



ALBERTA WILDERNESS ASSOCIATION

*"Defending Wild Alberta through Awareness and Action"*

February 28<sup>th</sup>, 2022

The Honourable Steven Guilbeault  
Minister of Environment and Climate Change Canada  
Email: [ec.ministre-minister.ec@canada.ca](mailto:ec.ministre-minister.ec@canada.ca)

**RE: Proposed Approach for Coal Mining Effluent Regulations – Discussion Document**

Dear Minister Steven Guilbeault,

Alberta Wilderness Association (AWA) is writing you with urgent concern regarding the January 2022 Discussion Document outlining Environment and Climate Change Canada's (ECCC) *Proposed Approach for Coal Mining Effluent Regulations* (hereafter referred to as the Proposed Regulations) scheduled for implementation in 2023. AWA is an Alberta-based conservation group with 7,500 members and supporters in Alberta and around the world. AWA seeks the completion of a protected areas network and good stewardship of Alberta's public lands, waters, and biodiversity to ensure future generations enjoy the abundant benefits they provide.

We appreciate having this opportunity to review the Proposed Regulations and to provide input and recommendations as part of this public engagement period ending March 1st, 2022. After reviewing the discussion document as well as participating in the February 16th Info Session hosted by ECCC, we have significant concerns with the regulations being proposed for implementation under the *Fisheries Act*, which are summarized in the list below, and outlined in greater detail in the following sections of this letter.

**Summary of Concerns:**

1. ECCC should continue to prohibit the deposit of coal mining effluent indefinitely until Industry can ensure water quality is equal to or greater than in the receiving watershed;
2. Limits and thresholds need to be science-based and ensure the protection of water quality and ecosystem health – not based on what is practical or feasible for Industry;
3. Revised limits and thresholds need to apply to all mines, including those currently operating or currently under development; and
4. ECCC needs to consider both the downstream and cumulative effects of these Proposed Regulations as opposed to solely focusing on end-of-pipe concentrations of deleterious substances as currently proposed.

## Detailed Comments:

The discussion document explicitly states that “Canadian coal mines produce effluent containing deleterious substances including selenium, nitrate and suspended solids, that pose a risk to fish and fish habitat. The deposit of coal mining effluent is subject to the general prohibition under the Fisheries Act, which prohibits the deposit of deleterious substances in waters frequented by fish, unless authorized by regulation.” However, the Proposed Regulations intend to allow for the deposit of deleterious substances from coal effluent into aquatic ecosystems, posing a risk to fish, fish habitat, riparian ecosystem health, and downstream uses by human communities.

The Government of Canada website hosting the public engagement for these Proposed Regulations mentions the following: “These regulations will reduce the risks to fish and fish habitat by limiting levels of harmful substances in coal mining effluent”. We acknowledge that the Proposed Regulations will establish limits on the allowable concentrations of harmful substances within effluent intended for release. However; the release of this effluent – even at limited concentrations – still represents an increased risk to fish and fish habitat by allowing for the deposit of these substances into the receiving environment in the first place.

AWA does not support ECCC’s intent to authorize the release of coal mining effluent into the aquatic environment, and we feel that ECCC should continue to prohibit the deposit of effluent indefinitely until Industry can ensure water quality is of a standard that is equal to or greater than in the receiving watershed. This requirement needs to be implemented to avoid any and all potential harm to fish, fish habitat, and aquatic ecosystems more broadly.

Our next concern with the Proposed Regulations is that the limits for both total suspended solids (TSS) and selenium have been increased from what was proposed in 2020 – with tolerable selenium concentrations double what was previously put forward (Section 1.2). Even low concentrations of selenium can be harmful to aquatic ecosystems because of bio-accumulation as it is absorbed by primary producers and eventually ends up in the tissues of fish and wildlife. Selenium poisoning can result in various harmful impacts to fish including developmental deformities – making fish easier targets for predation, and more prone to reproductive failure, and death as juveniles (1).

The discussion document explicitly recognizes that “Science indicates that low levels of selenium can be harmful to aquatic life and that selenium deposits from all coal mines have the potential to cause harm.” Yet, the proposed limits have become less stringent with regards to the concentration of selenium that is allowed to be deposited into aquatic ecosystems (from a maximum concentration of 10 to 20 µg/L never to exceed).

Nowhere in the rationale provided for these less stringent limits is there any mention of scientific or evidence-based justifications for these increases from what was proposed in 2020. The rationale for both TSS and selenium only mentions that “the proposed end-of-pipe limits are set at levels intended to limit impacts to receiving water quality while considering technical and economic factors”, which seems to indicate that these limits have been changed to better accommodate Industry requests, rather than considering the impacts to aquatic ecosystems. Industry should be responsible for ensuring that the

concentrations of deleterious substances within coal effluent can meet the most stringent limits possible regardless of the technical or economic feasibility of the task. Environmental regulations need to be based on scientific thresholds for ecosystem health, regardless of impacts to the bottom line of industry. Once valued ecosystem components – such as native fish – are lost, they are permanently gone. Industry can adjust, but nature cannot.

With specific reference to the ECCC information session hosted on February 16<sup>th</sup>, 2022, the presenter from ECCC stated that the proposed selenium limits were changed (from the February 2020 proposal) based on discussions with the provinces and industry on the achievability of limits. This reinforces our assumption that these limits are being tailored to the requests of industry, rather than basing them on evidence-based scientific limits for protecting healthy watersheds.

This same issue was present when reviewing the Sampling and Testing Requirements (Section 1.3). For both Total Nitrate and Total Selenium, the monthly mean concentration threshold for reducing testing frequency has been made less stringent than proposed in 2020. In both of these cases, the discussion document explicitly states that the reduced stringency has been proposed because the previous thresholds “may not be practical to meet”. This is yet another example of more stringent thresholds being relaxed because industry has deemed them impractical, rather than grounding these thresholds based on scientific evidence supporting ecosystem health.

AWA does not support the thresholds as currently stated in the Proposed Regulations. Limits should be as stringent as possible to ensure that water quality will meet the needs of both aquatic ecosystems and downstream uses by human communities, and industry should be required to adhere to more stringent limits regardless of what is practical or economically feasible.

We do not approve of ECCC’s plan to exempt new coal mines from the Proposed Regulations – for mines that begin production within three years of these Proposed Regulations coming into effect. Given the assumption that the Proposed Regulations would not be ratified until the end of 2023, this would apply to any new mines that begin production before 2027. The discussion document explicitly states the definition for existing mines as “a coal mine that produced coal anytime between 1 January 2012, and the date that is three years after Coming into force of the Regulations (CIF)”. This distinction means that mines that are currently planned or under development at this time, could qualify as an existing mine under the Proposed Regulations so long as they produce coal within three years after CIF.

We do not support this proposal, because the discussion document states that “new mines do not face the same constraints as existing mines, and can be designed from the start to meet more stringent limits”, which means that new mines currently under development might only be required to meet the less stringent limits by qualifying as an existing mine. Although we do not support ECCC’s intent to regulate the deposit of coal effluent into aquatic ecosystems, we would prefer to see all mines – both new and existing – be subject to the most stringent limits possible to better protect aquatic ecosystems.

During the February 16<sup>th</sup> information session hosted by ECCC, a question was submitted from the audience, asking why the Proposed Regulations don’t include any requirements for monitoring the cumulative impacts of multiple mines discharging into a single receiving watershed. Under these

regulations, so long as every mine's end of pipe concentrations for deleterious substances were below the defined limits, multiple mines could be depositing effluent into the same river or stream. We share this concern from the audience, and we were disappointed with the response from ECCC which stated that these regulations do not provide a comprehensive view of the problem, and that there is nothing under these regulations that assesses the health (or state) of a given watershed at the watershed scale. We feel that if ECCC is spending the time and resources to craft regulations that will govern the release of coal effluent, then the Proposed Regulations need to consider a cumulative effects perspective for an entire receiving watershed.

Continuing with cumulative effects, we were disappointed that the Proposed Regulations don't consider the potential impact of multiple stressors – both geographically and temporally – which could act in combination to harm fish and fish habitat. We would have liked to see these Proposed Regulations consider the cumulative effect of coal effluent in combination with other threats to fish such as invasive species, habitat loss and degradation, angling pressures, and effects from climate change. We were surprised to see the omission of a cumulative effects perspective in these Proposed Regulations, especially given that Fisheries and Oceans Canada conducted a public engagement in Spring 2021 which requested feedback on how the Fish and Fish Habitat Protection Program (FFHPP) should consider cumulative effects to support policy development, program guidance, and to meet its obligations under the *Fisheries Act*.

We do not think that monitoring and reporting "end-of-pipe" concentrations will provide adequate protection for aquatic ecosystems, since as long as the concentrations of deleterious substances within coal effluent released from a final discharge point (FDP) are below the stated limit, mines have the permission to dump as much effluent into the receiving environment as they want. These Proposed Regulations function only as a permission to pollute, and we question why the initial assumption from ECCC is that it's tolerable to treat our environment as a sink for pollution. Given the time and resources needed to develop these Proposed Regulations, we feel that ECCC should be seeking to set the global standard for environmental protection within its regulations.

We appreciate the staff at ECCC for their candid responses to questions during the February 16<sup>th</sup> information session. It was enlightening to learn that the staff tasked with developing these regulations has been directed to consider the costs to industry associated with implementing certain regulations depending on their stringency. However, as previously stated, we do not think it's appropriate to tailor regulations to ensure the profitability of industry when they are intended to reduce the risks to fish and fish habitat. One of the explicit purposes of the *Fisheries Act* under which these Proposed Regulations are intended to be implemented is "the conservation and protection of fish and fish habitat, including by preventing pollution." – yet these Proposed Regulations seem to undermine that very purpose.

Thank you for considering these comments and recommendations, and we would also like to note that our submission of this comment letter to ECCC should not be considered as support for any new or expanded coal mines. We hope to see these concerns addressed in the Proposed Regulations scheduled for publication in the Canada Gazette at a future date in 2022.

Sincerely,  
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**References:**

1. Lemly AD. Environmental hazard assessment of Benga Mining's proposed Grassy Mountain Coal Project. Environ Sci Policy. 2019 Jun 1;96:105–13.