agreement for the Conservation and Recovery of the Woodland Caribou in Alberta*, October 2020. (<https://open.alberta.ca/publications/agreement-for-the-conservation-and-recovery-of-the-woodland-caribou-in-alberta>)
 - *Recovery Strategy for the Woodland Caribou (Rangifer tarandus caribou), Boreal population in Canada* (<https://www.canada.ca/en/environment-climate-change/services/species-risk-public-registry/recovery-strategies/woodland-caribou-boreal-population-2012.html>)
 - *Recovery Strategy for the Woodland Caribou, Southern Mountain population (Rangifer tarandus caribou) in Canada* (<https://www.canada.ca/en/environment-climate-change/services/species-risk-public-registry/recovery-strategies/woodland-caribou-southern-mountain-2014-final.html>)
 - *Alberta woodland caribou recovery plan, 2004/05-2013/14* (<https://open.alberta.ca/publications/0778540766>)
 - *A woodland caribou policy for Alberta* (<https://open.alberta.ca/dataset/debdf4b3-d004-42a1-ab1a-6ac456362915/resource/b72d06b1-e3ec-4bbf-92e9-dfb67e601f49/download/2011-woodlandcariboupolicy-alberta-jun2011.pdf>)
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 target species. Correction is needed.

Supplementary Response - No citations or evidence to provide. The above noted Decision Document content is mis-leading or incorrect.

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.

Supplementary Response – The Decision Document does not provide a citation or evidence for the above listed assertion. Seventeen species are specified on pages 14 and 15 of the Decision Document, which references Government of Alberta reporting records. These species are: raven (*Corvus corax*); wolf (*Canus lupus*), coyote (*Canus latrans*), fox (*Vulpes vulpes*), fisher (*Pekania pennanti*), weasel (*Mustela frenata*), lynx (*Lynx canadensis*), magpie (*Pica hudsonia*), marten (*Martes americana*), golden eagle (*Aquila chrysaetos*), bald eagle (*Haliaeetus leucocephalus*), skunk (*Mephitis mephitis*), grey jay (*Perisoreus canadensis*), mink (*Mustela vison*), ermine (*Mustela erminea*), great gray owl (*Strix nebulosa*), and grizzly bear (*Ursus arctos horribilis*).

Of the 17 species noted above, only grizzly bear is a listed species at risk (*Threatened*) under Alberta's Wildlife Act (<https://www.alberta.ca/lookup/wild-species-status-search.aspx>). Grizzly bear is not listed as a species at risk under Canada's *Species at Risk Act* (<https://www.alberta.ca/grizzly-bear-recovery-plan>).

The Decision Document attributes two grizzly bear mortalities to the caribou program delivery, however, as noted below, Alberta acknowledges the death of one grizzly bear but strongly refutes the allegation that two bears were killed. The mortality of one grizzly bear during caribou program delivery did not result in any potential or actual threat to this species.

No evidence is provided in the Decision Document indicating that the caribou program posed a potential or actual threat to species at risk.

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 effects for non-target species. These statements are not based on evidence and are unfairly applied. We seek removal of these statements.

Supplementary Response – The Decision Document does not provide scientifically derived or other rationale to support an assertion of population-level affects for non-target species.

Our assessment is that the number of non-target animals killed through caribou program delivery could not result in population vital-rate, demographic or abundance effects for non-target species. For example, a population density of 1.86 ravens/km² has been reported (<https://digitalcommons.usu.edu/cgi/viewcontent.cgi?article=1770&context=hwi>). Applying this abundance estimate to the area of caribou program delivery results in an estimate of approximately 10,000 ravens occurring in the program area. The number of ravens killed during program deliver could not have an effect raven growth or abundance at a population scale. We submit that this assessment would be accurate for all other non-target species in the program area, which generally occur at medium to high population densities.

As per Alberta's response to #3 above, with the noted exception of grizzly bear, none of the reported non-target species are listed as at risk, indicating no evidence of population level concerns from the caribou program delivery. All the recorded non-target mammal species are classified in Alberta (including the caribou program area) as either non-licensed or furbearers. Hundreds or thousands of these species are annually commercially trapped (<https://albertaregulations.ca/trappingregs/furbearer-management.html>) or destroyed as pests in Alberta, as further evidence that Alberta does not have conservation concerns with the number of non-target animal mortalities associated with the woodland caribou conservation program delivery. The small number of non-target mammals killed during caribou program delivery could not create population level effects.

All of the reported passerine non-target species are listed as secure (<https://open.alberta.ca/publications/alberta-wild-species-general-status-listing>), again indicating large population levels and no conservation concerns.

The reported raptor species are listed as sensitive (<https://open.alberta.ca/publications/alberta-wild-species-general-status-listing>), however,

the caribou program resulted in few mortalities of these species, again indicating no potential for population level effects from the caribou program delivery.

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 this stated commitment to a science-based approach, the Decision Document repeatedly references, seemingly as evidence, unsubstantiated 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 affect meso-predators.

Supplementary Response – Alberta Fish and Wildlife Stewardship Branch personnel continue to observe ravens to be extremely abundant in the caribou program delivery area, as would be expected given the beneficial effect of forestry and oil and gas developments for raven abundance (https://abmi.ca/FileDownloadServlet?dir=WEB_GRAPH&filename=/reports/2019//Birds/Corvus-corax.pdf). There is no evidence of raven population declines in association with caribou program delivery. We again reference the C. Seip M.Sc. thesis (<https://open.library.ubc.ca/soa/cIRcle/collections/ubctheses/24/items/1.0406143>), which demonstrated no effects of the caribou program for meso-predators.

The caribou program did not result any confirmed mortalities of wolverines. Alberta could not find any scientific reports that provided evidence of wolverine declines within the program area(s). Example of available studies, for example: (<https://cdnsiencepub.com/doi/abs/10.1139/cjz-2013-0022>), in proximity to the caribou program area indicated that wolverines abundance is primarily correlated with the extent of anthropogenic developments, with wolverine abundance being higher in adjacent protected areas that are free from industrial activities than in areas with industrial resource extraction. The caribou program area contains very high levels of industrial development features (<https://www.canada.ca/en/environment-climate-change/services/species-risk-public-registry/recovery-strategies/woodland-caribou-boreal-population-2012.html>), negatively affecting wolverine abundance. The Decision Document provides no evidence of caribou program delivery affecting wolverine abundance.

The credibility of the trapper's commentary is particularly in question relative to the statement "*despite no industrial development in the area*" given the extremely high levels of industrial developments throughout the area (<https://www.canada.ca/en/environment-climate-change/services/species-risk-public-registry/recovery-strategies/woodland-caribou-boreal-population-2012.html>) and (https://www.registrelep-sararegistry.gc.ca/virtual_sara/files/ri_boreal_caribou_science_0811_eng.pdf).

- 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.

Supplementary Response – Associated reference: “Woodland Caribou Conservation and Recovery – Toxicant Wolf Control Program Standard Operating Procedure. Alberta Environment and Protected Areas (Fish and Wildlife Stewardship Branch Internal 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.

Supplementary Response – Associated citations:
(<https://open.alberta.ca/dataset/b5d41893-30ed-483b-8aa3-22a426499594/resource/20cf3fc3-22a9-4764-9a16-56f45c687e3a/download/2015-sar-athabrainbowtrout-recoveryplan-jun2015.pdf>) and (<https://www.canada.ca/en/environment-climate-change/services/species-risk-public-registry/recovery-strategies/rainbow-trout.html>)

6. Pages 14 and 16 - It is unclear why Health Canada is specifically identifying these advocacy groups Wolf Awareness and Animal Justice in the Decision Document? Particularly since these are organizations which advocate against 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.

Supplementary Response – We offer no citation associated with the above concern and recommendation. Alberta has willingly and honorably provided all records to Health Canada as required by Health Canada conditions of use, or upon request from Health Canada. Specifically naming two advocacy groups that take an adversarial position against Alberta's delivery of caribou recovery actions, and not identifying any other individuals, groups or associations when referencing comments/information provided within a scientific evaluation leaves an impression of inherent bias.

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 determined that to be necessary. We seek removal of the above noted statement from the Decision Document.

Supplementary Response – We have no further materials or commentary to submit on this item, other than to reiterate we find the inclusion of above listed allegations in a science-based Re-evaluation Decision to be inappropriate. Again, if the PMRA is convinced of these allegations, then formal outreach to AEPA should be pursued following the established regulatory procedures. We seek removal of the noted statement from the Decision Document and welcome a separate jurisdiction to jurisdiction conversation/process to address any evidence of non-compliance.

- 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, which 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.

Supplementary Response - No citation or evidence is necessary. AEPA complied with toxicant use reporting requirements. All field records during delivery of the woodland caribou conservation program between 2006-2009 (and all prior and subsequent years) underwent quality assurance review to validate field reporting before being consolidated and submitted to Health Canada. These records represent AEPA's official toxicant use reporting record. AEPA recognizes that other departments of the Alberta Government may not have addressed erroneous and/or transitory records.

- 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.

Supplementary Response – The statement listing in the Decision Document is not sensible. We assert that there is evidence that links occurrence of animal tracks with toxicant ingestion at bait sites. Further, it isn't reasonable to expect that each animal leaving tracks at draw bait sites would result ingest toxicant. The procedure of burying toxicant in snow piles is designed to protect animals from ingesting toxicant.

Health Canada has provided no citation, evidence, or scientific analyses that supports inclusion of the statement in the Decision Document: "there was evidence of more wolves or other animals on site than were recovered dead (for example, based on animal tracks or other signs of animal activity)".

Additionally, the presence of tracks is not a reliable indicator of animal abundance. Several studies have attempted to correlate track counts with species abundance or density. For example, Donoghue et. al. (2022) (<https://www.publish.csiro.au/WR/WR21159>) reported that snow track samples require validation by separate animal abundance data to enable track counts to estimate density.

- 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 subsequent years of the program. AEPA agrees it was important to recover drop baits, and program improvements we made in an attempt to improve program delivery.

Supplementary Response - Alberta can provide further background on the development and updating of Standard Operating Procedure documents that demonstrate Alberta's program improvements. In addition to the previously submitted Alberta PS-1 document, relevant materials include:

- Standard Operating Procedure – Woodland Caribou Conservation and Recovery – Toxicant Wolf Control Program
 - Strychnine – Safe Work Practice
 - Handling Dead wildlife – Safe Work Practice
8. Pages 14, 15 and 17 – AEPA submits that 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. We assess that the number of individual non-target animals that were killed during caribou program delivery was not excessive and did not/could not result in any population-level effects. We seek removal or clarification of assertions regarding the ratio of non-target to target animal mortalities.

Supplementary Response - Directly comparing the ratio of non-target to target mortalities does not adequately account for differences in species abundance, distribution, life history, or productivity. For example, a raven density estimate of 1.86 ravens/km² has been reported (<https://digitalcommons.usu.edu/cgi/viewcontent.cgi?article=1770&context=hwi>), although higher raven densities would be expected in the caribou program area, given reported high population growth rates ravens in the boreal plain (<https://digitalcommons.usu.edu/cgi/viewcontent.cgi?article=1762&context=hwi>). In contrast wolf population densities in northern forested areas (without wolf population reduction programs) range from .008 to .014 wolves/km² (<https://cdnscepub.com/doi/abs/10.1139/z85-160>). By the onset of caribou toxicant program delivery in mid-winter, it is probable that wolf density would be a fraction of those reported density estimates in consideration of wolves removed through aircraft tracking and shooting. The ratio of ravens to wolves in the delivery area would conservatively be 233:1. This same relationship, to varying degrees would hold true for most or all non-target species in relation to wolves. While Alberta has striven to minimize non-target animal kills, the ratio of non-target to wolf mortalities is a particularly false indicator. Alberta seeks 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 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 context be provided in relation to the listing of these reports.

Supplementary Response - Alberta does not refute the referenced citations, but request that Health Canada provide context within the Decision Document of how these studies are comparable (or not) to delivery of the caribou program.

10. Page 15 and Page 17 - **...two grizzly bears...** It is our position that there is no evidence for this alleged mortality, as alleged in the 2018 incident report (see below). In 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 the hair 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 the emaciated grizzly bear. We seek removal of references in the Decision Document to a second grizzly bear.

Supplementary Response - Alberta has no additional clarifications, but we continue to request for removal of the reference in the Decision Document of a second grizzly bear. Alberta remains resolute that caribou program delivery has only resulted in the non-target mortality of the one reported emaciated grizzly bear during mid-winter. There is no credible evidence to support the alleged grizzly bear mortality referenced in the 2018 incident report. Please also see our response #15 (below).

11. Page 16 – **Harris and Armstrong (2021).** We believe that it isn't appropriate to compare our 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 early years. During those earlier years, an abundance of toxicant was typically placed in draw-bait carcasses, which would unavoidably result in very high levels of animal mortalities. We request removal of this reference in context of our woodland caribou program delivery.

Supplementary Response - Alberta would again note that it isn't reasonable or appropriate to compare Alberta's caribou program delivery with the review completed by Harris and Armstrong (2021). Those authors reported that toxicant placement consisted of inserting toxicant pellets directly into draw baits which were positioned and anchored onto the surface of frozen lakes. Further, bait site may have only been checked 30 days after deployment. It is unclear if bait site visits involved attending/searching sites on the ground, rather than just circling the sites in fixed-wing aircraft. The approach described in Harris and Armstrong (2021) would be guaranteed to kill all or most scavengers attending the bait site. It is not comparable to delivery of Alberta's caribou program.

12. Page 16 – **...the number of gray jay deaths...** Caribou program drop baits are deeply buried in snow mounds. It isn't 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.

Supplementary Response - Alberta references the PS-1 operating procedure and other internal guidance documents/requirements to prevent and minimize gray jay and other non-target mortalities. Only one gray jay mortality was reported between 2005 and 2021. 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 to the caribou program area. The Decision Document notes that Alberta's livestock protection program no longer uses strychnine. We request that these circumstances 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. 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.

Supplementary Response – in support of the response listed above, we submit the following:

- Scobie, D. 2002. (https://www.ab-conservation.com/downloads/AWSR/Mammal%20Reports/Status%20of%20American%20Badger%20in%20Alberta_2002.pdf)
- Cotterill, S.E. 1997. (<https://open.alberta.ca/dataset/1cf2e6f8-e64e-41b4-8cd0-d5f7101a0da8/resource/49fba565-c8d0-47d7-a72e-3595859b5db2/download/1997-sar-statusswiffofalberta-1997.pdf>)
- Alberta Conservation Association. 2020. (https://www.ab-conservation.com/downloads/report_series/aca_report_wolverine_sok_population_density_data_nov_2020.pdf) AEPA notes that while wolverine distribution does overlap with the caribou conservation program area, the above citation does not identify Alberta's woodland caribou conservation program as a threat to wolverine in the associated Rocky Mountains and foothills, one of the wolverine study areas in Alberta.

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.

Supplementary Response - Health Canada provides no citation or evidence to indicate AEPA's toxicant delivery program has had any affect on (or loss of) biodiversity. As noted above, we assert that is not credible to believe that the caribou program could affect biodiversity, given the inability of the program to have population level effects on non-target species. Based on an assessment of habitat condition (broadly accepted as the key driver of biodiversity changes) the Alberta Biodiversity Monitoring Institute reports (<https://orb.abmi.ca/region/foothills-natural-region>) the Biodiversity Intactness Index in the region overlapped by the caribou program area. The Institute found the biodiversity index to be 84.2% for mammals and 79.8% for birds. There is no evidence for loss of biodiversity in the caribou program area. 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, assessments, 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 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 ***Health Canada's subsequent inspections did not identify any instance of non-compliance.*** This framing is inaccurate and 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. AEPA is unclear how these statements are relevant to the re-evaluation decision. We seek deletion of this content.

Supplementary Response – Alberta has provided detailed and comprehensive responses and assessments to the Alberta Public Interest Commissioner on the above noted complaint. We are not able to share those materials with the PMRA, in order to comply with privacy and other requirements imposed by the Public Interest Commissioner process. In brief, we have provided rational and evidence to the Commissioner describing the lack of credibility of many of the complainant assertions, outlined (with evidence) how sites were apparently staged to enable complainant photographs, noted the lack of any physical evidence being retained / submitted by the complainants, pointed out the complainants access to animal carcasses which could have been positioned at sites, pointed out the potential access to toxicant by one of the complainants as a result of former employment with a branch of the Alberta government, and described the long standing grievances that the former employee holds against the Crown of Alberta.

We feel that the framing of this complaint in the Decision Document is unfair, unfounded and inflammatory. For example, the Decision Document statements: “provided evidence”, “when

no toxicant was supposed to be present”, “shows that deaths of many non-target organisms can occur for months”, “Fox scat...without the retrieval of fox carcasses” are unreasonable for a science-based assessment and seem to imply inherent bias. Alberta submits that assertions made by the above noted complainants can not be considered factual evidence in a scientific assessment.

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 doesn’t fairly frame the circumstance of toxicant use for caribou conservation and doesn’t 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, creates high risk of 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 trapping and snaring activities results in large numbers of non-target animals being killed, including occurrences of caribou being 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.

Supplementary Response – We suggest that the PMRA does have the ability to assess how adjustments to wolf program delivery effectiveness could affect caribou vital rates and demography, and thereby affect the federally and provincially mandated achievement of caribou conservation and recovery objectives. Such an assessment requires application of analysis tools, such as described by Eacker et. al. (2019)
(<https://wildlife.onlinelibrary.wiley.com/doi/full/10.1002/wsb.950>)

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.

Supplementary Response - Alberta has no additions or clarifications to the statements and requests above.

Please acknowledge receipt of this resubmission. We look forward to a discussion with the PMRA on this matter.

Respectfully,



Kayedon Wilcox, as acting for:
Sue Cotterill
Executive Director
Fish and Wildlife Stewardship

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