

Response to Air Quality (AQI) Levels

Sept. 9, 2021

Goal

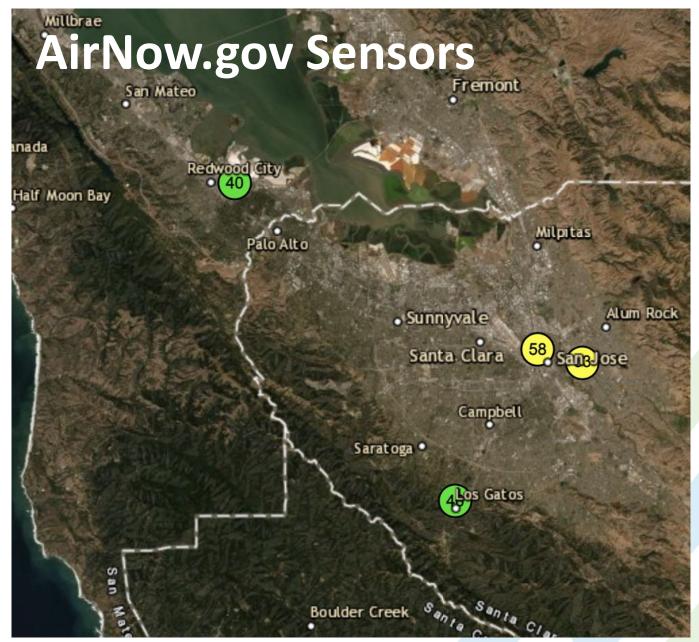
- Create a clear guidelines to deal with increased risks that are associated with fire season
 - Utilize professionally monitored systems and guidance that are recommended by CDE, CSBA, ACSA, SCCDPH, SCCOE to guide decision making
 - Anticipate and plan for scenarios that are specific to MVWSD



Monitoring Air Quality

Monitoring systems

- MVWSD uses AirNow.gov to determine the appropriate course of action
 - AirNow.gov is professionally monitored / calibrated system
 - Secondary system- Bay Area Air Quality
 Management District (est 1955)
 - Also has predictive capabilities
 - Breezo, Purple Air requires additional modifications to create an accurate reading that is reflective of US EPA standards







COVID-19 & AQI

Ventilation

- MVWSD classrooms and offices
 - All campuses have MERV 13 filters
 - Plan to add portable HEPA filters to each space
 - All campuses have maximized external air intake
- COVID-19 presents a larger concern in dealing with poor air quality and indoor activities

Ventilation

- Merv13 filters capture approximately 90% of smoke particulates.
- Smoke particles are larger than viruses they get caught in the filter at a higher rate.
- Merv13 filters are typically replaced every 90-days.
 - In smoke-related events, filters may have to be changed at a greater frequency depending on location, duration of event, etc.
- While Merv13 filters trap particulates, they are not deodorizers.
 Smoke smell may still make its way into the room but the Merv13 traps approximately 90% of particulates as the smoke passes through the filter.



Developing an Approach for Low AQI

Benefit of monitoring AQI

- School activities/closures/ will be made based on AirNow measurements and local conditions, such as the availability/quality of air filtration and direct observation of indoor/outdoor air quality.
- MVWSD will announce any closures or moves
- Children with respiratory or heart conditions are vulnerable to poor air quality and may require extra precautions. School districts should advise parents to consult with their family health care provider.



Poor AQI

Considerations - unknown territory

- All CDC, EPA guidance for air filtration was developed prior to COVID-19 pandemic
- MVWSD plan to add Bi-polar ionization was placed on hold
 - CDE and EPA concern about bi-products
 - More testing is required to understand the impact of ozone generators
 - Suggested to use these technologies while rooms are not occupied

Considerations - remaining open

- Catch 22 with AQI closures and remaining open
 - Need to factor our ability to reduce the spread of COVID-19
 - Determining whether the quality of our filtration system outperforms home systems
 - Poor AQI will require increased indoor activities
 - Current version of chart proposes closure at Hazardous/AQI of 301 or above

Considerations - monitoring

- Using AirNow.gov to monitor air quality
 - PurpleAir, Breezo have more monitors
 - When compared to AirNow several adjustments need to be made to produce readings comparable to US EPA
- AirNow.gov has predictive capabilities
- Sites and staff will not actively monitor AQI throughout the day.
 - Once we are in school we are in school
 - If conditions worsen significantly then we will

Mountain View make chonisite adjustments

MVWSD Guidelines for Outdoor Activity Based On Air Quality Level

Based on AQI as measured by AirNow.gov updated 9/3/2021

AQI Value (Air Quality Index)	Level 1: 0-50 Good	Level 2: 51-100 Moderate	Level 3: 101-150 Unhealthy for Sensitive Individuals	Level 4: 151-200 Unhealthy	Level 5: 201-300 Very Unhealthy	Level 6: 301-500 Hazardous
Windows/Doors	OK to Open	OK to Open	Keep Closed	Keep Closed	Keep Closed	Keep Closed
Lunch/Snack	No Restrictions	No Restrictions	No Restrictions Ensure sensitive individuals are medically managing their condition.*	30 minutes max with no physical activity	No Outdoor Activity	No Outdoor Activity
Recess/Play (15 Minutes)	No Restrictions	Ensure sensitive individuals are medically managing their condition. *	Sensitive individuals should exercise or play indoors. Encouraged to move indoors if AQI exceeds 100, if possible.	Indoors Only	No Outdoor Activity	No Outdoor Activity
P.E. (1 hour)	No Restrictions	Ensure sensitive individuals are medically managing their condition. *	Sensitive individuals should exercise or play indoors. Encouraged to move indoors if AQI exceeds 100, if possible.	Indoors Only	No Outdoor Activity	No Outdoor Activity
Athletic Practices & Training and Athletic Competitions (2-4 Hours)	No Restrictions	Ensure sensitive individuals are medically managing their condition. *	Athletic Practice Limit to 30 minutes per hour of practice time with increased rest breaks and substitutions Encouraged to move indoors if AQI exceeds 100, if possible. Athletic Competitions Increase rest breaks and substitutions per CIF guidelines for extreme heat.** Ensure sensitive individuals are medically managing their condition.*	Athletic Practice Indoors Outdoor Athletic Competitions Cancelled or relocated	Athletic Practice Indoors (monitor indoor air quality to ensure it does not exceed 150) Outdoor Athletic Competitions Cancelled or relocated	Athletic Practice Cancelled All Athletic Competitions Cancelled
School Status	Open	Open	Open	Open	Open	Possible school closure in consultation with SCC Superintendent and MVWSD Board of Trustees

^{*}Sensitive individuals include all those with asthma, respiratory or other heart/lung conditions

^{**} California Interscholastic Federation



Guidance Needed

Needed guidance

- Typically poor AQI is not an excused absence. Should we explore the possibility of excusing absences?
 - We anticipate parents will actively monitor AQI and make determinations about attendance
- Do the actions in the chart align with the Board's direction?
- Does the Board have additional considerations for actions?