LOW-COST SENSORS UPDATE

Board of Directors
Santa Barbara County
Air Pollution Control District
Our Mission: To protect the people and the environment of Santa Barbara County from the effects of air pollution.

Aeron Arlin Genet
Director / APCO

Desmond Ho / Air Quality Specialist
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BACKGROUND

- Important education tool
- Interest in low-cost sensor and local air quality conditions due to increasing wildfire frequency
- Provide air quality trends in areas without established air quality monitors
SENSORS

PurpleAir Sensor: Cuyama Elementary

Clarity Sensor: Goleta Monitoring Station
EPA FIRE AND SMOKE MAP

- Incorporates:
  - Permanent monitors
  - Temporary monitors
  - PurpleAir sensors
  - Regional correction factors for PurpleAir

www.fire.airnow.gov
“Fire and Smoke Map”
GOLETA PURPLEAIR VS. BAM

August 20-21 exceedances

September 11-15 exceedances

October 2-3 exceedances

Goleta PurpleAir

Goleta BAM
CAVE FIRE (NOV 2019) PURPLEAIR DATA
38 sensors deployed around the County
Provides neighborhood air quality trends
Challenges:
- Agreement
- WiFi
- Maintenance
Two minor changes:

- **Liability clause**: staff recommends the removal of the monetary liability clause as staff works with site host to find a safe and secure location for the sensors.

- **Duration of agreement**: staff recommends the replacement of the six-month agreement with an indefinite agreement until either party terminates with a 30-day notice.
MOVING FORWARD

- District will continue to use PurpleAir sensors to provide air quality trends
- PurpleAir sensors can serve as back-up information
- Continue to work with schools, public organizations, and other community partners
RECOMMENDATIONS

- Receive this update
- Approve the attached amended “Agreement for Low-Cost Air Quality Sensor”
- Delegate authority to the Air Pollution Control Officer to make minor updates to the Agreement subject to concurrence by District Counsel, Risk Management, and Auditor Controller
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