October 12, 2015

Via Electronic Mail: P65Public.Comments@oehha.ca.gov

Michelle Robinson
Office of Environmental Health Hazard Assessment
P.O Box 4010, MS-12B
Sacramento, CA 95812-4010

RE: 2015 DART Prioritization of Metallic Nickel

Dear Ms. Robinson:

The Office of Environmental Health Hazard Assessment (OEHHA) is proposing that metallic nickel (CAS# 7440-02-0) [1] along with 4 other chemicals, be reviewed by the Developmental and Reproductive Toxicant Identification Committee (DARTIC) under Proposition 65, using the prioritization process endorsed by the DARTIC and adopted by OEHHA in 2004. Importantly, the DARTIC will not be making any listing determination when it meets on November 9, 2015.

The undersigned organizations support the scientific comments submitted under separate cover by the Nickel Producers Environmental Research Association (NiPERA),[2] and emphasize the following key points, in particular:

- Excluding occupational settings, exposure to metallic nickel (CAS# 7440-02-0) via inhalation or the oral route is negligible or non-existent. Similarly, despite dermal exposure to metallic nickel in some consumer items, dermal absorption is very low and the contribution of this exposure route to systemic blood nickel levels is undetectable.[3]

[1] Currently, Proposition 65 contains numerous nickel containing chemicals with their own distinct CAS numbers, including nickel oxide, nickel carbonyl, nickel hydroxide, among others, as well as "nickel compounds" (without an assigned CAS number), and "nickel refinery dust from the pyrometallurgical process," also without an assigned CAS number.

[2] OEHHA used a focused epidemiology literature review to assess the evidence of reproductive hazard posed by metallic nickel, although many of the studies reviewed by OEHHA involved other forms of nickel that are not relevant to assessing the reproductive hazard of metallic nickel. NiPERA's comments, nonetheless, address the scientific value of these studies.

[3] The chemical forms of nickel predominantly present in ambient air (PM10) are not metallic nickel but rather water soluble sulfates and oxidic nickel including Ni monoxides and complex Ni-Mg and Ni-Fe oxides (e.g., Galbreath *et al.*, 2003). Nickel (II) is essential to microorganisms, plants and certain mammals (Eskew *et al.*, 1983; ATSDR, 2005). Nickel (II) is present in plants as complex organic molecules and in drinking water as the hydrated Ni(II) ion (water soluble form of nickel). Thus, nickel is present in food with 100-300 µg Ni ingested from the daily diet. Owing to nickel ingestion through the diet (and to a much lesser extent from air), nickel levels can be detected in blood and urine of the general population.

- The current proposal for prioritization of nickel was based on the new epidemiological studies available since 2007. The case-control studies of workers at the Monchegorsk nickel refinery stand out due to the high external and internal nickel exposures of the workers (many fold higher than any ambient air study) and the studies' ability to detect potential causal exposures related to reproductive outcomes. Yet, these studies do not support a causal association between exposure to nickel and adverse reproductive outcomes.

In total, the undersigned organizations urge OEHHA and the DARTIC to assign metallic nickel a low priority.

Sincerely,

American Chemistry Council
California Metals Coalition
Copper & Brass Fabricators Council
Copper Development Association
Industrial Fasteners Institute
Metal Finishing Associations of California
Motor & Equipment Manufacturers Association
National Association for Surface Finishing
National Tooling and Machining Association
Nickel Institute
North American Metals Council
Plumbing Manufacturers International
Precision Machined Products Association
Precision Metalforming Association
Specialty Steel Industry of North America