

Poor Air Quality Annex

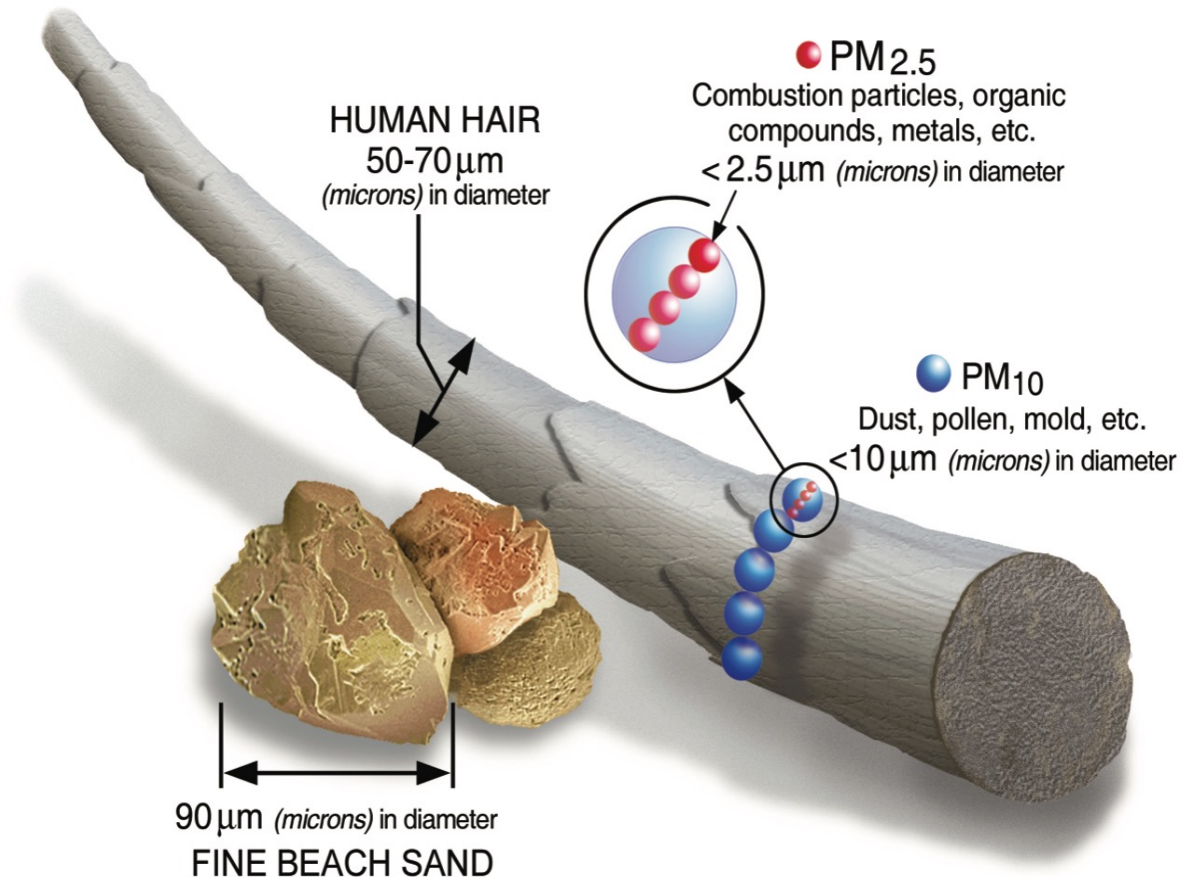


SAN MATEO COUNTY
COMMUNITY
COLLEGE DISTRICT

Air quality Index

Levels of Health Concern	Numerical Value	Meaning
Good	0 to 50	Air quality is considered satisfactory, and air pollution poses little or no risk.
Moderate	51 to 100	Air quality is acceptable; however, for some pollutants there may be a moderate health concern for a very small number of people who are unusually sensitive to air pollution.
Unhealthy for Sensitive Groups	100 to 151	Members of sensitive groups may experience health effects. The general public is not likely to be affected.
Unhealthy	151 to 200	Everyone may begin to experience health effects; members of sensitive groups may experience more serious health effects.
Very Unhealthy	201 to 300	Health warnings of emergency conditions. The entire population is more likely to be affected.
Hazardous	301 to 500	Health alert: everyone may experience more serious health effects.

Particulate Matter (PM) Basics



PM₁₀
Inhalable particles, with diameters that are generally 10 micrometers and smaller; and

PM_{2.5}
Fine inhalable particles, with diameters that are generally 2.5 micrometers and smaller.

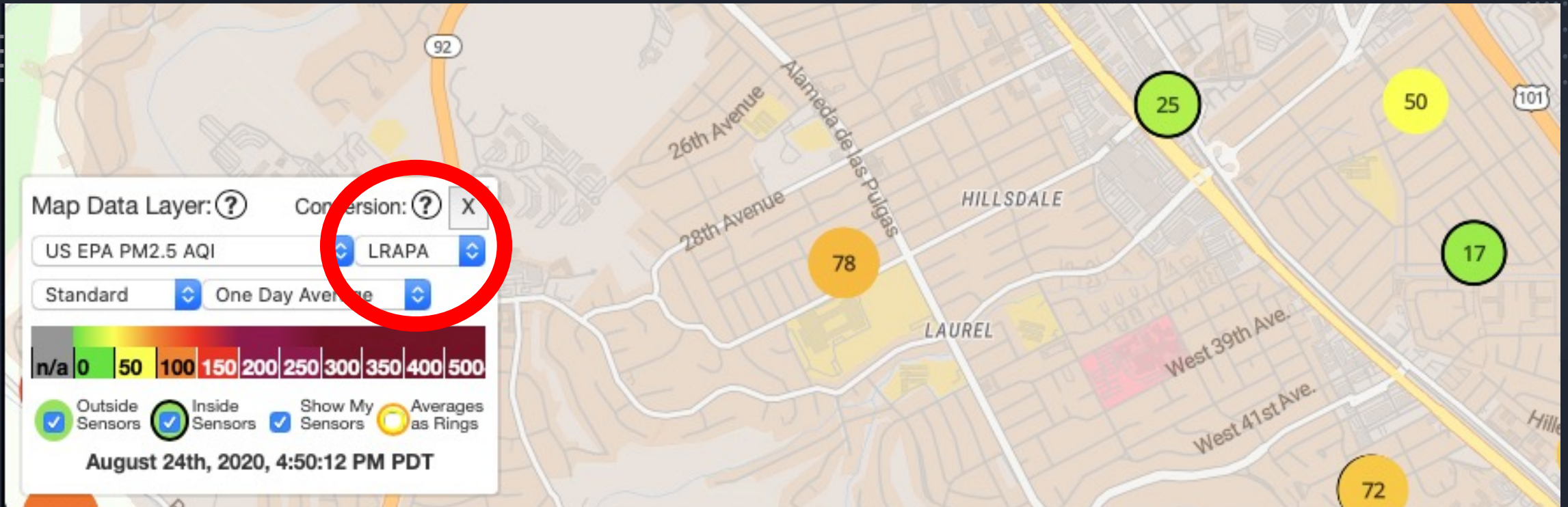


Five Major Pollutants:

- EPA establishes an AQI for five major air pollutants regulated by the Clean Air Act. Each of these pollutants has a national air quality standard set by EPA to protect public health:
- Ground-level ozone
- **Particle pollution (also known as particulate matter, including PM2.5 and PM10)**
- Carbon monoxide
- Sulfur dioxide
- Nitrogen dioxide

AirNow vs. PurpleAir

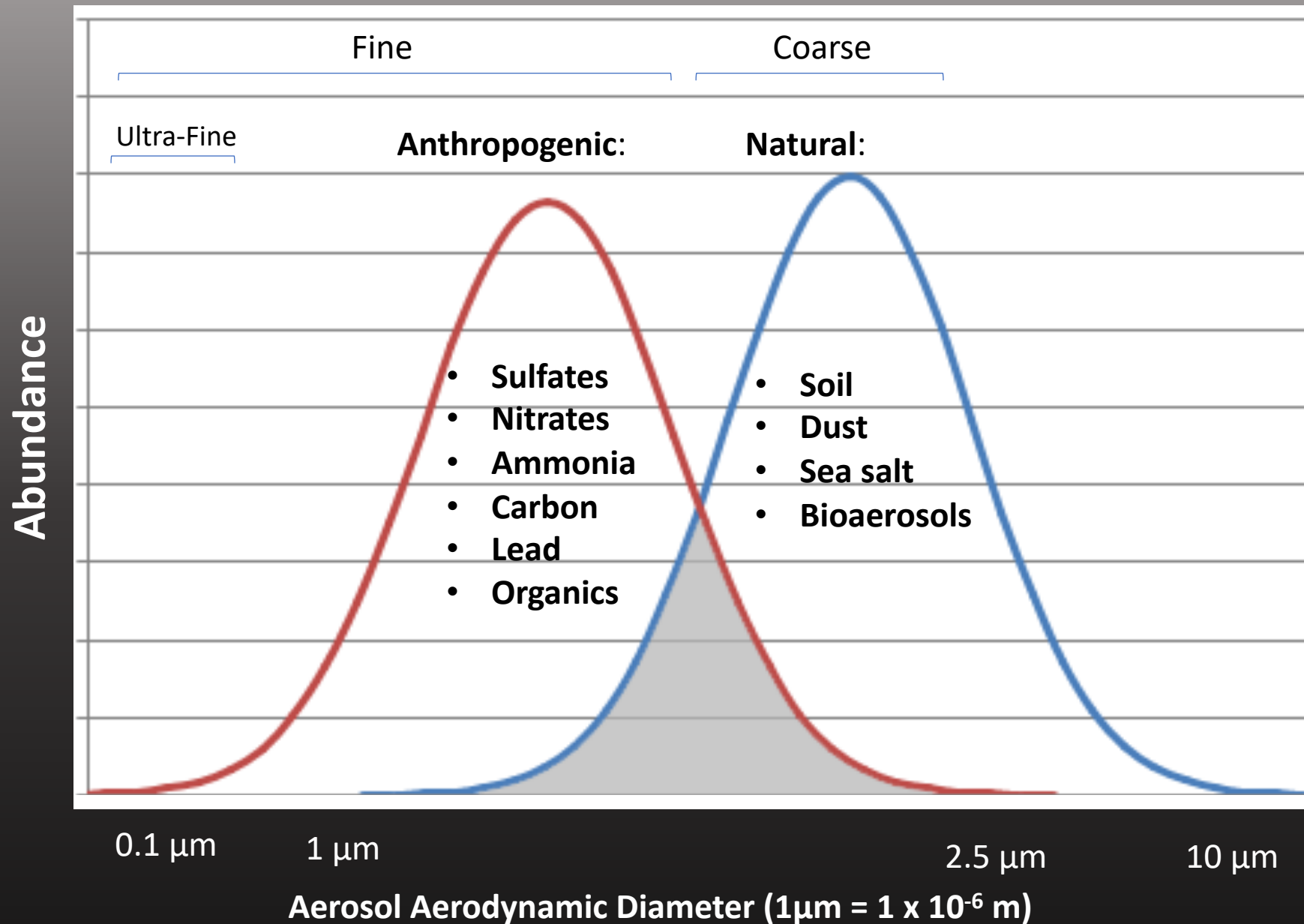




LRAPA Conversion

- Empirical studies have found that PurpleAir monitors tend to yield larger AQI values than regulatory agency quality monitors like those used by [AirNow](#)
- To correct for this, the **Lane Regional Air Protection Agency (LRAPA)** has developed a conversion formula that is built into Purple Air.
- Without using LRAPA conversion, you are comparing apples to oranges. Please note that LRAPA is specifically a **correction factor for areas where PM 2.5 particles are dominated by wood smoke**. You should not use LRAPA in other circumstances.

Sizes and Composition of Particulate Matter



Determining Harmful Exposure

- The smallest and usually the most harmful particulate matter is called PM2.5 (solid particles and liquid droplets suspended in air with an aerodynamic diameter of 2.5 micrometers or smaller).
- Emergency regulation section 5141.1, Protection from Wildfire Smoke, applies to workplaces and operations where the current Air Quality Index (AQI) for PM2.5 particulate is 151 or greater ("unhealthy") and where the employer should reasonably anticipate that employees may be exposed to wildfire smoke.

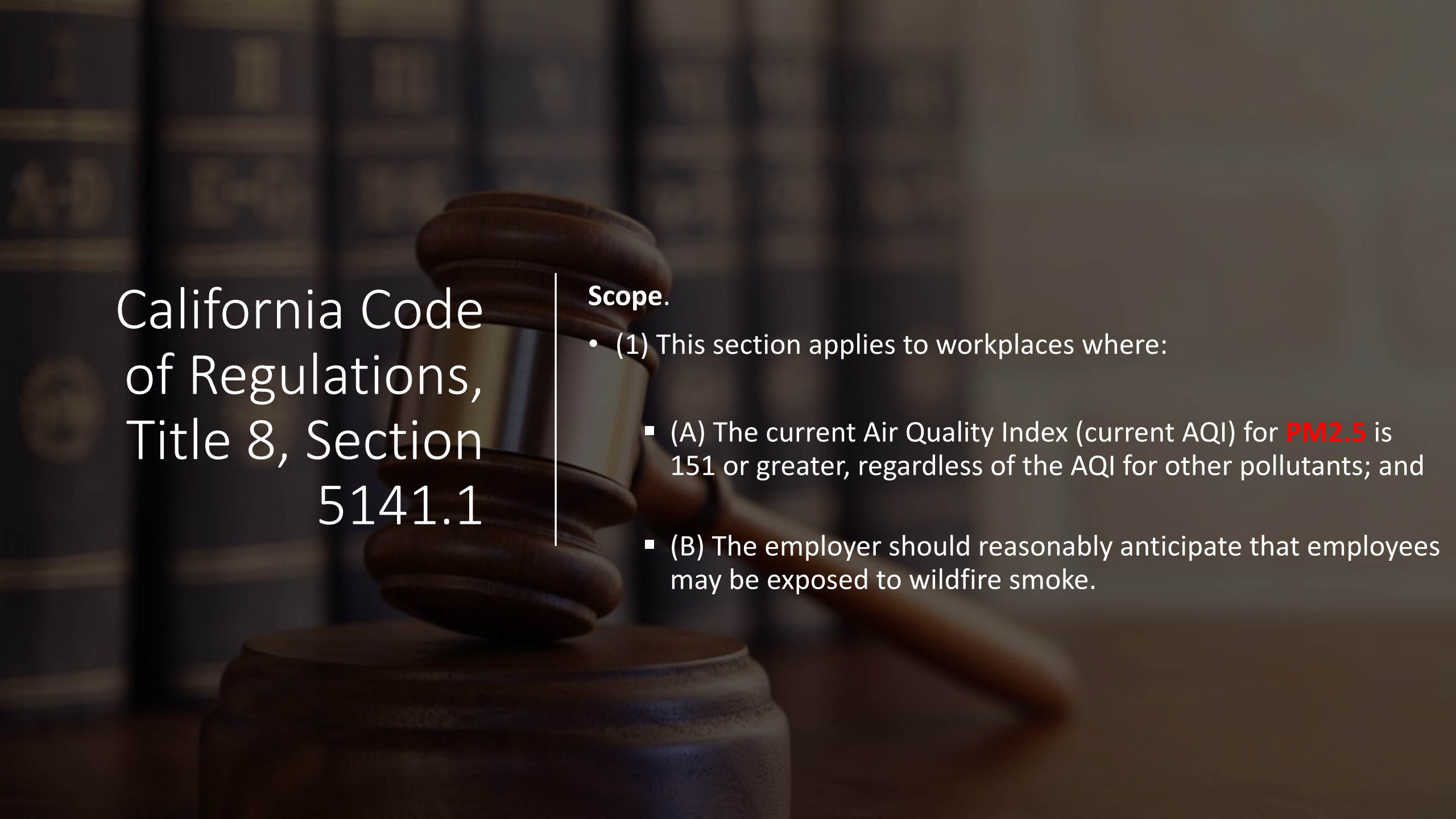
State of California Industrial Relations

Applies to workplaces and operations where the current Air Quality Index (AQI) for PM2.5 particulate is 151 or greater ("unhealthy")

Employer should reasonably anticipate that employees may be exposed to wildfire smoke

Based on stipulations from NIOSH and OSHA –
Reference section 5141.1





California Code
of Regulations,
Title 8, Section
5141.1

Scope.

- (1) This section applies to workplaces where:
 - (A) The current Air Quality Index (current AQI) for **PM2.5** is 151 or greater, regardless of the AQI for other pollutants; and
 - (B) The employer should reasonably anticipate that employees may be exposed to wildfire smoke.

5141.1 Appendix B - Protection from Wildfire Smoke Information to Be Provided to Employees

- ✓ The health effects of wildfire smoke
- ✓ An N95 filtering facepiece respirator, is the minimum level of protection for wildfire smoke.
- ✓ How employees can obtain the current Air Quality Index (AQI) for PM2.5
- ✓ The requirements in Title 8, section 5141.1 about wildfire smoke
- ✓ The importance, limitations, and benefits of using a respirator when exposed to wildfire smoke
- ✓ How to properly put on, use, and maintain the respirators provided by the employer



ACCEPTABLE RESPIRATORY PROTECTION EQUIPMENT INCLUDES (AQI 151 AND ABOVE)

- N95
- N99
- N100
- R95
- P95
- P99
- P100



All SMCCCD Employees shall be
trained to the stipulations of
5141.1 Appendix B

Before AQI Incident Occurs (Between 0 – 100)

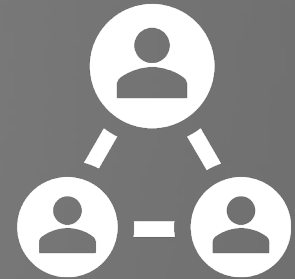


Subscribe to Air
Now California &
Air Quality
Department of
Education



District units responsible
for monitoring AQI

- Emergency Management
- Public Information Officer
- Public Safety
- Student Health
- Facilities



Contact Campus and
District leadership for
policy direction if AQI
Projection is to be
Orange

Recommendation for When Conditions are Between 100 and 150 (Green, Yellow, Orange)



Consider Closing Campus



Monitor Campus Recreation & Intramurals



Promote caution & use personal judgment for athletics



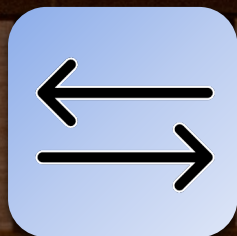
Monitor Vulnerable Populations



Limit Campus Operations at Department Discretion (Athletics/SMAC/ Recreation/& Affiliated Operations)



Monitor SMCCCD Affiliated Operations, Outdoor Classes, Children Center Outdoor Activities, Children Camps



Consider Instruction Relocation for classes in unfiltered buildings to filtered buildings

AQI Projected to be 151 to 200 (Red)



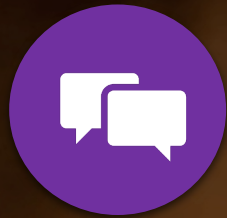
Public Safety



Policy Group



Emergency Management



Public Information Officer



Student Services



ITS



Instruction



Business Services



Human Resources



Health Services



Facilities



Athletics

Operational Periods

AQI Projected to be 201-500 (Purple or Maroon)

- Advise Policy Group
- Send an AlertMe notification to students, faculty, and staff (SMS & email)
- Place a banner on <https://emergency.sccd.info/> & on College Home Webpage

