



North American Metals Council  
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August 13, 2021

Via Electronic Submission

Doug Spry, Ph.D.  
Manager, Science and Technology Branch  
Environment and Climate Change Canada  
Gatineau, Quebec  
K1A 0H3 CANADA

Re: Comments on the Draft Selenium Federal Environmental Quality Guidelines (Canada Gazette, Part I, Vol. 155, No. 24 -- June 2021)

Dear Dr. Spry:

The North American Metals Council (NAMC)<sup>1</sup> Selenium Working Group (SWG)<sup>2</sup> is pleased to submit these comments on Environment and Climate Change Canada's (ECCC) draft "*Canadian Environmental Protection Act, 1999, Federal Environmental Quality Guidelines (FEQG) Selenium*" (draft SE FEQG). This submission provides overarching comments, detailed comments, and supporting rationale related to key aspects of the above-mentioned document. We have drawn information provided by our membership and the best available science.

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<sup>1</sup> NAMC is an unincorporated, not-for-profit group formed to provide a collective voice for North American metals producers and users (*i.e.*, the North American "metals industry") on science- and policy-based issues that affect metals in a generic way. NAMC members include trade associations as well as individual companies.

<sup>2</sup> The NAMC SWG (<http://www.namc.org/selenium.html>) is engaged in technical research on issues pertaining to selenium (Se). Activities include the development of water- and tissue-based standards for Se, the implementation of such standards, the development of effects thresholds, and the identification of analytical methods pertinent to such standards. As part of its ongoing efforts, the NAMC SWG develops papers on these topics and shares them publicly on its website or through the peer-reviewed scientific literature.



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### **Overarching Comments**

The SWG's overarching comments include:

1. NAMC SWG notes that the FEQG document is a draft, however, the document's title does not identify it as such.
2. Much of the information within the draft SE FEQG (the fish tissue aspects) relies on ECCC/Health Canada's (HC) (2017) Screening Assessment, which is now dated. ECCC should consider supplementing this with the latest data and scientific studies. Some references are provided in the attached table.
3. NAMC SWG requests clarification on the use of water quality guidelines, as they vary among jurisdictions.
4. NAMC SWG supports the U.S. Environmental Protection Agency's (EPA) approach to water quality criteria that includes both lentic and lotic systems and believes that ECCC should take a similar approach.
5. The draft SE FEQG does not provide any specific guidance on the collection of fish egg-ovary or whole-body tissues for Se analysis. We encourage the development of guidance on the collection of fish tissues.
6. The bird egg guideline relies only on mallard ducks, rather than on available data for multiple species of birds. NAMC SWG recommends that guidance be provided on the use of toxicity for other species, when waterfowl are not a concern at a given site.

### **Detailed Comments**

Additional comments and recommendations are provided in the attached table.



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The NAMC SWG strongly supports the need for reasonable and scientifically defensible guidelines, regulations, and approaches.

Thank you for the opportunity to provide these comments.

Sincerely,

Guy Gilron, MSc, RPBio, ICD.D  
Technical Lead, NAMC SWG

William J. Adams, Ph.D.  
NAMC and NAMC SWG Chair

Attachment