STATE OF CALIFORNIA
May Revise Letter - Cover Sheet
DF-46 (REV 03/13)

Fiscal Year	MRL No.	Org. Code	Department	Priority No.
2014-15	CD-01	4265 / 3960	California Department of Public Health / Department of Toxic Substances Control	

Program	Element	Component
CDPH: Program 20 DTSC: P2 & Green Tech	10	

Proposal Title
Stable Funding for Biomonitoring California

Proposal Summary
The California Department of Public Health (CDPH) and the Department of Toxic Substances Control (DTSC) jointly request 4.0 two-year limited-term positions and expenditure authority of $700,000 ($350,000 Toxic Substances Control Account/$350,000 Birth Defects Program Monitoring Fund) in 2014-15 and $696,000 ($346,000 Toxic Substances Control Account/$350,000 Birth Defects Program Monitoring Fund) in 2015-16 to support the California Environmental Contaminant Biomonitoring Program (CECBP). CDPH is the designated lead for Biomonitoring California, coordinating with two CalEPA departments: the Office of Environmental Health Hazard Assessment (OEHHA) and DTSC.

Requires Legislation	Code Section(s) to be Added/Amended/Repealed
☐ Yes ☒ No	

Does this BCP contain information technology (IT) components? ☐ Yes ☒ No *If yes, departmental Chief Information Officer must sign.*	Department CIO	Date

For IT requests, specify the date a Special Project Report (SPR) or Feasibility Study Report (FSR) was approved by the California Technology Agency, or previously by the Department of Finance.

☐ FSR ☐ SPR Project No. Date:

If proposal affects another department, does other department concur with proposal? ☒ Yes ☐ No
Attach comments of affected department, signed and dated by the department director or designee.

Prepared By	Date	Reviewed By	Date
[signature]	5/14/14	[signature]	5/14/14
Department Director	**Date**	**Agency Secretary**	**Date**
[signature]	5/14/14	[signature]	5-14-14

Department of Finance Use Only

Additional Review: ☐ Capital Outlay ☐ ITCU ☐ FSCU ☐ OSAE ☐ CALSTARS ☐ Technology Agency

BCP Type: ☐ Policy ☐ Workload Budget per Government Code 13308.05

PPBA	Date submitted to the Legislature
[signature]	5/14/14

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Fiscal Summary

(Dollars in thousands)

3960 - Department of Substances Control	Proposal Title: Biomonitoring California	Program: 20 - P2 & Green Tech

Personal Services	Positions			Dollars		
	CY	BY	BY + 1	CY	BY	BY + 1
Total Salaries and Wages [1]		2.0	2.0		$168	$168
Total Staff Benefits [2]					$72	72
Total Personal Services	0.0	2.0	2.0	$0	$240	$240
Operating Expenses and Equipment						
General Expense					14	14
Printing						
Communications					2	2
Postage						
Travel-In State					1	1
Travel-Out of State					2	2
Training					1	1
Facilities Operations						
Utilities						
Consulting & Professional Services: Interdepartmental [3]						
Consulting & Professional Services: External [3]					15	15
Data Center Services						
Information Technology						
Equipment [3]					70	70
Other/Special Items of Expense: [4]						
lab supplies; reagents, solvents, gases, consumable glassware, tubes, filers, disposable gloves, etc.					5	5
Total Operating Expenses and Equipment				$0	$110	$110
Total State Operations Expenditures				$0	$350	$350

Fund Source	Item Number					
	Org	Ref	Fund			
General Fund						
Special Funds	3960	001	0557		$175	$175
Special Funds	3960	001	3114		$175	$175
Other Funds (Specify)						
Reimbursements						
Total Local Assistance Expenditures				$0	$0	$0

Fund Source	Item Number					
	Org	Ref	Fund			
General Fund						
Special Funds [5]						
Federal Funds						
Other Funds (Specify)						
Reimbursements						
Grand Total, State Operations and Local Assistance				$0	$350	$350

[1] Itemize positions by classification on the Personal Services Detail worksheet.

[2] Provide benefit detail on the Personal Services Detail worksheet.

[3] Provide list on the Supplemental Information worksheet.

[4] Other/Special Items of Expense must be listed individually. Refer to the Uniform Codes Manual for a list of standard titles.

[5] Attach a Fund Condition Statement that reflects special fund or bond fund expenditures (or revenue) as proposed.

Personal Services Detail

(Whole dollars)

3960 - Department of Toxic Substances Control	Proposal Title Biomonitoring California

Salaries and Wages Detail

Classification [1] [2]	Positions			Salary Range	Dollars		
	CY	BY	BY + 1		CY	BY	BY + 1
(5608) Research Scientist IV		1.0	1.0			$90,048	90,048
(5591) Research Scientist III		1.0	1.0			$78,306	78,306
Total Salaries and Wages [3]	0.0	2.0	2.0		$0	$168,354	$168,354

Staff Benefits Detail	CY	BY	BY + 1
OASDI		$10,438	$10,438
Health/Dental/Vision Insurance		22,980	22,980
Retirement			
Miscellaneous		35,696	35,696
Safety			
Industrial			
Other:			
Workers' Compensation		17	17
Industrial Disability Leave			
Non-Industrial Disability Leave			
Unemployment Insurance		84	84
Other: Medicare		2,441	2,441
Total Staff Benefits [3]	$0	$71,657	$71,657
Grand Total, Personal Services	$0	$240,011	$240,011

[1] Use standard abbreviations per the Salaries and Wages Supplement. Show any effective date or limited-term expiration date in parentheses if the position is not proposed for a full year or is not permanent, e.g. (exp 6-30-13) or (eff 1-1-13)
Note: Information provided should appear in the same format as it would on the Changes in Authorized Positions.

[2] If multiple programs require positions, please include a subheading under the classification section to identify positions by program/element.

[3] Totals must be rounded to the nearest thousand dollars before posting to the Fiscal Summary.

Supplemental Information

(Dollars in thousands)

3960 - Department of Substances Control	Proposal Title
	Biomonitoring California

Equipment	CY	BY	BY +1
Standard Complement			
Major Equipment (Gas or Liquid Chromatograph/mass spectrometer (1/ea)	0	70	70
Total	**$0**	$70	$70

Consulting & Professional Services			
Equipment preventive maintenance contracts - External	0	15	15
	0		
Total	$0	$15	$15

Facility/Capital Costs			
Total	$0	$0	$0

One-Time/Limited-Term Costs Yes ☐ No ☐

Description	BY		BY +1		BY +2	
	Positions	Dollars	Positions	Dollars	Positions	Dollars
						0
						0
	0.0	$0	0.0	$0	0.0	$0

Full-Year Cost Adjustment Yes ☐ No ☐

Provide the incremental change in dollars and positions by fiscal year.

Item Number	BY		BY +1		BY +2	
	Positions	Dollars	Positions	Dollars	Positions	Dollars
Total	0.0	$0	0.0	$0	0.0	$0

Future Savings Yes ☐ No ☐

Specify fiscal year and estimated savings, including any decrease in positions.

Item Number	BY		BY +1		BY +2	
	Positions	Dollars	Positions	Dollars	Positions	Dollars
Total	0.0	$0	0.0	$0	0.0	$0

Special Fund Detail

(Dollars in thousands)

3960 - Department of Toxic Substances Control	Proposal Title Biomonitoring California

Special Fund Title	Item Number			Dollars		
	Org	Ref	Fund	CY	BY	BY + 1
Toxic Substances Control Account	3960	001	0557		$175	
Birth Defects Monitoring Fund	3960	001	3114		$175	
Total Special Funds - State Operations [1]				$0	$350	$0

Special Fund Title	Item Number			Dollars		
	Org	Ref	Fund	CY	BY	BY + 1
Total Special Funds - Local Assistance [2]				$0	$0	$0

[1] Total must tie to "various" funds identified for State Operations, Special Funds in the Fiscal Summary. Add rows if necessary.

[2] Total must tie to "various" funds identified for Local Assistance, Special Funds in the Fiscal Summary.

DF-46 *(REV 3/13)*

Fiscal Summary

(Dollars in thousands)

4265 - Department of Public Health	Proposal Title: Stable Funding for Biomonitoring California	Program: 20.10

Personal Services	Positions			Dollars		
	CY	BY	BY + 1	CY	BY	BY + 1
Total Salaries and Wages [1]		2.0	2.0		$141	$141
Total Staff Benefits [2]					60	60
Total Personal Services		2.0	2.0		$201	$201

Operating Expenses and Equipment			
General Expense		11	7
Printing		2	2
Communications			
Postage			
Travel-In State		2	2
Travel-Out of State			
Training		2	2
Facilities Operations			
Utilities			
Consulting & Professional Services: Interdepartmental [3]			
Consulting & Professional Services: External [3]		25	25
Data Center Services			
Information Technology		25	25
Equipment [3]			
Other/Special Items of Expense: [4]		58	58
Tech & Sci			
Departmental Services: Admin			
Departmental Services: Facility Ops		20	20
Departmental Services: Consolidated Data Center		1	1
Departmental Services: Communication		3	3
Total Operating Expenses and Equipment		$149	$145
Total State Operations Expenditures		$350	$346

Fund Source	**Item Number**					
	Org	**Ref**	**Fund**			
General Fund						
Special Funds[5]	4265	001	0557		$175	$171
Special Funds[5]	4265	001	3114		$175	$175
Other Funds (Specify)						
Reimbursements						
Total Local Assistance Expenditures					$0	$0

Fund Source	**Item Number**					
	Org	**Ref**	**Fund**			
General Fund						
Special Funds[5]						
Federal Funds						
Other Funds (Specify)						
Reimbursements						
Grand Total, State Operations and Local Assistance					$350	$346

[1] Itemize positions by classification on the Personal Services Detail worksheet.

[2] Provide benefit detail on the Personal Services Detail worksheet.

[3] Provide list on the Supplemental Information worksheet.

[4] Other/Special Items of Expense must be listed individually. Refer to the Uniform Codes Manual for a list of standard titles.

[5] Attach a Fund Condition Statement that reflects special fund or bond fund expenditures (or revenue) as proposed.

Personal Services Detail

(Whole dollars)

4265 - Department of Public Health	Proposal Title Stable Funding for Biomonitoring California

Salaries and Wages Detail

Classification [1] [2]	Positions			Salary Range	Dollars		
	CY	BY	BY + 1		CY	BY	BY + 1
RESEARCH SCIENTIST II (CHEMICAL SCIENCES) Expires 06-30-16		2.0	2.0	5,309-6,596		140,556	140,556
Total Salaries and Wages [3]		2.0	2.0			140,556	140,556

Staff Benefits Detail	CY	BY	BY + 1
OASDI		$8,714	$8,714
Health/Dental/Vision Insurance		9,663	9,663
Retirement			
Miscellaneous		28,818	28,818
Safety			
Industrial			
Other:			
Workers' Compensation		2,090	2,090
Industrial Disability Leave		163	163
Non-Industrial Disability Leave		143	143
Unemployment Insurance			
Other:		10,368	10,368
Total Staff Benefits [3]	$0	$59,959	$59,959
Grand Total, Personal Services		$200,515	$200,515

[1] Use standard abbreviations per the Salaries and Wages Supplement. Show any effective date or limited-term expiration date in parentheses if the position is not proposed for a full year or is not permanent, e.g. (exp 6-30-13) or (eff 1-1-13)
Note: Information provided should appear in the same format as it would on the Changes in Authorized Positions.

[2] If multiple programs require positions, please include a subheading under the classification section to identify positions by program/element.

[3] Totals must be rounded to the nearest thousand dollars before posting to the Fiscal Summary.

Supplemental Information

(Dollars in thousands)

4265 - Department of Public Health	Proposal Title Stable Funding for Biomonitoring California

Equipment	CY	BY	BY +1
Total	$0	$0	$0

Consulting & Professional Services			
DEODC/EHIB Acquisition of Human Samples (TBD)		25	25
Total	$0	$25	$25

Facility/Capital Costs			
Standard Facility Costs		20	20
Total	$0	$20	$20

One-Time/Limited-Term Costs Yes ☐ No ☐

Description	BY		BY +1		BY +2	
	Positions	Dollars	Positions	Dollars	Positions	Dollars
Personal Services	2.0	201	2.0	201		
OE&E		149		145		
	2.0	$350	2.0	$346	0.0	$0

Full-Year Cost Adjustment Yes ☐ No ☐

Provide the incremental change in dollars and positions by fiscal year.

Item Number	BY		BY +1		BY +2	
	Positions	Dollars	Positions	Dollars	Positions	Dollars
Total	0.0	$0	0.0	$0	0.0	$0

Future Savings Yes ☐ No ☐

Specify fiscal year and estimated savings, including any decrease in positions.

Item Number	BY		BY +1		BY +2	
	Positions	Dollars	Positions	Dollars	Positions	Dollars
Total	0.0	$0	0.0	$0	0.0	$0

Special Fund Detail

(Dollars in thousands)

4265 - Department of Public Health	Proposal Title Stable Funding for Biomonitoring California

Special Fund Title	Item Number			Dollars		
	Org	Ref	Fund	CY	BY	BY + 1
Toxic Substance Control Fund	4265	001	0557		$175	$171
Birth Defects Monitoring Fund	4265	001	3114		$175	$175
Total Special Funds - State Operations [1]				$0	$350	$346

Special Fund Title	Item Number			Dollars		
	Org	Ref	Fund	CY	BY	BY + 1
Total Special Funds - Local Assistance [2]				$0	$0	$0

[1] Total must tie to "various" funds identified for State Operations, Special Funds in the Fiscal Summary. Add rows if necessary.

[2] Total must tie to "various" funds identified for Local Assistance, Special Funds in the Fiscal Summary.

A. PROPOSAL SUMMARY

The California Department of Public Health (CDPH) and the Department of Toxic Substances Control (DTSC) jointly request 4.0 two-year limited-term positions and expenditure authority of $700,000 ($350,000 Toxic Substances Control Account/$350,000 Birth Defects Program Monitoring Fund) in 2014-15 and $696,000 ($346,000 Toxic Substances Control Account/$350,000 Birth Defects Program Monitoring Fund) in 2015-16 to support the California Environmental Contaminant Biomonitoring Program (CECBP). CDPH is the designated lead for Biomonitoring California, coordinating with two CalEPA departments: the Office of Environmental Health Hazard Assessment (OEHHA) and DTSC. The requested positions would replace some federal grant positions lost when Centers for Disease Control and Prevention (CDC) funding is eliminated on August 31, 2014, ensuring that the mission of CECBP maintains its momentum.

B. BACKGROUND/HISTORY

Chapter 599, Statutes of 2006 (Senate Bill (SB) 1379, Perata and Ortiz), established the tri-departmental California Environmental Contaminant Biomonitoring Program (CECBP). CECBP is a collaborative effort among CDPH, OEHHA, and DTSC, with CDPH as the lead entity. CECBP's principal mandates are to measure and report levels of specific environmental chemicals in blood and urine samples from a representative sample of Californians, conduct community-based biomonitoring studies, and help assess the effectiveness of public health and environmental programs in reducing chemical exposures. CECBP provides unique information on the extent to which Californians are exposed to a variety of environmental chemicals and how such exposures may be influenced by factors such as age, gender, ethnicity, diet, occupation, residential location, and use of specific consumer products.

The three departments that constitute CECBP received $2.2 million in 2013-14 from five special funds: (1) Toxic Substances Control Account, (2) Birth Defects Monitoring Program Fund, (3) Department of Pesticide Regulation Fund, (4) Air Pollution Control Fund, and (5) Childhood Lead Poisoning Prevention Fund. This baseline state funding currently supports eight positions in CDPH and five total positions within OEHHA and DTSC.

In 2009, CECBP was awarded a competitive five-year Cooperative Agreement (grant) of $2.65 million per year from CDC through the Sequoia Foundation as its designated bona fide agent. Although the funding was awarded directly to the Sequoia Foundation and is not included in CDPH's or DTSC's budget, CECBP benefits from these resources as the Sequoia grant staff work with state staff to accomplish the tasks of the Cooperative Agreement. The CDC Cooperative Agreement with Sequoia Foundation funds approximately 15 non-state "grant" positions to supplement the 13 core state positions. This grant has complemented CECBP's state funding since 2009-10, and has played a critical role in establishing the program's current capabilities and proficiencies. The grant from CDC ends on August 31, 2014. When the grant ends, CECBP's resources will be reduced by nearly 60 percent, if resources are not renewed.

In February 2014, CDC issued a new Funding Opportunity Announcement for state public health laboratories with biomonitoring capabilities. This new competitive five-year grant is restricted to funding only work that generates surveillance data to augment the national and state databases. It is not to be used for purposes of research or laboratory expansion. About five states will be awarded grants. On May 5, 2014, the Sequoia Foundation, as CDPH's designated bona fide agent, submitted a proposal to CDC to fund CECBP at the maximum allowable level of $1 million per year. If awarded, the new grant would support up to six Sequoia Foundation positions for five years between September 1, 2014 and August 31, 2019.

Resource and Workload History: Over the past five years, CECBP has increased its laboratory capability to analyze environmental chemicals or their metabolites in human urine and blood. In 2009, CECBP was capable of measuring fewer than 10 toxic chemicals in human urine and blood; it can now measure 140 distinct chemicals in human samples. Currently, CECBP staff is developing methods to measure chemicals newly introduced to commerce, such as chemical fragrances, new flame retardants, and substitutes for Bisphenol A (BPA). In addition, CECBP is developing unique capabilities to measure many previously unknown and undetected chemicals in biological samples.

The Resource History tables below do not include the Sequoia Foundation's CDC grant resources, which expire on August 31, 2014. This proposal requests authority to create 4.0 two-year limited-term positions including 2.0 Research Scientist II (RS II), 1.0 RS III, and 1.0 RS IV as detailed in Attachment A.

Resource History (CDPH)
(Dollars in thousands)

Program Budget	2009-10	2010-11	2011-12	2012-13	2013-14
Authorized Expenditures	984	1,017	1,071	1,078	1,177
Actual Expenditures	928	967	1,041	1,031	-
Authorized Positions	8.0	8.0	8.0	8.0	8.0
Filled Positions	8.0	8.0	8.0	8.0	8.0
Vacancies	0	0	0	0	0

Resource History (DTSC)
(Dollars in thousands)

Program Budget	2009-10	2010-11	2011-12	2012-13	2013-14
Authorized Expenditures	367	367	367	367	367
Actual Expenditures	186	190	228	367	-
Authorized Positions	2.0	2.0	2.0	2.0	2.0
Filled Positions	2.0	1.0	1.5	2.0	2.0
Vacancies	0	1.0	0.5	0	0

Resource History (OEHHA)
(Dollars in thousands)

Program Budget	2009-10	2010-11	2011-12	2012-13	2013-14
Authorized Expenditures	499	595	620	619	634
Actual Expenditures	475	552	585	547	-
Authorized Positions	3	3	3	3	3
Filled Positions	3	3	3	3	3
Vacancies	0	0	0	0	0

C. STATE LEVEL CONSIDERATIONS

CECBP collaborates with the University of California, Kaiser Permanente, and other private and public organizations in California. Participants for biomonitoring are selected to represent California's general population or potentially vulnerable communities in California.

As a tool for measuring and tracking exposure to toxic chemicals, biomonitoring has broad statewide relevance for public health. Biomonitoring data can be used as an early warning system for exposure to toxic chemicals and as a means to target surveillance for potential adverse health

effects. Furthermore, information collected by CECBP can help inform the implementation of Cal/EPA's California Safer Consumer Products Regulations and Proposition 65, as well as CDPH's Environmental Health Tracking and Safe Cosmetics Programs. CECBP data can also be used to assess the effectiveness of public health efforts and regulatory programs to decrease exposures to specific chemicals. For example, biomonitoring data can show that product restrictions or other actions actually result in lower exposures, with consequent improved health outcomes. In addition, CECBP's laboratory resources can be mobilized, as needed, to augment the state's emergency response to chemical releases.

D. JUSTIFICATION

CECBP's current state funding of $2.2 million per year has been fairly stable since FY 2008-09. It has supported 13 permanent state staff positions (eight in CDPH, three in OEHHA, and two in DTSC) that form the scientific core of CECBP. As described above, the Sequoia Foundation, as CDPH's designated bona fide agent, successfully applied for a five-year CDC grant to complement CECBP's state funding in 2009. The grant (providing $2.65 million per year) was critical in building CECBP's capabilities well beyond those attainable with existing state resources. Fifteen non-state Sequoia Foundation "grant" positions are funded through this Cooperative Agreement until August 31, 2014.

When the CDC grant expires, the on-going level of state funding will not be adequate to sustain the current program resource levels. Without this proposed funding, CECBP's ability to serve as an early warning system for new chemical exposures or promote state environmental and public health policies would be reduced. Furthermore, although Sequoia Foundation, recently applied for new federal funding of $1 million per year over a five-year funding cycle, this level of federal funding represents a reduction from the $2.65 million in federal funding received annually over the last five years. CDC has stated that there would likely be no federal funding for state biomonitoring programs beyond that date when the next five-year funding cycle expires on August 31, 2019.

This proposal requests 4.0 two-year, limited term positions and expenditure authority of $700,000 in 2014-15 and $696,000 in 2015-16 from the Toxic Substances Control Account and the Birth Defects Monitoring Program Fund to support this program and partially offset the loss of federal funds on August 31, 2014. The requested four positions would replace some of the 15 grant positions that will be eliminated when current CDC funding ends.

The four limited-term state positions would help CECBP maintain a degree of proficiency and productivity after August 31, 2014, when the CDC grant ends and some Sequoia Foundation contract positions are eliminated. The four proposed state positions would continue to analyze specific toxic chemical contaminants in biological samples from on-going population-based investigations, establish methodologies, conduct statistical analyses of the data, and contribute to other mandated activities such as returning results to individual participants and conducting essential public health investigations. Detailed staff workloads for the four positions, which are comparable to workloads for some of the current Sequoia grant staff, are provided in Attachment A. This limited-term funding would allow CECBP to: (1) hire state staff to perform the duties currently accomplished by some of the grant staff for the next two years; (2) sustain productivity over the next two years in detecting and measuring chemical exposures; (3) begin developing capabilities to investigate emerging and as of yet unknown chemical threats in the environment and consumer products; and (4) continue collaborations with external (mainly university) investigators.

During the past five years, CECBP has built a state-of-the art laboratory capacity to measure 140 chemicals in samples collected from various California populations. These laboratory capabilities support studies of chemicals in Californian's bodies that inform new public health policy, improve

medical advice, change regulations, and find new hazards of chemical exposures that were previously unknown. Several biomonitoring investigations are still in progress. For example, additional laboratory methods, such as those for Bisphenol A analogs and substitutes or new flame retardant substitutes are currently under development.

If the proposal is not approved, CECBP's baseline productivity would drop substantially due to an estimated 60 percent reduction of its resources when the CDC grant ends on August 31, 2014. This proposal would help the program retain some of its current productivity. Without this state funding the CECBP would have to scale back its efforts and productivity substantially, with the following results:

- No new population-based investigations would be initiated. Fewer community studies would be conducted to investigate chemical threats to Californians.
- California's ability to evaluate whether its diverse sub-populations may experience elevated chemical exposures would be compromised and potentially be at increased risk for reproductive and developmental effects or chronic diseases.
- The state would have limited capacity to assess or prevent exposures to toxic chemicals found in consumer products, the environment and the workplace.
- Fewer biological samples would be acquired and analyzed, as 60-80 percent of current laboratory capabilities to test specimen samples and chemicals would be curtailed.
- The rate of development of methods to analyze new chemicals of emerging concern would be reduced.
- Returning results to existing participants (required by law) would not occur in a timely manner, reducing the educational value and public health impact of bio-monitoring.
- CECBP's ability to inform and improve the efficacy of state environmental and occupational health programs to reduce toxic exposures, such as CDPH's Safe Cosmetics Program, DTSC's Safer Consumer Products Initiative, and OEHHA's Proposition 65 would be degraded.

E. OUTCOMES & ACCOUNTABILITY

Mandated Outcomes for CECBP:

1. Information on the levels of environmental chemicals in the bodies of Californians and a determination of how these levels differ among sub-populations or over time.
2. Results returned to participants and information provided on how to prevent future exposures to certain chemicals.
3. Insights gained about exposure sources that may contribute to the levels of environmental chemicals found in Californians.
4. Policymakers provided data to evaluate the effectiveness of California's environmental regulatory programs and to take future actions to reduce exposures to harmful chemicals.
5. Data produced that researchers can use to study relationships between levels of chemicals in Californians and health effects.
6. Facilitated identification of emerging environmental health issues.
7. Public outreach and involvement strategies are implemented, consistent with Cal/EPA's environmental justice strategy.

Measures of accountability include the following:

1. CDPH and DTSC laboratories would continue to work with the Division of Laboratory Sciences in CDC, which conducts the bio-monitoring laboratory analyses for the National Health and Nutrition Examination Survey surveys. The laboratory personnel requested in this

proposal would collaborate with CDC on laboratory methods development and transfer, and would maintain existing strict quality assurance/quality control programs designed to produce test results of the highest scientific caliber. The laboratories would continue to participate successfully in periodic proficiency testing surveys, including those sponsored by CDC, the American College of Pathologists, and other states (Wisconsin and New York) and countries (Germany and Canada).

2. The legislatively-mandated Scientific Guidance Panel (SGP) would continue to provide scientific peer review of all aspects of program implementation, including rigorous review of scientific data used to inform many public and environmental health programs, public health intervention, and policy decisions. SGP meetings are held three times a year in public venues; for each meeting, a transcript and a summary of the Panel's input and recommendations are posted on CECBP's website. CECBP reports back to the SGP on how the Panel's recommendations have been addressed.
3. CECBP is required to produce a Legislative Report biennially, including a progress report and a summary of results for ongoing and continuing work.
4. CECBP maintains an active, user-friendly website, which is updated to maintain current information about CECBP, public meetings, and results of its investigations.

F. ANALYSIS OF ALL FEASIBLE ALTERNATIVES

Alternative 1: Approve funding for 4.0 two- year, limited-term positions (two positions directed to CDPH and two positions directed to DTSC) and expenditure authority of $700,000 special fund ($350,000 Toxic Substances Control Account/$350,000 Birth Defects Program Monitoring Fund) in 2014-15 and $696,000 ($346,000 Toxic Substances Control Account/$350,000 Birth Defects Program Monitoring Fund) in 2015-16.

Pros:

- California would have resources over the next two years to provide important public health services to protect the health of state residents from exposure to toxic chemicals in the environment, workplace, and consumer products.
- Provides resources for this program even after current federal grant support ends on August 31, 2014.
- Biomonitoring would continue to provide sound scientific data to inform public and environmental health programs, public health interventions, and policy decisions in California, which in turn would reduce pollutant-associated illness and deaths.
- Close collaboration with partners (including the University of California) would continue, which would enhance Program efficiency and effectiveness.
- No impact on the General Fund.

Cons:

- Requires a limited term increase in position authority for CDPH and DTSC.

Alternative 2: No new funding for the biomonitoring program.

Pros:

- No additional position authority would be required.

Cons:

- No new population-based investigations would be initiated. Fewer community studies would be conducted to investigate chemical threats to Californians.

- California's ability to evaluate whether its diverse sub-populations may experience elevated chemical exposures would be compromised and potentially be at increased risk for reproductive and developmental effects or chronic diseases.
- The state would have limited capacity to assess or prevent exposures to toxic chemicals found in consumer products, the environment and the workplace.
- Fewer biological samples would be acquired and analyzed, as 60-80% of current laboratory capabilities to test specimen samples and chemicals would be curtailed.
- The rate of development of methods to analyze new chemicals of emerging concern would be reduced.
- Returning results to existing participants (required by law) would not occur in a timely manner.
- CECBP's ability to inform and improve the efficacy of state environmental and occupational health programs to reduce toxic exposures, such as CDPH's Safe Cosmetics Program, DTSC's Safer Consumer Products Initiative, and OEHHA's Proposition 65 would be degraded.

Alternative 3: Redirect staff to perform biomonitoring activities.

Pros:
- No additional position authority would be required.

Cons:
- Even with redirection of staff, CECBP's operations would still require periodic purchase and maintenance of state-of-the-art laboratory equipment, and continuously available resources to carry out other aspects of the program, from acquisition of lab supplies, maintenance and repairs, to participant recruitment and collection of blood and urine samples.
- There are insufficient resources and specialized scientific personnel to redirect to cover the anticipated programmatic needs of CECBP without significantly impacting other CDPH and DTSC programs. Furthermore, specialist expertise is required for laboratory personnel in CECBP, and neither CDPH nor DTSC has sufficient staff with these skills to be redirected.

G. IMPLEMENTATION PLAN

If this proposal is approved, the following activities will take place within the specified number of days from approval of the state budget:

- Within 20 days, advertise for all positions; screen and select eligible candidates for interviews.
- Within 40 days, interview selected candidates; complete personnel file reviews, reference and background checks; offer employment to successful candidates.
- Within 60 days, submit hiring documents to personnel for all new positions.

H. SUPPLEMENTAL INFORMATION

☐ None ☐ Facility/Capital Costs ☒ Equipment ☒ Contracts ☒ Other

In addition to the proposed staff positions, this proposal requests the following:

Equipment: Biomonitoring is an emerging field with rapidly changing laboratory technologies. With both state funding and the CDC grant awarded to the Sequoia Foundation as CDPH's designated bona fide agent, DTSC has purchased several such instruments to test for different toxic chemicals in samples from different populations. The instruments have a useful life of approximately seven to

eight years and, therefore, need to be replaced on a regular cycle. To ensure that the laboratory is operating with the appropriate instrumentation, DTSC is requesting $70,000 per year for the purchase of new equipment to replace biomonitoring equipment as it ages, or to take advantage of new technologies with improved detection capability. No facility modifications or costs will be needed to house this equipment in the laboratory.

Laboratory supplies: This proposal requests resources for several laboratory-related costs for CECBP projects. A variety of supplies are required to test human biological samples. Based on laboratory staffing levels and experience with current laboratory utilization of consumable supplies, DTSC requests $5,000 per year, and CDPH requests $58,000 per year to purchase laboratory supplies. These supplies include: ultra-pure chemical reagents, solvents and gases, standard reference materials, consumable plastic-ware and specialty glassware, chromatographic columns, and many other materials.

Preventive maintenance: The sophisticated laboratory equipment utilized by CECBP requires service and maintenance, in order to continue functioning within specifications. Each manufacturer provides on-site service, maintenance and repair of this equipment under preventive maintenance contracts. Annual preventive maintenance costs approximately 10 percent of the purchase value of lab equipment. Based on the current inventory of CECBP equipment used for bio-monitoring, DTSC requests $15,000 per year and CDPH requests $25,000 per year for preventative maintenance services/contracts.

Travel and Training: Training on new techniques, equipment operation, and on new epidemiological methods is critical to keep scientists well informed and trained to perform their duties. It is important that this training continue. CDPH requests $2,000 per year for staff training and participation in technical classes or conferences. In addition, DTSC is requesting $2,000 per year for out-of-state travel. With support from the CDC grant, DTSC staff has visited the CDC campus in Atlanta, GA, to learn from CDC staff new biomonitoring laboratory techniques. CDC personnel have provided invaluable training to DTSC scientists on specific chemical analytical methods. The out-of-state travel requests are for four (2) DTSC staff to train at CDC and to attend professional meetings on biomonitoring sponsored by CDC. A total of $1,000 per year is earmarked for training (registration for technical classes) at conferences and vendor facilities.

I. RECOMMENDATION

Alternative 1: Approve funding for 4.0 two-year, limited-term positions (two positions directed to CDPH and two positions directed to DTSC) and expenditure authority of $700,000 special funds ($350,000 Toxic Substances Control Account/$350,000 Birth Defects Program Monitoring Fund) in 2014-15 and $696,000 ($346,000 Toxic Substances Control Account/$350,000 Birth Defects Program Monitoring Fund) in 2015-16.

Attachment A
Workload Analysis

California Department of Public Health
Center for Chronic Disease Prevention and Health Promotion
Environmental and Occupational Disease Control
Environmental Health Laboratory Branch
California Environmental Contaminant Biomonitoring Program

Research Scientist II (Chemical Sciences)

Activity	Number of Items	Average Hours per Item	Total Annual Hours
Conduct analyses for urinary phthalate metabolites and structurally related chemicals. Generate laboratory reports. Upload test results into Laboratory Information Management System (LIMS).	1,000	1.0	1,000
Prepare reagents, standards, and quality control materials for phthalate analysis. Participate in external quality assessment and proficiency test programs.	30	10	300
Maintain and troubleshoot sophisticated laboratory instrument. Conduct instrument check to maintain the instrument performance.	50	3	150
Expand phthalate metabolites list to include additional analytes, such as phthalate substitutes. Improve the current analytical method to increase method sensitivity and revise the laboratory standard operating procedure, as needed.	30	6	180
Conduct data review, generate data review report, and generate data summary reports from LIMS for further statistical analysis.	40	3	120
Attend regular staff meetings and required trainings on laboratory health & safety, etc.	50	1	50
Total hours for workload projected for this classification			**1,800**
1,800 hours = 1 Position			
Actual number of Positions requested			**1.0**

Attachment A
Workload Analysis

California Department of Public Health
Center for Chronic Disease Prevention and Health Promotion
Environmental and Occupational Disease Control
Environmental Health Investigations Branch
California Environmental Contaminant Biomonitoring Program

Research Scientist II (Epi/Biostat)

Activity	Number of Items	Average Hours per Item	Total Annual Hours
Develop protocols for data collection, editing, analysis and maintenance; conduct data analysis and interpretation; generate reports, coordinate data analysis and special studies with other organizations and researchers.	20	30	600
Review and perform QA/QC analysis of data, statistical applications, data entry, and other technical forms of data management to maintain internal quality and consistency.	20	12	240
Develop and refine study sampling plans and develop participant selection protocols.	4	30	120
Coordinate field operations protocol development, including managing external contract involving field operations.	18	10	180
Prepare proposals/grants for external funding; coordinate with other organizations and researchers.	8	20	160
In collaboration with other staff, prepare, revise, and refine the multi-year, multi-agency Biomonitoring California (BC) program plan, including program goals, guidelines, priorities, and research strategies.	1	40	40
Develop public outreach and education materials (including website materials and text), prepare for and conduct focus groups and other public meetings for prospective BC participants and other interested groups.	24	10	240
Represent CDPH in meetings and interactions with staff from other institutions, state and federal agencies involved with biomonitoring.	25	1	25
Prepare materials for Institutional Review Board evaluation and approval.	6	10	60
Participate in regular program staff meetings.	90	1.5	135
Total hours for workload projected for this classification			**1,800**
1,800 hours = 1 Position			
Actual number of Positions requested			**1.0**

Attachment A
Workload Analysis

Department of Toxic Substances Control
Environmental Chemistry Laboratory Branch
California Environmental Contaminant Biomonitoring Program

Research Scientist IV (Chemical Sciences)

Activity	Number of Items	Average Hours per Item	Total Annual Hours
Lead scientist for method development for the identification and measurement of "unknown" chemicals in blood and urine, using state-of-the-art instrumentation (TOF Mass Spectrometer).	2	280	560
Tests, troubleshoots and maintains the new Time-of-Flight Mass Spectrometer	24	12	288
Organizes, implements and maintains a quality assurance/quality control system in the laboratory to deliver high-quality, timely human monitoring results to meet Program needs.	12	16	192
Summarizes biomonitoring findings on "unknown" chemicals for DTSC management and Advisory Committee meetings; coordinates with CDPH and OEHHA staff	3	40	120
Evaluates program goals, priorities, guidelines, protocols, research strategies and administrative materials.	2	40	80
Represents the department in meetings and interactions with staff from different institutions, state and federal agencies involved with Biomonitoring	12	8	96
Takes the lead in the preparation of technical reports and manuscripts on "unknown" chemicals for publication in the scientific literature.	2	80	160
Prepares reports with updated results and trends of persistent chemicals and their relationship to DTSC program activities.	12	12	144
Prepares proposals for external funding.	1	80	80
Training	12	8	96
Total hours for workload projected for this classification			**1,816**
1,800 hours = 1 Position			
Actual number of Positions requested			**1.0**

Attachment A
Workload Analysis

Department of Toxic Substances Control
Environmental Chemistry Laboratory Branch
California Environmental Contaminant Biomonitoring Program

Research Scientist III (Chemical Sciences)

Activity	Number of Items	Average Hours per Item	Total Annual Hours
Perform analyses of 1000 samples for complex persistent contaminants in human specimens	50	900	900
Direct the evaluation of laboratory instruments to meet specialized needs of biomonitoring sample analysis.	3	144	144
Conduct the most complex and advanced methods development to test for chemicals in human samples.	2	240	240
Provide technical leadership and consultation on testing methods to Research Scientists I and II performing human sample tests.	6	216	216
Implement and maintain a quality assurance/quality control system in the laboratory to deliver high-quality, timely human monitoring results to meet Program needs.	12	192	192
Assists in the preparation of proposals for external funding.	1	20	20
Training	12	96	96
Total hours for workload projected for this classification			**1,808**
1,800 hours = 1 Position			
Actual number of Positions requested			**1.0**