



North American Metals Council  
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May 12, 2014

Via E-Mail

Asa Bradman, Ph.D.  
Acting Chair  
Scientific Guidance Panel  
Biomonitoring California  
c/o Office of Environmental Health Hazard Assessment  
1515 Clay St.  
16th Floor  
Oakland, CA 94612

Re: Comments on SGP Discussion Concerning Inclusion of Metals in  
Biomonitoring California Program

Dear Dr. Bradman:

The North American Metals Council (NAMC) submits this letter in response to discussions concerning the inclusion of various metal substances in the Biomonitoring California program that occurred as part of the March 27, 2014, Scientific Guidance Panel (SGP) meeting. NAMC is an unincorporated not-for-profit group of metals-producing and metals-using associations and companies that focus on science and policy issues that affect metals in a generic way. NAMC and its member organizations are not opposed to biomonitoring programs. Indeed, we recognize and support the need to understand better potential human exposures as part of an overall risk management approach. We believe, however, that the recent decision to include numerous metals in the Biomonitoring California program was inappropriate, will not result in meaningful information, and will impose an undue cost burden on California taxpayers.

### **Inappropriate, Non-Scientific Basis for Including Metals in the Program**

NAMC is extremely concerned with the process used by SGP members to identify metals to include in the Biomonitoring California program. Based on our members' responses to the March 27, 2014, webinar, it appears that SGP members agreed to rely on the contract laboratory's pitch that it can measure multiple metals in blood and urine as the basis for including those metals in the Biomonitoring California program. This is problematic for several reasons.



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First, given the cost of implementing and maintaining this program, the citizens of California should have better, more robust scientific reasoning for including a substance. Simply indicating the substances are “of interest” or that they can be measured is not sufficient. Measuring these substances in humans and reporting those results to the public will not come free. To justify the costs to taxpayers, SGP should clearly, transparently, and publicly identify the scientific basis for why listed substances have been chosen.

Second, rapid analysis of trace metals in blood, as suggested by a representative from the contract laboratory during the March 27, 2014, meeting, is not appropriate for many metals. For example, blood levels of copper are not reliable indicators of copper status in the body. As previously stated, simply being able to measure a metal is not a proper or scientific basis for including it in the Biomonitoring California program.

We urge the SGP to reconsider the approach used at the March 27, 2014, meeting, and re-evaluate each metal individually. The SGP should clearly identify the basis for listing for each metal and identify whether a scientifically relevant and validated approach for measuring that metal is available.

### **Existing Monitoring Programs Show No Concern for Many Metals**

The SGP should consider information already gathered for certain substances under other biomonitoring programs, and whether inclusion of those substances in the Biomonitoring California program will result in new, meaningful data, or whether information generated will be superfluous.

For example, the SGP decided to include antimony in the Biomonitoring California program. Antimony has already been studied in the extensive biomonitoring campaign in Canada and there were no issues detected. Similar conclusions were made by the U.S. Centers for Disease Control and Prevention (CDC) in its September 2013 report. In 2009, CDC issued a report evaluating potential antimony exposure from firefighter protective clothing and found no indication of elevated exposure. These findings confirm the recent conclusions by the European Union, the Organization for Economic Cooperation and Development (OECD), and the U.S. Environmental Protection Agency (EPA), that human exposures to antimony are low and are not expected to result in significant risk to human health. Including antimony in the Biomonitoring California program would be duplicative of the work already conducted and would not generate any new meaningful information to support the goal of protecting public health.



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### **SGP Should Consider Essentiality of Metals and Naturally-Occurring Metals**

The SGP should recognize that many metals, such as iron, molybdenum, and zinc, are essential to human health, and therefore should be present in the human body. Including essential metals in a biomonitoring program -- knowing that the substances will be detected in essentially the entire population -- does not appear scientifically justified. At a minimum, the SGP must identify how biomonitoring data will be presented to the general public so undue concern regarding detection does not occur. For example, cobalt is part of vitamin B12, which, due to normal metabolism and excretion, will result in cobalt being found in blood and urine in "non-exposed" populations. Other essential metals, such as zinc, molybdenum, or copper, should be present in the human body. People who use multi-vitamin supplements or are using certain medications will likely have higher levels of certain essential metals. Care must be taken to explain fully that findings of substances essential to good health are not unusual and are not alarming.

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Thank you for this opportunity to comment on this important issue. NAMC members would be happy to meet with Panel members to address any questions or discuss the scientific issues in more detail.

Sincerely,

Kathleen M. Roberts  
NAMC Executive Director