Air Quality and Smoke Management

Jim McHargue, Air Pollution Control Officer







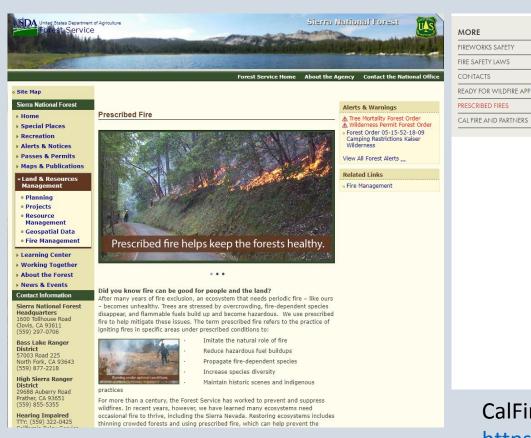
Our Mission:

To improve the quality of life for our residents and we are responsible for watching over the air resources for Amador County.

Furthermore, we assist businesses to comply with regulations, achieve and maintain ambient air quality standards set by US EPA and California Air Resources Board, and protect public health and the environment from adverse air quality impacts.



Prescribed Fire



WHAT ARE PRESCRIBED FIRES AND HOW ARE THEY HELPFUL?

Year-round wildfires are normal in California. New fires start every day across the state, and some of these fires can grow into destructive fires, spreading quickly over landscape, often threatening communities and destroying property. CAL FIRE uses numerous methods to help reduce the likelihood of severe damage caused by large, devastating wildfires on our lands and in our communities. One of these methods is prescribed fire.

State law defines prescribed fire as a planned application and confinement of fire on lands selected in advance to achieve any of the following objectives:

- 1. Prevention of high-intensity wild land fires through reduction of the volume and continuity of wild land
- 2. Watershed management
- 3. Range improvement
- 4. Vegetation management
- 5. Forest improvement
- 6. Wildlife habitat improvement
- 7. Air quality maintenance

While wildfires are destructive, prescribed fires are carefully planned and executed by CAL FIRE during appropriate fuel conditions and weather conditions to help to one or more of the objectives listed above.

Fires have been a natural part of the California landscape for a very long time, it is an agent of change necessary to keep our forests healthy and resilient. Native Americans in California used fire as a tool to drive game for hunting, to encourage the growth of plants used for food or tools, and rarely thought of fire as something that needed to be excluded.

Prescribed fires help protect our communities for future generations to enjoy the beauty that surrounds us.

CalFire -

https://www.readyforwildfire.org/ more/prescribed-fires/



USDA Forest Service –

https://www.fs.usda.gov/detail/sierra/land management/?cid=stelprdb5442511

OUTDOOR BURNING IN AMADOR COUNTY

What you need to know...

HOW ARE BURN DAYS DETERMINED?

The California Air Resources Board (CARB) determines burn days not the Amador Air District. CARB uses meteorological data to determine burn day status.

- 1. Call **BURN LINE** (209) 223-6246 before igniting.
- 2. For piles larger than 4'x4', you must have a large pile burn **PERMIT** from the Amador Air District.
- 3. No **PROHIBITED** materials may be burned (e.g., trash, waste materials, etc...).
- 4. **DRY** fresh cut vegetation a minimum of 3 days.
- 5. **BURN HOT**, oxygenated fires to reduce smoke.
 - ⇒ Cover piles from rain.
 - ⇒ Smoke must not create a nuisance.
 - ⇒ Don't leave fire unattended.
 - ⇒ No smoldering fires.

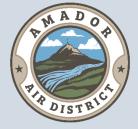
⇒ BE A GOOD NEIGHBOR €

Amador Air District

Burn Line 209/223-6246-Office 209/257-0112



1 year fe Cash or Cl 2 year fe	La	or Air District Large Pile RN PERMIT Permit expires:						
Permit # 810 Court Street, Jackson, CA 95642 Office Phone 209-257-0112								
		Burn Day Inform	nation	209-2	23-6	246		
This permi	it is being issue	d to:						
Name:				Telep	hone:			
Mailing Address:				City:		State: Zip:		
Email Address:								
Location where the burning will take place:								
Street Addre	ess:				City			Zip:
Or Assessor's Parcel Number (if known):								
Distance to 1	nearest occupied by	ulding:						
Non-Residential Property Clearing and Vegetation Maintenance Agricultural Property Maintenance or Clearing – Primary crop Public Agency Ditch and Road Maintenance – Area Forest Maintenance – requires submission of Smoke Management Plan Annual How many Piles? Average Length? Average Width? Average Height? Or Total Acres?								
Amount→					\perp		Ľ	or rotal ricies.
 ▶ Fires may only be lit on permissive burn days. Call 223-6246 before lighting! ▶ Only natural vegetation originating on the property may be burned there! ▶ Don't leave your fire unattended or allow the smoke to impact your neighbors! ▶ We recommend burning only one pile at a time! The information provided above is true and correct to the best of my knowledge and I agree to comply with all applicable sections of the Amador Air District's Rules & Regulations regarding open outdoor burning within its jurisdiction. 								
Applicant's Signature:					Date:			
Violations of air quality regulations carry substantial monetary penalties. If you have any questions - call us before lighting.								
District Use Only Amount \$ □ Cash □ Check # □ Other								
Issued b		1 0431						



AMADOR AIR DISTRICT _____

AMADOR AIR DISTRICT AUTHORIZATION TO BURN ON A NO-BURN DAY

APPLICANT IS AUTHORIZED TO LIGHT FIRES AT THE LOCATION LISTED HEREIN WITHOUT REGARD TO A DECLARATION OF "NO-BURN DAY" ISSUED BY THE CALIFORNIA AIR RESOURCES BOARD OR THE AIR POLLUTION DISTRICT.

Please complete and fax to 209/257-0116. THIS AUTHORIZATION IS VALID ON________(Date is of proposed fire) Applicant_____Phone____ Mailing Address_____ City/State/Zip_____ Location of fire Description of material Acres or # of piles and size State reasons why denial of this request would cause an imminent and substantial economic loss: Estimated dollar value of economic loss________(An amount must be entered) I believe the information listed above is correct and truthful. This authorization is issued pursuant to District Regulation III and is not a substitute for permits required by other agencies. Approved by_____





Amador Air District

810 Court Street, Jackson, CA 95642

Residential Burning Information

Call 223-6246 for burn day status before lighting fires!

Only natural vegetation originating on the premises of a one or two family residence may be burned in any outdoor fire. Fires in burn barrels or incinerators are prohibited.

What is Residential Burning?

Residential burning is the burning of natural vegetation at a residence in small outdoor fires that are not larger than 4' in diameter. You do not need a burn permit from the Amador Air District for this type of fire. We recommend burning one pile at a time to reduce smoke impacts in your neighborhood.

Where is Residential Burning Allowed?

Residential burning is only allowed on the premises of a one or two family dwelling. Residential burning is not allowed at multiple family dwellings such as apartment buildings, condominiums, or mobile home parks.

When is Residential Burning Allowed?

Residential burning is only allowed on permissive burn days. Call 223-6246 before lighting your fire to hear current information.

Smoke from Residential Fires can be a Nuisance!

Residential fires with high moisture content don't burn well and create a lot of unnecessary smoke. Be considerate of your neighbors. Some may have respiratory problems. If wind blows your smoke toward neighbors consider extinguishing the fire. Dry vegetation, free of soil and stacked loosely burns more quickly and produces less smoke. Fires should be attended at all times.

Who issues Residential Burn Permits?

Some incorporated cities issue residential burn permits. Contact your local city hall for information. In the unincorporated areas of the District residential burn permits are required from May 1st through November by the California Department of Forestry. Permits are issued at their fire stations. Large Pile burn permits are issued by the Amador Air District.

Penalties may be assessed for violating Air District

Some examples of violations are burning prohibited materials, burning on a District declared no burn day and causing a nuisance with excessive smoke. Monetary penalties are higher than the cost for proper disposal.

Are there any Alternatives to Residential Burning?

Yes, chipping, mulching and composting are some of the alternatives to burning natural vegetation. Wood chips can be used to reduce soil erosion and mulched leaves and composted vegetation can be used to enrich your soil.

If your fire will not be located on the premises of a one or two family dwelling, you need to obtain a burn permit from the Amador Air District. Call 257-0112 for more information.



Amador Air District

810 Court Street, Jackson, CA 95642

Large Pile Burning Information

Call 223-6246 for burn day status before lighting fires!

<u>Only natural vegetation</u> originating on the property where the fire is located <u>may be burned</u>.

Burn permits are required by the Amador Air District for all large outdoor fires.

Large piles are defined as piles larger than 4 feet by 4 feet in diameter. Natural vegetation may be burned in large piles on the property where it originates if it is directly related to one of the following activities:

Agricultural Operations – The growing and harvesting of crops or the raising of animals for the primary purpose of providing a livelihood.

Range Improvement – Removing natural vegetation for improvement of wildlife, game or livestock habitat or the initial establishment of an agricultural operation on previously uncultivated land.

Land Development – Clearing of natural vegetation from industrial, commercial or residential property.

Fire Hazard Reduction – Any public fire protection agency may use or permit the use of fire to abate a fire hazard created by an accumulation of natural vegetation.

Forest Management – Prescribed burning involving a public or private agency to remove forest debris from timber harvesting activities.

Ditch and Road Maintenance – Right-of-way clearing by a public entity, utility or for levee, ditch, or reservoir maintenance.

Wildland Vegetation Management –

Prescribed burning involving a public agency to burn land predominately covered with chaparral, trees, grass or standing brush.

When may large piles of vegetation be burned?

Large burn piles may be lit only on permissive burn days. Call 223-6246 the Burn Day Information Line for current information before lighting your fire. Burning is prohibited on all No-Burn Days. If your fire is still burning on a no-burn day do not disturb the material unless directed by a responsible official to extinguish the fire.

When and where are permits issued to burn large piles?

Permits to burn large piles of vegetation are issued by the Amador Air District and there is a \$30.00 annual fee. Permits are valid for one year from the date they are issued. Air District permits are required year-round. Additional burn permits may be required by fire agencies during wildfire seasons. Contact your local fire official for information.

Large Pile Burn Permit applications are available at the Air District office at 810 Court Street, Jackson or on-line at the County Web site.

WWW.amadorgov.org search Burn Permit.

Always call the Burn Day Information line 223-6246 before lighting your pile.

If you have any questions about large pile burning, call the Air District at 257-0112 <u>before</u> burning.

STATE OF CALIFORNIA-NATURAL RESOURCES AGENCY

Gavin Newsom, Governor



DEPARTMENT OF FORESTRY AND FIRE PROTECTION Amador/El Dorado Unit Camino Headquafets 2840 Mt. Danaher Rd. Camino CA, 95709 (330) 644-2345



BURN PERMIT GUIDE YOU AND YOUR BURNING PERMIT

There are four types of permits that allow open burning in Amador County. Three of these burn permits are issued by CAL FIRE and local Fire Agencies (LE-62A, LE-63, & LE-5).

An LE-5 and an Amador Air District permit are required for piles larger than 4x4 feet.

The California Campfire Permit or LE-63 is issued to individuals camping outside an improved campground. They are valid from the date of issuance to the 31st of December of that same year. This permit is issued by both the federal and California State wildland fire agencies. Permittees are responsible for knowing the specific restrictions for using campfires on National Forest or BLM lands. A person camping on private property, not designated as an improved campground, must have the written permission of the property owner allowing use of a campfire on the owner's property. This written permission must be in the possession of the permittee in order to make the California Campfire Permit valid. Permittee's must clear all flammable material to bare mineral soil for 5 feet around the campfire and have a shovel available at the campfire site. A responsible person must be in attendance at all times and the campfire must be completely extinguished if no one is in attendance.

Campfire Permits (LE-63) are also available online at: http://www.preventwildfireca.org/Campfire-Permit/

Residential Burn Permit/Burn Pile or LE-62A is issued to residents who have a house on their property. It is not issued for burning on vacant land. An LE-62A is valid for a period of three years from the date of issuance. By law a LE-62A is required from May 1st until the CAL FIRE Director declares the end of fire season in the fall. Residents may only burn vegetation (leaves, tree branches, limbs, piled brush, etc.) that originates from their property. The piles will be no larger than 4x4 feet. A 10-foot diameter clearance to bare mineral soil of all flammable material must be provided around the burn pile prior to lighting. An adult must be in attendance during permit use. The adult must have a shovel and water available for containing and extinguishing the burn pile. The burn pile must be extinguished before it can be left unattended. The person who signed the burn permit is responsible for its safe use. Residential Burn Permits generally occurs when fire conditions are elevated to a level that residential burning is no longer safe. The burn suspension will be lifted in the fall when there is enough rainfall to allow safe permitted burning again.

Residential Burn Permits (LE-82A) are now available online at (online residential burn permits expire December 31st of the year of issuance): https://burnemit.fre.oa.gov/

For burn piles larger than 4x4 feet, both permits below are required

Interagency Burning Permit or LE-5 must be acquired at a CAL FIRE station and is issued to land owners who burn larger than 4x4 foot dimensioned burn piles or burn on vacant land. A LE-5 is required from May 1st until fire season is terminated by the CAL FIRE Director. An inspection of the property by a CAL FIRE Officer may be required prior to permit issuance. Fire officers can list any conditions on the permit they determine are necessary for public safety. These conditions may include when the pile(s) can be burned, pre-burn notifications to CAL FIRE, or weather-based participations.

The LE-5 is also issued for welding operations, grinding operations, etc. LE-5's requested by timber companies are issued by the CAL FIRE area forester.

*A permit from the Amador County Air District is also required to burn oversized piles.

<u>Air Quality Management District Permit</u> is required for any burning of piles larger than 4x4 feet. This permit is issued for residential, agricultural, land clearing and forestry management burning. The permit is only valid on permissive BURN DAYS. Only vegetation (leaves, tree branches, limbs, piled brush, etc.) that originates from the property may be burned. The smoke must be managed so that it does not negatively impact neighboring residents. "An LE-5 permit from the CAL FIRE is also required to burn oversized piles.

A permit can be obtained at the AAD office (810 Court Street, Jackson CA, 95642), via FAX or via the webpage. CONSERVATION IS WISE-KEEP CALIFORNIA GREEN AND GOLDEN PLEASE REMEMBER TO CONSERVE ENERGY, FOR TIPS AND INFORMATION, VISIT "FLEX YOUR POWER" AT WWW.CA, GOV.

"The Department of Forestry and Fire Protection serves and safeguards the people and protects the property and resources of California."

CAL FIRE

Amador/El Dorado Unit Headquarters

2840 Mt Danaher Rd, Camino, 95709 (530) 644-2345

CAL FIRE Stations:

Amador County

Sutter Hill (CAL FIRE)	(209) 267-5215
River Pines (CAL FIRE)	(209) 245-6412
Dew Drop (CAL FIRE)29300 Dew Drop Bypass, Pioneer, CA 95666 (Intermittent Staffing during the Winter)	(209) 295-7735
Pine Grove (CAL FIRE)	(530) 333-2306

Amador County Air District

810 Court Street, Jackson CA, 95642(209) 257-0112

https://www.amadorgov.org/services/amador-air-district/burning-and-burn-permits/how-to-get-a-large-pile-burn-permit AQMD@edcgov.us

Burn Day Information Line:

(209) 223-6246

Smoke Reduction Bin Program: Pine Needle Collection Project

Dear Friend(s):

Thank you for your interest in hosting a Pine Needle Collection Project. The Amador Air District strives to minimize smoke from outdoor burning in Amador County.

The following information outlines your responsibilities as the host to make certain our Pine Needle Collection Project operates smoothly and successfully.

- Dumpster Size: The District will perform a site visit in order to meet with the host and determine what size bin will be suitable for the project.
- Dumpster Placement: The bin is for the use of the community and may be utilized by any of your neighbors. The bin needs to be oriented in a way that it is not a safety hazard to the public, allows for easy access of the users, and can be removed and/or replaced as needed. The area for the bin needs to be relatively flat. Cul-de-sac or open areas on a centrally-located piece of property work well.
- Monitoring: The bin is for green waste only, primarily pine needles and small yard prunings. Large limbs and stumps are discouraged. These projects are for homeowners, NO COMMERCIALLY-GENERATED GREENWASTE ACCEPTED (i.e., no professional landscaping waste allowed). It is necessary for the host to monitor the material being deposited into the bin. Unwanted materials, such as plastic bags, garbage, appliances, construction debris are not allowed. A "Community Pine Needle Collection Project" sign will be placed near the dumpster by the District. The sign will include the words, "No Garbage." If you find that garbage is being placed into the dumpsters please call the Air District immediately.
- Dumpster Replacement: When the dumpster is full and needs replacing, the host should call the Air District office at 257-0112. The District will notify the garbage company, ACES, that the dumpster is ready for pick-up. ACES will bring an empty replacement dumpster if needed. Finally, the host will help the District determine when to end the program.

The Air District appreciates your involvement as a host for a Pine Needle Collection Project and we look forward working with you. With your help, we believe that we can make a positive impact on minimizing smoke in your neighborhood and Amador County.

Sincerely, AMADOR AIR DISTRICT



The Smoke Reduction Bin Program was started by the Amador Air District (AAD) in an effort to reduce outdoor burning and minimize smoke in Amador County. This is a no cost program for all Amador County residents; however, it is limited to available budget and may be discontinued at any time.

The following information outlines responsibilities that residents should keep in mind in order to make certain our Pine Needle Collection Project operates smoothly and successfully.

- NO COMMERCIALLY-GENERATED/BUSINESS GREENWASTE ACCEPTED (i.e., no professional landscaping waste allowed).
- The bin is for <u>GREEN WASTE ONLY</u>, primarily pine needles, leaves, yard prunings, and/or tree branches trimmed to size such that they will make a neat flat pile when placed inside dumpster.
- Large limbs greater than 6-inches in diameter, logs, rounds, and stumps are <u>NOT</u> allowed.
- Unwanted materials, such as plastic bags, garbage, appliances, and construction debris
 are NOT allowed.
- No hazardous waste or electronic waste of any kind accepted.
- If you find that garbage or unwanted materials are being placed into the dumpsters
 please call the Air District immediately (209) 257-0112.
- If dumpsters are <u>FULL</u>, residents will need to take their material back home until next dumpster is delivered or take it directly to the landfill for proper disposal.
- A "Community Pine Needle Collection Project" sign will be placed near the dumpster by the District.

The AAD appreciates all the involvement residents have in the Pine Needle Collection Project and we look forward working with you. With your help, we believe that we can make a positive impact on minimizing smoke in your neighborhood and Amador County.

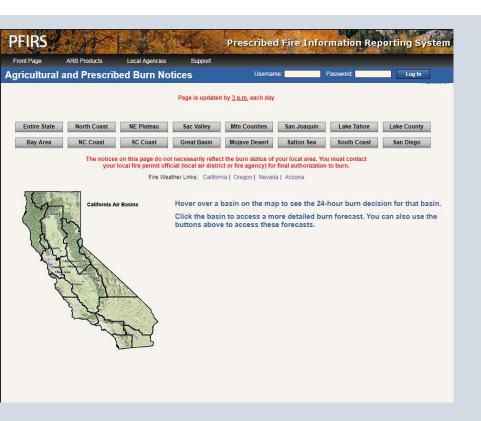
Sincerely, AMADOR AIR DISTRICT

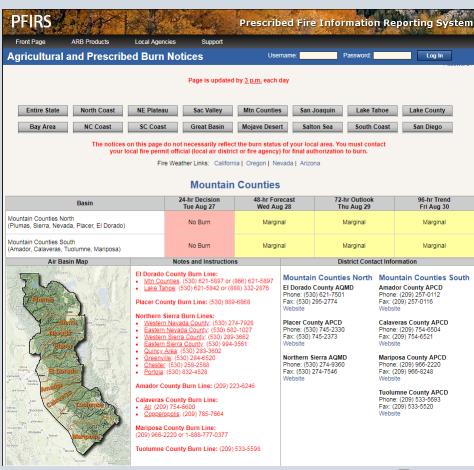
Smoke Management Plan Check Off Sheet (for permittee use only)

Air District: Date:						
Permittee Name:						
Project Name:						
Check (✔) one of the following as a result of the information listed above or other pertinent information:						
Less than 1 ton of Particulate Matter (PM10) emissions and/or less than 10 acres in size, applicant must complete and comply with an Air District Burn Permit.						
Between 1 ton and 10 tons of PM10 emissions and/or between 10 and 100 acres, complete sections 1, 2, 3, and 5 of the Smoke Management Plan.						
Over 10 tons of PM10 emissions and/or 100 acres complete sections 1-5 of the Smoke Management Plan.						
If over 250 acres, complete sections 1-6 of the Smoke Management Plan.						
Regardless of size or PM10 emissions, if smoke has the potential to impact a smoke sensitive area, complete those sections of the Smoke Management Plan identified by the Air District.						
Those Sections checked off (✔) are to be completed and submitted as the Smoke Management Plan to your local air district for review.						
Section 1– GENERAL INFORMATION AND APPROVALS						
Section 2 – PROJECT SPECIFIC INFORMATION						
Section 3 – PUBLIC NOTIFICATION AND ALTERNATIVES						
Section 4 – SMOKE DISPERSAL SURVEILLANCE AND MONITORING						
Section 5 – DAILY AUTHORIZATION REQUEST AND INFORMATION REPORTING FORM						
Section 6 – AIR DISTRICT PROJECT POST BURN FORM						



Section 5 to be completed and submitted every day of active ignition. Section 6 to be completed and submitted within 30 days after completion of project.

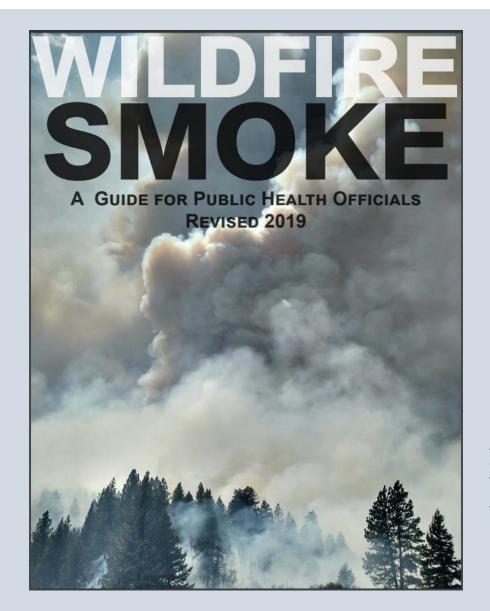




CARB Meteorology & Burn Days –

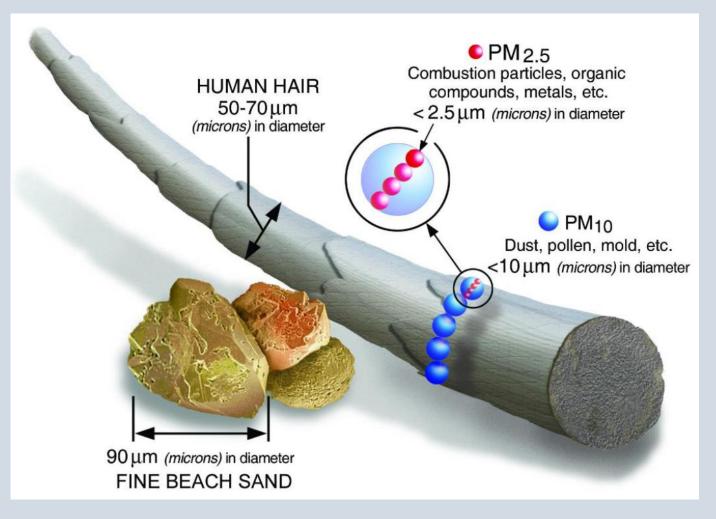
https://ssl.arb.ca.gov/pfirs/cb3/cb3.php





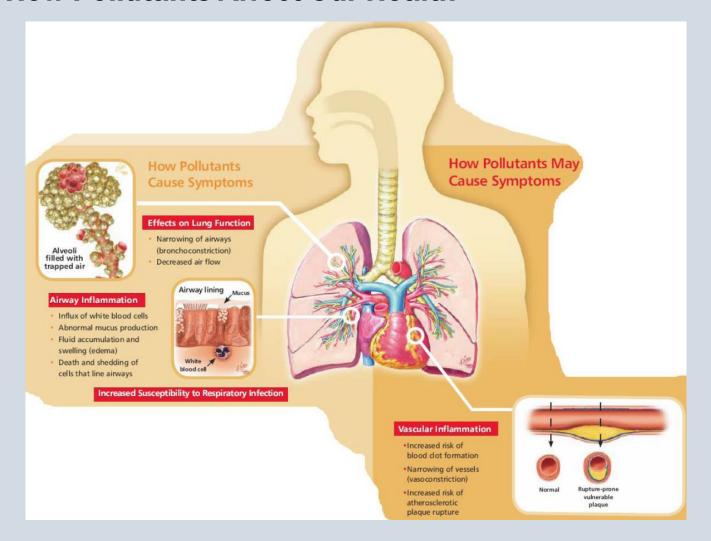
https://www3.epa.gov/airnow/wild fire-smoke/wildfire-smoke-guiderevised-2019.pdf

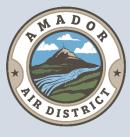
Coarse and Fine Particulate Matter





How Pollutants Affect Our Health





AMADOR AIR DISTRICT ____





School Air Quality Activity Recommendations

PROTECT STUDENT HEALTH DURING POOR AIR QUALITY

Air quality is an important consideration for schools in terms of student activities. Local air districts are available to assist schools with understanding local air quality concerns and actions they can take to protect student health. To find out more, contact your local air district. Visit this page to learn which District serves your area: www.arb.ca.gov/app/dislookup/dislookup.php



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

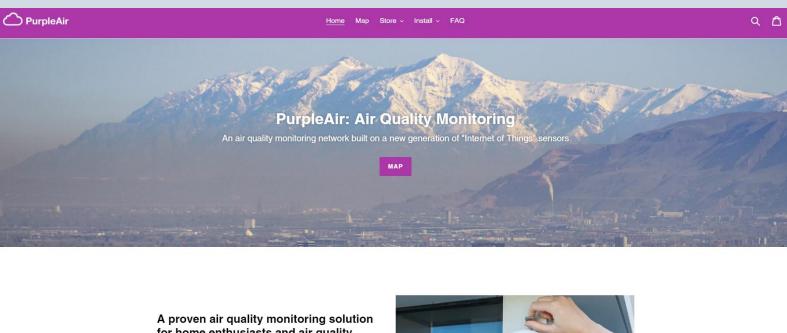
Modify these levels to correspond with the AQI, emissions concentration, or other air district recommended method for your region.

Air Quality Level LEVEL 1 **LEVEL 4** LEVEL 3 LEVEL 5 Activity School districts may consider school closures based on site-by-site concerns. Exercise indoors or avoid No outdoor activity. Ensure that sensitive Sensitive individuals should vigorous outdoor activities. Recess (15min) individuals are medically exercise indoors or avoid No restrictions All activities should Sensitive individuals should managing their condition.* vigorous outdoor activities.* be moved indoors. remain indoors * Exercise indoors or limit vigorous outdoor activities to No outdoor activity. Ensure that sensitive Sensitive individuals should a maximum of 15 minutes. P.E. (1hr) individuals are medically No restrictions exercise indoors or avoid All activities should managing their condition.* vigorous outdoor activities.* Sensitive individuals should be moved indoors. remain indoors.* Exercise indoors or reduce Reduce vigorous exercise to 30 minutes per hour of practice vigorous exercise to Athletic time with increased rest breaks 30 minutes of practice time No outdoor activity. Ensure that sensitive **Practice** and substitutions. with increased rest breaks and No restrictions individuals are medically All activities should & Training substitutions. managing their condition.* Ensure that sensitive be moved indoors. (2-4hrs) individuals are medically Sensitive individuals should managing their condition.* remain indoors.* Increase rest breaks and Increase rest breaks and substitutions per CIF guidelines substitutions per CIF guidelines Scheduled Ensure that sensitive Event must be for extreme heat ** for extreme heat.** Sporting No restrictions individuals are medically rescheduled Ensure that sensitive Ensure that sensitive individuals or relocated. managing their condition.* **Events** individuals are medically are medically managing their managing their condition.* condition.*



^{*} Sensitive Individuals include all those with asthma or other heart/lung conditions ** California Interscholastic Federation

PurpleAir

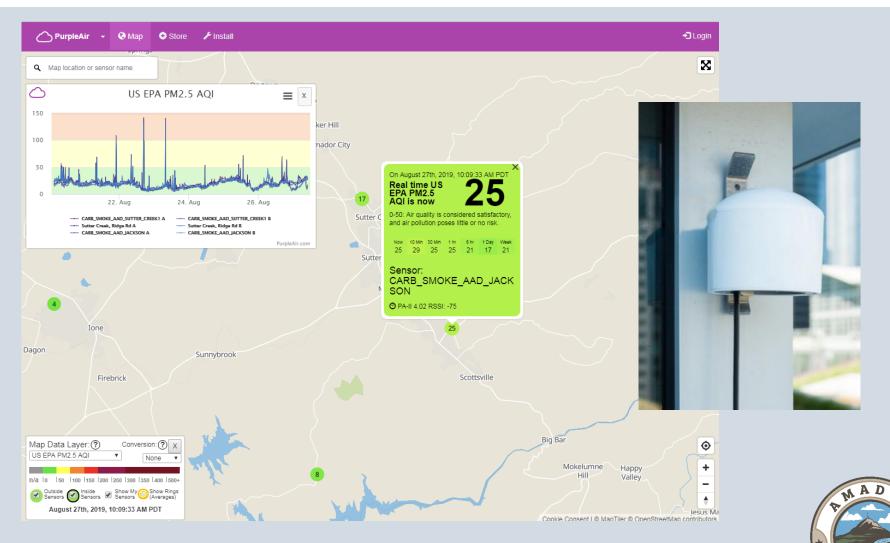


for home enthusiasts and air quality professionals alike

Using a new generation of laser particle counters to provide real time measurement of (amongst other data), PM1.0, PM2.5 and PM10. PurpleAir sensors are easy to install, requiring a power outlet and WiFi. They use WiFi to report in real time to the PurpleAir Map.

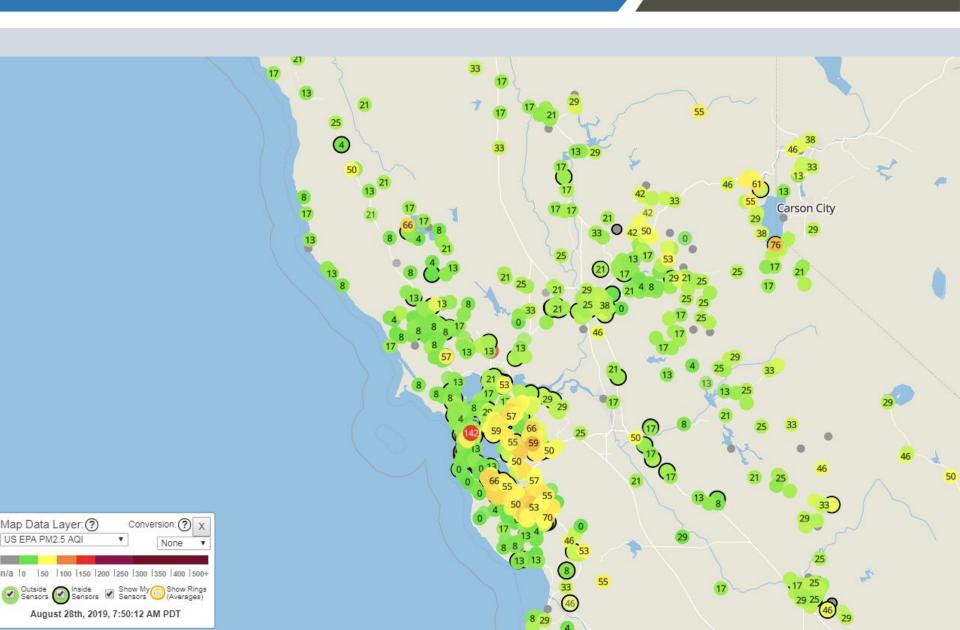






PurpleAir –

https://www2.purpleair.com/



Thank You!

