



PARTICULATE MATTER FACT SHEET FOR SUMMERVILLE MILL FIRE 2012

AQI Category (AQI Values)	PM _{2.5} or PM ₁₀ Levels (µg/m ³ , 1-to 3-hr avg.)	PM _{2.5} or PM ₁₀ Levels (µg/m ³ , 8- hr avg.)	PM _{2.5} or PM ₁₀ Levels (µg/m ³ , 24-hr avg.)	Visibility – Arid Conditions (miles)	Recommended Actions
Good (0 to 50)	0 – 38	0 - 22	0 - 15	≥ 10	Implement communication plan if smoke event forecast
Moderate (51 to 100)	39 - 88	23 - 50	16 – 35	6 – 9	-Issue press releases to advise public about health effects and symptoms and ways to reduce exposure -Distribute information about exposure avoidance
Unhealthy for Sensitive Groups (101 to 150)	89 – 138	51 – 79	36 – 65	3 – 5	-If smoke event projected to be prolonged, evaluate and notify possible sites for cleaner air shelters -If smoke event projected to be prolonged, prepare evacuation plans -Individuals who have asthma or another lung disease or heart disease should consider wearing a particulate respirator when outside.
Unhealthy (151 to 200)	139 - 351	80 – 200	66 – 150	1.5 – 2.5	-Consider “Smoke Day” for schools (i.e., no school that day), possibly based on school environment and travel considerations -Consider canceling public events, based on public health and travel considerations. -All individuals should consider wearing a particulate respirator when the AQI is 151 or higher when outside
Very Unhealthy (201 to 300)	352 – 526	201 – 300	151 – 250	1 – 1.25	-Consider closing some or all schools (However, newer schools with a central air cleaning filter may be more protective than older, leakier homes. See “Closures”, below) -Cancel outdoor events (e.g., concerts and competitive sports)
Hazardous (> 300)	> 526	>300	>250	≤3/4	-Close Schools -Cancel outdoor events (e.g., concerts and competitive sports) -Consider closing workplaces not essential to public health -If PM level projected to continue to remain high for a prolonged time, consider evacuation of sensitive populations

Notes:

- These 1- and 8-hr PM_{2.5} levels are estimated using the 24-hr breakpoints of the PM_{2.5} Air Quality Index included in the February 7, 2007 issue paper (http://www.epa.gov/airnow/aqi_issue_paper_020707.pdf) by dividing the 24-hr concentrations by the following ratios: 8-hr ratio is 0.7, 1-hr ratio is 0.4. Visibility is based on 1-hr values. If only PM₁₀ measurements are available during smoky conditions, it can be assumed that the PM₁₀ is composed primarily of fine particles (PM_{2.5}), and that therefore the AQI and associated cautionary statements and advisories for PM_{2.5} may be used. This assumption is reflected in the column headings.
- This table was adapted from Table 3, page 31 of *Wildfire Smoke: A Guide for Public Health Officials*, July 2008.
- Based on New Mexico Department of Health's "Recommended Actions During Smoke Events"