air pollution control district
SANTA BARBARA COUNTY

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Continued Item: No

Board Agenda Item

TO: Air Pollution Control District Board

FROM: Aeron Arlin Genet, Air Pollution Control Officer

CONTACT: Bryan Wong, Air Quality Specialist, (805) 979-8302

SUBJECT: Overview of the District's Exceptional Events Mitigation Plan

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RECOMMENDATION:

Receive and file a summary of the District's Exceptional Events Mitigation Plan.

BACKGROUND:

Wildfires are not typically predictable, preventable, or immediately controllable, and the smoke from wildfires can result in elevated emission concentrations and adverse air pollution impacts to the public. In the 2016-2018 period, multiple wildfires affected air quality within the South Central Coast air basin, which includes San Luis Obispo, Santa Barbara, and Ventura County Air Pollution Control Districts. Specifically, during this timeframe, Santa Barbara County was impacted by wildfire smoke and ash from three separate wildfire events: Sherpa Fire (2016), Canyon Fire (2016), and Thomas Fire (2017-2018). During these wildfire events, particulate matter concentrations less than 10 microns in diameter (PM_{10}) measured in Santa Barbara County exceeded the National Ambient Air Quality Standards (NAAQS) on 18 days. The Federal Clean Air Act has provisions that allow monitoring data influenced by exceptional events such as wildfire smoke to be excluded when the U.S. Environmental Protection Agency (EPA) evaluates an area's attainment with the NAAQS. The District and California Air Resources Board (CARB) submitted notification to the EPA that monitoring data in Santa Barbara County was influenced by wildfire events between 2016 and 2018.

The 2016 Exceptional Events Rule requires the EPA to identify areas that frequently have recurring exceptional events of the same type of pollutant. These areas are required to develop a mitigation plan to help protect the public from future events of the same nature. The District was notified by the EPA in April 2022 that Santa Barbara County was subject to the mitigation plan requirements of the 2016 Exceptional Events Rule specific to PM_{10} pollution. The District's

Exceptional Events Mitigation Plan summarizes the actions the District will implement prior to and throughout exceptional events that elevate PM_{10} levels in Santa Barbara County.

DISCUSSION:

Exceptional events, which include wildfires, high wind dust events, prescribed fires, stratospheric ozone intrusions, and firework demonstrations, are unusual or naturally occurring events that can negatively impact air quality but are not reasonably controllable using the District's typical air pollution control measures. Areas, like Santa Barbara County, that have experienced recurring exceedances during exceptional events are required by the EPA's 2016 Exceptional Events Rule to develop mitigation plans.

The District's Exceptional Events Mitigation Plan aims to minimize public exposure to PM_{10} during wildfires and other exceptional events. It outlines procedures for the District to follow when PM_{10} concentrations exceed or are expected to exceed ambient air quality standards.

The key components and objectives of the of this plan are as follows:

- Maintain a robust monitoring network to detect changes in air quality during exceptional events and to collect data to understand the severity and duration of the impact.
- Inform the public, local authorities, and relevant stakeholders about the event, its potential impact on air quality, and recommended precautions or actions to mitigate exposure.
- Implement measures to reduce emissions and minimize public exposure to high concentrations of identified pollutants.
- Keep detailed records of the event, the responsive actions taken, and the resulting air quality data. This documentation is crucial for regulatory compliance and reporting to the EPA.
- Collaborate with other agencies, both local and regional, to coordinate responses, share information, and optimize mitigation efforts.

The plan also describes the District's ongoing efforts to reduce PM_{10} exposure through our existing permitting, enforcement, and incentive programs.

The District made the plan available to the public for review and input between December 18, 2023 to January 17, 2024. No comments were received, and the District submitted the plan to CARB for final review and submittal. The plan was reviewed by CARB and submitted to the EPA on January 29, 2024. Following this initial approval and submission, the District is committed to a review and update to the plan every five years to ensure its continued efficacy.

The final Mitigation Plan is available on the District's website (here: https://www.ourair.org/wp-content/uploads/2023-SBCAPCD-Exceptional-Events-Mitigation-Plan-Final.pdf) and included as an attachment to this letter.

FISCAL IMPACT:

The costs for the Exceptional Events Mitigation Plan described above are included in the budget approved by your Board. There are no additional fiscal impacts.

ATTACHMENT:

A. District Exceptional Events Mitigation Plan

ATTACHMENT A

District Exceptional Events Mitigation Plan

March 21, 2024

Santa Barbara County Air Pollution Control District
Board of Directors

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

Exceptional Events Mitigation Plan

Final January 2024

Aeron Arlin Genet, Air Pollution Control Officer

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I. INTRODUCTION

Exceptional events are unusual or naturally occurring events that can affect air quality, but are not reasonably controllable using techniques that state or local air agencies may implement in order to attain and maintain the National Ambient Air Quality Standards (NAAQS). Exceptional events may include wildfires, high wind dust events, prescribed fires, stratospheric ozone intrusions, and firework demonstrations. Since these events cannot be reasonably controlled, the U.S. Environmental Protection Agency (EPA) has adopted requirements and procedures to exclude air quality monitoring data affected by an exceptional event from regulatory determinations. However, to further verify that the public is being protected from exceptional events, the 2016 revisions to the federal Exceptional Events Rule requires states to develop mitigation plans for areas with historically documented or known recurring exceptional events.[1]Santa Barbara County was not initially identified by the EPA as an area that needed to submit a mitigation plan. However, in April 2022, EPA identified additional areas subject to the mitigation plan requirements based on recent air quality data.[2] Specifically, the mitigation plan requirement is triggered if an initial notification is submitted for three or more exceptional events of the same type and pollutant within a three-year period. Santa Barbara County was included as a designated area due to PM_{10} (particulate matter that is 10 microns or less in diameter) exceedances from wildfires.

The Santa Barbara County Air Pollution Control District (District) has prepared this exceptional events mitigation plan to satisfy the requirements of the 2016 Exceptional Events Rule and to demonstrate the District's practices to minimize public exposure to the impacts of PM_{10} during wildfires and other exceptional events. Since the District has no control over these events, the District must be ready to take the appropriate actions when they negatively impact the region's air quality. This plan outlines the procedures the District will take to protect public health in cases where exceptional events increase PM_{10} concentrations in the region to a level where they exceed or are expected to exceed the 24-hour PM_{10} ambient air quality standard.

[1] EPA. Treatment of Data Influenced by Exceptional Events; Final Rule; 81 Fed. Reg. 191, pp. 68216-68282. (October 3, 2016). https://www.govinfo.gov/content/pkg/FR-2016-10-03/pdf/2016-22983.pdf

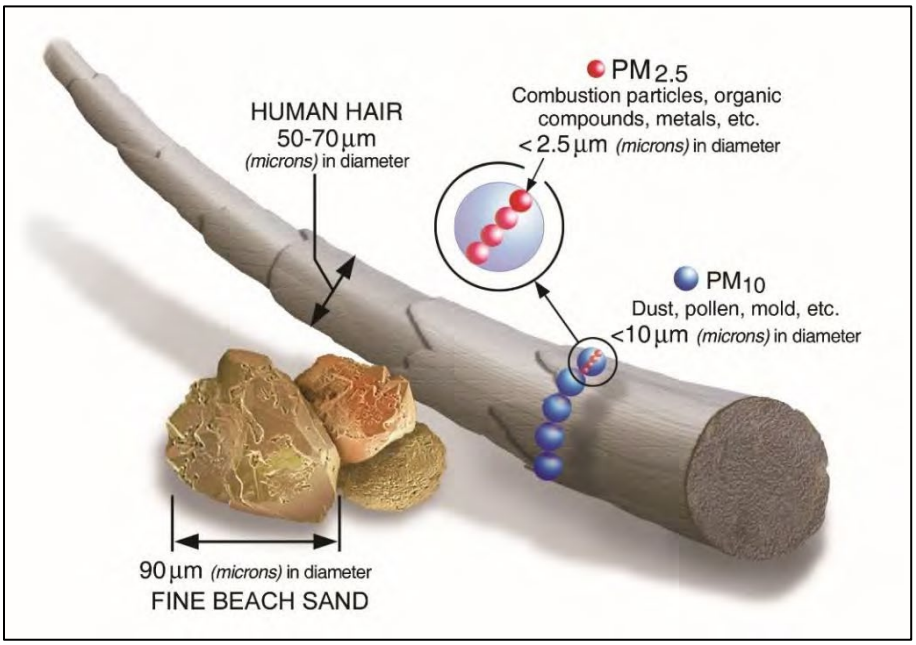
[2] Additional Areas Subject to Mitigation Plan Requirements Under the Exceptional Events Rule (April 2022), https://www.epa.gov/system/files/documents/2022-04/ca-letter_ee-mitigation-plans_letter_final.pdf

II. BACKGROUND

Particulate Matter

Particulate matter (PM) is the term for the mixture of solid and liquid particles in the ambient air. Particles originate from a variety of activities and processes, and the chemical and physical compositions vary. Components of PM include nitrates, sulfates, elemental carbon, organic carbon compounds, acid aerosols, trace metals, and geologic materials. PM can be directly emitted to the air or can be produced by secondary formation in the atmosphere when precursor gaseous pollutants, such as nitrogen oxides and sulfur dioxide, chemically react to form fine aerosol particles. Sources of PM are mainly due to human (anthropogenic) activities, such as residential fuel combustion, entrained road dust, and motor vehicle exhaust. PM can also be generated from natural sources such as wildfires.

FIGURE 1: COMPARISON OF PM_{10} TO HUMAN HAIR AND SAND



Studies have linked PM exposure to a variety of significant health problems. While all particle pollution can cause health impacts, PM_{10} particles are so small that they can be inhaled and deposited into the lungs. Consequently, exposure to PM_{10} can cause serious health problems and aggravate existing problems. People with heart or lung diseases, children, and older adults are the most likely to be affected by particle pollution. However, even if a person is healthy, they may experience temporary symptoms from exposure to elevated levels of particle pollution. Adverse health effects linked to PM_{10} include:

- Increased respiratory symptoms, such as irritation of the airways, coughing, or difficulty breathing;
- Decreased lung function;

- Aggravated asthma;
- Development of chronic bronchitis;
- Irregular heartbeat; and
- Premature death in people with heart or lung disease.

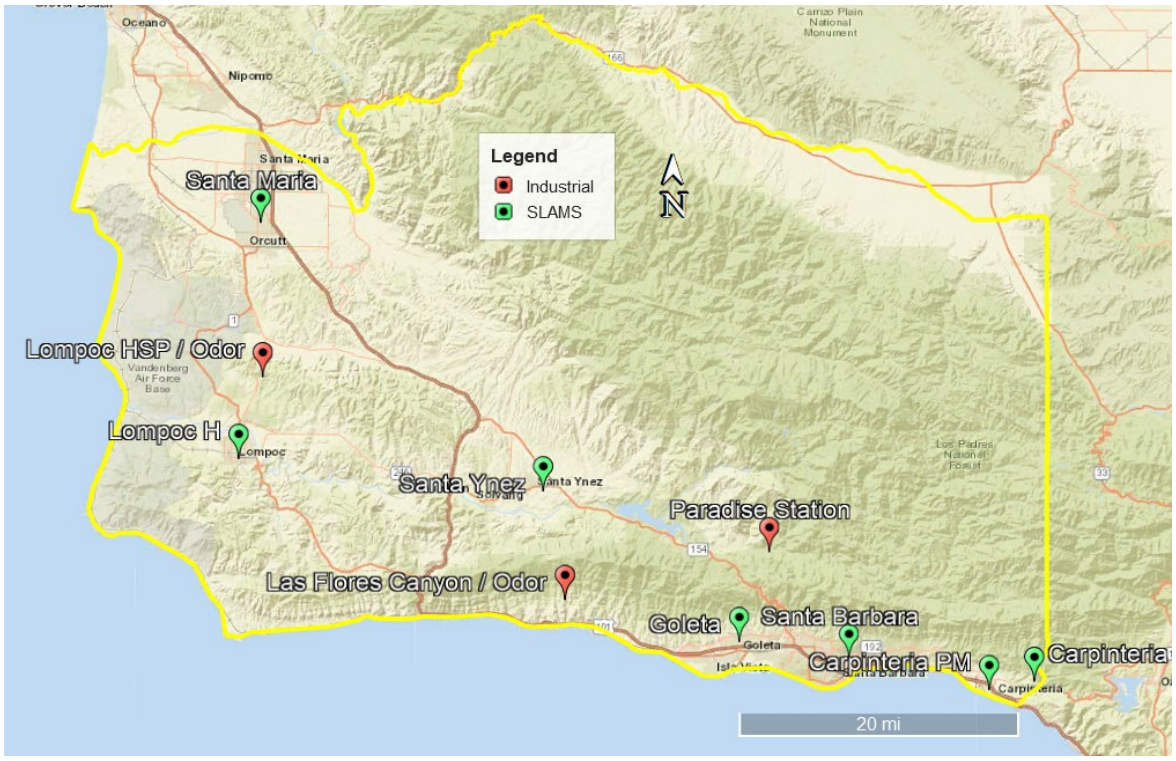
To protect the public from health effects caused by the exposure to particulate matter, the EPA has established NAAQS for PM_{10}. The 24-hour PM_{10} standard was adopted in 1987 and it is set at 150 micrograms per cubic meter (µg/m3).

Monitoring Network and Exceptional Events

The District has established an air monitoring network to monitor for various air pollution concentrations in the region, as illustrated in Figure 2 below. The air monitoring network complies with federal air monitoring regulation requirements as specified in 40 CFR Part 58 for methodology and data quality assurance. It is designed to meet three basic monitoring objectives: 1) provide air pollution data to the public in a timely manner; 2) support compliance with ambient air quality standards and emission strategy development; and 3) support air pollution research studies. The District's Air Monitoring Network Plan, which is available on the District's website[3], presents details about the entire network and about each air monitoring site in the County. Each monitoring site is categorized as either a State and Local Air Monitoring Station (SLAMS) or an Industrial monitoring station. SLAMS are designed to measure urban and regional air quality throughout the county while the Industrial stations are required by facility permits to monitor air quality impacts from the operation of nearby facilities. Continuous PM_{10} measurements are taken from the Santa Barbara, Goleta, Lompoc H Street, Santa Maria, and Las Flores Canyon monitoring stations. The District also has portable monitoring stations available that can continuously measure PM_{10} and be deployed as necessary.

[3] SBCAPCD Ambient Air Monitoring webpage, https://www.ourair.org/air-monitoring/

FIGURE 2: SBCAPCD AIR MONITORING NETWORK



The Clean Air Act (CAA) Section 319(b) recognizes that using air monitoring data influenced by an exceptional event, like wildfires, may not be appropriate when making certain regulatory decisions. For air monitoring data influenced by an exceptional event that causes one or more exceedances of the NAAQS, CAA Section 319(b) establishes a mechanism to exclude this air monitoring data from regulatory determinations. The CAA Section 319(b) defines an exceptional event as the following:

1) It affects air quality;
2) It is not reasonably controllable or preventable;
3) It is an event caused by human activity that is unlikely to recur at a particular location or a natural event;
4) It is determined by EPA through the process established in the regulations to be an exceptional event; and
5) It does not include stagnation of air masses, meteorological inversion, a meteorological event involving high temperature or lack of precipitation, or air pollution relating to noncompliant source.

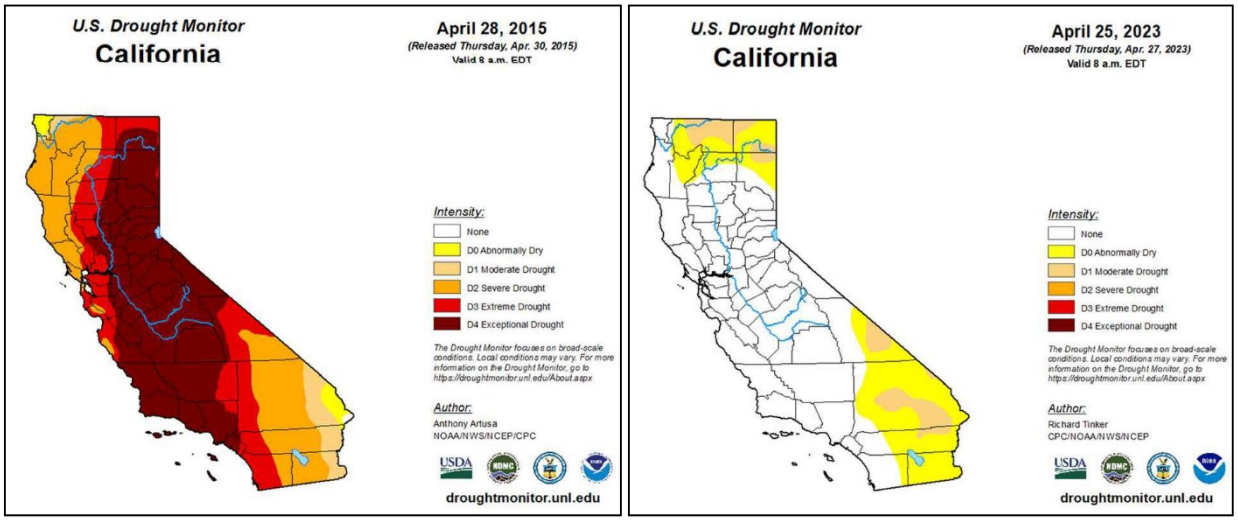
Climate and Terrain

Santa Barbara County occupies more than 2,700 square miles, most of which is sparsely populated and mountainous. The County is situated among a series of mountain ranges, and most of the County's developed areas are located along the coastal plain and in the inter-mountain valleys. Santa Barbara County's climate is typically warm and dry in summer and cool and wet in winter, close to that of a Mediterranean-type climate. During the summer, the

region typically encounters a strong subtropical, high-pressure system over the Pacific Ocean, resulting in minimal rainfall. During the winter, low-pressure systems bring storms into California as the polar jet stream migrates southward from the Gulf of Alaska.

Mediterranean climates are prone to drought conditions as has been the case for California over several years in the last decade. According to the United States Geologic Survey, California experienced its worst drought in over a century during 2011-2015. The National Drought Mitigation Center maps, shown in Figure 3 below, compare the currently improved drought conditions in the State to the exceptional drought conditions that existed in 2015. The drought conditions in the past decade were a significant factor in the conditions that led to previous wildfires within Santa Barbara County and the state of California. If the region experiences long-term extreme or exceptional drought conditions again, there is an increased likelihood and potential for more wildfires to occur.

FIGURE 3: CALIFORNIA DROUGHT INTENSITY IN APRIL 2015 AND APRIL 2023



Wildfire Events

Wildfires are not typically predictable, preventable, or immediately controllable, and the smoke from wildfires can result in elevated emission concentrations and adverse air pollution impacts to the public. In the 2016-2018 period, multiple wildfires affected air quality within the South Central Coast air basin, which includes San Luis Obispo, Santa Barbara, and Ventura County Air Pollution Control Districts. Specifically, the three events that triggered the federal requirement to create this exceptional events mitigation plan were the Sherpa Fire, Canyon Fire, and Thomas Fire. Information on these wildfires and the PM_{10} impacts at the highest recorded monitoring station are shown below in Figures 4 and 5. Note that some of the exceedances occurred after the wildfire event was over, as the exceedances were caused by high wind events that stirred up deposits of smoke ash and debris.

FIGURE 4: WILDFIRE EVENTS IN SANTA BARBARA COUNTY

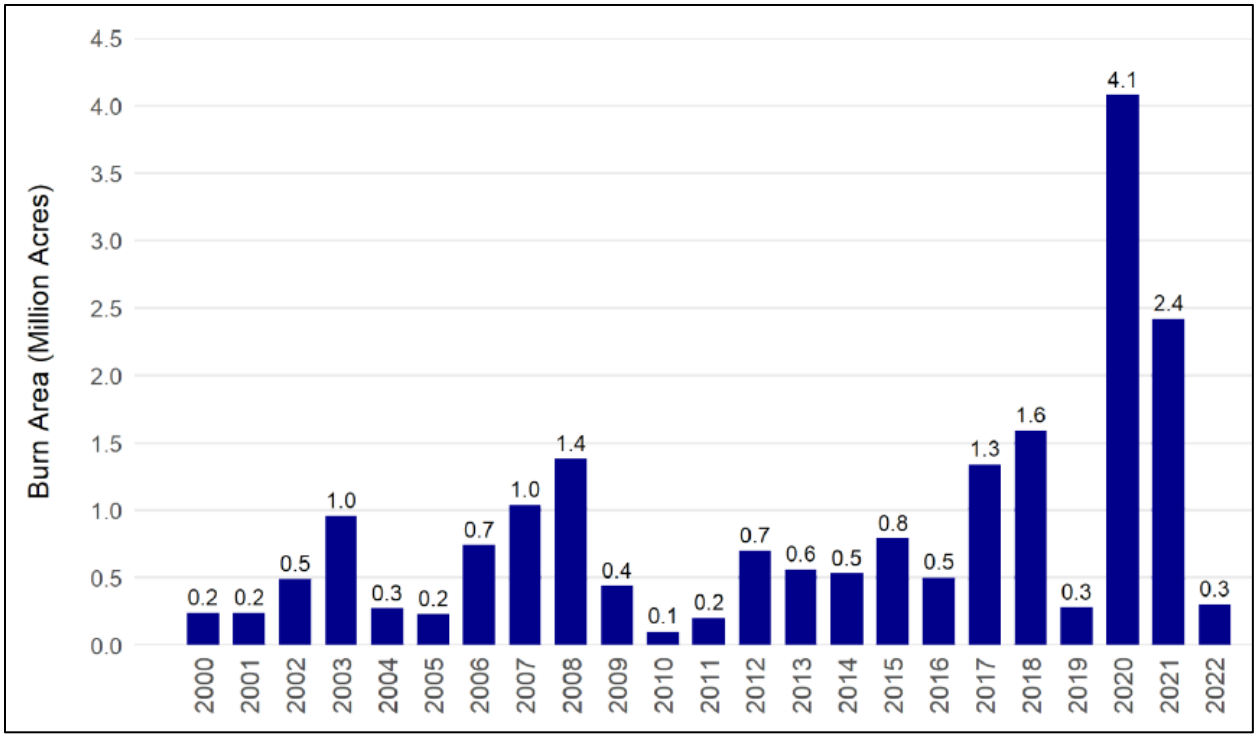
Wildfire Event	Wildfire Description	Monitoring Station with Highest Impacts	Exceedance Date	PM_{10} Exceedance Concentration
Sherpa Fire	7,474 acres in south-central Santa Barbara County; 6/15/2016 - 7/12/2016	Las Flores Canyon	6/16/2016	436 µg/m3
			6/17/2016	202 µg/m3
			6/18/2016	206 µg/m3
			6/19/2016	266 µg/m3
			7/21/2016	212 µg/m3
Canyon Fire	12,742 acres in western Santa Barbara County; 9/17/2016 - 9/24/2016	Vandenberg Air Force Base[4]	10/18/2016	168 µg/m3
			10/19/2016	177 µg/m3
			10/23/2016	204 µg/m3
			11/16/2016	257 µg/m3
			1/8/2017	399 µg/m3
			2/2/2017	208 µg/m3
Thomas Fire	281,893 acres in Santa Barbara and Ventura counties; 12/4/2017 - 3/22/2018	Santa Barbara	12/6/2017	163 µg/m3
			12/7/2017	337 µg/m3
			12/9/2017	171 µg/m3
			12/10/2017	203 µg/m3
			12/11/2017	235 µg/m3
			12/12/2017	187 µg/m3
			12/16/2017	252 ug/m3

[4] Monitoring station closed in March 2019.

FIGURE 5: FIRE PERIMETERS FROM THE WILDFIRE EVENTS

Wildfires throughout the state of California have also caused severe smoke impacts in Santa Barbara County. Major wildfires in northern and central California (outside of the South Central Coast air basin) have created massive amounts of smoke emissions that were transported into the region, lasting for multiple consecutive days. Information on the total acreage from all California wildfires is included in Figure 6 below.

FIGURE 6: CALIFORNIA WILDFIRES – ACREAGE OF BURNED WILDLAND



Source: California Air Resources Board, "Wildfire Emissions & Burned Area Estimates 2000–2022"

III. MITIGATION PLAN COMPONENTS

Per the 2016 Exceptional Events Rule, all states having areas with historically documented or known recurring seasonal events shall be required to develop a mitigation plan, demonstrating that appropriate and reasonable actions are being taken to protect public health from exceedances or violations of the NAAQS. The specific components of the mitigation plan, which are outlined in 40 CFR 51.930(b)(2) and described in detail in this chapter, include the following:

1) Public notification to and education programs for affected or potentially affected communities.
2) Steps to identify, study, and implement mitigation measures, including approaches to address each of the following:
    a. Measures to abate or minimize contributing controllable sources of identified pollutants.
    b. Methods to minimize public exposure to high concentrations of identified pollutants.
    c. Process to collect and maintain data pertinent to the event.
    d. Mechanisms to consult other air quality managers in the affected area regarding the appropriate responses to abate and minimize impacts.
3) Provisions for periodic reviews and evaluation.

Public Education and Notification

(40 CFR 51.930(b)(2)(i))

The District utilizes various data from the air monitoring network and meteorology networks within Santa Barbara County to track air pollutant concentrations (including PM_{10}) and meteorology parameters (like wind speed and direction) throughout each day. District staff also monitor national and regional meteorology forecast models to identify forecast meteorology conditions that could result in air quality impacts. When episodic events like high winds or wildfires occur or are forecasted to occur, District staff watch for increases in hourly PM_{10} concentrations, as well as gather information from other agencies and available eye-witness observations. Staff then take action to engage in public notification and educational processes, as described in Table 1. Through these measures the District provides prompt public notification to potentially affected communities to inform them of exceedances, or the possibility of exceedances, of the NAAQS and of the public health impacts from wildfire smoke.

Additionally, the District communicates the health impacts of air pollution throughout the year with information available on www.OurAir.org, as well as via outreach and public messaging through social media and other avenues, as described in Table 1. District actions are also identified in Table 1 and examples of educational materials and District notification efforts are included in Appendix A.

TABLE 1: PUBLIC EDUCATION AND NOTIFICATION

SBCAPCD Mitigation Plan Components
Public Education and Notification
(40 CFR 51.930(b)(2)(i))

Additional Measures During Air Pollution Episodes

- Implement a website splash page regarding the exceptional event on the District's homepage. (See Appendix A, Figure 1)
- Issue bilingual news releases when wildfire smoke events are expected to occur, or are occurring: (https://www.ourair.org/news/ (See Appendix A, Figure 2)
- Post bilingual messages to social media outlets informing of potential or actual occurrences of harmful air pollution levels and linking to health-protective resources (e.g. Twitter, Instagram, Nextdoor) (See Appendix A, Figure 3)
- Actively field phone calls from the public
- Participate in interviews with the local news media outlets
- Share "Air Quality Alert" messages to the National Weather Service (NWS) offices for display on their website and weather products. Air Quality Alerts provide:
  - guidance on how to protect health and reduce impacts from wildfire smoke and ash
  - information on the effects of elevated particulate matter
  - phone numbers to contact the District and links to the District's website for more information on air quality
- Promote up-to-date information on EPA's Fire and Smoke Map

Measures in Effect Year-Round

- Maintain the District's website with information about the following. Many of these resources are also available in Spanish.
  - Air pollution and health: https://www.ourair.org/apcd/air-pollutants-and-health/ (See Appendix A, Figure 4)
  - Information on "clean air rooms" for keeping indoor air clean: https://www.ourair.org/clean-air-rooms/ (See Appendix A, Figures 5 and 6)
  - Today's air quality and forecasts: https://www.ourair.org/todays-air-quality/
  - Air monitoring: https://www.ourair.org/air-monitoring/ (See Appendix A, Figure 7)
  - School air quality activity recommendations. (https://www.ourair.org/wp-content/uploads/AQ-Levels-School-Guidelines-SBCAPCD-2022.pdf) (See Appendix A, Figure 8)
  - District's residential wood smoke reduction program (See Appendix A, Figure 9)
- Post messages to social media outlets informing of air quality conditions, District programs, events, and clean air tips (e.g. Twitter, Instagram, Nextdoor) (See Appendix A, Figure 10)
- Provide educational outreach, like the District's Clean Air Ambassadors program, which promotes environmental literacy and teaches students about ways they can help improve air quality: https://www.ourair.org/clean-air-ambassadors-program/
- Offer a free subscription to air quality alerts and news, via email and text: https://www.ourair.org/subscribe/
- Provide real-time PM_{10} and $PM_{2.5}$ concentrations to CARB for updates to their Air Quality and Meteorological Information System "AQMIS" website:

https://www.arb.ca.gov/aqmis2/aqmis2.php

- Share real-time PM_{10} and $PM_{2.5}$ concentrations and forecast the Air Quality Index (AQI) to EPA for display to their AirNow webpages (https://www.airnow.gov/ and https://fire.airnow.gov/) and AirNow mobile app.

Measures to Minimize Contributing Controllable Sources

(40 CFR 51.930(b)(2)(ii)(A))

Current District rules and regulations establish stringent control of PM and other pollutant emissions from sources in Santa Barbara County. Through ongoing efforts to evaluate the effectiveness of rules, the District continues its efforts to mitigate emissions of fugitive dust and other controllable sources of particulates which can exacerbate PM concentrations during high wind events and wildfire events.

Permitting and enforcement programs are designed to reduce the emissions of various pollutants and air contaminants including PM. When high concentrations are observed, District staff rely on field observations, air quality complaints, and public calls to identify areas of impact and likely sources of the high concentrations. Emissions from controllable sources like open burning, can be curtailed in the area to reduce contributing impacts to high PM concentrations during high wind events and wildfire events. Rules designed to minimize smoke and dust impacts from controllable sources are listed in Table 2.

When air quality is impacted or is forecasted to be impacted by exceptional events, the District takes additional measures to reduce emissions. Burning activities, such as agricultural burning, hazard reduction burning, and prescribed burning are curtailed and burn authorizations are not granted. Further, ongoing communication and close coordination between the District and local land managers on prescribed burning projects helps to reduce the risk that very large, out-of-control wildfires will occur. Reduction of fuel build-up through prescribed burning projects and other, non-burning methods used by land managers, in areas that are susceptible to wildfires, is a key contributing factor that can lead to reduced wildfires and reduced frequency and duration of smoke impacts in Santa Barbara County.

The District also provides a variety of grants and incentive programs designed to reduce PM emissions throughout Santa Barbara County. The programs provide funding for the replacement of commercial on- and off-road vehicles and equipment, agricultural and marine engines, lawn care equipment, and residential wood-burning stoves, fireplace inserts, and fireplaces with cleaner alternatives. Other incentive programs, like the District's Vessel Speed Reduction program, also result in the reduction of PM pollution, resulting in improved local air quality. The District successfully operates these programs in coordination with regional stakeholders to voluntarily reduce emissions across the county. A list of the District's current grant and incentive programs are included in Table 2 and are maintained on the District's Planning and Grants webpage (https://www.ourair.org/planning-grants/).

TABLE 2: MEASURES TO MINIMIZE CONTRIBUTING CONTROLLABLE SOURCES

SBCAPCD Mitigation Plan Practices
Measures to Minimize Contributing Controllable Sources
(40 CFR 51.930(b)(2)(ii)(A))

Rules and Regulations

- The District implements several rules designed to minimize smoke and dust impacts from controllable sources. Relevant rules include:
  - **Rule 312 (Open Fires):** minimizes smoke impacts to the public from open burning conducted in Santa Barbara County, with the exception of prescribed burning and hazard reduction burning as defined in Rule 401 *(Agricultural and Prescribed Burning).*
  - **Rule 401 (Agricultural and Prescribed Burning):** minimizes smoke impacts to the public from all prescribed burning and hazard reduction burning in wildland/urban interface.
  - **Rule 345 (Control of Fugitive Dust from Construction and Demolition Activities):** requires actions to prevent, reduce, and mitigate fugitive dust emissions from construction, demolition, excavation, extraction, and other earthmoving activities.

Grant and Incentive Programs

- The District provides clean air grant funds to benefit public health by cost-effectively replacing old, high polluting equipment with newer, cleaner equipment. Current grant programs include:
  - On-Road Vehicles: https://www.ourair.org/grants-for-on-road-vehicles/
  - Off-Road Equipment: https://www.ourair.org/grants-for-off-road-equipment/
  - Agricultural Engines: https://www.ourair.org/grants-for-agricultural-engines/
  - Marine Engines: https://www.ourair.org/grants-for-marine-vessels/
  - Infrastructure: https://www.ourair.org/ev-charging-program/
  - Low Emission School Buses: https://www.ourair.org/clean-air-grants-for-buses/
- The District offers a variety of incentive programs designed to reduce air pollution, benefit public health, and help educate students about the importance of clean air. Current incentive programs include:
  - Old Car Buy Back Program: https://www.ourair.org/old-car-buy-back-program/
  - Woodsmoke Reduction Program: https://www.ourair.org/heatclean/
  - Resources for Teachers: https://www.ourair.org/resources-for-teachers/
  - Landscape Equipment Electrification Fund: https://www.ourair.org/leefprogram/
  - Vessel Speed Reduction Program: https://www.ourair.org/air-pollution-marine-shipping/

Measures to Minimize Public Exposure to High Concentrations of PM

(40 CFR 51.930(b)(2)(ii)(B))

The District's public education and public messaging efforts increase community awareness about the harmful effects of air pollution and provide information about ways residents can take action to minimize exposure to high concentrations of PM during episodic events like high winds and wildfires. District-issued bilingual news releases, social media outreach, and webpage banners are utilized to inform the public that high concentrations of PM are forecast to occur or are occurring and share measures that can be taken to minimize exposure. Additional public education and notification measures were presented above in Table 1 and examples of outreach and education materials are shown in Appendix A. Table 3 highlights the measures that help to minimize public exposure to high concentrations of PM.

TABLE 3: MEASURES TO MINIMIZE PUBLIC EXPOSURE TO HIGH CONCENTRATIONS OF PM

SBCAPCD Mitigation Plan Practices ***Minimize Public Exposure to High Concentrations of PM*** *(40 CFR 51.930(b)(2)(ii)(B))*
• The District's Clean Air Rooms Pilot Program helps mitigate the harmful health effects of wildfire smoke for residents of the disadvantaged communities of Guadalupe and Casmalia by providing free residential air filtration units. https://www.ourair.org/clean-air-rooms/ • The District supports the Clean Air Centers Program established by Assembly Bill (AB) 836. AB 836 provided funding to create Wildfire Smoke Clean Air Centers for vulnerable populations and establish a network of publicly accessible facilities with high-efficiency air filtration systems for residents who may not otherwise have access to clean aid during wildfire events (https://www.ourair.org/050522-news/). The District conducted outreach to eligible applicants (https://www.ourair.org/050522-news/) and is supporting successful applicants with their projects and community outreach. One grant recipient is expected to have their Clean Air Center ready in 2023, and the two other recipients are expected to have their Clean Air Centers ready in 2024, depending on construction timelines. • Obtain field observations and confirmation of windblown dust and wildfire smoke PM impacts to aid the District's public messaging efforts. • Investigate air quality complaints. • "*Public Education and Notification*" measures (see Table 1) are applicable to minimizing public exposure to high concentrations of PM. • "*Measures to Minimize Contributing Controllable Source*s" measures (see Table 2) are applicable to minimizing public exposure to high concentrations of PM.

Processes to Collect and Maintain Data Pertinent to the Event

(40 CFR 51.930(b)(2)(ii)(C))

The District collects and maintains data pertinent to documenting and reviewing exceptional events that impact air quality and public health. The air monitoring network in Santa Barbara County has continuous PM_{10} and $PM_{2.5}$ monitors operating throughout the year. Continuous monitoring provides real-time air quality information that is used to identify air pollution episodes. Data from the District's air monitoring network are available to District staff, CARB, and the general public in real-time on the District's website, and is retained on internal District servers as well as EPA's Air Quality Systems (AQS) database.

When exceptional events occur or are forecast to occur, additional information is collected including photos of impacted areas, satellite images, weather information, meteorological data like wind speed and direction, and news and media postings and articles. Data and information are retained for use when preparing exceptional event demonstrations that are submitted to CARB and to EPA to request that exceedances caused by exceptional events be excluded from regulatory determinations. Table 4 summarizes the measures taken to collect and maintain data.

TABLE 4: PROCESSES TO COLLECT AND MAINTAIN DATA PERTINENT TO THE EVENT

SBCAPCD Mitigation Plan Practices ***Minimize Public Exposure to High Concentrations of PM*** *(40 CFR 51.930(b)(2)(ii)(B))*
• A network of gaseous and particulate air quality monitors is operated throughout Santa Barbara County by the District. • Use real-time data from continuous monitors to identify exceptional events impacts. • Collect photos, satellite images, and other evidence that represents the severity and location of impacts from the exceptional events to be used in demonstration documentation requesting EPA exclude the impacted data from regulatory determinations. • Collect PM data and upload to EPA's AQS database for future reference and analysis. • Maintain Data in District's local data management server. • Save evidence and data workbooks relevant to exceedances on District servers for future reference.

Mechanisms to Consult with Other Air Quality Managers to Abate and Minimize Impacts

(40 CFR 51.930(b)(2)(ii)(D))

Often the same weather systems or natural events are responsible for impacts to air quality across multiple regions and air basins in California, highlighting the need for inter-District consultation regarding the appropriate responses to abate and minimize impacts to PM_{10} from wildfires and other exceptional events. The District engages with neighboring air districts and public health departments within the county to share information when exceptional events impacts are occurring or forecast to occur and that will have prolonged impacts.

The District also works closely with land management agencies including CalFire, U.S. Forest Service, Department of Fish and Wildlife, and other local fire departments and land managers to carry out forest management efforts. A key part of these efforts includes planning for and executing safe and effective hazard reduction burns. As part of its burn program, the District ensures these prescribed burns are designed and planned to minimize air quality impacts and reduce the occurrence and impact of wildfires. A District approved Smoke Management Plan (SMP) is required for all prescribed burns prior to granting ignition authorization, and Basic Smoke Management Practices (BSMP) are required during a burn – including deployment of an Environmental Beta Attenuation Monitor (EBAM) at a potential Sensitive Receptor Location, referencing pollutant levels on the District Monitoring Network, and coordinating burns with other Air Districts in our shared air basin. The District's prescribed burn efforts also include smoke modeling (prior to a burn) and a two-step public notification process, whereby the District works with the involved Fire Agency to broadly disseminate two news releases about upcoming burns. This two-step process involves 1) a news release once the "burn window" is determined, and 2) a media advisory issued the day before or morning of a burn. All past prescribed burn notices can be found on the District's website (https://www.ourair.org/category/prescribed-burn-information/). This robust notification process ensures that community members understand when, where, and why prescribed burns are occurring in their area and ensures that measures are in place to minimize the duration and severity of smoke emissions.

Internal coordination amongst various divisions within the District is also an integral part of communicating with partner agencies and ensuring that the District responds promptly and appropriately to minimize impacts during exceptional events. The District's air quality forecasting team has the primary responsibility for observing air quality impacts from exceptional events and is responsible for initiating coordination with other divisions at the District including the outreach, compliance, and air monitoring teams. This ensures the same up-to-date information is being used to make decisions and allows these groups to effectively coordinate with their counterparts at partner agencies.

TABLE 5: MECHANISMS TO CONSULT WITH OTHER AIR QUALITY MANAGERS

SBCAPCD Mitigation Plan Practices ***Mechanisms to Consult with Other Air Quality Managers*** *(40 CFR 51.930(b)(2)(ii)(D))*
• Coordination with neighboring air quality management agencies and land management agencies via phone calls, conference calls, and email during high-wind and wildfire events to address public messaging and dust mitigation tactics to minimize impacts to public health. • Coordination with internal divisions via phone calls, in-person meetings, and email between the District's forecasting, outreach, compliance, and air monitoring teams.

Public Review and Comment

(40 CFR 51.930(b)(2)(iii)(A))

This exceptional events mitigation plan will be made available for public review and comment for a minimum of 30 days. A copy of the public notice for this review period is included in Appendix B. The District will consider any and all comments received and make changes to the plan if appropriate. Comments received and responses will be included in the final plan when submitted to CARB. Upon submitting the final plan to CARB, the District will request that CARB submit the final plan to EPA.

Periodic Review and Evaluation

(40 CFR 51.930(b)(2)(iii)(B))

The District will review the mitigation plan every five years and make revisions as appropriate. The District will then submit the reviewed or revised mitigation plan to CARB, for transmittal to EPA.

APPENDIX A – EXAMPLES OF PUBLIC OUTREACH AND EDUCATION MATERIALS

1. Examples of Outreach Measures During Air Pollution Episodes

Examples include news releases, social media posts, and outreach materials during air pollution episodes such as wildfires and high winds events

Figure 1: Example of Splash Page on District Homepage

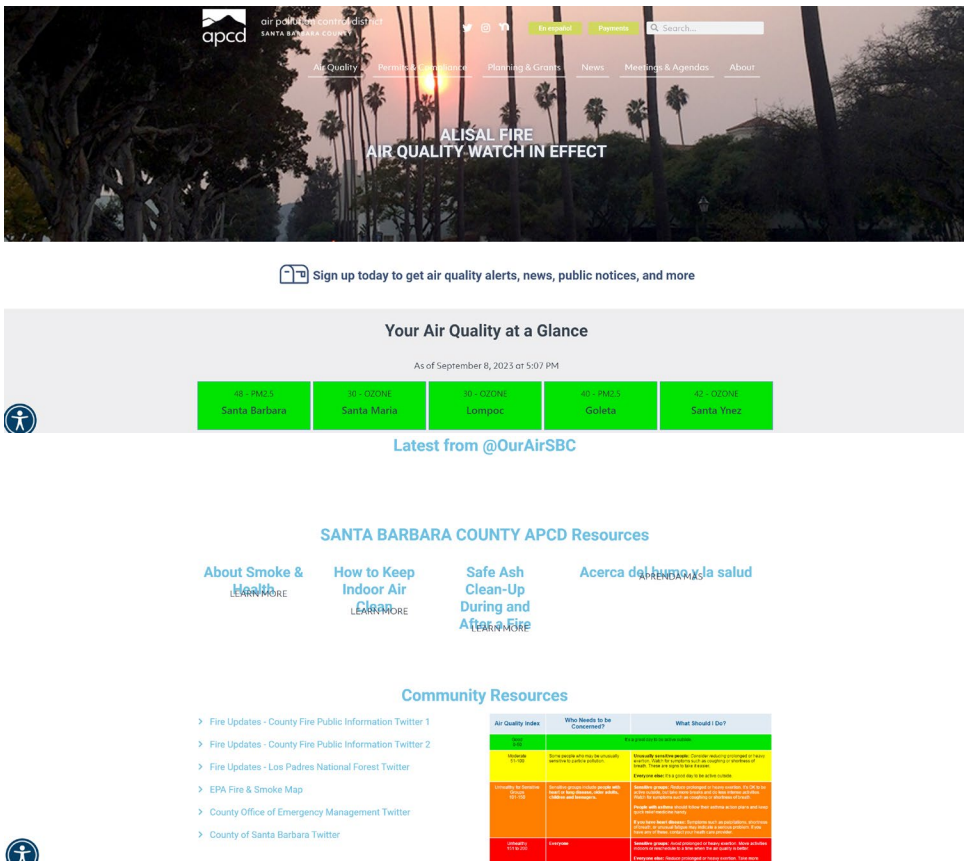


Figure 2: Example of District News Release for Wildfire Event

Air Quality Alert for Santa Barbara County

FOR IMMEDIATE RELEASE
October 13, 2021

(PDF)

En español

For Immediate Release
October 13, 2021

Contacts:
Lyz Bantilan, Air Pollution Control District Public Information Officer, (805) 961-8819
Jackie Ruiz, Santa Barbara County Public Health Public Information Officer, (805) 896-1057

Air Quality Alert for Santa Barbara County

SANTA BARBARA COUNTY, Calif. — The Santa Barbara County Public Health Department and the Santa Barbara County Air Pollution Control District (APCD) have upgraded the Air Quality Watch to an Alert for Santa Barbara County, including the Channel Islands. Smoke and ash from the Alisal Fire is affecting air quality, and winds in the forecast are expected to push more smoke onshore. This is a dynamic situation, and local air quality conditions can change quickly.

All Santa Barbara County residents are encouraged to stay alert to local conditions by using two resources in particular:

- Check readings available on APCD's website: ourair.org/todays-air-quality.
  - Our permanent monitoring stations are sophisticated devices that provide reliable readings from regional monitors located throughout the county.
- Check the EPA Fire & Smoke map: airnow.gov.
  - This map shows data from our permanent monitoring stations, as well as from temporary monitors and low-cost sensors. Using multiple data sets, this map allows you to keep tabs on trends in the air quality conditions and see a bigger picture of information. It also displays a smoke plume to show what areas are being affected.

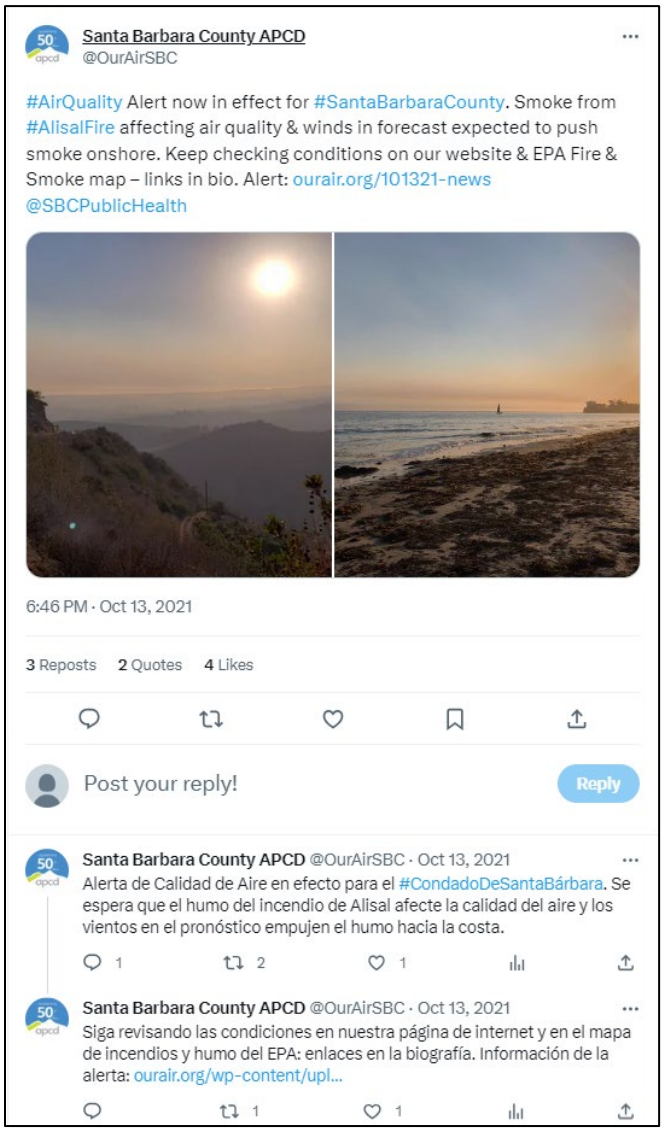
We also encourage people to pay attention to conditions around them. Levels of smoke and particles, and areas affected, will vary. If you see or smell smoke in the air, be cautious and use common sense to protect your and your family's health. Everyone, especially people with heart or lung conditions, older adults, pregnant women, and children, should limit time spent outdoors and avoid outdoor exercise when high concentrations of smoke and particles are in the air.

When air quality reaches unhealthy levels, and/or if you see or smell smoke, we recommend that everyone:

- Head indoors and remain indoors, as much as possible – the best protection against wildfire smoke is to stay indoors as much as possible;
- Avoid outdoor activity;
- Close all windows and doors that lead outside to prevent bringing additional smoke inside;
- Create a "clean air room" to keep indoor air quality safe. Turn on your High-Efficiency Particulate Air (HEPA) purifier if possible. For information on different ways to create a "clean air room," click here.
- Avoid driving when possible and use "recycle" or re-circulate mode to avoid drawing smoky air into the car;
- Drink plenty of fluids to keep respiratory membranes moist; and,
- If you are an essential worker and must work outside during wildfire smoke conditions, the use of a properly fitted N-95 mask provides protection.

If you have symptoms that may be related to exposure to smoke and soot, contact your doctor. Symptoms include repeated coughing, shortness of breath or difficulty breathing, wheezing, chest tightness or pain, palpitations, and nausea or unusual fatigue or lightheadedness.

Figure 3: Examples of District Posts to Social Media during Wildfire Events




ourairsbc
ourairsbc Strong winds, locally and across the state, are stirring up dust and ash into the air. The #AlisalFire is also producing a lot of smoke, and the high winds will be moving that smoke around. We encourage you to stay indoors if air quality in your area is being affected by these situations, and to keep tabs on hourly air quality conditions on our website and the EPA Fire & Smoke map (links below). We are grateful for all of the firefighters working to put out the Alisal Fire! @sbcpublichealth
Today's Air Quality Webpage: https://www.ourair.org/todays-air-quality/
Fire & Smoke Map: https://fire.airnow.gov/
How to Use the Fire & Smoke Map Video: https://vimeo.com/592345480
42 likes
OCTOBER 11, 2021
Add a comment...
Post


ourairsbc
ourairsbc Soplan vientos muy fuertes, tanto en la zona como en todo el estado, que están aventando mucho polvo y ceniza al aire. El incendio Alisal en nuestro condado también está produciendo mucho humo, y los altos vientos estarán removiendo todo ese humo por todos lados. Les recomendamos que permanezcan adentro si la calidad del aire a su alrededor se está viendo afectada por esta situación, y que controlen las condiciones de la calidad del aire que se publican cada hora en nuestra página web y en el mapa de la EPA de los incendios y el humo (vea los enlaces a continuación.) @sbcpublichealth
¡Agradecemos a todos los bomberos que están trabajando duro para apagar el incendio Alisal!
10 likes
OCTOBER 11, 2021
Add a comment...
Post

2. Examples of Resources and Information Available Year-Round

Examples include resources and information available on the District's webpage throughout the year to communicate the types of pollution, the effects of being exposed to pollution, and recommended actions the public can take to reduce exposure to harmful pollution.

Figure 4: District's "About Smoke and Health" Webpage

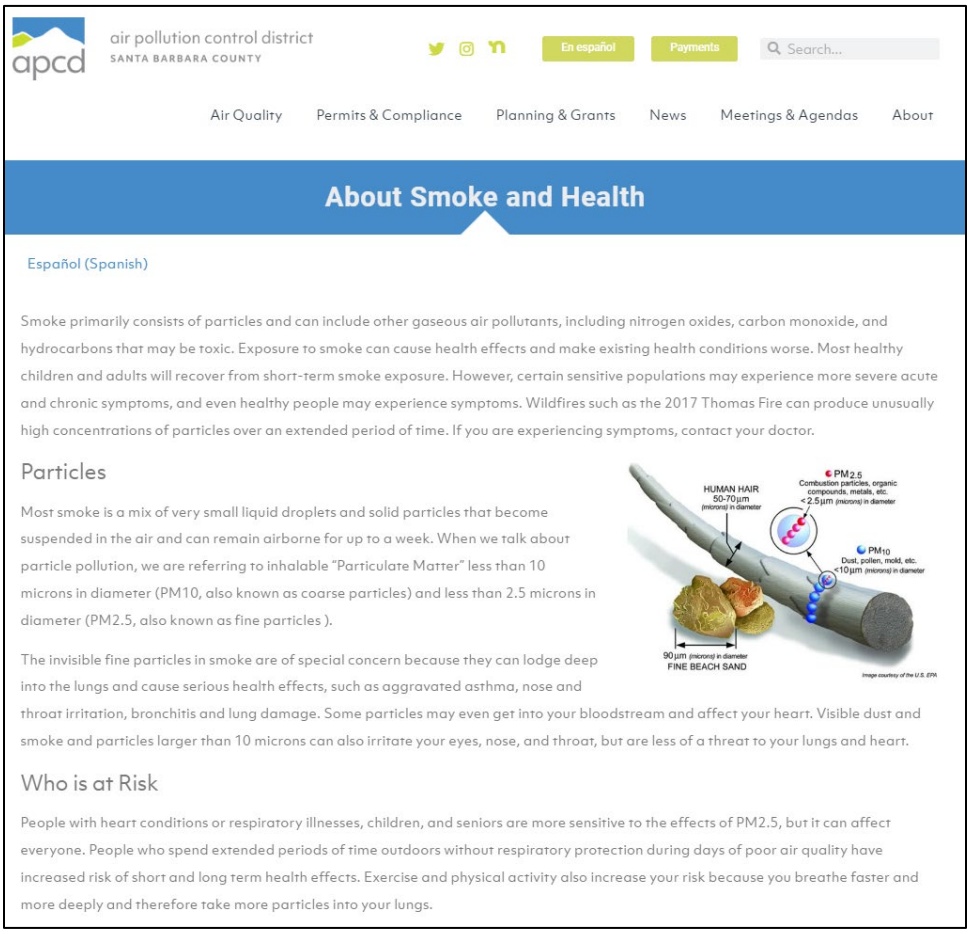


Figure 5: District Clean Air Rooms Webpage

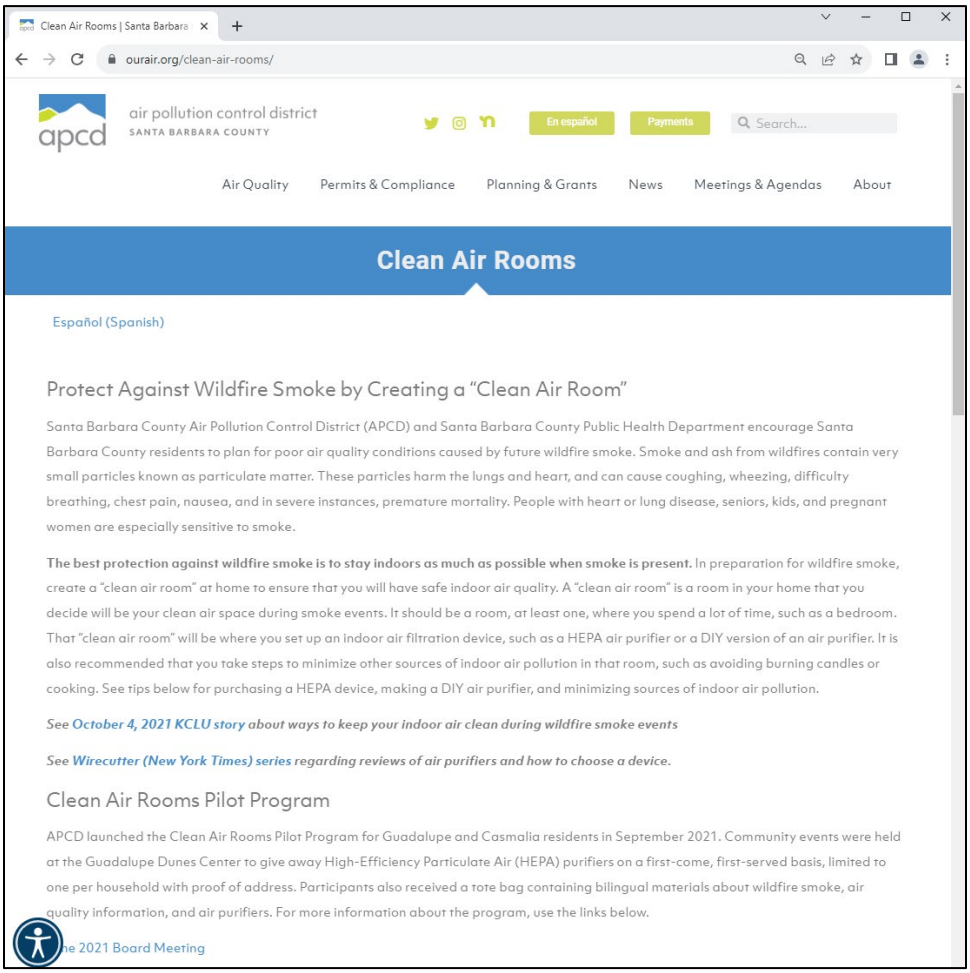


Figure 6: Clean Air Room Infographics

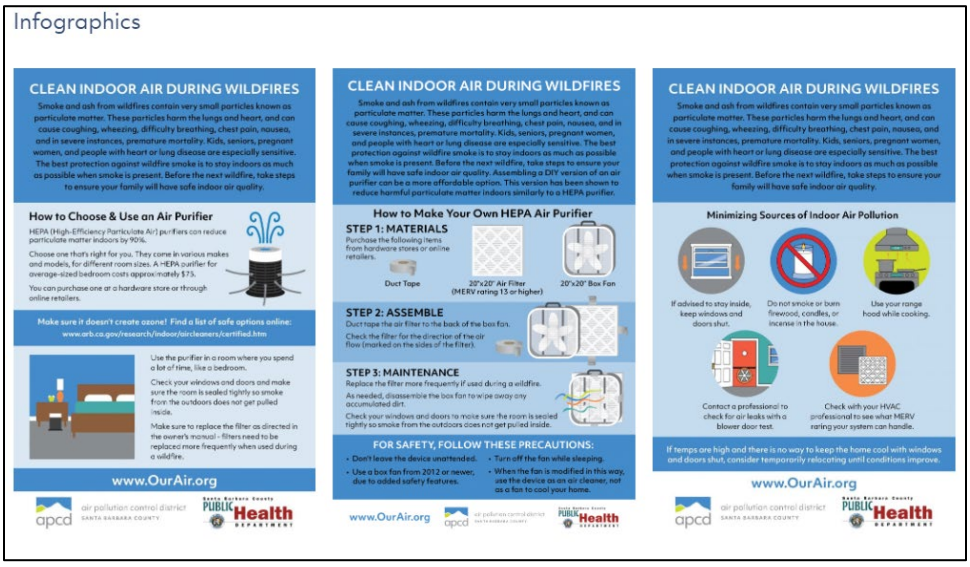


Figure 7: District Daily Air Quality Forecast Webpage

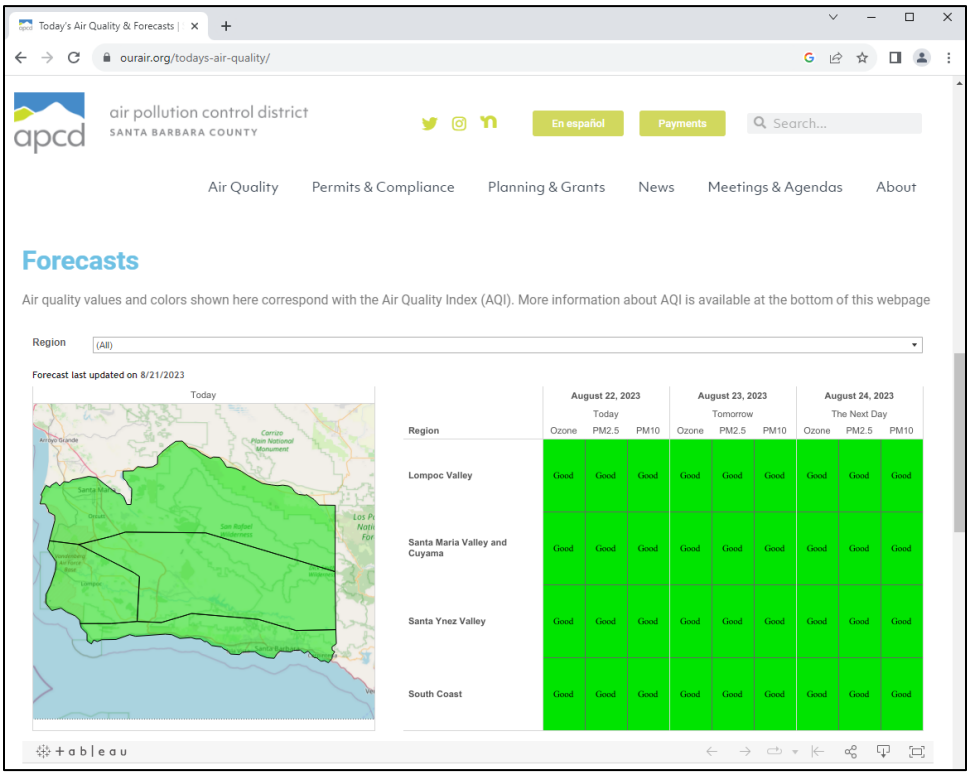
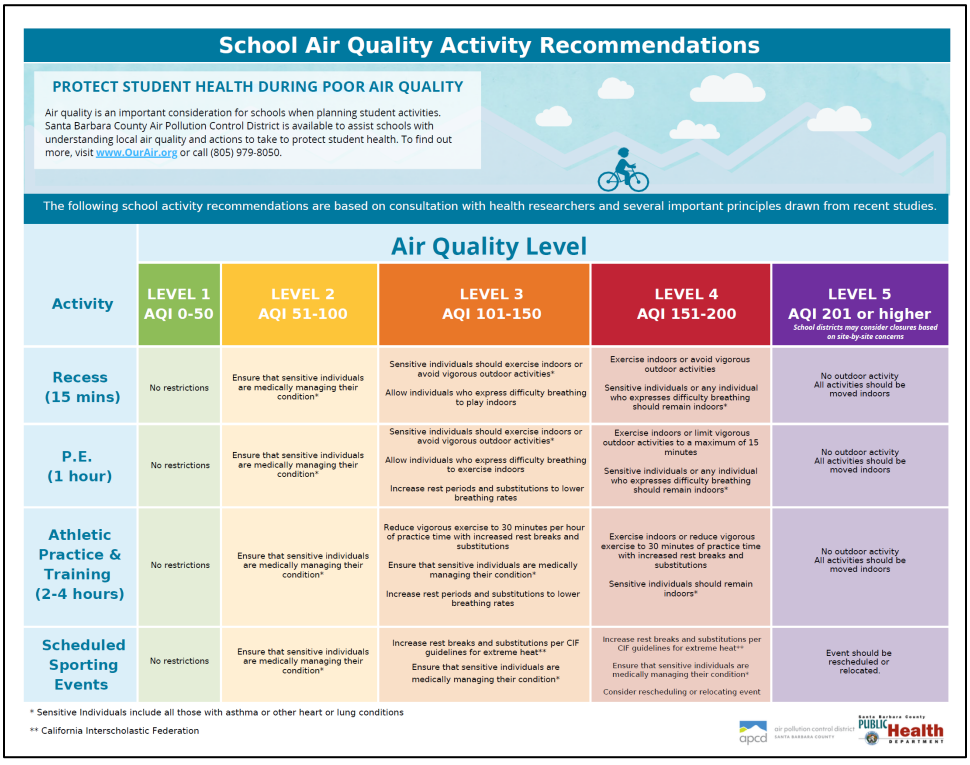


Figure 8: Air Quality Activity Chart Provided to School Districts



School Air Quality Activity Recommendations

PROTECT STUDENT HEALTH DURING POOR AIR QUALITY

Air quality is an important consideration for schools when planning student activities. Santa Barbara County Air Pollution Control District is available to assist schools with understanding local air quality and actions to take to protect student health. To find out more, visit www.OurAir.org or call (805) 979-8050.

The following school activity recommendations are based on consultation with health researchers and several important principles drawn from recent studies.

Activity	Air Quality Level				
	LEVEL 1 AQI 0-50	LEVEL 2 AQI 51-100	LEVEL 3 AQI 101-150	LEVEL 4 AQI 151-200	LEVEL 5 AQI 201 or higher *School districts may consider closures based on site-by-site concerns*
Recess (15 mins)	No restrictions	Ensure that sensitive individuals are medically managing their condition*	Sensitive individuals should exercise indoors or avoid vigorous outdoor activities* Allow individuals who express difficulty breathing to play indoors	Exercise indoors or avoid vigorous outdoor activities Sensitive individuals or any individual who expresses difficulty breathing should remain indoors*	No outdoor activity All activities should be moved indoors
P.E. (1 hour)	No restrictions	Ensure that sensitive individuals are medically managing their condition*	Sensitive individuals should exercise indoors or avoid vigorous outdoor activities* Allow individuals who express difficulty breathing to exercise indoors Increase rest periods and substitutions to lower breathing rates	Exercise indoors or limit vigorous outdoor activities to a maximum of 15 minutes Sensitive individuals or any individual who expresses difficulty breathing should remain indoors*	No outdoor activity All activities should be moved indoors
Athletic Practice & Training (2-4 hours)	No restrictions	Ensure that sensitive individuals are medically managing their condition*	Reduce vigorous exercise to 30 minutes per hour of practice time with increased rest breaks and substitutions Ensure that sensitive individuals are medically managing their condition* Increase rest periods and substitutions to lower breathing rates	Exercise indoors or reduce vigorous exercise to 30 minutes of practice time with increased rest breaks and substitutions Sensitive individuals should remain indoors*	No outdoor activity All activities should be moved indoors
Scheduled Sporting Events	No restrictions	Ensure that sensitive individuals are medically managing their condition*	Increase rest breaks and substitutions per CIF guidelines for extreme heat** Ensure that sensitive individuals are medically managing their condition*	Increase rest breaks and substitutions per CIF guidelines for extreme heat** Ensure that sensitive individuals are medically managing their condition* Consider rescheduling or relocating event	Event should be rescheduled or relocated.

* Sensitive Individuals include all those with asthma or other heart or lung conditions

** California Interscholastic Federation

Figure 9: District Residential Wood Smoke Reduction Program Webpage

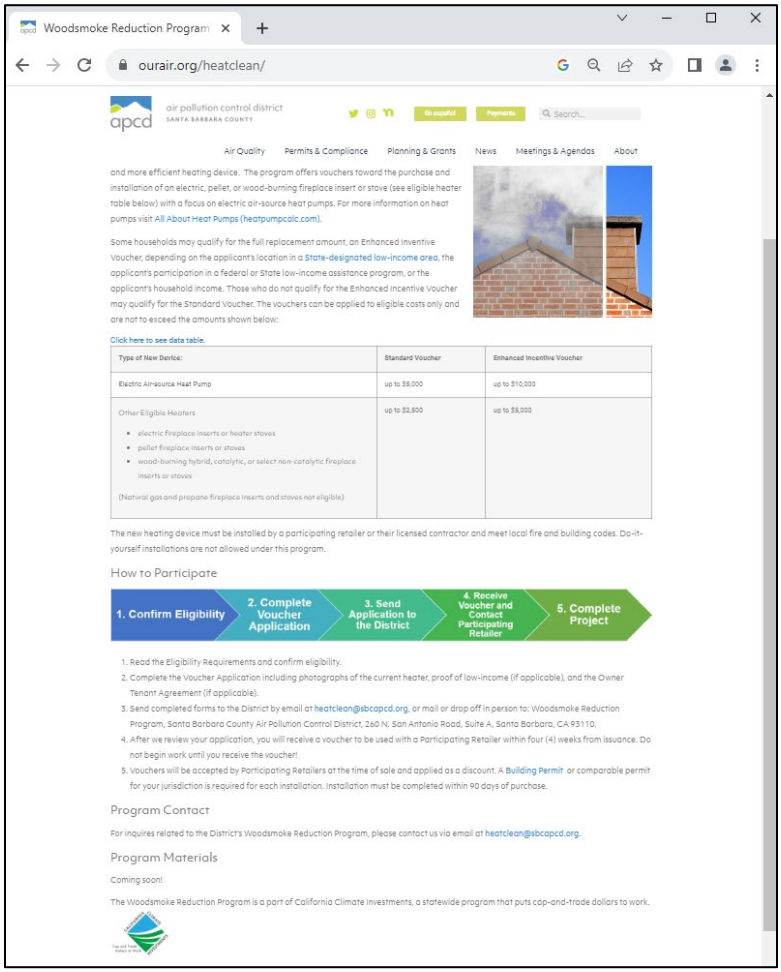
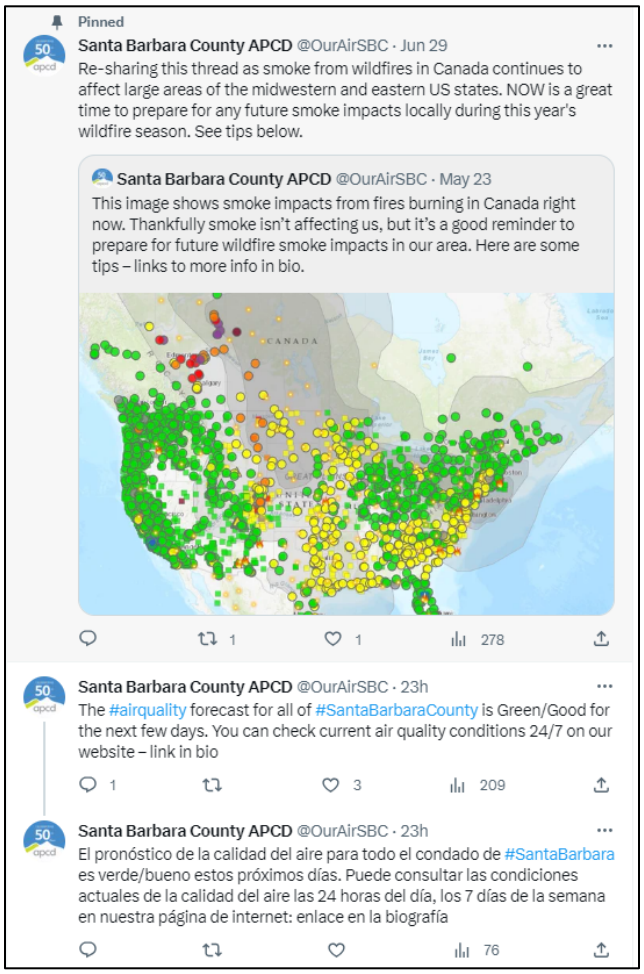


Figure 10: Examples of Ongoing Public Outreach

Twitter/X
(@OurAirSBC)



Santa Barbara County APCD @OurAirSBC · Aug 17

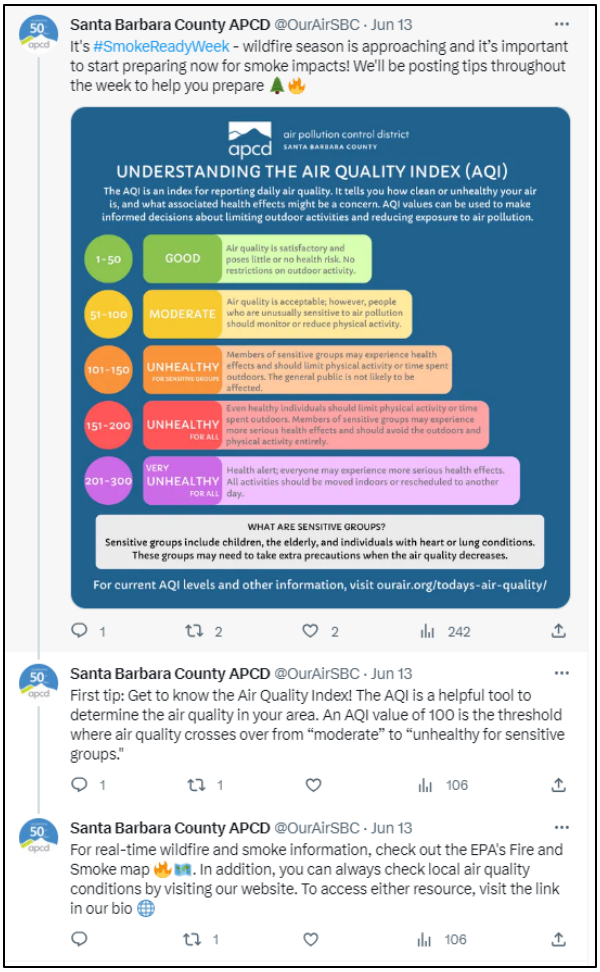
Our Landscape Equipment Electrification Fund (LEEF) Program is accepting applications! Funds are available on a first-come, first-served basis, so apply now by visiting the link in our bio!

1 2 3 920

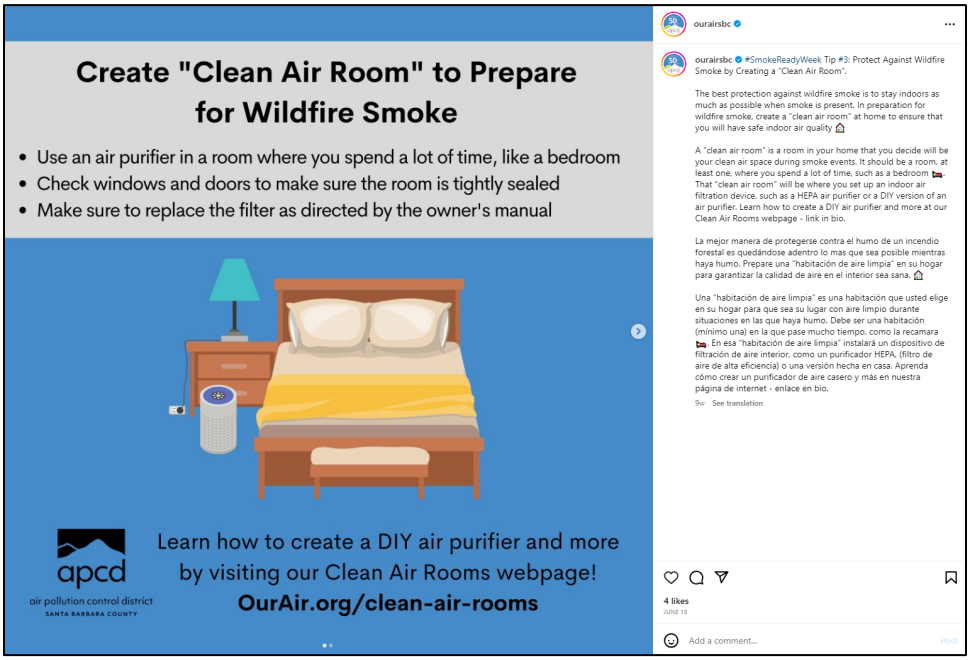
Santa Barbara County APCD @OurAirSBC · Aug 17

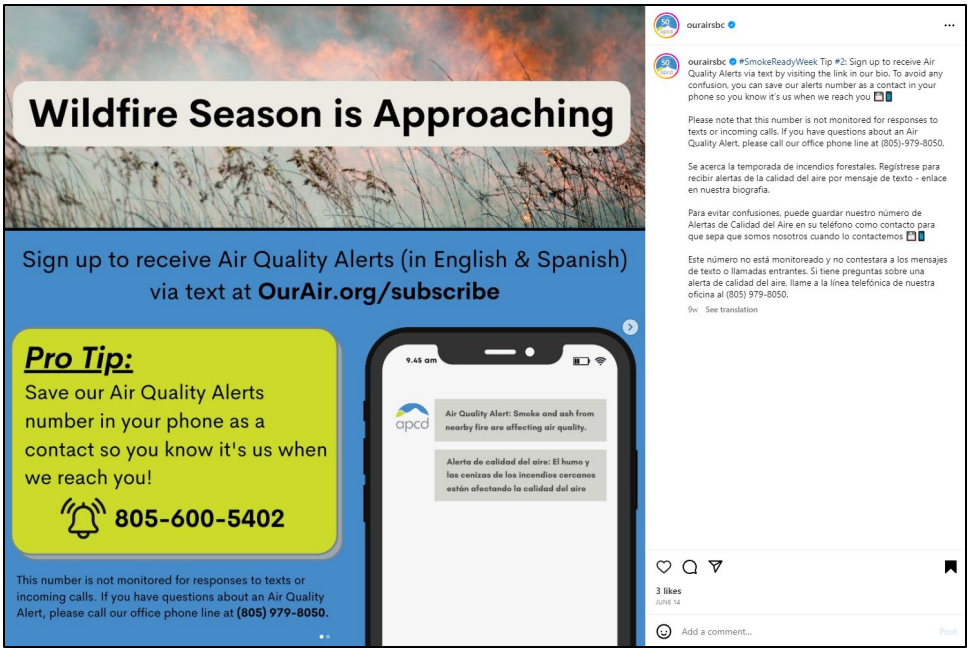
¡Nuestro Programa del Fondos para la Electrificación de Equipos de Jardinería (LEEF, por sus siglas en inglés) está aceptando solicitudes! Los fondos están disponibles por orden de llegada, así que aplique hoy visitando el enlace en nuestra biografía.

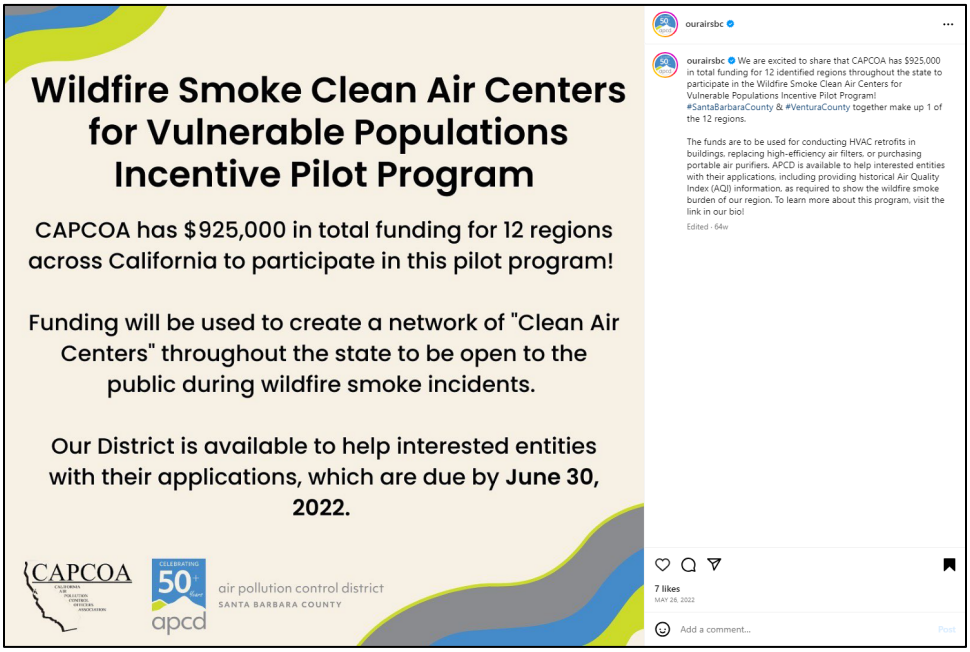
58

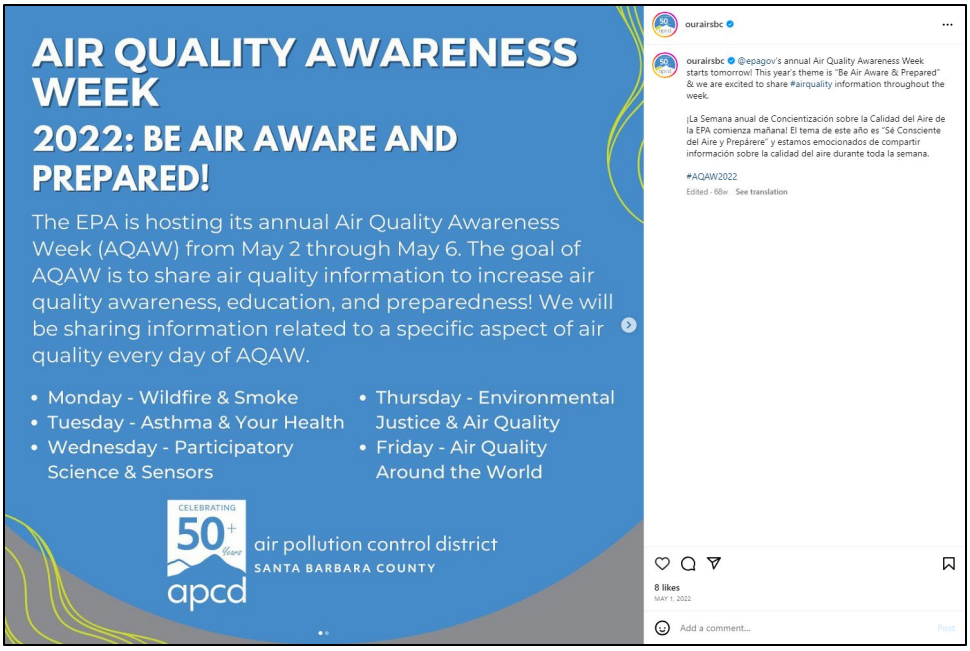


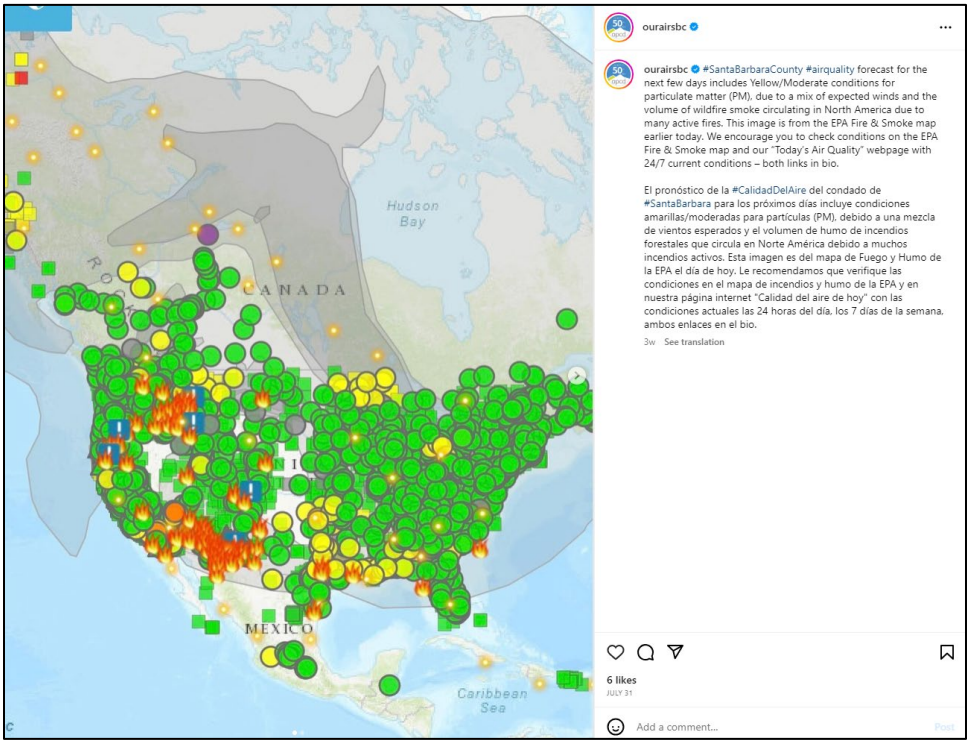
Instagram
(@ourairsbc)




Wildfire Season is Approaching
Sign up to receive Air Quality Alerts (in English & Spanish) via text at OurAir.org/subscribe
Pro Tip:
Save our Air Quality Alerts number in your phone as a contact so you know it's us when we reach you!
805-600-5402
This number is not monitored for responses to texts or incoming calls. If you have questions about an Air Quality Alert, please call our office phone line at (805) 979-8050.
9.45 am
apcd
Air Quality Alert: Smoke and ash from nearby fire are affecting air quality.
Alerta de calidad del aire: El humo y las cenizas de los incendios cercanos están afectando la calidad del aire
ourairsbc
ourairsbc #SmokeReadyWeek Tip #2: Sign up to receive Air Quality Alerts via text by visiting the link in our bio. To avoid any confusion, you can save our alerts number as a contact in your phone so you know it's us when we reach you
Please note that this number is not monitored for responses to texts or incoming calls. If you have questions about an Air Quality Alert, please call our office phone line at (805)-979-8050.
Se acerca la temporada de incendios forestales. Regístrese para recibir alertas de la calidad del aire por mensaje de texto - enlace en nuestra biografía.
Para evitar confusiones, puede guardar nuestro número de Alertas de Calidad del Aire en su teléfono como contacto para que sepa que somos nosotros cuando lo contactemos
Este número no está monitoreado y no contestara a los mensajes de texto o llamadas entrantes. Si tiene preguntas sobre una alerta de calidad del aire, llame a la línea telefónica de nuestra oficina al (805) 979-8050.
9w · See translation
3 likes
JUNE 14
Add a comment...
Post


Wildfire Smoke Clean Air Centers for Vulnerable Populations Incentive Pilot Program
CAPCOA has $925,000 in total funding for 12 regions across California to participate in this pilot program!
Funding will be used to create a network of "Clean Air Centers" throughout the state to be open to the public during wildfire smoke incidents.
Our District is available to help interested entities with their applications, which are due by June 30, 2022.
CAPCOA
CELEBRATING 50
apcd
air pollution control district
SANTA BARBARA COUNTY
ourairsbc
ourairsbc We are excited to share that CAPCOA has $925,000 in total funding for 12 identified regions throughout the state to participate in the Wildfire Smoke Clean Air Centers for Vulnerable Populations Incentive Pilot Program! #SantaBarbaraCounty & #VenturaCounty together make up 1 of the 12 regions.
The funds are to be used for conducting HVAC retrofits in buildings, replacing high-efficiency air filters, or purchasing portable air purifiers. APCD is available to help interested entities with their applications, including providing historical Air Quality Index (AQI) information, as required to show the wildfire smoke burden of our region. To learn more about this program, visit the link in our bio!
Edited · 64w
7 likes
MAY 26, 2022
Add a comment...
Post


AIR QUALITY AWARENESS WEEK
2022: BE AIR AWARE AND PREPARED!
The EPA is hosting its annual Air Quality Awareness Week (AQAW) from May 2 through May 6. The goal of AQAW is to share air quality information to increase air quality awareness, education, and preparedness! We will be sharing information related to a specific aspect of air quality every day of AQAW.
• Monday - Wildfire & Smoke
• Tuesday - Asthma & Your Health
• Wednesday - Participatory Science & Sensors
• Thursday - Environmental Justice & Air Quality
• Friday - Air Quality Around the World
CELEBRATING 50+ Years
air pollution control district
SANTA BARBARA COUNTY
apcd
ourairsbc
ourairsbc @epagov's annual Air Quality Awareness Week starts tomorrow! This year's theme is "Be Air Aware & Prepared" & we are excited to share #airquality information throughout the week.
¡La Semana anual de Concientización sobre la Calidad del Aire de la EPA comienza mañana! El tema de este año es "Sé Consciente del Aire y Prepárese" y estamos emocionados de compartir información sobre la calidad del aire durante toda la semana.
#AQAW2022
Edited · 68w See translation
8 likes
MAY 1, 2022
Add a comment...
Post


Hudson Bay
CANADA
MEXICO
Caribbean Sea
ourairsbc
ourairsbc #SantaBarbaraCounty #airquality forecast for the next few days includes Yellow/Moderate conditions for particulate matter (PM), due to a mix of expected winds and the volume of wildfire smoke circulating in North America due to many active fires. This image is from the EPA Fire & Smoke map earlier today. We encourage you to check conditions on the EPA Fire & Smoke map and our "Today's Air Quality" webpage with 24/7 current conditions – both links in bio.
El pronóstico de la #CalidadDelAire del condado de #SantaBarbara para los próximos días incluye condiciones amarillas/moderadas para partículas (PM), debido a una mezcla de vientos esperados y el volumen de humo de incendios forestales que circula en Norte América debido a muchos incendios activos. Esta imagen es del mapa de Fuego y Humo de la EPA el día de hoy. Le recomendamos que verifique las condiciones en el mapa de incendios y humo de la EPA y en nuestra página internet "Calidad del aire de hoy" con las condiciones actuales las 24 horas del día, los 7 días de la semana, ambos enlaces en el bio.
3w See translation
6 likes
JULY 31
Add a comment...
Post


APPLY FOR OUR 2023 CLEAN AIR GRANTS!
We have approx. $2.5M for projects this year!
Project Categories
On-road trucks & buses
Off-road equipment
Agricultural engines
Infrastructure
Marine vessels
School buses
Priority will be given to zero- or near-zero emission technology projects, along with projects located within low-income and disadvantaged communities
Applications will be accepted July 24 - September 1
apcd
More information: www.OurAir.org/grants
ourairsbc
ourairsbc Our 2023 Clean Air Grants Program is open for applications until Friday, September 1, 2023! Approximately $2.5 million of funding is available for near-zero-emission or zero-emission projects across the six categories.
For more information about project eligibility and the application process, visit our "Grants" webpage - link in bio.
Edited · 1w
12 likes
AUGUST 10
Add a comment...
Post


CELEBRATING 50+ Years
air pollution control district
SANTA BARBARA COUNTY
apcd
Prescribed Burn Notification
Prescribed training burn occurring today at Vandenberg Space Force Base
More info in caption.
Stay updated on prescribed burns and air quality by visiting us online at:
www.OurAir.org
ourairsbc
ourairsbc Vandenberg Space Force Base (VSFB) Fire Department will be conducting a prescribed burn of approximately 5-10 acres of grassland and coastal sage scrub today. A portable air monitor (pictured) has been set up nearby to monitor air quality conditions.
El Departamento de Bomberos de Vandenberg Space Force Base (VSFB) llevará a cabo una quema prescrita de aproximadamente 5-10 acres de pastizales y matorrales de salvia costera hoy. Se instalará un monitor de aire portátil en las inmediaciones para controlar las condiciones de calidad del aire.
8w See translation
4 likes
JUNE 26
Add a comment...
Post


Fireplace Air Quality Tip
Consider saving fireplace use for special occasions to help minimize the impacts of fireplace smoke in our communities.
CELEBRATING 50+ Years
air pollution control district
SANTA BARBARA COUNTY
apcd
www.OurAir.org
ourairsbc
ourairsbc This time of year, we often see periods of elevated particulate matter levels due to increased use of wood-burning fireplaces. We also hear concerns from people about smoke from neighborhood fireplaces affecting them. We encourage you to consider saving fireplace use for special occasions to minimize impacts to those in your area who may be affected by fireplace smoke. Stay up to date on air quality data 24/7 by visiting our website - link in bio.
Durante este tiempo del año, típicamente vemos niveles elevados de partículos debido al uso de chimeneas de leña. Tambien sabemos de las preocupaciones de las personas afectadas por las chimeneas de leña. Lo alentamos a que considere usar chimineas de leña solo para ocasiones especiales para minimizar los impactos del humo en nuestras comunidades. Manténgase actualizado sobre los datos de calidad del aire a todas horas visitando nuestro sitio de web - enlace en la bio.
31w See translation
bikingbreathing Thank you for sharing
31w Reply
6 likes
JANUARY 12
Add a comment...
Post

Appendix B Notice of Public Review and Request for Comments

Exceptional Events Mitigation Plan for Santa Barbara County

Santa Barbara County has been identified by the United States Environmental Protection Agency (EPA) as an area that is required to develop a mitigation plan to minimize the public exposure from PM_{10} emissions generated during exceptional events, which may include wildfires, high wind dust events, prescribed fires, stratospheric ozone intrusions, and firework demonstrations. As required by the 2016 Exceptional Events Rule, and codified at Title 40, Code of Federal Regulations, Part 51.930 (40 CFR 51.930), the Santa Barbra County Air Pollution Control District (District) has prepared a draft Exceptional Events Mitigation Plan for Santa Barbara County and is soliciting comments on the draft plan.

This draft plan outlines the procedures the District will take to protect public health in cases where exceptional events increase PM_{10} concentrations in the region to a level where they exceed or are expected to exceed the 24-hour PM_{10} ambient air quality standard. Key elements for the plan include: 1) public education and notification, 2) measures to minimize contributing controllable sources, 3) measures to minimize public exposure to high concentrations of PM, 4) processes to collect and maintain data pertinent to the event, and 5) periodic review and evaluation.

Public Comment Procedures

A copy of the draft plan is available for review at the District office, 260 North San Antonio Road, Suite A, Santa Barbra, CA 93110, and can also be downloaded from the District's website: www.OurAir.org/news.

Comments may be submitted in writing from December 18, 2023 to January 17, 2024, to Bryan Wong at the District office at the above address. For more information, contact Bryan Wong at (805) 979-8302 or WongB@sbcapcd.org.

All public comments and responses will be part of the plan submittal to EPA.

Published on December 18, 2023

Appendix C Public Comments

No Public Comments Were Received