STATE OF CALIFORNIA
Budget Change Proposal - Cover Sheet
DF-46 (REV 08/15)

Fiscal Year	Business Unit	Department	Priority No.
2016-2017	3900	Air Resources Board	2

Budget Request Name	Program	Subprogram
3900-302-BCP-BR-2016-A1	3510-Climate Change	N/A

Budget Request Description
Aliso Canyon: Neighborhood Air Quality Monitoring Near Oil and Gas Operations

Budget Request Summary
The Air Resources Board is requesting a total of $2.3 million dollars and 4 new permanent full-time Air Pollution Specialists from the Oil, Gas and Geothermal Administrative Fund to support neighborhood air quality monitoring near oil and gas facilities. This cost includes $579,000 for 4 new permanent full-time Air Pollution Specialists, a one-time equipment request of $1.4 million dollars and an additional $340,000/year for equipment maintenance and consumables to support air monitoring of toxic compounds, methane, particulate matter, and meteorological parameters at and around communities near oil and gas related facilities. The resources will enable short-term (3-4 month/site) community monitoring near oil and gas activities and source testing to identify potential areas of elevated risk. The information will inform health risk assessments as well as the need for further mitigation. The monitoring resources will also enable the Air Resources Board to more effectively and quickly deploy short term monitoring capabilities in response to unanticipated events such as the natural gas leak at Aliso Canyon. Additionally, the Air Resources Board also requests trailer bill language authorizing the use of the Oil, Gas and Geothermal Administrative Fund.

Requires Legislation	Code Section(s) to be Added/Amended/Repealed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 Department of Technology, 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 Kathleen Kozawa	Date 3.29.16	Reviewed By Alice Stebbins	Date 3-28-16
Department Director Richard W. Corey	Date 3/29/2016	Agency Secretary Matthew Rodriquez	Date 3-29-16

Department of Finance Use Only

Additional Review: ☐ Capital Outlay ☐ ITCU ☐ FSCU ☐ OSAE ☐ CALSTARS ☐ Dept. of Technology

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

PPBA	Date submitted to the Legislature
Original Signed By: Ellen Moratti	APR 01

Analysis of Problem

A. Budget Request Summary

The Air Resources Board (ARB) is requesting a total of $2.3 million dollars and 4 new permanent full-time Air Pollution Specialists from the Oil, Gas and Geothermal Administrative Fund to support neighborhood air quality monitoring near oil and gas facilities. This cost includes $579,000 for 4 new permanent full-time Air Pollution Specialists, a one-time equipment request of $1.4 million dollars and an additional $340,000/year for equipment maintenance and consumables to support air monitoring of toxic compounds, methane, particulate matter, and meteorological parameters at and around communities near oil and gas related facilities. The resources will enable short-term (3-4 month/site) community monitoring near oil and gas activities and source testing to identify potential areas of elevated risk. The information will inform health risk assessments as well as the need for further mitigation. The monitoring resources will also enable ARB to more effectively and quickly deploy short term monitoring capabilities in response to unanticipated events such as the natural gas leak at Aliso Canyon. ARB also requests trailer bill language authorizing the use of the Oil, Gas and Geothermal Administrative Fund.

B. Background/History

ARB's mission is to protect the public from harmful effects of air pollution. As such, enhancing our community monitoring for toxics and methane, particularly near disadvantaged communities or other highly impacted communities such as Porter Ranch near Aliso Canyon, enables us to better meet our mission. While oil and gas facilities are the focus of this proposal, the resources requested can be used subsequently for other purposes such as monitoring in communities near other sources of concern or in response to accidents (e.g., refinery fires).

Further, ARB's current network monitors regional emissions, and therefore identification of specific sources of toxic volatile organic compound (VOC) emissions, methane, and other air pollutants is challenging because the network primarily consists of fixed monitoring stations to assess regional air quality. Our ability (both in terms of staff and equipment) to conduct neighborhood monitoring to assess potential exposures to emissions associated with nearby sources (oil and gas operations) is currently limited due to other ongoing programmatic commitments. ARB currently has 11 staff positions assigned to special purpose and emergency response air monitoring but they are fully committed to monitoring pesticide, wildfire, and refinery emissions. An expansion of ARB's current monitoring efforts is needed so that ARB can conduct near-source neighborhood monitoring as well as quickly respond with monitoring studies in response to events such as the Aliso Canyon natural gas leak. Conducting such monitoring will enable ARB to better characterize neighborhood exposures and potential health impacts, the need for further mitigation, as well as provide the public living near sources of concern (e.g., oil and gas operations) with timely information. Resources previously acquired to support and implement hydraulic fracturing and well stimulation mandates (as required by Chapter 313, Statutes of 2013 (SB 4)) were not designated for neighborhood monitoring and are used specifically for monitoring during well stimulation activities.

Oil and gas operations occur in a variety of locations in California, including in densely populated areas of Los Angeles, near disadvantaged communities in the San Joaquin Valley, and along the Central Coast. Certain emissions associated with oil and gas activities are known to have the potential to result in adverse health effects. However, data on the ambient concentrations of these pollutants and residents' exposure levels in nearby California communities is limited and not sufficient to assess potential exposures and health impacts. Emissions from operations such as drilling and completion, production, storage, and wastewater disposal have the potential to impact the health of residents.

Recent events highlight the necessity to focus on oil and gas operations and acquire and analyze current data on toxic pollutant levels in communities near such activities. First, the California Council on Science and Technology (CCST) released a report in July 2015 assessing the impacts of well stimulation activities and concluded that general oil and gas production is potentially a concern and that exposure data is lacking. The report also recommended establishing set-backs to limit exposure, but emissions and air quality monitoring data are needed to determine appropriate recommendations. Second, a large natural gas leak was discovered at a natural gas storage facility in Southern California on October 23, 2015 (Aliso Canyon). Numerous initial attempts to stop the leak failed, and on January 6, 2016 Governor Brown issued a state of emergency. The leak was plugged on February 18, 2016.

Residents of Porter Ranch, a community near the Aliso Canyon leak, have expressed concern about exposure to natural gas and have complained of symptoms such as nausea, nosebleeds, and headaches.

Analysis of Problem

This event has increased public health and environmental concerns associated with oil and gas activities, particularly for those living in nearby communities. This well failure highlights the need to better understand the current emissions at these facilities as well as the levels of air pollution in and around neighborhoods adjacent to such operations. Although many air pollution control districts have regulations to limit VOC emissions, the potential for increases in emissions due to aging wells and use of enhanced oil recovery methods is unknown. In addition to these two events, residents of disadvantaged communities near oil and gas activities have raised concerns about toxic compound exposure, particularly to children in nearby schools.

Pursuant to our mission, ARB is responding to public concern by requesting resources to conduct enhanced air quality monitoring, source testing, and health risk assessment in communities in and around oil and gas facilities such as production fields and storage facilities, particularly in disadvantaged or highly impacted communities. Air monitoring conducted in specific communities of concern and the data generated from the effort would serve as a basis for identifying and prioritizing the need for further mitigation at such facilities. In addition to providing much needed information on toxic pollutant levels in affected communities, the requested resources will allow ARB to rapidly respond to incidents such as the Aliso Canyon natural gas leak with focused, short-term monitoring studies in and around communities. The results of such monitoring can help to assess potential community exposure to pollutants of concern, provide the public with information they need to make informed decisions, as well as assess the effectiveness of onsite mitigation activities at reducing levels of pollution in the community.

To this end, ARB is requesting $579,000 for 4 new permanent full-time Air Pollution Specialist positions, a one-time equipment request of $1.4 million and an additional $340,000/year for equipment maintenance, consumables, and source testing contracts.

Workload Metrics

The proposal would implement new programs; however, experience with air quality monitoring programs provides a basis for determining potential work metrics for this proposal. ARB estimates four additional staff to perform the monitoring, which will be broken into two phases. The first phase will be focused on oil and gas monitoring at several sites throughout the state. Each site will undergo intensive monitoring for several months, targeted towards periods of highest activity. Staff will equip and maintain two temporary monitoring sites which will sample within communities near oil and gas facilities (upwind and downwind) at a minimum of two locations per year. Staff will continue with monitoring-related tasks that may transition to other industrial sectors and will be available to respond to emergency or evolving situations. ARB estimates two staff positions to set up, maintain and operate the real-time monitoring instruments at the two sites and on the mobile platform, one staff position to conduct laboratory analyses of samples collected at the sites and perform quality assurance and validation of the air monitoring data. ARB also estimates one staff position to analyze the incoming data, coordinate with the Office of Environmental Health Hazard Assessment on health risk assessments as needed, and recommend follow up as appropriate. Workload tasks are listed in more detail in Attachment A.

Resource History
(Dollars in thousands)

Program Budget	PY - 4	PY - 3	PY - 2	PY - 1	PY
Authorized Expenditures	New Activity				
Actual Expenditures					
Revenues					
Authorized Positions					
Filled Positions					
Vacancies					

Analysis of Problem

Workload History

Workload Measure	PY - 4	PY - 3	PY - 2	PY - 1	PY	CY
e.g., Applications Received, Applications Processed, Call Volume, etc.	None					

C. State Level Considerations

This proposal will allow ARB to meet our overall mission to promote and protect public health and welfare as well as support goals of reducing greenhouse gas emissions under the California Global Warming Solutions Act of 2006 (Chapter 488, Statutes of 2006 (AB 32)) and addressing air-related well stimulation concerns under Chapter 313, Statutes of 2013 (SB 4). With the recent gas leak at Aliso Canyon and ongoing concerns relating to exposure in and around communities near oil and gas facilities, ARB recognizes a need to enhance our monitoring capabilities at these facilities and the ability for quick mobilization of community monitoring throughout the state. ARB will continue to coordinate with the Division of Oil and Gas and Geothermal Resources, the Public Utilities Commission, the Office of Environmental Health Hazard Assessment, local air districts, and other agencies on oil and gas related activities, including air monitoring.

D. Justification

This proposal will address several key charges for ARB, including our overall mission to protect public health and our charge to gather air quality monitoring data. In addition, this proposal informs efforts related to the California Global Warming Solutions Act of 2006 (Chapter 488, Statutes of 2006 (AB 32)) and Chapter 313, Statutes of 2013 (SB 4). The justification outlined below discusses key aspects of the proposal in terms of the overall goal to support and improve short-term community monitoring near oil and gas facilities and determine associated health risks.

As highlighted in the recent CCST report, scientific knowledge on exposures in communities near oil and gas facilities and the resulting health impacts is clearly lacking and requires urgent attention. In addition, in light of the recent natural gas storage leak in Southern California, the extent and implications of public health need to be addressed quickly.

Short-term Community Monitoring Near Oil and Gas Facilities: The recent Aliso Canyon incident highlights the importance of being able to rapidly deploy community-based monitoring tools, improving our understanding of the pollutants the public may be exposed to, making that information publicly available in real-time, and implementing measures to minimize exposure. To better understand public exposure levels in communities surrounding oil and gas operations, ARB is proposing a targeted short-term real-time and media-based monitoring program (i.e., upwind and downwind sites) at various locations in both the South Coast and San Joaquin Air Basins. The targeted monitoring at each location would last 3 to 4 months. Over a two-year period, ARB would be able evaluate public exposure levels in several communities (a minimum of two per year) that are in close proximity to oil and gas facilities. Resources from the short-term targeted monitoring program may also be utilized to enhance ARB's long-term monitoring efforts to support special studies or emergency deployments at industrial facilities statewide (e.g., refinery, agriculture, chemical, railyards, ports, etc.). In response to the recent Aliso Canyon incident, ARB efforts to increase monitoring, quantify emissions, and estimate impacts has been substantial. The equipment and staff requested for the short-term monitoring effort would improve ARB's capability to respond to similar events quickly and efficiently.

Chapter 313, Statutes of 2013 (SB 4) created a framework to regulate well stimulation-related events. Although the short-term community monitoring will inform these efforts, the scope of the proposed monitoring is much broader than well stimulation and will build upon the resources ARB received as

part of that effort, which are spent on regulating and investigating well stimulation specifically. In addition, SB 4 does not require community level monitoring as described in this request. As noted above, the scientific study conducted under SB 4 concluded that there are data gaps in air quality information related to oil and gas activities in general as well as those related to well stimulation. The short-term community monitoring and the SB 4 efforts are complementary and will provide a well-informed understanding of emissions, their effect on air quality, and policy options for minimizing adverse community impacts to all types of oil and gas activities.

Special Response Monitoring: The Aliso Canyon event also highlighted the need to be able to deploy the appropriate monitoring equipment in a quick and efficient manner and disseminate information about pollutant levels to the public. While the nature of the air quality monitoring near oil and gas activities previously described is meant to be short-term in nature (3-4 months per site), the equipment and additional trained staff may also be used to assist in quick response or emergency response situations for similar events.

Source Testing and Health Risk Assessment: A better understanding of emissions from specific sources as well as the community based monitoring described in this document will provide much needed information to conduct a health risk assessment to determine potential cancer and noncancer risk in communities near oil and gas facilities as well as other industrial sources. Equipment such as the infrared cameras included below and short-term monitoring efforts will enable ARB to determine what sources are of concern to conduct further source testing. These data will then be used to conduct a health risk assessment by the Office of Environmental Health Hazard Assessment (OEHHA)

If the requested resources are not provided, ARB would have remaining data gaps in identifying and quantifying toxics and methane emissions in communities located near oil and gas facilities and the State will not be able to determine the associated potential health risks described in the OEHHA Risk Assessment Guidelines. In addition, short term quick response monitoring capability would not be available in the case of future events.

Below is a description of the resources needed:

Real-Time Monitoring

Pollutant	Description	Total Cost
Methane	Picarro or LGR - $95,000/unit	$190,000
Benzene/Toluene/Xylene	Auto GC-PID - $75,000/unit	$150,000
PM2.5	Beta Attenuation Monitors	$36,000
Meteorology	$3,000/unit	$6,000
	FLIR 320 (IR Camera - $92,250/unit)	$184,500
	Dataloggers	$6,000
	Monitoring Shelters	$40,000
	Site Improvements (pad, fence, power)	$30,000
	Contract for Source Testing	$150,000/yr
	Supplies (consumables, etc.- all sites)	$7,000/yr
	Calibration Standards/Gases - $3,000/site	$6,000/yr
	Leases ($400/mo)	$9,600/yr
	Maintenance Contract-Equipment (5% of cap cost)	$28,625/yr

Media-Based Sampling - Laboratory

Pollutant	Description	Total Cost
VOCs	GCMS for VOC Target Compounds	$250,000
	Xontech 901/912 - $15,000/unit	$30,000
	Semi-volatile Sampler - $10,000/unit	$20,000
	6L Summa Canisters (40 cans) - $700/unit	$14,000
	Protective Shipping Boxes (40 - $325/unit)	$6,500
	Canister Cleaning System	$30,000
	DNPH Canisters-Formaldehyde	$20,000
	Sampling Media	$40,000/yr

Maintenance Contract-Equipment (5% of cap cost)	$17,500/yr
Supplies (i.e., consumables, etc.)	$40,000/yr
Calibration Standards/Gases	$3,000/yr
Shipping Costs	$20,000/yr

Mobile Monitoring

Pollutant	Description	Total Cost
Methane	Picarro or LGR - $95,000/unit	$95,000
	Benzene/Toluene/Xylene Auto GC - $75,000/unit	$75,000
	FLIR 320 (IR Camera - $92,250/unit)	$92,250
	GPS Datalogger	$6,600
	Vehicle (Low or zero emissions SUV)	$75,000
	Supplies (consumables, etc.)	$10,000/yr
	Maintenance Contract-Equipment (5% of cap cost)	$8,500/yr

Total Equipment Costs	**$1,356,850**
Total Annual Costs (Supplies, Source Testing, Gases, Shipping)	**$340,225**

In addition to the equipment and supply related costs and based on past experience, ARB anticipates that 4 technical positions will be filled by professional staff, all Air Pollution Specialists. ARB estimates two staff positions to set up, maintain and operate the real-time monitoring instruments at the two sites and on the mobile platform, one staff position to conduct laboratory analyses of samples collected at the sites perform quality assurance and validation of the air monitoring data. ARB also estimates one staff position to analyze the incoming data, coordinate with the Office of Environmental Health Hazard Assessment on health risk assessments as needed, and recommend follow up as appropriate. (See Attachment A Workload Justification).

E. Outcomes and Accountability

This proposal will provide community monitoring data for outdoor exposure near oil and gas facilities and inform targeted source testing. These data will help identify potential health risks associated with living near such facilities as well as inform the need for further mitigation. Progress and outcomes will be measured by the number of monitoring events conducted, resulting data, and subsequent health risk analyses. Ultimately the improvement in our knowledge of emissions and impacts at these locations and any resulting appropriate actions to reduce air pollution risks would be expected outcomes.

				Outcome	
Workload Measure	**CY**	**BY**	**BY+1**	**BY+2**	**BY+3**
Community Monitoring		Two communities monitored will be within EPA Region 9 Regional Screening Levels (Residential)	Two communities monitored will be within EPA Region 9 Regional Screening Levels (Residential)	Continuing monitoring as needed	Continuing monitoring as needed
Source Testing: Emission Rates from Oil and Gas Sources			Data may inform and update existing emission rates from oil and gas sources and be used for HRA	Data may inform and update exiting emission rates from oil and gas sources and be used for HRA	
Health Risk Assessment (HRA)				Better understanding of health risks in	Better understanding of health risks in communities

				communities	
Resulting Actions					Recommendations on mitigation as appropriate and/or determination of next steps

F. Analysis of All Feasible Alternatives

Alternative 1: Comprehensive Methane, Toxics, and Meteorological Monitoring Program with Health Risk Assessment (Recommended)

(1) Monitoring:

Pros:

(a) Hourly methane data;

(b) Hourly toxics data (benzene, toluene, xylene) using real-time gas chromatographs;

(c) Hourly meteorological data using portable meteorological stations;

(d) 24-hour VOC data; and

(e) Upwind and downwind air monitoring stations.

(f) Mobile monitoring platform to address public complaints and accidental releases.

Cons: A potential drawback of this alternative is the inability to monitor at all oil and gas facilities simultaneously.

Cost: The cost of this alternative is estimated at $1.4 million in one-time equipment funds, $340,000 in annual operating costs, and $579,000 in salaries and administrative overhead for an additional 4 staff positions.

(2) Health Risk Assessment and Data Analysis:

Pros: With appropriate data inputs, the risk assessment provides an evaluation of potential cancer and noncancer health impacts to persons of all ages from exposures to oil and gas production utilizing the most current health risk assessment guidelines developed by OEHHA. In addition, further analysis of collected data and development of appropriate policies may be conducted.

Cons: The potential health impacts of specific population groups or cohorts (e.g. by age, ethnicity etc.) living near oil and gas production will not be presented.

Cost: 1 PY as noted in Attachment A Workload Justification that is included in 4 staff positions requested.

Alternative 2: Contract Out Monitoring Efforts with ARB Completing Health Risk Assessment

This alternative approach considers subcontracting the operations and maintenance of monitoring efforts. The health risk assessment would be conducted by ARB.

(1) Monitoring

Pros:

(a) Contracts with research/service contractors (e.g., University of California campuses, Lawrence Berkeley National Laboratory, etc.) for the operations and maintenance of monitoring efforts will limit state resource commitments for the monitoring efforts for the duration of the contract (12-24 months);

(b) Hourly methane data;

(c) Hourly toxics data (benzene, toluene, xylene) using real-time gas chromatographs;

(d) Hourly meteorological data using portable meteorological stations;

(e) 24-hour VOC data from canister samples;

(f) Four air monitoring stations; and

(g) Mobile monitoring platform to address public complaints and accidental releases.

Cons: Since the implementation of an air monitoring program in communities near oil and gas facilities will require long term efforts to determine the exposure and health impacts, this effort will be significantly more expensive in the long run. This alternative also limits development of in-house expertise.

Cost: This alternative will have similar cost as Alternative #1 for one-time purchase of equipment ($1.4 million) and annual operating costs ($340,000), but will have an added cost of contracting out the workload for 4 staff at $2,380,000 per year (based on actual contracts with leading research institutions for similar work).

(2) Health Risk Assessment and Data Analysis

Pros: With appropriate data inputs, the risk assessment provides an evaluation of potential cancer and non-cancer health impacts to persons of all ages from exposures to oil and gas production utilizing the most current health risk methodologies developed by OEHHA. In addition further analysis of data and development of appropriate policies may proceed.

Cons: The potential health impacts of specific population groups or cohorts (e.g. by age, ethnicity etc.) living near oil and gas production will not be presented.

Cost: $144,800 in salary for 1 PY for data analysis, policy development and other duties as outlined in Attachment A Workload Justification.

Alternative 3: Redirecting of Existing Positions

(1) Monitoring

Redirecting existing positions is not a viable solution as no air monitoring programs have terminated, or are scheduled to terminate in the foreseeable future. Stricter air quality standards, revised risk assessment guidance, and increased litigation require greater efforts to collect high quality, legally defensible air quality data for state designations and other purposes.

(2) Health Risk Assessment

Redirecting existing positions to perform the health risk assessment by ARB staff is not feasible as no current programs have terminated or are foreseen to be terminated in the future. ARB does not have the additional staff resources to conduct this HRA.

Alternative 5: Status quo.

Additional resources would not be provided to monitor air toxics, criteria pollutants, or methane to assess the health risks, climate, or economic impacts of natural gas leaks.

A summary of these alternatives is provided in the table below.

Analysis of Problem

Alternative	Title	Pros	Cons	Cost	
				One-time	Annual
1	Comprehensive Monitoring and Health Risk Assessment	Recommended program <u>Monitoring:</u> Hourly and 24-hour toxics data. Hourly meteorological data 2 monitoring stations Mobile monitoring platform for CH4, and BTX <u>Health Risk Assessment and Data Analysis:</u> Provide cancer and non-cancer impacts from exposures to oil and gas production, policy development as appropriate	<u>Monitoring:</u> The inability to monitor at all oil and gas facilities <u>Health Risk Assessment:</u> Potential health impacts for specific cohorts will not be presented	$1,356,850	$340,225 (operating costs) + $724,000 (salaries)
				$1,356,850	$340,225 (operating costs) + $579,200 (salaries)

Analysis of Problem

2	Contract Out Monitoring Program with Health Risk Assessment	<u>Monitoring:</u> Contracting the operations and maintenance of monitoring efforts to research/service contractors Limits state resource commitments for the duration of the contract (12-24 months) <u>Health Risk Assessment and Data Analysis:</u> Provide cancer and non-cancer impacts from exposures to oil and gas production, policy development as appropriate	<u>Monitoring:</u> Significantly more expensive in the long run <u>Health Risk Assessment:</u> Potential health impacts for specific cohorts will not be presented	$1,356,850	$340,225 (operating costs) + $2,380,000 (contract salaries) + $144,800 (salary, 1 APS)
3	Redirecting of Existing Positions	Redirecting existing positions	Not a viable solution	-	-
4	Status Quo	NA	Unable to assess the health risks, climate, or economic impacts of natural gas leaks	-	-

G. Implementation Plan

The recommended alternative (#1) will be implemented over a one-year period beginning in July 2016, and will be completed in three phases:

- Personnel hiring, which can be initiated as early as July 2016
- Initiating equipment purchase, selecting sites, and developing air monitoring plans, which can be formalized as early as December 2016
- Initiating start-up of monitoring programs – March 2017
- Coordinating Health Risk Assessment with the Office of Environmental Health Hazard Assessment after monitoring has been completed
- Addressing next steps based on findings may require more resources depending on the extent of the results

H. Supplemental Information

See proposed trailer bill language, attached.

I. Recommendation

We recommend approving Alternative #1. Protecting public health from the harmful emissions resulting from oil and gas production requires a thorough understanding of exposure and the associated health risk. This can only be achieved by enhancing current monitoring of toxics, methane, and PM2.5, through an adequately staffed and properly designed network. If this proposal is not approved, ARB's ability to identify and quantify these emissions from oil and gas facilities will be limited and the State will not be able to determine the associated health risks.

Public Resources Code 3401

"(a) The proceeds of charges levied, assessed, and collected pursuant to this article upon the properties of every person operating or owning an interest in the production of a well shall be used exclusively for the support and maintenance of the department charged with the supervision of oil and gas operations, ~~and~~ for the State Water Resources Control Board and the regional water quality control boards for their activities related to oil and gas operations that may affect water resources~~.~~ , and for the Air Resources Board and Office of Environmental Health Hazard Assessment for their activities related to oil and gas operations that may affect air quality, public health, or public safety.

(b) Notwithstanding subdivision (a), the proceeds of charges levied, assessed, and collected pursuant to this article upon the properties of every person operating or owning an interest in the production of a well undergoing a well stimulation treatment, may be used by public entities, subject to appropriation by the Legislature, for all costs associated with ~~both~~ all of the following:

(1) Well stimulation treatments, including rulemaking and scientific studies required to evaluate the treatment, inspections, any air and water quality sampling, monitoring, and testing performed by public entities.

(2) The costs of the State Water Resources Control Board and the regional water quality control boards in carrying out their responsibilities pursuant to Section 3160 and Section 10783 of the Water Code.

(3) The costs of the Air Resources Board and the Office of Environmental Health Hazard Assessment in carrying out their responsibilities pursuant to Sections 38510 and 39607 of the Health and Safety Code with respect to oil and gas operations."

BCP Fiscal Detail Sheet

BCP Title: Neighborhood Air Quality Monitoring Near Oil and Gas Operations **DP Name: 3900-302-BCP-DP-2016-A1**

Budget Request Summary

	FY16					
	CY	BY	BY+1	BY+2	BY+3	BY+4
Positions - Permanent	0.0	4.0	4.0	4.0	4.0	4.0
Total Positions	**0.0**	**4.0**	**4.0**	**4.0**	**4.0**	**4.0**
Salaries and Wages						
Earnings - Permanent	0	330	330	330	330	330
Total Salaries and Wages	**$0**	**$330**	**$330**	**$330**	**$330**	**$330**
Total Staff Benefits	0	153	153	153	153	153
Total Personal Services	**$0**	**$483**	**$483**	**$483**	**$483**	**$483**
Operating Expenses and Equipment						
5301 - General Expense	0	8	8	8	8	8
5302 - Printing	0	4	4	4	4	4
5304 - Communications	0	8	8	8	8	8
5320 - Travel: In-State	0	16	16	16	16	16
5322 - Training	0	4	4	4	4	4
5324 - Facilities Operation	0	40	40	40	40	40
5346 - Information Technology	0	16	12	12	12	12
539X - Other	0	1,697	340	340	340	340
Total Operating Expenses and Equipment	**$0**	**$1,793**	**$432**	**$432**	**$432**	**$432**
Total Budget Request	**$0**	**$2,276**	**$915**	**$915**	**$915**	**$915**

Fund Summary

Fund Source - State Operations						
3046 - Oil, Gas, and Geothermal Administrative Fund	0	2,276	915	915	915	915
Total State Operations Expenditures	**$0**	**$2,276**	**$915**	**$915**	**$915**	**$915**
Total All Funds	**$0**	**$2,276**	**$915**	**$915**	**$915**	**$915**

Program Summary

Program Funding						
3510 - Climate Change	0	2,276	915	915	915	915
Total All Programs	**$0**	**$2,276**	**$915**	**$915**	**$915**	**$915**

BCP Title: Neighborhood Air Quality Monitoring Near Oil and Gas Operations **DP Name: 3900-302-BCP-DP-2016-A1**

Personal Services Details

Positions	Salary Information Min	Mid	Max	CY	BY	BY+1	BY+2	BY+3	BY+4
3887 - Air Pollution Spec (Eff. 07-01-2016)				0.0	4.0	4.0	4.0	4.0	4.0
Total Positions				**0.0**	**4.0**	**4.0**	**4.0**	**4.0**	**4.0**

Salaries and Wages	CY	BY	BY+1	BY+2	BY+3	BY+4
3887 - Air Pollution Spec (Eff. 07-01-2016)	0	330	330	330	330	330
Total Salaries and Wages	**$0**	**$330**	**$330**	**$330**	**$330**	**$330**
Staff Benefits						
5150350 - Health Insurance	0	48	48	48	48	48
5150500 - OASDI	0	25	25	25	25	25
5150600 - Retirement - General	0	80	80	80	80	80
Total Staff Benefits	**$0**	**$153**	**$153**	**$153**	**$153**	**$153**
Total Personal Services	**$0**	**$483**	**$483**	**$483**	**$483**	**$483**