

Appendix 2 Excerpts of Legislation on Chemical Selection for the California Environmental Contaminant Biomonitoring Program

Senate Bill (SB) 1379 (Perata and Ortiz, 2006) Biomonitoring (Health and Safety Code Chapter 8 commencing with Section 105440¹), also known as the California Environmental Contaminant Biomonitoring Program (CECBP), authorizes the program and provides guidance on program implementation. As specified in Section 105441, “The program shall utilize biological specimens, as appropriate, to identify designated chemicals that are present in the bodies of Californians.”

The legislation establishes the Scientific Guidance Panel (SGP). The SGP is involved in two major aspects of the chemical selection process for the CECBP:

1. Assembling a list of Designated Chemicals.
The Scientific Guidance Panel (SGP) recommends chemicals for addition to the Designated Chemicals list in addition to those identified in the law.
2. The SGP recommends Priority Chemicals for inclusion in the CECBP.
Priority Chemicals are selected from among the Designated Chemicals, for biomonitoring in California.

Designated Chemicals

[Section 105440(b)(6)]

““Designated chemicals” means those chemicals that are known to, or strongly suspected of, adversely impacting human health or development, based upon scientific, peer-reviewed animal, human, or in vitro studies, and consist of only those substances including chemical families or metabolites that are included in the federal Centers for Disease Control and Prevention studies that are known collectively as the National Reports on Human Exposure to Environmental Chemicals program and any substances as specified pursuant to subdivision (c) of Section 105449.”

[Section 105449 (c)]

“The panel may recommend additional designated chemicals not included in the CDC report, for inclusion in the program using the following criteria:

- (1) Exposure or potential exposure to the public or specific subgroups.
- (2) The known or suspected health effects resulting from some level of exposure based on peer-reviewed scientific studies.
- (3) The need to assess the efficacy of public health actions to reduce exposure to a chemical.
- (4) The availability of a biomonitoring analytical method with adequate accuracy, precision, sensitivity, specificity, and speed.
- (5) The availability of adequate biospecimen samples.
- (6) The incremental analytical cost to perform the biomonitoring analysis for the chemical.”

¹ All further references are to California Health and Safety Code Chapter 8 unless otherwise indicated.

Priority Chemicals for Biomonitoring in California

[Section 105449 (a)]

“The panel shall provide scientific peer review and make recommendations regarding the design and implementation of the program, including specific recommendations for chemicals that are priorities for biomonitoring in California, as specified in subdivisions (b) and (c), with the program retaining final decision-making authority.”

[Section 105449 (b)]

“The panel shall recommend priority chemicals for inclusion in the program using the following criteria:

- (1) The degree of potential exposure to the public or specific subgroups, including, but not limited to occupational.
- (2) The likelihood of a chemical being a carcinogen or toxicant based on peer-reviewed health data, the chemical structure, or the toxicology of chemically related compounds.
- (3) The limits of laboratory detection for the chemical, including the ability to detect the chemical at low enough levels that could be expected in the general population.
- (4) Other criteria that the panel may agree to.”