

T. L. Barber, Ph.D.  
Associate Service Fellow  
NIOSH/ Health Effects Laboratory Division  
Morgantown, West Virginia, USA

Date: October 13<sup>th</sup>, 2020      Your ref: NIOSH e-mail, February 13<sup>th</sup> 2020      Our ref: 1760273/SV/ym/543  
Phone: +31 70 340 75 20      E-mail: info@gr.nl      Encl: -  
Subject: Comments on draft report *Cadmium and selected cadmium compounds*

Dear dr. Barber,

Thank you for accepting the invitation to comment on the draft report *Cadmium and selected compounds*, which the Health Council of the Netherlands published for public review in November 2019. The Council's Subcommittee on the Classification of Substances Toxic to Reproduction appreciates the thorough review of the report, and is pleased that you support the Committee's recommendations. You made several textual suggestions which improved the report. Further, you suggested several changes in the scientific content, which will be addressed below.

One suggestion is to add a description of types of (oral) exposures, as environmental exposure to cadmium can occur and the majority of the available studies concern the oral exposure route. The recommendations of the Committee are requested by the Ministry of Social Affairs and Employment, to be used for policy regarding the occupational situation. As the oral route is not considered a relevant exposure route for workers, the Committee decided to maintain the focus on human exposure by inhalation only.

You also comment on the outline of the summary tables. The Committee notes that the summary tables are organised chronologically, which is helpful when searching for study details, such as information on the substance used. The Committee agrees with your statement that a table organized according to study design (i.e. route; species, sex) would be appropriate. Such tables are included in the report in later sections, when the study results are evaluated. The Committee notes that specifying the cadmium substances add little value, as the majority of the studies are performed with either cadmium chloride and cadmium oxide, and the results of these studies are already distinguished based on exposure route (oral and inhalation exposure, for cadmium chloride and cadmium oxide, respectively).

With respect to your suggestion to include additional useful information (e.g. on occupational exposure limits), the Committee notes that the information provided in the report is limited by a fixed format.

Finally, you express the opinion that insufficient data are available to classify cadmium as H362 to date. The Committee, however, is of the opinion that at least the criterion concerning potentially toxic levels in breast milk is met, which is sufficient for classification. With regard to effects via lactation, the Committee added a publication by Halder et al. (2016) to the report. In that study, female mice were exposed to cadmium during lactation and effects on neurodevelopment were observed in the pups after the lactation period.

The final advisory report *Cadmium and selected cadmium compounds* was published on the website of the Health Council of the Netherlands ([www.healthcouncil.nl](http://www.healthcouncil.nl)) on October 13, 2020. This letter and your comments can also be found there.

Best regards,

S.R. Vink, PhD  
Scientific secretary