

California Air Resources Board

Community Air Protection Program



Reporting Period: 08/01/22 through 07/30/23
Community Air Protection Implementation Year 5

The Santa Barbara County Air Pollution Control District (District) received a grant in fiscal year 2021-2022 from the California Air Resources Board (CARB) for \$93,960.00. The grant is to support the District's implementation efforts of California Assembly Bill 617 goals and objectives. This report describes the District's efforts in accomplishing those goals during the reporting period of August 01, 2022 through July 30, 2023. In accordance with Grant Agreement G21-CAPP-28, the below report includes the following sections: I. Grant Information, II. Associated Costs, III. Grant Utilization, IV. Summary of Work, V. Funds Remaining and Expended, and VI. Expenditure Summary.

I. Grant Information

- a. Report number: Final Report
- b. Title: Community Air Protection Implementation Year 5
- c. Grantee: Santa Barbara County Air Pollution Control District
- d. Date of submission: 10/13/2023
- e. Grant number: G21-CAPP-28

II. Associated Costs (Costs associated with specific tasks)

Below is a table showing all District costs associated with the AB 617 implementation grant during the Fiscal Grant Term.

Description	Cost
Community Programs <ul style="list-style-type: none">Bilingual outreach materialsOutreach & community group meetingsPublic meetings to discuss goals and implementation effortsClean Air Rooms (Air Purifier Program)	\$37,183
Air Quality Planning <ul style="list-style-type: none">Toxic emissions inventoryPartnering in AB617 CTR regulation development	\$8,618
Rules (BARCT) <ul style="list-style-type: none">Additional research on facilities subject to BARCT scheduleOutreach to sources related to BARCTEngineering support on BARCTContinued development of rules on the BARCT schedule	\$61,009
Community Air Monitoring <ul style="list-style-type: none">Portable Monitor deploymentState and Local Air Monitoring	\$5,456
Other Community Air Protection Implementation Efforts <ul style="list-style-type: none">Grant program parameters and preparationUpdate standard grant agreement and APCO authority	\$11,047
TOTAL	\$123,313

III. Grant Utilization (Report how grant is being utilized to meet the goals of Assembly Bill 617. If applicable, include emission reductions being achieved)

AB 617 directs CARB to establish the Community Air Protection Program to reduce exposure in communities most affected by air pollution. The goal is to prioritize air quality improvements in California's most polluted communities through enhanced monitoring and targeted deployment of cleaner technologies, with expanded community participation. We focused our efforts on Disadvantage Communities as identified in CalEnviroScreen 4.0 and AB 1550 Low-Income Communities, since they experience a higher pollution burden.

The District has used a variety of strategies to meet the goals of AB 617 since its inception. During this reporting period, we participated in several outreach events throughout Santa Barbara County, provided information in both English and Spanish, continued development of rules on our BARCT rule development schedule, operated and expanded PurpleAir sensors throughout the District, and through our Clean Air Grants and other incentive programs, we advertised and promoted the use of cleaner technology to support community health. In addition, the District continued to focus AB 617 efforts on our most populated low-income areas. In the Disadvantaged Community of Guadalupe, we continued to focus our recent program to provide air purifiers to local residents. The air purifiers were made available at no cost, one per household with proof of address. This community responded enthusiastically, and we were able to distribute all 656 air purifiers to local residents. The demand was so high, we placed 137 residents on a waitlist. We reallocated some local expenditures to purchase air purifiers for the waitlist and were able to disperse them to the local community during the reporting period. During April of 2023, we purchased air purifier filter replacements and are currently working on advertising a three-day window where residents can pick up those filter replacements. The Air Purifier Program was advertised through several outlets, including but not limited to Twitter, Instagram, NextDoor, and advertising with local businesses. Spanish speakers represent a significant portion of this community's population, so we utilized bilingual District staff to provide outreach materials as much as possible. Some of the bilingual materials we provided included outreach advertisements and flyers, air quality news and alerts, and Spanish resources on our website.

The District maintains a bilingual web page, www.ourair.org/community-air, for stakeholders and the public. It contains background information, key elements of AB 617, the District's efforts within our county, proposed grant projects and approved projects, details of our BARCT schedule, links to a bilingual survey, and survey results. The District performs regular updates on the website to ensure visitors receive up-to-date information.

Specific tasks and work products for the current reporting period are discussed in more detail in Section IV of this report.

IV. Summary of Work (Work completed and in progress since the last progress report)

Community Programs, Events, Outreach:

During this reporting period, the District planned ways to connect with community groups and coordinated its participation with the following community events:

- National Drive Electric Week: September 2022
- California Clean Air Day: October 2022

- Carpinteria Ribbon-Cutting for new EV fast charger (Clean Air Grant recipient): April 2023
- Santa Barbara Earth Day Festival: April 2023
- Guadalupe Community Clean-Up Day: April 2023
- Buellton Open Streets: May 2023

In addition, the District gave virtual presentations on air quality to a University of California, Santa Barbara Environmental Studies class in the winter of 2023.

The District held public meetings, including District Board meetings, to discuss AB 617-related activities. At each District Board meeting, a summary update was provided on grant program activity that included the emission-reduction grant agreements approved by the Air Pollution Control Officer since the previous meeting; every Board meeting also includes a summary of recent outreach efforts, including those related to AB 617 activities. In June 2023, the District Board received a presentation on Clean Air Grants and all the other incentive programs administered by District staff for the prior fiscal year. These reports included a focus on the Community Air Protection Program and specified the project type and location for grant funds awarded. Each of these Board meetings provides an opportunity for community members to follow Board deliberations, present public comments, and observe through livestreaming. District staff also tracks and posts potential CAP projects, as well as the projects that are funded, to our website for each funding year: www.ourair.org/community-air-protection-projects.

During this reporting period, the District Clean Air Grants program and National Drive Electric Week-related efforts to encourage electric vehicle adoption. The District also provided outreach resources and support to the Community Environmental Council (CEC) for their CARB Community Air Grant to conduct air quality monitoring and outreach in Guadalupe.

Air Quality Planning:

The District actively reviewed and tracked updates to CARB's Criteria and Toxics Reporting (CTR) Regulation. The CTR Regulation, and proposed amendments, will require modifications to the District's custom database tools and will also result in a significant amount of additional work for District staff and for affected sources. During the reporting period, additional data fields were added to the District's database to prepare for the 2022 Inventory submittal to CARB. The 2022 inventory submittal included Stack data for the largest emission sources within the District. For future submittals, District staff will need to send new data requests to the permitted facilities to incorporate the stack data for the remaining devices in our inventory program.

Rules and BARCT:

Pursuant to Assembly Bill 617, in December 2018 the District Board adopted an expedited rule development schedule for the implementation of BARCT (Best Available Retrofit Control Technology) at industrial facilities in our District that are subject to the California GHG Cap-and-Trade Program. There are six facilities in Santa Barbara County that are affected by the BARCT rule schedule. In prior years, District staff completed three of the six measures on the schedule that achieved emission reductions from boilers, process heaters, and Particulate Matter (PM) control devices such as baghouses and cyclones. For this reporting period, District staff actively worked on and completed the BARCT assessment for reciprocating internal combustion engines. This assessment required prime, natural gas fired engines that were previously derated to less than 50 horsepower to comply with lower NOx limits. The lower NOx limits could be achieved by installing 3-way catalysts and air-fuel ratio controllers on each engine. District staff worked with the

affected facility to incorporate all BARCT requirements directly into the facility's operating permit. Hence, a rule proceeding was no longer necessary since BARCT-level controls were incorporated through the permit process. The District presented the analysis to its Community Advisory Council in February 2023 and to the Board of Directors in March 2023. The remaining two BARCT assessments are anticipated to be completed prior to December 2023.

Community Air Monitoring:

To help address community-level air monitoring concerns in impacted communities, the District has purchased and installed low-cost PurpleAir sensors throughout the county. We currently operate 36 low-cost sensors that are deployed throughout the District; 9 of those 36 low-cost sensors were given to the District from CARB. PurpleAir sensor locations are available here: www.purpleair.com/map#9.68/34.7356/-120.2016. In addition, the District deployed two solar-powered Clarity Node S sensors that were operated at the Goleta and Santa Maria monitoring stations and were co-located with a reference method monitor to assess their accuracy. We observed some operational issues with these sensors, despite both sensors having been replaced. Two new sensors were installed at our Goleta station for further testing and evaluation, although these are also currently non-operational. These low-cost sensors help characterize air quality trends in impacted communities. The Clarity sensors, although more costly, are equipped with solar power and internet connectivity. A map of the locations of the Clarity sensors can be found here: [Open Map - Clarity Movement](#).

The District owns and operates an Airpointer portable air monitoring system that was co-funded with AB 617 Year 1 Implementation Grant funds. The system is compact and sophisticated and is capable of being deployed quickly at secure locations that have a power source. The Airpointer is capable of measuring hydrogen sulfide, PM_{2.5}, PM₁₀, and meteorological information simultaneously, and has the ability to store and report that data to the web in real-time. In the spring of 2020, the District purchased and installed additional instrumentation for the Airpointer, including an ozone analyzer and a BTEX mini-gas chromatograph capable of measuring Benzene, Ethylbenzene, Toluene, and Xylene (BTEX). It has been deployed in Goleta from August 2021 through November 2021 and from October 2022 through January 2023, as well as Summerland in January 2023.

The District has five State and Local Air Monitoring Stations (SLAMS) throughout the County that measure the typical concentrations in areas of high population density and/or to monitor the impacts of regional pollution. One SLAMS station was operated by the California Air Resources Board (Santa Maria) while the other four were operated by the District (Lompoc, Santa Ynez, Santa Barbara, and Goleta). The Santa Barbara and Lompoc stations are located in a low-income community, as designated by AB 1550. CARB stopped operating the Santa Maria station located off Broadway at the end of February 2021 and shut down the station. In December 2020, the District secured a location on Orcutt Rd., and began installing a new SLAMS measuring ozone, PM_{2.5}, PM₁₀, and meteorological information. The new Santa Maria station also has the capability of measuring sulfur dioxide, hydrogen sulfide and BTEX for refinery-related air pollution monitoring, as required by AB 1647. During this reporting period, the District equipped and installed the station: it became operational on October 01, 2022, was audited and approved by CARB, and started reporting ozone data, PM_{2.5}, PM₁₀, and meteorological data to EPA, AirNow, and AirNow's Fire and Smoke Map.

Other Community Air Protection Implementation Efforts:

The District continues to develop and refine the Clean Air Grants program to solicit project ideas from the community, while remaining transparent on our project ranking and selection process. The District updated all grant program applications to incorporate ideas from prior year applicants as well as staff members, while also implementing recent updates to our standard grant agreement language, ensuring our language remains compliant with CARB requirements. We also have a newly streamlined digital signature element for grant applications and standard grant agreements to better assist our applicants. The District continues to work with members of the public on outreach for our CAP program and continually develops and expands upon our digital outreach list, which has grown to over 1,000 contacts.

V. Grant Funds Remaining and Expended (Grant funds remaining and expended)

- a. Total Implementation Funds: \$ 93,960
 - i. Expended funds: \$ 123,313
 - ii. Remaining funds: \$ 0

From August 01, 2022 through July 31, 2023 the District expended 100% of the Implementation Grant amount.

VI. Expenditure Summary (showing all Community Air Protection Program Implementation Funds for which reimbursement is being requested)

Section II provides a breakdown of District expenditures.