Exceptional Events Mitigation Plan





Joaquin Valley Air Pollution Control District	June 9, 2023	
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I. INTRODUCTION

On October 3, 2016, the U.S. Environmental Protection Agency (EPA) finalized revisions to the Exceptional Events Rule. 1 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. The promulgated new regulations require states to develop mitigation plans for areas with historically documented or known seasonal exceptional events. Mitigation requirements are included in Title 40, Code of Federal Regulations (CFR), section (§) 51.930. EPA initially identified 29 areas subject to the new regulations, thus requiring the submittal of mitigation plans within two years of the effective date of the rule.

Per 40 CFR §51.930, a state requesting to exclude air quality data due to exceptional events must take appropriate and reasonable actions to protect public health from exceedances or violations of the NAAQS. As such, the revised rule specifies the following requirements:

- All states having areas with historically documented or known seasonal events shall be required to develop a mitigation plan.
- States subject to developing a mitigation plan shall submit a plan within two years of notification.
- At a minimum, the mitigation plan shall contain three components:
 - 1. Public notification and educational programs.
 - 2. Steps to identify, study, and implement mitigating measures.
 - 3. Provisions for review and evaluation of the mitigation plan.
- After review and evaluation, states shall submit the mitigation plan to the Administrator for review and verification of the above-listed components.
- States shall periodically revise and evaluate the effectiveness of the mitigation plan.

As previously mentioned, the exceptional events rule requires for states to prepare mitigation plans for areas with recurring events. Specifically, the mitigation plan requirement applies to events of the same type and pollutant that recur in a three-year period that meet either of the following:

- Three events or event seasons for which air agencies submitted an exceptional events demonstration in a three-year period; or
- Three events or event seasons that are the subject of an initial notification of a potential exceptional event in a three-year period regardless of whether the state submits a demonstration.

¹ EPA. Treatment of Data Influenced by Exceptional Events; Final Rule, notification to states with areas subject to mitigation requirements; final guidance. 81 Fed. Reg. 191, pp. 68216-68282. (October 3, 2016). Retrieved from: https://www.epa.gov/sites/default/files/2018-10/documents/exceptional_events_rule_revisions_2060-as02_final.pdf

In the October 2016 final rule, the San Joaquin Valley (Valley) was included in the list of areas that need to submit mitigation plans according to the requirements of the rule provisions in 40 CFR 51.930(b), PM10 (particulate matter that is 10 microns or less in diameter) exceedances caused by high wind dust events.² In April 2022, EPA identified additional areas subject to mitigation plan requirements.³ The Valley was included in the list of additional areas for PM10 exceedances from wildfires and PM2.5 (particulate matter that is 2.5 microns or less in diameter) exceedances from wildfires, high winds, and fireworks. Therefore, the San Joaquin Valley Air Pollution Control District (District) is subject to the mitigation plan requirements specified in 40 CFR 51.930. In response to these requirements, the District has prepared this exceptional events mitigation plan listing the specific requirements in 40 CFR 51.930(b)(2) and the District's practices which address and satisfy each requirement for PM10 and PM2.5 events caused by high winds, PM10 and PM2.5 events caused by wildfires, and PM2.5 events caused by fireworks.

II. BACKGROUND

As shown in Figure 1, the Valley is a distinct inter-mountain valley region approximately 200 miles long and 80 miles wide. It orients southeast to northwest, with a slightly higher elevation in the south near Bakersfield and the lower elevation at the north near Stockton. There are distinct mountain ranges that surround the San Joaquin Valley Air Basin (SJV Basin, or Basin) – The Sierra Nevada range to the east, the Temblor and Coastal ranges to the west, and the Tehachapi and San Emigdio ranges to the south. The surrounding mountain ranges combine to form a "bowl" effect that traps pollutants in the SJV Basin.

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² Table 6 "Areas Subject to the Mitigation Requirements in 40 CFR 51.930(b)", 81 FR 68272 (October 3, 2016), https://www.govinfo.gov/content/pkg/FR-2016-10-03/pdf/2016-22983.pdf

³ 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

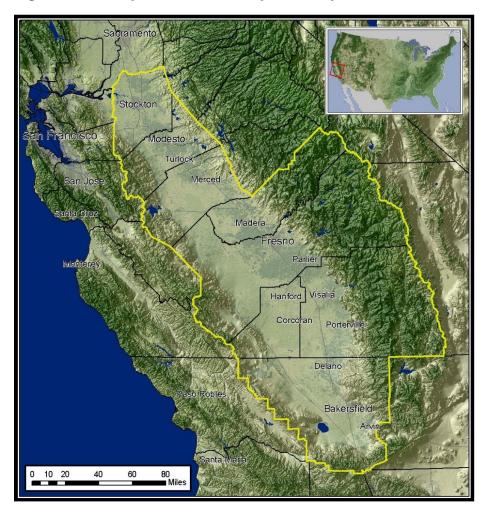


Figure 1 Map of the San Joaquin Valley

The Valley has a Mediterranean climate, with hot, dry summers and mild, moist winters. During the summer, the region encounters a strong subtropical high-pressure system over the eastern Pacific. This system establishes dry air that caps the surface marine layer along the coast and prevents rainfall development unless an influx of monsoonal moisture moves into the region. During the winter, low-pressure systems bring storms into California as the polar jet stream migrates southward from the Gulf of Alaska. These winter systems generate wind throughout the Valley. They also bring rain with snow at higher elevations, accounting for the majority of the Valley's annual precipitation during the winter season.

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 2013-2014 winter was by far the driest of the five-year drought period, and the 2015-2016 winter represented the fifth consecutive year of drought conditions in the Valley. The drought conditions in the past decade were a significant factor in the conditions that lead to the wildfire and windblown dust exceptional events impacts in the

San Joaquin Valley in recent years. The National Drought Mitigation Center maps shown in Figure 2 compare the currently improved drought conditions in the State to the exceptional drought conditions that existed in 2015, which is representative of conditions that lasted many years throughout California and the western U.S.

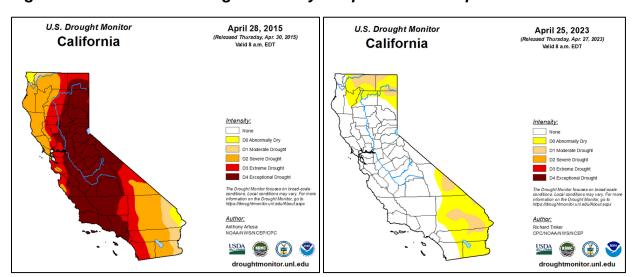


Figure 2 California Drought Intensity in April 2015 and April 2023

A. High Wind Events in the San Joaquin Valley

Drought conditions can augment blowing dust during high wind events and cause particulate matter (PM) concentrations to increase. California's recent drought conditions have rendered dry soils and fallow fields over large areas of the Valley floor and increased susceptibility to blowing dust on high wind days. Various types of weather events such as prefrontal winds, onshore flow, offshore flow, and thunderstorms can generate windblown dust events in the Valley. Windblown dust events in the San Joaquin Valley have occurred in late spring and in the fall. Impacts typically occur over a few hours on one or two consecutive days at a time. High winds usually cause larger increases in the coarse fraction of particulate matter (PM2.5 to PM10) and can cause smaller increases in the fine fraction of particulate matter (PM2.5 and smaller).

B. Wildfire Events in the San Joaquin Valley

Drought conditions are also a precursor to wildfires. With more regions in California experiencing long-term extreme or exceptional drought conditions in recent years, more vegetation across the State has experienced the effects of the drought, increasing the potential for wildfires. Fires are possible throughout the year in California, but the peak fire season typically begins in June and in recent years has run through late October, with August through October being the most vulnerable months for major wildfires. In 2020, multiple fires affected air quality in the SJV air basin, with the 2020 Creek Fire being the most impactful due not only to its size but also due to its location within the SJV air basin. Wildfire smoke emissions contribute to both PM and ozone

concentrations due to the release of direct PM as well as ozone and secondary PM precursor emissions that impact local air quality and public health.

Wildfires throughout the state of California have also caused severe smoke impacts in the San Joaquin Valley. Major wildfires in northern and southern California (outside of the SJV air basin) have created massive amounts of smoke emissions that have transported into the Valley over long periods, lasting weeks and months. Smoke impacts have been more severe in recent years due to the amount of larger wildfires that have occurred in California in 2020 and 2021 causing a greater number of days of wildfire smoke impacts than in previous years. Although the severity and number of days of wildfire smoke impacts in the Valley was lower in 2022 than in the previous two years, there were several weeks of continuous impacts in July, August, and September of 2022.

C. Fireworks Celebrations in the San Joaquin Valley

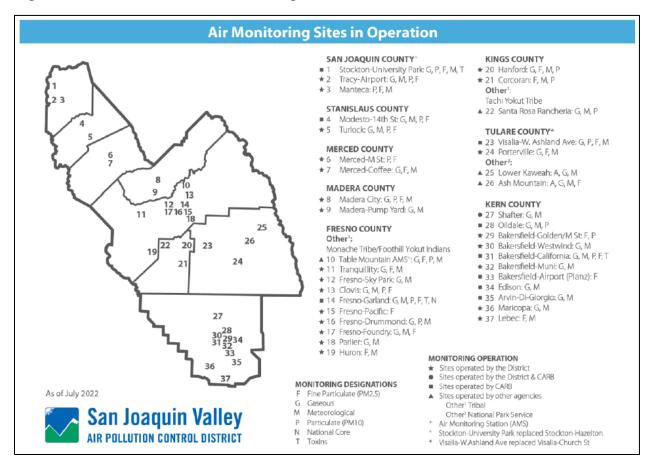
Fireworks are a part of a variety of celebrations of holidays and significant events in the United States. Fireworks generate high concentrations of particulate matter (PM) and gaseous air pollutants. Examples of more common celebrations where fireworks are likely to be used are New Year's Eve on December 31st, Memorial Day on the 4th Monday of May, the fourth of July, and local sporting events. The fourth of July, also known as Independence Day or July 4th, is a federal holiday in the United States that is customarily celebrated with fireworks being lit in the evening. Of the potential celebrations where fireworks may be used, the fourth of July is the most common and the highest occurrence of fireworks being lit. In the San Joaquin Valley, fireworks celebrations are most likely to contribute to PM2.5 concentrations around New Year's Eve and the fourth of July, with the fourth of July being the most likely for significant impacts.

III. AIR MONITORING NETWORK

The District occasionally experiences high wind events, wildfires, or fireworks celebrations, or a combination of these, which affect the Valley's air quality. In order to protect public health, the District implements programs and measures that ensure the public receives prompt notifications with information to help mitigate impacts during such events. The District and the California Air Resources Board (CARB) operate a vast air monitoring network in the San Joaquin Valley (SJV), illustrated in Figure 3. The air monitoring network is an integral part of the District's public notification decision-making process. Continuous particulate matter measurements from the air monitoring sites in the SJV are used to identify when air pollutant concentrations become elevated during exceptional events and are helpful in identifying and forecasting the severity of impacts from events. The pollutant concentrations and information about health impacts are communicated by the District to the public in various ways including the District's RAAN, AirNow.gov, social media posts, and press releases. The District also prepares its annual Air Monitoring Network Plan per 40 CFR part 58.10. In its annual network plan, the District collects and presents updated network information and details

about the entire network and about each air monitoring site in the SJV as a helpful resource. The Air Monitoring Network Plan is available on the District's web site⁴.

Figure 3 SJVAPCD Air Monitoring Network



⁴ SJVUAPCD Ambient Air Monitoring web page, https://ww2.valleyair.org/air-quality-information/air-monitoring/

IV. MITIGATION PLAN COMPONENTS

A. 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 the San Joaquin Valley Air Basin to track air pollutant concentrations (including PM10 and PM2.5) 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, wildfires, and fireworks celebrations occur or are forecast to occur, District staff watch for increases in hourly PM10 and PM2.5 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. The District provides prompt public notification for potentially affected communities to inform of exceedances, or the possibility of exceedances of the NAAQS and of the public health impacts from the windblown dust, wildfire smoke, or fireworks celebrations.

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

Table 1 Public Education and Notification

SJVAPCD Mitigation Plan Components Public Education and Notification

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

Additional Measures During Air Pollution Episodes

- Issue press releases when windblown dust, wildfire smoke, or fireworks events are expected to occur, or are occurring. (https://ww2.valleyair.org/news-outreach-and-education/news-room)
- Post messages to public social media outlets informing of potential or actual occurrences of harmful air pollution levels and linking to health protective resources (e.g., <u>Facebook</u>, <u>Twitter</u>, <u>Instagram</u>, <u>Nextdoor</u>)
- Post a banner message on District web pages and on the District's iOS and Android mobile "<u>Valley Air</u>" app
- Actively field phone calls from the public
- Participate in interviews with the local news media outlets
- Provide "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 oneself and reduce impacts from blowing-dust and wildfire smoke
 - o information on the effects of elevated particulate matter
 - phone numbers to the District's regional offices and the link to the District's website for more information on air quality

Measures in Effect Year-Round

- Educational programs like the District's Healthy Air Living (HAL) program actively
 provide education and opportunities for Valley residents and businesses to make
 personal or professional changes that will result in big improvements in air quality.
 http://www.healthyairliving.com
- Make current air quality and educational information readily available to the public via the District's website including:
 - o Real-time Air Advisory Network (RAAN) (myRAAN.com)
 - Real-time Outdoor Activity Risk (ROAR) guidelines (http://www.healthyairliving.com/media/1055/roar-guidelines-web.pdf)
 - Fugitive Dust Control brochures (https://ww2.valleyair.org/dustcontrol)
 - Annual Report to the Community (https://ww2.valleyair.org/outreach-and-education/information-and-documents)
- Provide real-time PM10 and PM2.5 concentrations to CARB for updates to their Air Quality and Meteorological Information System "AQMIS" website. (https://www.arb.ca.gov/aqmis2/aqmis2.php)
- Provide real-time PM10 and PM2.5 concentrations and forecast AQI to EPA for display to their AirNow webpages (https://www.airnow.gov and https://fire.airnow.gov) and AirNow mobile app

B. 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 stationary sources in the San Joaquin Valley Air Basin. 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, wildfire events, and fireworks celebrations.

In addition, the District operates stringent permitting and enforcement programs that 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, video surveillance networks, and air quality complaints and public calls to effectively identify likely sources of high concentrations and areas of impact. 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, wildfire events, and fireworks celebrations.

The District also operates robust and successful incentive grant funding programs aimed at reducing emissions from additional sources across the region. These programs provide funds toward the voluntary replacement of a variety of agricultural equipment, including nut harvesting equipment with low dust options, replacement of agricultural tractors and pumps with cleaner alternatives, replacement of lawn care equipment with zero emission alternatives, alternatives to open agricultural burning, and many other programs. The District successfully operates these programs in partnership with valley stakeholders to voluntarily reduce emissions across the Valley.

When air quality is impacted, or is forecast to be impacted by exceptional events, the District takes additional measures to reduce emissions. Burning activities, such as agricultural burning, hazard reduction burning, prescribed burning, and residential wood 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 the San Joaquin Valley. Table 2 summarizes the District's key practices and controls that help to directly abate or minimize PM emissions in the Valley.

Table 2 Measures to Minimize Contributing Controllable Sources

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

- Rule 4103 (Open Burning): Minimizes smoke impacts to the public from open burning conducted in the San Joaquin Valley Air Basin, with the exception of prescribed burning and hazard reduction burning as defined in Rule 4106 (Prescribed Burning and Hazard Reduction Burning)
- Rule 4106 (Prescribed Burning and Hazard Reduction Burning): Minimizes smoke impacts to the public from all prescribed burning and hazard reduction burning in wildland/urban interface.
- Rule 4550 (Conservation Management Practices): Limits fugitive dust emissions from agricultural operation sites, including on-field activities and confined animal feeding operations located within the San Joaquin Valley Air Basin.
- Rule 4901 (Wood Burning Fireplaces and Wood Burning Heaters): limits
 emissions of particulate matter from wood burning fireplaces, wood burning
 heaters, and outdoor wood burning devices. The Rule restricts residential wood
 burning between November 1 and the end of February and has requirements
 applicable to the sale or transfer of wood burning heaters, the sale or transfer of
 real property, and the remodel of wood burning fireplaces and chimneys
 throughout the San Joaquin Valley.
- Regulation VIII (Fugitive PM10 Prohibitions): requires actions to prevent, reduce, and mitigate anthropogenic fugitive dust emissions from the following sources:
 - Construction, demolition, excavation, extraction, and other earthmoving activities
 - Outside storage and handling of bulk materials
 - Mud and dirt deposited onto public paved roads
 - Open land within urban areas
 - Paved and unpaved roads
 - Unpaved vehicle and equipment traffic areas
 - Agricultural unpayed roads and traffic areas

C. Minimize Public Exposure to High Concentrations of PM (40 CFR 51.930(b)(2)(ii)(B))

The District's robust public education and public messaging program helps the public to increase their knowledge of the effects of exposure to harmful air pollution and to take action to minimize exposure to high concentrations of PM during episodic events like high winds, wildfires, and fireworks. District-issued news releases, social media outreach, and webpage and app banners are utilized to inform the public that high concentrations of PM are forecast to occur or are occurring. Additional public education and notification measures were presented above in Table 1 and examples of outreach and education materials are shown in Appendix B.

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

SJVAPCD 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 Program helps mitigate the harmful health effects
 of wildfire smoke on Valley residents, and in particular the Valley's most
 vulnerable populations, to provide residential air filtration units free to residents in
 Valley disadvantaged communities (https://ww2.valleyair.org/grants/clean-air-room-program/)
- The District's Clean Air Centers Program was established by Assembly Bill 836, which provided funding to create Wildfire Smoke Clean Air Centers for vulnerable populations and establish a network of publicly accessible facilities with highefficiency air filtration systems for valley residents who may not otherwise have access to clean air during wildfire events (https://ww2.valleyair.org/grants/ab-836-clean-air-centers-pilot-program/)
- 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 received.
- "Public Education and Notification" measures (see Table 1) are applicable to minimizing public exposure to high concentrations of PM.
- "Measures to Minimize Contributing Controllable Sources" measures (see Table
 are applicable to minimizing public exposure to high concentrations of PM.

D. Processes to Collect and Maintain Data Pertinent to the Event (40 CFR 51.930(b)(2)(ii)(C))

The District has internal processes to collect and maintain data pertinent to documenting and reviewing exceptional events that impact air quality and public health. The air monitoring network in the San Joaquin Valley Air Basin has continuous PM10 and PM2.5 monitors operating throughout the year. Continuous monitoring provides real-time air quality information that is used to identify air pollution episodes. Data from the air monitors in the Valley is available to District staff, CARB, and the general public in real-time and is retained on internal District servers as well as the EPA 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 requests that exceedances

caused by exceptional events be removed from regulatory decisions. Table 4 summarizes the measures taken to collect and maintain data.

Table 4 Processes to Collect and Maintain Data Pertinent to the Event

SJVAPCD Mitigation Plan Practices Processes to Collect and Maintain Data Pertinent to the Event (40 CFR 51.930(b)(2)(ii)(C))

- A network of gaseous and particulate air quality monitors is operated throughout the Valley by the District, CARB, and National Park Service (NPS).
- Use real-time data from continuous monitors to identify exceptional events impacts.
- Collect photos, satellite images, and other evidence that represents the severity and locations of impacts from the exceptional events to be used in demonstration documentation requesting EPA remove the impacted data from regulatory decisions.
- Collect PM data and upload to EPA's Air Quality System (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.

E. 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 PM10 and PM2.5 from high winds and wildfires and PM2.5 from fireworks. The District engages with neighboring air quality management districts and public health departments within the Valley to share information when exceptional events impacts are occurring or forecast to occur and that will have prolonged impacts. The District also coordinates with land management agencies like CalFire, National Park Service (NPS), U.S. Forest Service, Bureau of Land Management (BLM), Department of Fish and Wildlife, local utility service providers, and other local land managers, on a daily basis throughout the year to operate a robust and highly effective smoke management program for open burning including hazard reduction burning and forest management that uses prescribed fire. Email and telephone communication, a daily recurring state-wide smoke coordination conference call, use of the state-wide Prescribed Fire Information Reporting System (PFIRS), and other common tools are utilized.

Internal coordination amongst various departments within the SJVUAPCD is also an integral part of 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 others departments at the District including the Outreach and Communications department, the Compliance-Enforcement department, and the Air Monitoring program.

Table 5 Mechanisms to Consult with Other Air Quality Managers

SJVAPCD 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 E-mail during highwind and wildfire events to address public messaging and dust mitigation tactics in an effort to minimize impacts to public health.
- Coordination with National Weather Service (NWS) offices via phone calls and automated data transfer technology to issue Air Quality Alerts and provide guidance on how the public can minimize health impacts during an exceptional event.
- Coordination with internal departments via phone calls, in-person meetings, and E-mail between the District's air quality forecasting team and the Outreach and Communications department, the Air Monitoring team, and the Compliance Enforcement department.

V. 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.

VI. 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 submit reviewed or revised mitigation plans to CARB, for transmittal to EPA.

APPENDICES

Appendix A: Examples of Public Outreach and Education Materials

Appendix B: Notice of Public Comment Period

Appendix C: Comments and Responses

APPENDIX A

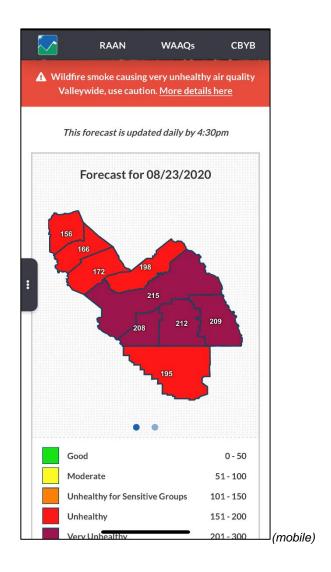
Examples of Public Outreach and Education Materials

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, high winds events, and fireworks celebrations. Also included are examples of special webpage and app banners and the District's coordination with the National Weather Service (NWS) to issue Air Quality Alerts.

Example of Episode Banner on District Web Pages





Example of District News Release for High Winds Event



For immediate release 4/9/2022

Attn: Local news, weather, health and assignment editors

Media Contact: Heather Heinks (559) 994-7591 Spanish Media Contact: Maricela Velasquez (559) 230-5849

Air Quality High Wind Advisory

Gusty winds and blowing dust pose potential health concern Valley-wide

Strong northwesterly winds are expected to continue through today and into this evening, followed by the potential for ongoing high winds into early next week as a significant temperature change in the Valley is anticipated. These high winds have the potential to cause blowing dust and elevated PM10 concentrations. The District recommends that residents in affected areas remain indoors with window and doors closed, avoiding exposure to blowing dust.

Strong winds often cause localized blowing dust in areas where soils are exceptionally dry—creating unhealthy concentrations of particulate matter 10 microns and smaller (PM10). Exposure to particulate pollution can cause serious health problems, aggravate lung disease, trigger asthma attacks and bronchitis, and increase risk of respiratory infections.

Where conditions warrant, people with heart or lung disease should follow their doctors' advice for dealing with episodes of particulate exposure. Additionally, older adults and children should avoid prolonged exposure or heavy exertion, depending on their local conditions.

To monitor PM10 levels in your area, visit www.airnow.gov or download the "EPA AirNow" app for android or iPhone. For more information, visit www.valleyair.org or call a District office in Fresno (559-230-6000), Modesto (209-557-6400) or Bakersfield (661-392-5500).

Example of District News Release for Wildfire Event



For immediate release 9-30-2021

Attn: Local news, weather, health and assignment editors

Media Contact: Heather Heinks (559) 994-7591 Spanish Media Contact: Maricela Velasquez (559) 230-5849

Air Quality Alert Due to Wildfire Smoke KNP Complex and Windy Fire Send Smoke Into the Valley

Smoke infiltration from the Windy and KNP Complex fires in Tulare County combined with high pressure and poor dispersion have prompted air quality officials in the San Joaquin Valley to issue an Air Quality Alert. Smoke is expected to continue to impact the San Joaquin Valley through Monday, October 4, when a low-pressure system moving over the Valley is forecast to improve dispersion. The District warns residents being impacted by smoke to remain indoors to reduce their exposure to particulate matter (PM) emissions.

Particulate matter can trigger asthma attacks, aggravate chronic bronchitis, and increase the risk of heart attack and stroke. Individuals with heart or lung disease should follow their doctors' advice for dealing with episodes of PM exposure. Those with existing respiratory conditions, including COVID-19, young children and the elderly, are especially susceptible to the health effects from this form of pollution. Anyone experiencing poor air quality due to wildfire smoke should move to a filtered, air-conditioned environment with windows closed. Common cloth and paper masks being used as protection from COVID-19 may not be sufficient protection from wildfire smoke inhalation.

For details on current and past wildfires affecting the Valley, as well as resources to protect yourself from exposure to wildfires smoke, visit the District's Wildfire Information page at www.valleyair.org/wildfires. In addition, you can access RAAN to check air quality at any Valley location at myRAAN.com, view the EPA AirNow Fire and Smoke map (https://fire.airnow.gov/) and find links to temporary foothill monitors

For more information, visit www.valleyair.org or call a District office in Fresno (559-230-6000), Modesto (209-557-6400) or Bakersfield (661-392-5500).

Example of News Release Ahead of Expected Fireworks Celebrations



District: Personal fireworks can have negative health effects Fireworks elevate PM levels and threaten public health

This Independence Day, Air District officials remind Valley residents that personal fireworks emit high levels of particulate matter (PM), including soot, ash and metals, which can cause serious health effects. Individuals most at-risk are small children, the elderly and people with existing respiratory conditions (including COVID-19).

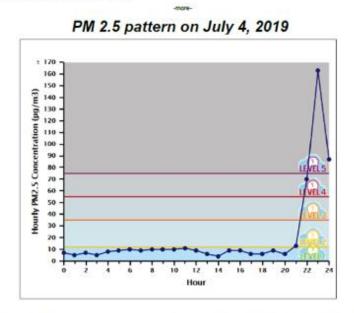
While a nation-wide pandemic has forced many communities to cancel 4th of July celebrations and fireworks displays, the District asks Valley residents to resist the urge to light personal fireworks and seek other methods of celebrating and showing their patriotism for our country's Independence.

"We ask that residents are considerate to the health and well-being of the Valley's most vulnerable individuals, especially during this unprecedented health crisis," said Samir Sheikh, the Valley Air District's Executive Director/Air Pollution Control Officer. "Fireworks release large amounts of PM at ground-level, where individuals can breathe in the harmful pollutant," he added.

Each 4th of July, air monitors across the Valley reflect spikes in PM concentrations from fireworks, often four to five times higher than the health-based federal standard, and typically during evening hours, when personal fireworks are most in use. This unnecessary source of air pollution threatens the Valley's progress in meeting air-quality standards that protect public health. (An attached graph illustrates a typical increase in PM following fireworks). Fine particulate matter can invade the bloodstream, get deep into the lungs, and increase the risk of heart attack and stroke

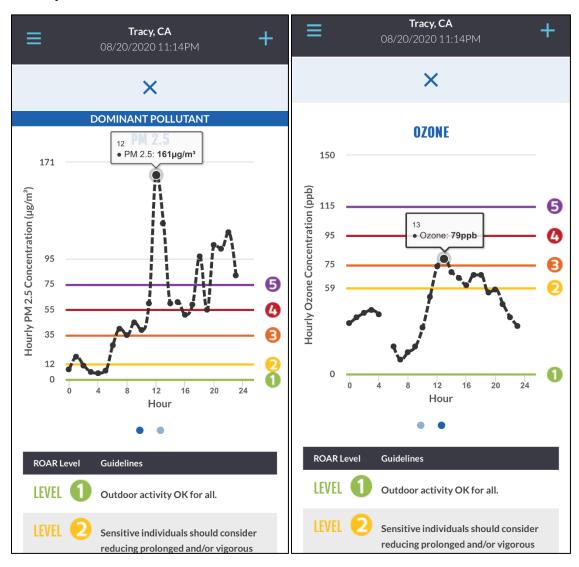
The District's Real-time Air Advisory Network (RAAN) provides access to localized air quality data from an extensive air-monitoring network. Visit myRAAN.com and input any address in the San Joaquin Valley.

For more information about the Air District, call a regional office in Fresno (559) 230-6000, Modesto (209) 557-6400 or Bakersfield (661) 392-5500.



This graph illustrates a spike in particulate levels on July 4, 2019 in the City of Turlock.

Examples of Air Quality Information on the District's Mobile App During Wildfire Smoke Impacts



Examples of District Posts to Social Media







Valley Air District @ValleyAir · Sep 25, 2022

Heads up! Avoid this area or head indoors to reduce your exposure to particulate matter pollution (microscopic particles in smoke = PM2.5)



ABC30 Fresno @ABC30 · Sep 25, 2022

#BREAKING Large fire breaks out near storage facility in Fresno abc30.com/large-fire-bre...







Valley Air District @ValleyAir · Sep 2, 2022

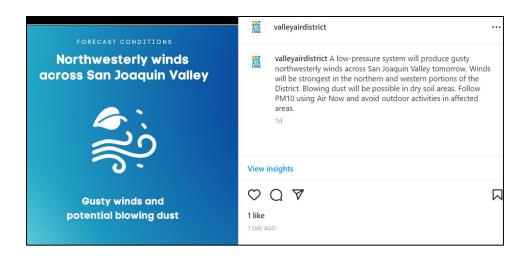
#extremeheat and ongoing #wildfires can contribute to unhealthy air quality. Tips for the weekend:

- · Check on your neighbors and remind them to hydrate
- · Reduce your electricity use
- Stay indoors and follow air quality at myRAAN.com











A low-pressure system will produce gusty northwesterly winds across San Joaquin Valley tomorrow. Winds will be strongest in the northern and western portions of the District. Blowing dust will be possible in dry soil areas. Follow PM10 using AirNow.gov

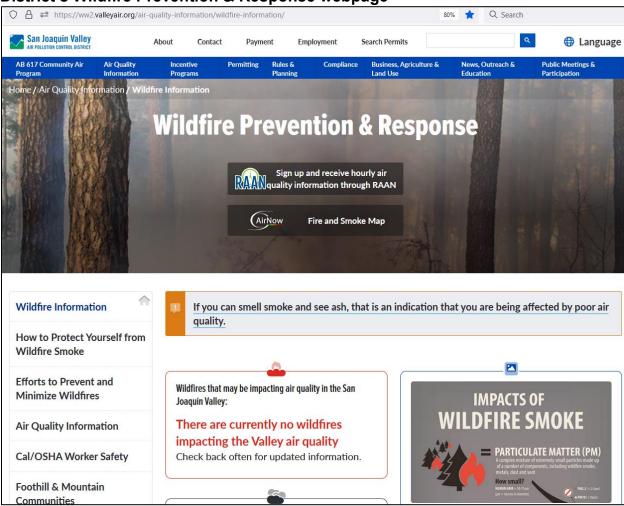
Example of Air Quality Alert Messaging



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.





Impacts of Wildfire Smoke brochure (English, Spanish, Hmong, and Punjabi languages available)



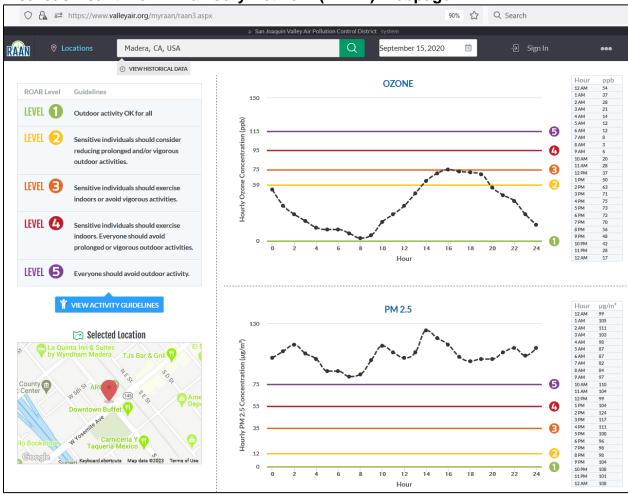


District's Real-time Outdoor Activity Risk (ROAR) Guidelines

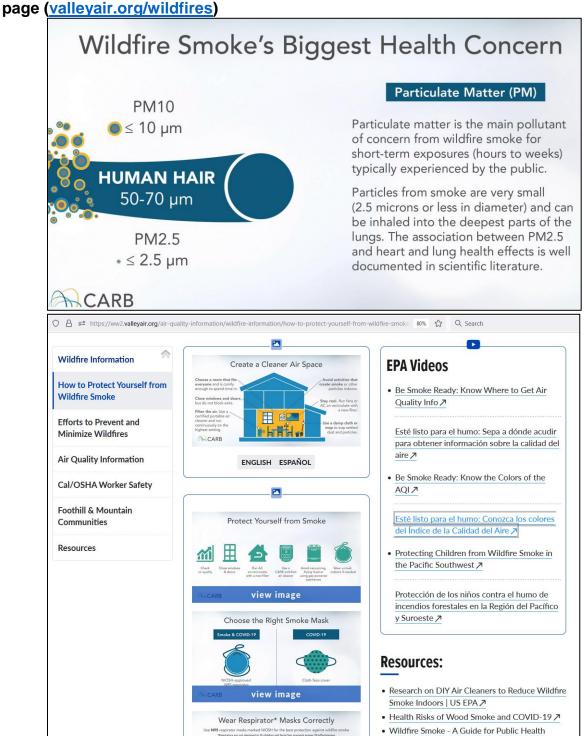


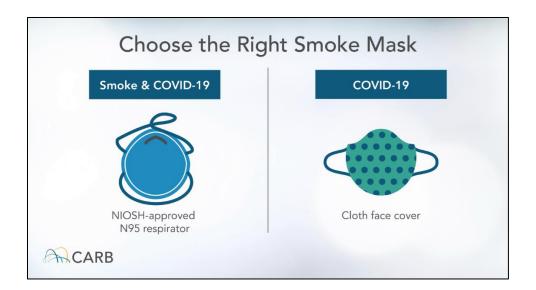
RAAN Real-time Outdoor Activity Risk (ROAR) Guidelines								
	Level 1	Level 2	Level 3	Level 4	Level 5			
Recess (15 min)	Outdoor activity OK for all.	Ensure that sensitive individuals are medically managing their condition.*	Sensitive individuals should exercise indoors or avoid vigorous outdoor activities.*	Exercise indoors or avoid vigorous outdoor activities. Sensitive individuals should remain indoors.*	No outdoor activity. All activities should be moved indoors.			
P.E. (1hr)	Outdoor activity OK for all.	Ensure that sensitive individuals are medically managing their condition	Sensitive individuals should exercise indoors or avoid vigorous outdoor activities.	Exercise indoors or limit vigorous outdoor activities to a maximum of 15 minutes. Sensitive individuals should remain indoors.	No outdoor activity. All activities should be moved indoors.			
Athletic Pracitce & Training (2-4hrs)	Outdoor activity OK for all.	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.	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	Outdoor activity OK for all.	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.	Event must be rescheduled or relocated.			
PM2.5 Rage	1-12 µg/m³	13-35 μg/m³	36-55 μg/m³	56-75 μg/m³	>75 μg/m³			
Ozone Range	1-59 ppb	60-75ppb	76-95 ppb	96-115 ppb	>115 ppb			
* San Joaquin Va * California Interscholastic Federation San Joaquin Va * California Interscholastic Federation San Joaquin Va * Www.valleyair.org/m								

District's Real-time Air Advisory Network (RAAN) Webpage

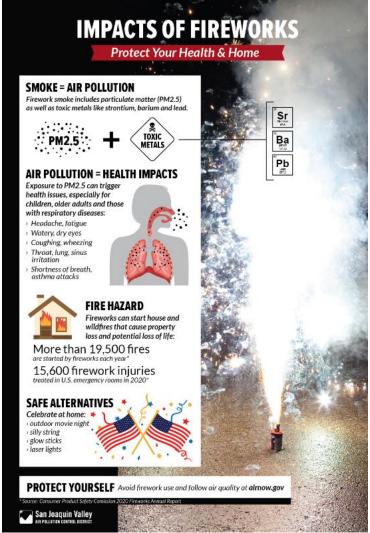


Information on Health Effects from the District's Wildfire Prevention & Response

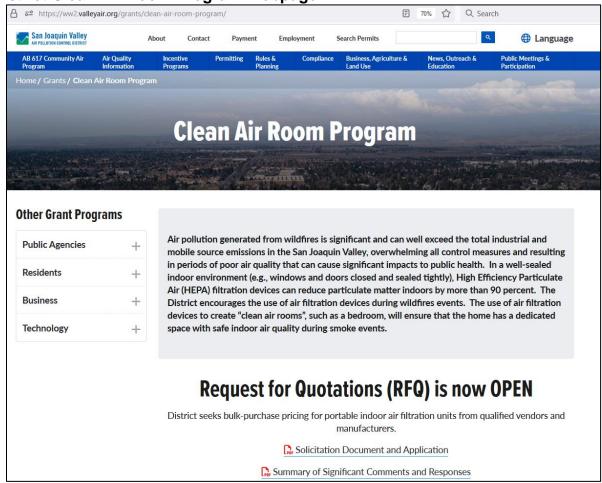




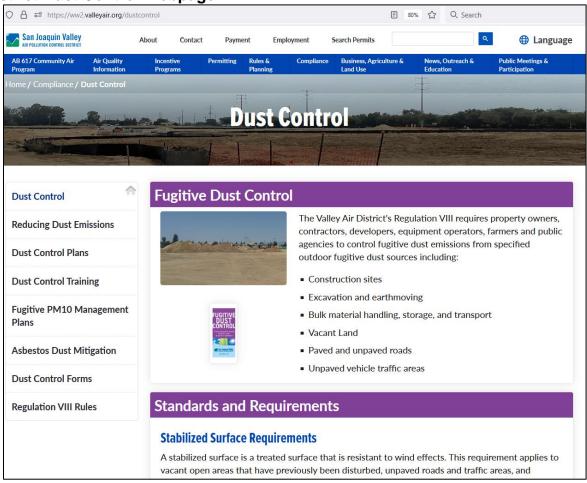
District Fireworks Infographic



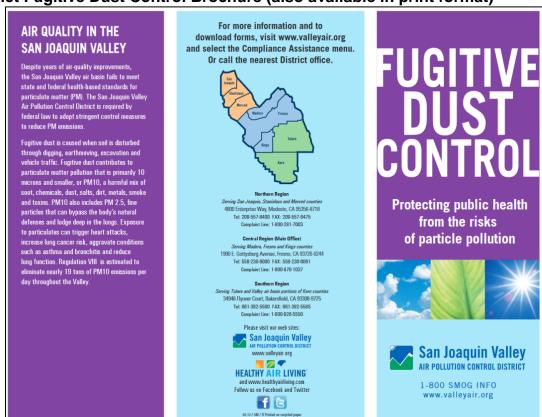
District Clean Air Room Program Webpage



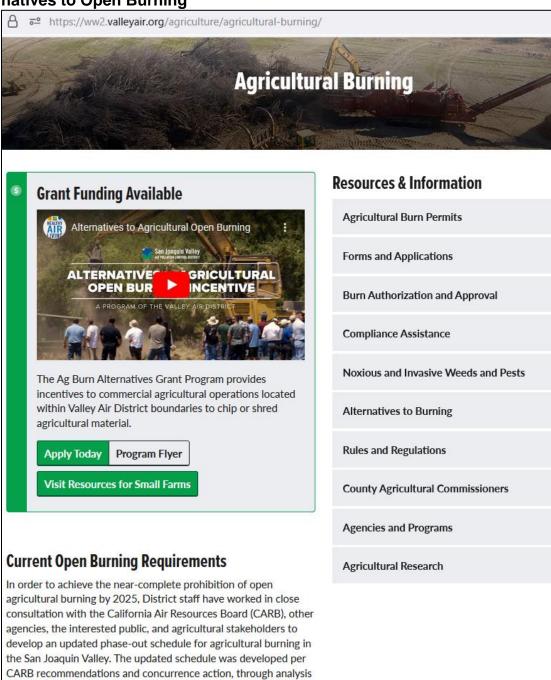
District Dust Control Webpage



District Fugitive Dust Control Brochure (also available in print format)



District Agricultural Burning Webpage Highlighting Grant Funding for Alternatives to Open Burning



of various alternatives.

of historical burn data, and research into the costs and feasibility

District Daily Air Quality Forecast Webpage ↑ https://ww2.valleyair.org/air-quality-information/daily-air-quality-forecast/ 70% San Joaquin Valley About Contact Search Permits Language Employment AB 617 Community Air Program Business, Agriculture & Land Use Home / Air Quality Information / Daily Air Quality Forecast **Daily Air Quality Forecast** Sign up and receive hourly air quality information through RAAN Forecast for 04/27/2023 Forecast for 04/28/2023 **Localized Impacts** Please note, the Daily Air Quality Forecast is issued for your entire County. Localized wildfire smoke, blowing dust, or other air quality situations may differ with the forecast as it pertains to your local area. Follow instructions from your emergency responders as necessary and take precautions as needed. More Information ■ Sign Up to receive this daily air quality forecast 0 - 50 **1** Pollutant · For real-time air quality data from the monitor closest to you visit RAAN 7. O3 - Ozone 51 - 100 Moderate · For archived air quality data for your PM - Particulate Matter 101 -Unhealthy for neighborhood visit the WAAQ System ↗. Sensitive Groups · For general air quality information click Concentration here 7. 151 - 200 Unhealthy

ppb - parts per billion

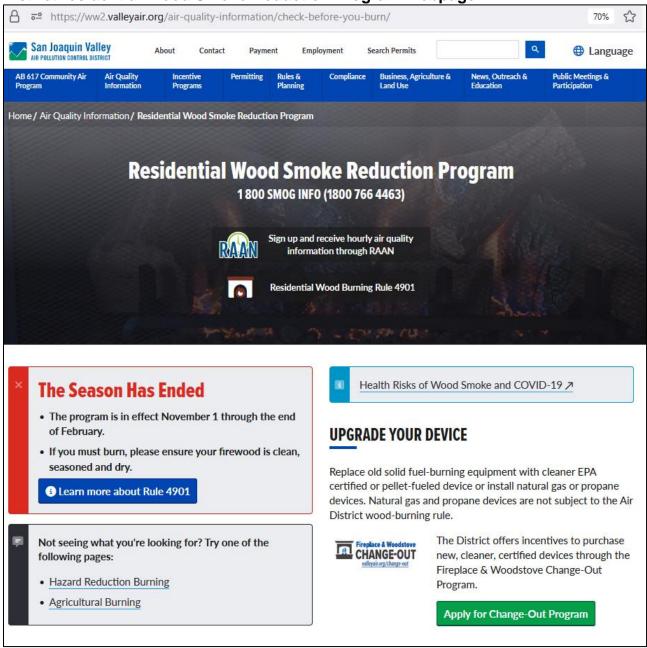
μg/m³ - microgram per cubic meter

201 - 300 Very Unhealthy

301 - 500 Hazardous

To obtain air quality data for

District residential Wood Smoke Reduction Program Webpage



Examples of Ongoing Public Outreach









AIR QUALITY INFORMATION THAT MATTERS

The official Valley Air app is designed for neighborhoods and communities in the San Joaquin Valley.

- Save up to 10 locations... home, school, mom's work, dad's bike route, dog park, etc.
- Control where and when air quality notifications are delivered to you.
- Give your locations and addresses a personalized nickname.

APPENDIX B

Notice of Public Comment Period on the SJVUAPCD Exceptional Events Mitigation Plan





SAN JOAQUIN VALLEY UNIFIED AIR POLLUTION CONTROL DISTRICT NOTICE OF PUBLIC COMMENT PERIOD ON THE DISTRICT EXCEPTIONAL EVENTS MITIGATION PLAN

NOTICE IS HEREBY GIVEN that a 30-day public comment period is being held on the San Joaquin Valley Air Pollution Control District's (District) Exceptional Events Mitigation Plan. Interested persons may submit comments to:

Madison Jordan-Perkins San Joaquin Valley Unified Air Pollution Control District 1990 East Gettysburg Avenue Fresno, CA 93726

Email: airqualityplanning@valleyair.org

The public comment period begins May 3, 2023 and will end 5:00 pm June 2, 2023.

Copies of the District's Exceptional Events Mitigation Plan can be obtained by contacting (559) 230-6000 or airqualityplanning@valleyair.org. You may also download a copy of the Exceptional Events Mitigation Plan from the District's website on or after May 3, 2023 under the Other Notices portion of the Public Notices page:

http://www.valleyair.org/notices/public notices idx.htm#Other Notices

For additional information, contact Madison Jordan-Perkins by phone at (559) 230-6000 or email at airqualityplanning@valleyair.org.





DISTRITO UNIFICADO DE CONTROL DE LA CONTAMINACIÓN DEL AIRE DEL VALLE DE SAN JOAQUÍN AVISO DE PERÍODO DE COMENTARIOS PÚBLICOS SOBRE EL PLAN DE MITIGACIÓN DE EVENTOS EXCEPCIONALES DEL DISTRITO

POR EL PRESENTE SE NOTIFICA que se llevará a cabo un período de comentarios públicos de 30 días sobre el Plan de Mitigación de Eventos Excepcionales del Distrito de Control de Contaminación del Aire del Valle de San Joaquín (Distrito). Las personas interesadas pueden enviar comentarios a:

Madison Jordan-Perkins Distrito Unificado de Control de la Contaminación del Aire del Valle de San Joaquín 1990 East Gettysburg Avenue Fresno, CA 93726

Correo electrónico: airqualityplanning@valleyair.org

El período de comentarios públicos comenzará el 3 de mayo de 2023 y se finalizará a las 5:00 pm del 2 de junio de 2023.

Se pueden obtener copias del Plan de Mitigación de Eventos Excepcionales del Distrito comunicándose al (559) 230-6000 o <u>airqualityplanning@valleyair.org</u>. También puede descargar una copia del Plan de Mitigación de Eventos Excepcionales en el sitio web del Distrito a partir del 3 de mayo de 2023 en la sección "*Other Notices*" de la página de Avisos Públicos:

http://www.valleyair.org/notices/public notices idx.htm#Other Notices

Para obtener información adicional, comuníquese con Madison Jordan-Perkins por teléfono al (559) 230-6000 o por correo electrónico a <u>airqualityplanning@valleyair.org</u>.

APPENDIX CComments and Responses

A 30-day public comment period for the District's Exceptional Events Mitigation Plan was completed on June 2, 2023. The District received no public comments on the Exceptional Events Mitigation Plan.