

IMPLEMENTATION OF THE CALIFORNIA ENVIRONMENTAL  
CONTAMINANT BIOMONITORING PROGRAM: 2010-2012

**Appendix G**

**Letter from the Chair of the Scientific Guidance Panel Supporting  
Biomonitoring California Priorities**

California Department of Public Health  
in collaboration with  
California Environmental Protection Agency's  
Office of Environmental Health Hazard Assessment and  
Department of Toxic Substances Control

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Governor  
State of California

Diana Dooley  
Secretary  
California Health and Human  
Services Agency

Ron Chapman, MD, MPH  
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August 18, 2011

Ron Chapman, MD, MPH  
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Dear Dr. Chapman:

I am writing on behalf of the Scientific Guidance Panel (SGP) for the California Environmental Contaminant Biomonitoring Program (CECBP, also called Biomonitoring California) with our recommendations regarding the ongoing and future efforts of the Program. As you may know, the CECBP was established by legislation (Senate Bill 1379, Perata and Ortiz, Chapter 599, Statutes of 2006) to monitor the presence and concentration of selected chemicals in Californians. This legislation also established the SGP and stipulated that it be composed of nine members, five appointed by the Governor, two appointed by the Senate Committee on Rules, and two appointed by the Speaker of the Assembly. The SGP meets three times yearly to review progress and advise the Program. We met most recently on July 14, 2011.

Since the last report to the Legislature in 2010, the staff of the California Department of Public Health (CDPH), the Office of Environmental Health Hazard Assessment (OEHHA), and the Department of Toxic Substances Control (DTSC) have continued to do a truly outstanding job growing and developing the program and ensuring transparency and high quality participation across stakeholders and the general public. Moreover, they have accomplished this despite limited resources in very difficult fiscal times. During the past two years, the Program has identified new collaborators and initiated several exciting collaborative pilot projects, built laboratory capability and capacity, successfully obtained external funding, and actively engaged the public.

The SGP strongly endorses the efforts of the CECBP staff to obtain external resources to supplement State funding. We were extremely pleased that the cooperative agreement between the CECBP and the U.S. Centers for Disease Control and Prevention (CDC) was renewed at \$2.6 million for 2010-11, the second year of a five-year agreement. Together with the \$1.9 million in State funding for the CECBP, this cooperative agreement has enabled the Program to expand laboratory capability and capacity and to undertake targeted biomonitoring studies. The SGP

applauds the excellent progress made by both the CDPH Environmental Health Laboratory and the DTSC Environmental Chemistry Laboratory to develop new methods for the measurement of priority chemicals identified by the SGP, such as methods for the measurement of brominated organic flame retardants and of hydroxylated polycyclic aromatic hydrocarbons, as well as methods to measure chemicals in dried blood spots. The SGP commends the CECBP for their outreach efforts to form partnerships with other State programs and with academic researchers to conduct innovative and informative targeted studies. Examples of these successful ongoing and completed collaborations include:

- Maternal and Infant Environmental Exposure Project (MIEEP), a collaboration between CECBP and researchers at the University of California San Francisco and University of California Berkeley to conduct a pilot biomonitoring study to measure and compare levels of chemicals in pregnant women and their infants, for which enrollment of 92 participants, sample collection, and analyses of blood metals have been completed. A key early finding of MIEEP was the detection of elevated blood mercury in one mother-infant pair. The source of mercury exposure was identified as a face cream, and a Health Alert about mercury-adulterated creams from Mexico was distributed. This case is an excellent illustration of the benefits of biomonitoring. Additional biomonitoring analyses and development of report back materials for MIEEP are ongoing.
- Firefighter Occupational Exposures (FOX) Project, a collaboration between CECBP, researchers at the University of California Irvine, and the Orange County Fire Authority for which enrollment of 101 participants, sample collection, and biomonitoring analyses of metals and perfluorinated chemicals have been completed. Additional biological sample analyses and usability testing for results return materials are in progress.
- Biomonitoring Exposures Study (BEST), a collaboration between CECBP and the Kaiser Research Program on Genes, Environment, and Health of Kaiser Permanente Northern California (KPNC) to assess chemical exposures in a stratified random sample of KPNC members in seven Central Valley counties. Participant recruitment and sample collection have started for this project. BEST is an important first step in obtaining a regionally representative sample of Californians.
- CECBP collaborations with the CDPH Environmental Health Tracking Program to conduct biomonitoring for organophosphate insecticides in Tulare County and for perchlorate and metals in Imperial County. These studies have been successfully completed.

The SGP fully supports the Program priorities identified by CECBP staff for the coming fiscal year:

- Continue to pursue opportunities and collaborations to leverage existing resources.
- Continue conducting activities specified in the CDC cooperative agreement to increase laboratory capability and capacity.
- Continue outreach efforts to identify and engage additional stakeholders.
- Continue efforts to improve the biomonitoring website.
- Continue efforts to identify emerging chemicals of concern for possible biomonitoring.
- Refine methods and materials used for results communication.
- Begin to return the results of biomonitoring tests to participants.
- Meet with the SGP three times a year to obtain input and recommendations on all Program activities.

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- The SGP also encourages the Program to pursue collaborations for the development of laboratory methods to screen unknown chemicals in Californians as a potentially important tool in the selection of chemicals for biomonitoring.

While the SGP strongly commends the outstanding progress the CECBP has made with limited resources, the SGP recognizes that the Program would need additional resources to fully accomplish the objectives of the law. Specifically, the law directs the State to establish a biomonitoring program that, “will assist in the evaluation of the presence of toxic chemicals in a representative sample of Californians, establish trends in the levels of these chemicals in Californians..., and assess effectiveness of public health efforts and regulatory programs to decrease exposures...” The funding needed to biomonitor a representative sample of California’s 37 million residents would amount to an estimated \$10 million annually, which is more than five times greater than the current state budget for the Program. Members of the SGP are well aware of the severe financial challenges currently facing the State and that it is not possible to increase Program funding at this time. The CECBP staff are doing a remarkable job of leveraging funding sources and of laying the groundwork for a full program in the future when additional funding becomes available. In order to continue making optimal use of current Program resources, the SGP strongly supports the maintenance of current Program staffing levels. At the earliest possible time, CDPH, OEHHA and DTSC should fill several critical vacancies that resulted from the hiring freeze and ensure that these vacant Program positions are not eliminated.

During the past two years, the CECBP has expanded laboratory capability and capacity and initiated pilot studies that are providing scientifically credible data on environmental exposures and providing insight into the public health impacts of these exposures. The CECBP is providing information on exposures that can ultimately support money-saving public health initiatives, reducing health care costs and preventing the need for costly environmental remediation. Finally, the increased capacity of California laboratories enabled by the Program will also improve the ability of our State to respond to terrorist attacks, industrial accidents, or other disasters involving human exposures and health effects.

Thank you for considering this information. We look forward to continuing our assistance to the State agencies charged with implementing this challenging and extremely important public health program. Please feel free to contact me if you would like me to provide further information about Biomonitoring California.

Respectfully,



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Chair, California Environmental Contaminant Biomonitoring Committee  
Scientific Guidance Panel

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