

Board Agenda Item

TO: Air Pollution Control District Board

FROM: Aeron Arlin Genet, Air Pollution Control Officer 

CONTACT: Lyz Bantilan, Public Information Officer, (805) 961-8819

SUBJECT: Clean Air Rooms Pilot Program

RECOMMENDATION:

Adopt the attached Resolution authorizing the District to establish and implement the Clean Air Rooms Pilot Program.

BACKGROUND:

Based upon the increasing frequency and intensity of wildfires and related concern regarding the health effects from smoke exposure, the District has designed a pilot program to use a portion of Clean Air Funds to give High-Efficiency Particulate Air (HEPA) air purifiers to residents of select communities in Santa Barbara County. The goal of this program is to provide more individuals with the ability to keep their indoor air safe and clean during wildfire smoke events and other high-pollution incidents, and to foster a larger discussion countywide about the benefits of “clean air rooms” to protect health.

DISCUSSION:

Wildfire Smoke and HEPA Purifiers

Smoke and ash from wildfires contain very small particles known as particulate matter. These particles harm the lungs and heart, and can cause coughing, wheezing, difficulty breathing, chest pain, nausea, and in severe instances, premature mortality. People with heart or lung disease, seniors, kids, and pregnant women are especially sensitive to smoke. The best protection against wildfire smoke is to stay indoors as much as possible when smoke is present, which emphasizes the importance of keeping indoor air clean.

In a well-sealed indoor environment (e.g., windows and doors closed and sealed tightly), HEPA devices can reduce particulate matter indoors by more than 90 percent. These devices can be purchased at local stores or online retailers, and come in various makes and models, suitable for different room sizes. A HEPA device for a small bedroom typically costs approximately \$75. The California Air Resources Board (CARB) maintains a list of HEPA devices approved for sale in the state; California does not allow for the sale of air purifiers that produce ozone. CARB's list of approved devices is available on the agency's website: <https://ww2.arb.ca.gov/list-carb-certified-air-cleaning-devices>.

In recent years, the District has increasingly encouraged the use of HEPA devices during wildfires, through joint air quality alerts with County Public Health, media interviews, and social media posts. Use of a HEPA device to create a "clean air room" – ideally, in a room where you spend a lot of time, like a bedroom – would ensure that the home has a dedicated space with safe indoor air quality during smoke events. Last year, the District shared with your Board a series of bilingual "clean air rooms" [infographics](#) that showed 1) how to choose and use an air purifier; 2) how to create a do-it-yourself (DIY) air filtration device, which is a less expensive option; and 3) how to minimize indoor sources of air pollution. These infographics have been shared widely via the District's social media, news releases with County Public Health, and radio ads. Further, they have been shared with other air districts and environmental offices for use in other areas of California and other western states.

Smoke in Santa Barbara County

As mentioned, wildfire season has grown longer and more intense, and smoke impacts are more sustained and no longer limited to the region where the wildfire occurs. As a result, short-term levels of particulate matter have increased across the Western United States, with smoke from 2020 wildfires reaching 96 percent of Californians¹ and the acreage burned in 2020 surpassing that of all the wildfires from the previous four years combined. In Santa Barbara County, the District saw [significant spikes](#) [see slide 4] in PM2.5 levels during the wildfires in August, September, and October 2020, compared to the previous years' average concentrations. Unfortunately, we anticipate that this trend is going to continue across the West as well as here locally.

Communities for Pilot Program

With this pilot program, the District's goal is to provide HEPA devices to Santa Barbara County residents who are traditionally underserved and/or who may not have the means to purchase an air purifier on their own. The District also desired to select communities for this pilot program that are home to many outdoor agricultural workers, who often endure wildfire smoke while working.

To analyze which area(s) of the county would be best served by this pilot program, the District look at criteria established by CalEnviroScreen, a State-created mapping tool that uses environmental, health, and socioeconomic data collected from state and federal sources to compare communities across California. Within CalEnviroScreen, the District looked at metrics for pollution burden (such as high asthma levels) and population characteristics (such as high poverty levels). Additional analysis was factored in from the [AB 1550 map of disadvantaged and low-income communities](#).

¹ <https://www.latimes.com/california/story/2021-01-13/wildfire-smoke-fine-particle-pollution-western-us-study>

Based on our analysis, and with limited funding available for this pilot program, the District proposes to implement the pilot program in the City of Guadalupe, as well as in the community of Casmalia. According to CalEnviroScreen, the census tract for these areas shows the county's highest combination of pollution burden for certain population characteristics. CalEnviroScreen assigns a numerical ranking to each tract, with values of 75 and above classifying the location as a State-recognized Disadvantaged Community. In the current version of CalEnviroScreen, the ranking for Guadalupe and Casmalia was 74; in a draft version of the tool, the ranking is 86. These communities also frequently experience windblown dust, which can increase PM levels.

Program Implementation

Selection and Purchase of Purifiers

To narrow down which device to purchase for the program and make the best use of limited public funds, the District outlined the following requirements, which were recommended by subject-matter experts at California Air Resources Board:

- Certified by California Air resources Board for sale in the State of California
- Mechanical operation (versus electronic)²
- HEPA-rated
- Energy Star-rated
- Features a light indicator for filter replacement
- Comes with three replacement filters per unit
- Effective for a room size of 150-300 square feet, with a standard ceiling height of 8 feet
- Does not produce excessive noise – approximately 45 decibels or less
- Comes with instruction manual with directions in English and Spanish
- Device, current or similar future model, must be widely available to purchase through stores or online retailers

The District provided those requirements to County Purchasing to solicit bids through the procurement process. Through this process, a Request for Proposal (RFP) was posted on the County's website for two weeks, and the District has received those RFP submissions. Pending approval of this pilot program by your Board, the District will determine whether the submittals meet the criteria set in the RFP to move forward with ordering the devices from one of the bidders or to close the bid process and explore other options with County purchasing, to maximize the use of public funds.

Distribution of Purifiers

If approved by your Board, the District will purchase approximately 1,000 devices (each with replacement filters) to distribute to residents of the designated communities, limited to one per household. Guadalupe and Casmalia, combined, have a population of approximately 7,218 individuals living in approximately 1,867 households.

The District will select a dedicated weekend day on which to distribute the devices in Guadalupe, with Casmalia residents invited to attend at that location; the District will work with local stakeholders to find an optimal outdoor location for the event. The purifiers will be available on a first-come, first-served basis. To pick up a purifier, limited to one per household, individuals will need to provide proof of address with the zip code of Guadalupe or Casmalia (driver's license,

² <https://ww2.arb.ca.gov/list-carb-certified-air-cleaning-devices>

utility bill, etc.). Households picking up an air purifier will also receive a refrigerator magnet with bilingual information about how to access air quality data on the District's website.

Partners and Promotion of Program

To maximize participation, the District will work with multiple partners, including city and county government representing the selected communities, to promote the program across a variety of platforms ahead of the launch. The District will also enlist the help of non-profit organizations and community partners to share information in Spanish and Mixteco with community members, both about the existence of the program and the benefits of HEPA purifiers and how to use them. Staff will also work with the media to ensure that news about the program reaches a wide audience.

Associated Outreach Campaign

Accompanying the pilot program will be a countywide awareness campaign on the benefits of HEPA purifiers. Key messages will focus on selecting an air purifier to purchase or putting together a DIY version, key components needed for creating a "clean air room," and following best practices for use for each version. The District will also share information regarding how to interpret air quality data, especially during wildfire smoke events, and when it is recommended to use the air purifier. The District will work with partners to share this information through a variety of platforms and across languages (English, Spanish, and Mixteco). The District will also ask program participants to share success stories with the District for future promotion of the benefits of the devices. If additional funds become available in the future, the District will work to expand this program across the region.

FISCAL IMPACT:

The District has identified \$100,000 for this project. The funding is set aside in the proposed budget for Fiscal year 2021-22, before your Board for approval at this meeting. A portion of the funding will come from the District's Clean Air Fund, while the remaining portion will come from the District's operational reserves fund balance. The District's Clean Air Fund was established by your Board on March 21, 2019 with Resolution 19-03. In the resolution, excess Notice of Violation revenues are allocated to Clean Air Fund projects undertaken by the District and/or third parties that provide air quality and human health benefits to the Santa Barbara County community.

If approved by your Board, this program would be funded and implemented in FY 21-22. Administrative costs for implementing this program are also be covered by the FY 21-22 budget.

ATTACHMENTS:

- A. Board Resolution — Clean Air Rooms Pilot Program

ATTACHMENT A

Clean Air Rooms Pilot Program
Resolution

June 17, 2021

Santa Barbara County Air Pollution Control District
Board of Directors

260 San Antonio Road, Suite A
Santa Barbara, California 93110

**RESOLUTION OF THE BOARD OF DIRECTORS OF
THE SANTA BARBARA COUNTY
AIR POLLUTION CONTROL DISTRICT**

IN THE MATTER OF APPROVING THE
CLEAN AIR ROOMS PILOT PROGRAM

APCD RESOLUTION NO. _____

RECITALS

WHEREAS, the Santa Barbara County Air Pollution Control District (District) is an agency with the mission to protect the people and the environment of Santa Barbara County from the effects of air pollution; and

WHEREAS, smoke from wildfires contains particulate matter, a pollutant that harms the lungs and heart; and

WHEREAS, wildfire smoke events are growing more intense and sustained, and are affecting Santa Barbara County residents when wildfires occur locally and out of the county; and

WHEREAS, the District works to promote the use of High-Efficiency Particulate Air (HEPA) devices to reduce pollution indoors during wildfire smoke events, as the best way to protect health; and

WHEREAS, the District's Clean Air Fund was established by your Board on March 21st of 2019 with Resolution 19-03. In the resolution, excess Notice of Violation revenues were allocated to Clean Air Fund projects undertaken by the District and/or third parties that provide air quality and human health benefits to the Santa Barbara County Community; and

WHEREAS, the Clean Air Rooms Pilot Program will provide \$100,000 worth of free HEPA devices and limited replacement filters to residents of the City of Guadalupe and the community of Casmalia, based on criteria established by CalEnviroScreen and the AB 1550 map of disadvantaged and low-income communities, to ensure that residents of those communities

APCD RESOLUTION IN THE MATTER OF THE CLEAN AIR ROOMS
PILOT PROGRAM

have access to this health-protective measure regardless of their ability to purchase a device themselves, and;

WHEREAS, all Santa Barbara County residents will be encouraged to use a HEPA device through a countywide educational campaign across multiple languages, to ensure that all County residents know how to protect themselves from wildfire smoke pollution; and

WHEREAS, the Board wishes to delegate authority to the Air Pollution Control Officer to implement the Clean Air Rooms Pilot Program, funded using existing funds within the Proposed FY 2021-22 Budget and within the Clean Air Fund.

NOW, THEREFORE, IT IS HEREBY RESOLVED, as follows:

1. The Board hereby approves the use of \$100,000 to fund the Clean Air Rooms Pilot Program, and delegates authority to the Air Pollution Control Officer to implement the Pilot Program.
2. Upon completion of this Clean Air Rooms Pilot Program, District staff shall present the results of the project to the District Board.

PASSED, APPROVED, AND ADOPTED by the Air Pollution Control District Board of the Santa Barbara County, State of California, this 17th day of June, 2021, by the following vote:

Ayes:

Noes:

Abstain:

Absent:

SANTA BARBARA COUNTY
AIR POLLUTION CONTROL DISTRICT

ATTEST:

AERON ARLIN GENET
Clerk of the Board

By _____
Deputy

By _____
Chair

APPROVED AS TO FORM:

MICHAEL C. GHIZZONI
County Counsel

By  _____
District Counsel

APPROVED AS TO FORM:

RAY AROMATORIO, ARM, AIC
Risk Manager

By  _____
Risk Manager

APPROVED AS TO FORM:

BETSY M. SCHAFFER, CPA
Auditor-Controller

By  _____
Deputy