



Air Monitoring and Community Benefit Programs in the Eastern Coachella Valley

COACHELLA VALLEY EJ TASK FORCE MEETING

DECEMBER 19, 2018

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SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT

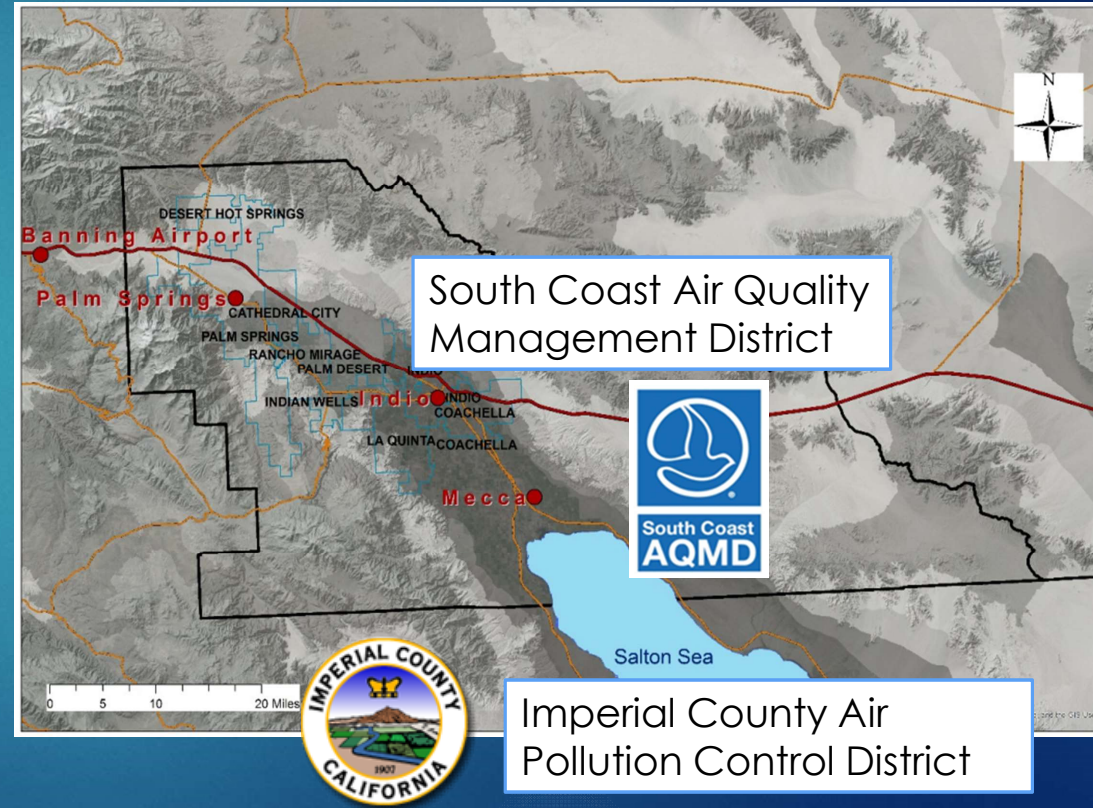
Local Air Districts near the Salton Sea



- ▶ Two local air districts serve the communities near the Salton Sea

SCAQMD Air Monitoring in the Eastern Coachella Valley:

- ▶ 3 permanent air monitoring stations
- ▶ 2 stations measuring hydrogen sulfide*
- ▶ Monitoring for special circumstances – Frost Prevention Burning



* with assistance from the Imperial Irrigation District

Air Quality Trends

- ▶ Ozone pollution has been **improving for the last couple of decades**
- ▶ The Coachella Valley still **does not meet the federal standards** for ozone
- ▶ We're continuing to work on this through implementing our **Air Quality Management Plan (AQMP)**



Air Quality – How Are We Doing?



- ▶ The Coachella Valley currently **meets** the federal standards for:

- ▶ Fine Particulate Matter (PM_{2.5})
- ▶ Nitrogen dioxide (NO₂)
- ▶ Carbon Monoxide (CO)
- ▶ Lead (Pb)
- ▶ Sulfur Dioxide (SO₂)



- ▶ The Coachella Valley **does not meet** the federal standards for:

- ▶ Coarse Particulate Matter (PM₁₀), due to windblown dust events that recur in the area
- ▶ Ozone (O₃)

Air Pollution Monitoring near Salton Sea



South Coast
AQMD

[Trends](#) [Alerts](#) [About](#) [Contact](#)

The Salton Sea

Hydrogen Sulfide Monitoring

Sign up to receive email alerts when Hydrogen Sulfide (H₂S) levels reach 30 Parts Per Billion.

Please select air monitoring station of interest:

- ☐ Near Shore Site - Alert me when H₂S reaches or exceeds 30 ppb
- ☒ Mecca Community Site - Alert me when H₂S reaches or exceeds 30 ppb

Provide your email address and click subscribe

Subscribe

Manage My Subscriptions

Near-Shore Site

Most Recent
H₂S

0.5

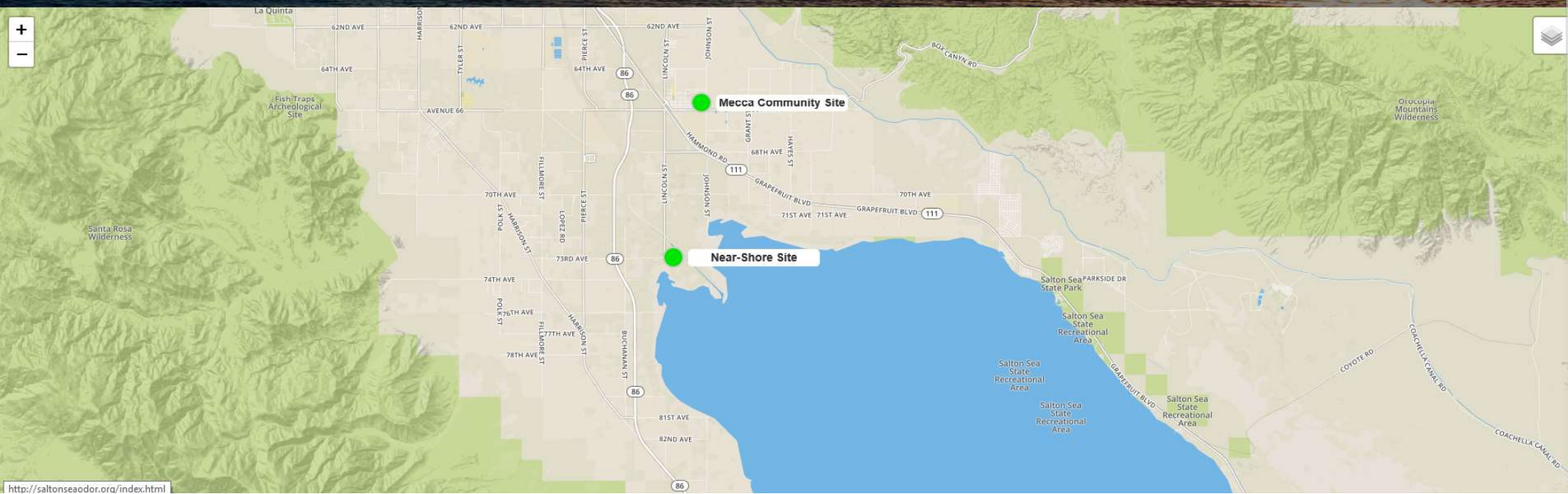
Parts Per Billion (ppb)
2018-10-17 03:00 PM PDT

Mecca Community Site

Most Recent
H₂S

0

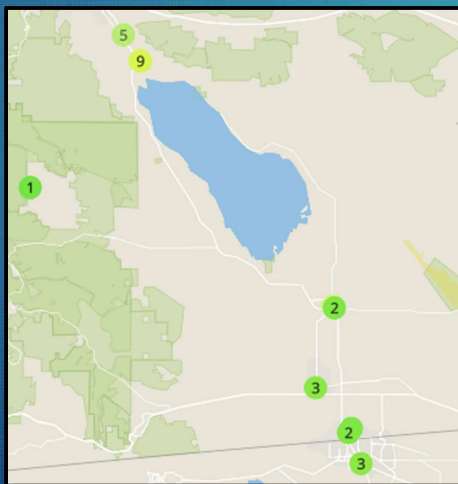
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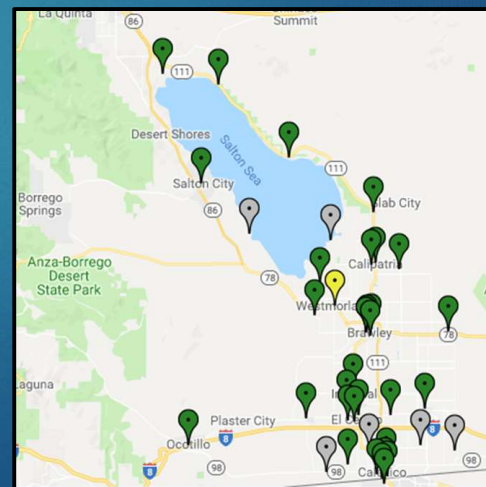
Community Citizen Science Projects

- ▶ Community air monitoring networks serve as a complement to regulatory monitors
- ▶ Increased use of “low-cost” air quality sensors improves the knowledge of exposure to air pollution at a community and individual level
- ▶ Large-scale community air monitoring networks have started in Coachella Valley
 - ▶ PurpleAir
 - ▶ Identifying Violations Affecting Neighborhoods (IVAN))

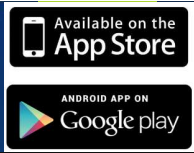
PurpleAir Network



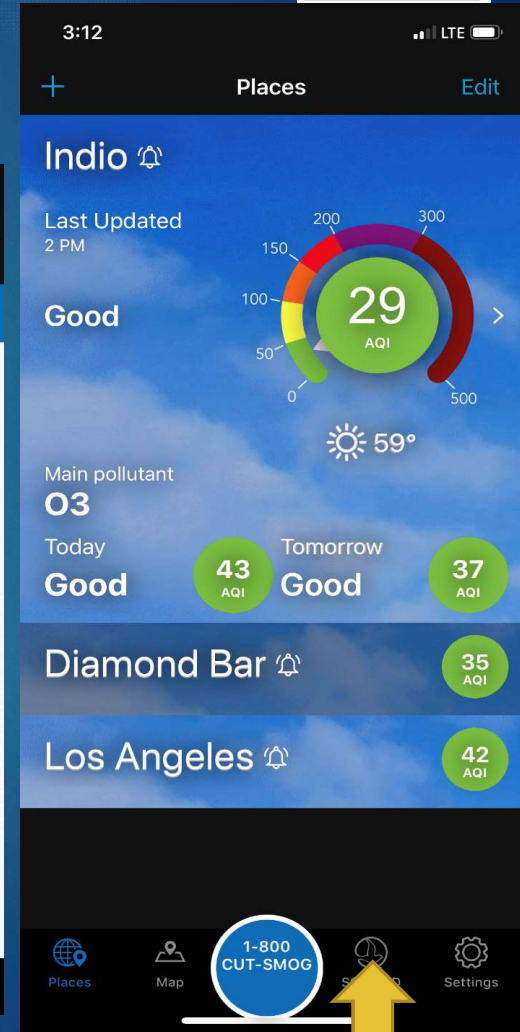
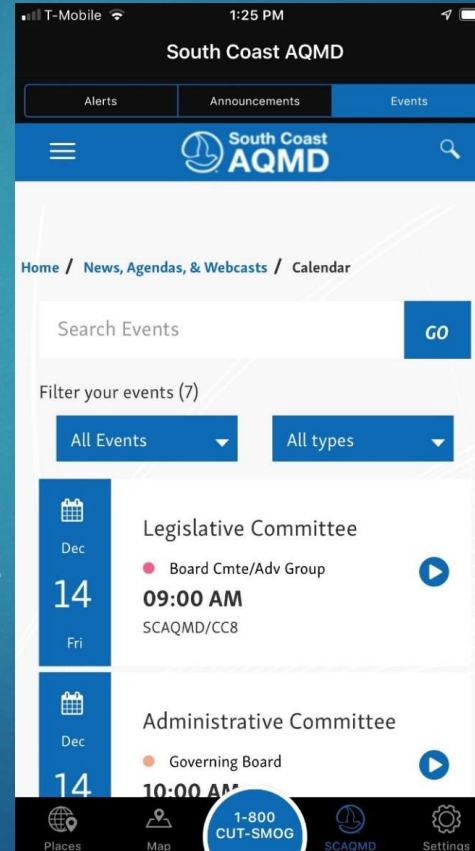
IVAN Network



How to Get Air Pollution Information – SmartPhones and Computers



- ▶ SCAQMD Phone App
 - ▶ Current Weather and Air Quality
 - ▶ Forecasted Air Quality
- ▶ SCAQMD AirAlerts (www.AirAlerts.org)
 - ▶ Forecasts and real-time alerts
- ▶ Salton Sea H2S Alerts (www.saltonseaodor.org/)
 - ▶ Real-time H2S data



How to Get Air Pollution Information – “Traditional Ways”



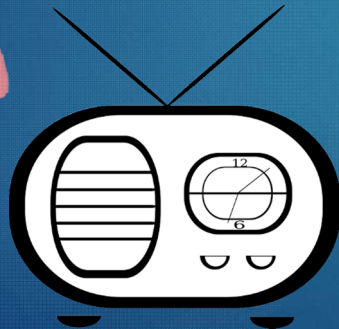
► Call 1-800-CUT-SMOG

➤ Daily Air Quality Forecasts (1-800-CUT-SMOG)

➤ Coachella Valley Rule 403.1 High-Wind Forecasts (909-396-2399)

➤ Agricultural and Prescribed Burn Forecasts (909-396-3355)

► SCAQMD Advisories and Press Releases – Issued for prolonged or severe air quality events



Assembly Bill No. 1318



AB 1318 (V. M. Perez) requires that funds be spent on emission reductions in the following areas:

- At least 30 percent in environmental justice areas
- At least 30 percent on projects in close proximity to the plant
- The remaining 40 percent in any location within SCAQMD's four-county jurisdiction. While not required by AB 1318, the SCAQMD Board decided in February 2012 to dedicate this entire amount to projects in the Coachella Valley.

Road Paving

Purpose: Reduce the amount of dust that is kicked up into the air from dirt roads, parking lots and construction sites



Road Paving

Three Projects:

- Torres Martinez Desert Cahuilla Indians (EJ)
- City of Desert Hot Springs
- Riverside County

Before



After

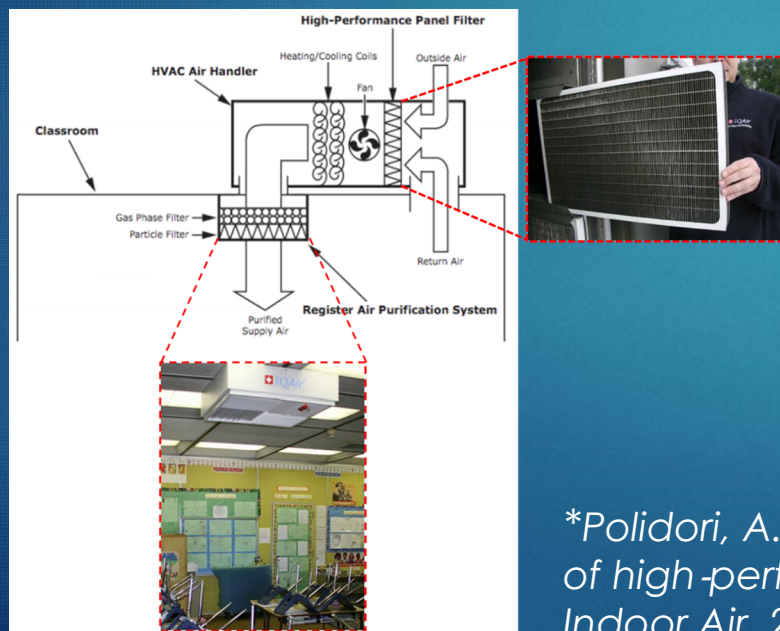


High Performance Air Filtration

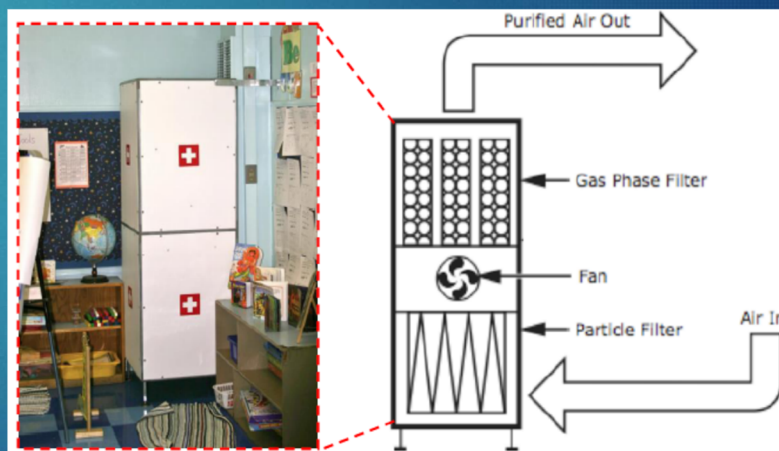
Purpose: Reduce the exposure air pollutants indoors, especially at schools located near freeways and other known sources

A pilot study* conducted by SCAQMD in Southern California showed that air filtration technologies can remove an average of ~90 percent black carbon (BC), ultrafine PM (UFP), and PM_{2.5}

Register System



Stand-Alone System



*Polidori, A., Fine, P. M., White, V., & Kwon, P. S. (2013). Pilot study of high-performance air filtration for classroom applications. *Indoor Air*, 23(3), 185-195.

\$52.2 million in funding
\$52.2 millones en fondos

AB 1318 Emission Mitigation

Mitigación de emisiones de AB 1318

2013-present

Projects - Proyectos

New CNG and propane vehicles
*Nuevos vehiculos de
propano y gas natural*



Road paving and landscaping - *Pavimentación y jardinería.*



Home weatherization
Climatización de casas



School filtration
Filtros en escuelas



CV link
(In progress)
(En progreso)



Solar
Installations
*Instalaciones
Solares*



Fueling stations
*Estaciones de
abastecimiento*



Location *Ubicación*

City of Coachella

Coachella Valley USD

City of Palm Springs

Palm Springs USD

Angel View (Palm Springs)

City of Desert Hot Springs

Find Food Banks

Desert Sands USD (La Quinta)

Sun Power Solar
(Palm Desert)

Torres Martinez Desert
Cahuilla Indians (Thermal)

Sunline Transit Agency

Riverside County

Border Valley Trading

College of the Desert

St. Elizabeth's of Hungary
Food Pantry



Other activities

- ▶ Salton Sea Management Program
- ▶ Specialized support to CARB Salton Sea air measurements
- ▶ Agricultural burning enforcement and methods evaluations
- ▶ Continue to engage with these communities for future efforts (i.e. potentially AB 617)