AB 617 Implementation Funds Annual Report

I.	**Report Number:**	Year 4, Final Report
	Title:	AB 617 Implementation Funds Year 4, Report 2 Final Report
	Reporting Period:	June 1, 2021 – February 28, 2023
	Name of Grantee:	San Luis Obispo County Air Pollution Control District
	Grant Number:	G20-CAPP-27
	Date of Submission:	June 30, 2023

II. Costs associated with specific tasks:

(for example: identifying location for monitoring, deploying community air monitoring systems, fence- line monitoring, reporting emissions, developing a community emissions reduction program, establishing best available retrofit control technology requirements, adopting an expedited schedule for the implementation of best available retrofit control technology, community meetings or other Community Air Protection implementation efforts and outreach). Information for outreach events must include the date, location, topics, and number of attendees, for each event.)

See excel document for more detail:

II. Report Costs Associated with Specific Tasks	Community Monitoring Staff Time (identifying location for monitoring, deploying community air monitoring systems, etc.)	$35,770.00
	Monitoring Equipment Purchases	$13,559.52
	Community Engagement (website updates, board presentations, etc.)	$11,074.00
	General Staff Time(administrative, board items, etc.)	$1,960.00

III. How is grant being utilized to meet goals of AB 617:

(If applicable, include emissions reductions being achieved)

The implementation grant funds were and continue to be used to maintain and operate the Oceano Community Monitoring Project and the Nipomo Mesa Monitoring Project. The goals of these projects are congruent with the goals of AB617 as staff are deploying and operating community level air monitoring systems and improving community capacity to access and utilize the information generated by these sensors and instruments. Additionally, they provide supplemental data to evaluate the impacts of ongoing emissions reduction work associated with the Oceano Dunes State Vehicular Recreation Area

In March of 2018, a resident of Oceano and Nipomo Mesa nominated their community to the CAP Program. Since Oceano and the Nipomo Mesa have not been and are not likely to be among the priority CAP communities selected for funding by CARB, the San Luis Obispo County Air Pollution Control District (SLO County APCD) decided to address the community concerns by using CAP implementation funds to purchase, install, and manage particulate matter (PM) sensors in Oceano and the Nipomo Mesa.

During previous funding cycles, SLO County APCD sought participation from the Oceano community to host monitors by attending community meetings and engaging with political leaders. Staff were able to secure host sites at the Oceano community Service District and at the homes of Oceano residents. Staff then sought community partners on the Nipomo Mesa and was ultimately successful in securing hosts of monitoring equipment. Seeking community partners to host monitoring equipment insured community participation in the monitoring process. Subsequently, SLO County APCD has dedicated some of our CAP Implementation funds to continue supporting the equipment and ensuring the data is readily accessible by the public.

IV.	Summary of work completed and in progress since the last progress report:

To continue measuring particulate matter (PM) levels staff used Year 4 Implementation funding for the ongoing operation and maintenance of a more complete and reliable air quality network with a continued focus on measuring PM levels near Dorothea Lange Elementary and Lopez High on the Nipomo Mesa.

Staff continued to work with community partners near these schools to host particulate monitors. These strategic locations identified by the community in previous years are nearby sensitive receptor locations and located in an area of the Nipomo Mesa that is frequently impacted by high PM_{10} during spring and fall months when school is in session. A BAM 1020 in a standalone cabinet is located just south of Dorothea Lange Elementary School. Meanwhile, the YR3 funded Solar powered trailer housing a BAM 1020 is located just east of Lopez Continuation High School.

Since the previous progress report these instruments continued operation throughout the fall season. They were returned to the office during December 2022 and received full annual maintenance and repairs. The solar trailer was fully serviced to ensure longevity and resiliency of the system. These units were redeployed to their strategic locations in late January 2023 ahead of the spring windy season when high PM_{10} concentrations regularly occur. In addition, data polling from these instruments was transitioned from older analog data collection via a datalogger to modern direct instrument polling allowing for the collection of additional metadata parameters and real-time data flagging furthering the reliability and accuracy of the network.

In addition to the BAM1020's in operation a low cost Air Visual sensor has been operated at a location further to the north on the Nipomo Mesa to increase spatial coverage and help to further refine minor differences in air quality due to the localized nature of the windblown dust that affects the area.

Staff continued to operate and maintain the remaining Air Visual sensors comprising the Oceano Community monitoring project. These Air Visual sensors are housed in custom made enclosures and located throughout Oceano on partnered community member houses as well as at the local Community Services District Office.

The district purchased two new Air Visual Outdoor sensors that do not require custom made enclosures and also include replaceable PM sensors. The district began to test these Air Visual Outdoor sensors as potential replacements for the aging Air Visual sensors in the network. These instruments were collocated with an FEM BAM1020 at the Mesa 2 monitoring station for evaluation. The additional ability to replace aging components instead of the entire sensors should lead to cost savings in the future and higher reliability of these low-cost sensors. Collocation was still ongoing at the end of the grant expenditure.

Recent changes in the AirVisual API has resulted in adjustments to code that staff has previously created to ingest data from these sensors for internal use. This code update is currently ongoing.

Staff understands that one of the goals of 617 is to improve the community's capacity to participate in the monitoring process which includes access to monitoring data in a user-friendly way. The APCD's Oceano Community Monitoring's Particulate Matter Air Quality Index Map displaying the monitors and sensors deployed for the project and their corresponding hourly data. The map also includes APCD regulatory monitors such as CDF. Staff continues to maintain this map and have also added the Nipomo Mesa Monitoring Project monitors to the map so the public can easily access hourly data from the monitors and readily understand the current air quality with high spatial resolution across the South County region.

V.	**Grant funds remaining and expended:**

See excel document for more detail:

V.	**Funding Expended**	**$60,403.00**
	Funding Remaining	**$0**

VI.	**Expenditure summary showing all Community Air Protection Program Implementation Funds for which reimbursement is being requested:**

See excel document for more detail. No reimbursement is being requested at this time:

	Grant Funds Available	$60,403.00
II. Report Costs Associated with Specific Tasks	Community Monitoring Staff Time (deploying/maintaining community air monitoring systems, etc.)	$35,770.00
	Monitoring Equipment Purchases (including site lease payments)	$13,559.52
	Community Engagement (website updates, board presentations, etc.)	$11,074.00
	General Staff Time (administrative, board item prep, etc.)	$1,960.00
V.	**Funding Expended**	**$60,403.52**
	Funding Remaining	**$0**
VI.	**Reimbursement Requested and Received**	**$60,403.00**