

POLICY BRIEF: EAST COACHELLA VALLEY AIR QUALITY MONITORING

EXECUTIVE SUMMARY

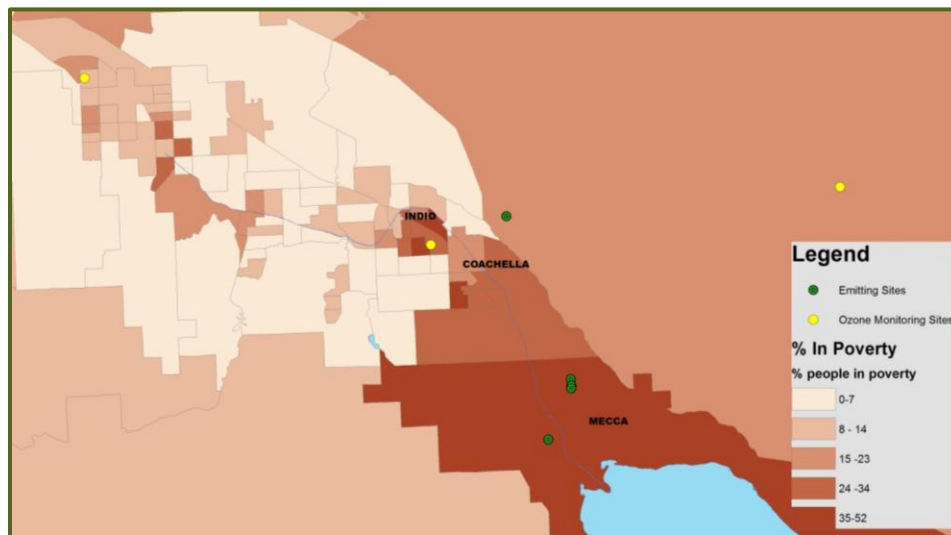
The Coachella Valley consistently falls outside the level of safe air quality standards as determined by the United States Environmental Protection Agency. Residents in the East Coachella Valley have complained of poor air quality for a number of years and have requested more monitoring sites. There are a number of reasons for this request, one being the existence of odors that make residents ill and a lack of knowledge regarding these odors.

STATEMENT OF THE ISSUE

The East Coachella Valley is limited with regard to air quality monitoring due to the lack of air quality monitoring stations. Focused discussions with community residents within some of these rural communities have addressed the lack of timely and adequate data on air quality. In 2011, students and staff at Saul Martinez Elementary School in Mecca became ill from aerielly borne odors. Students and staff were evacuated, the school closed and several were taken to hospital. However, there was no way to pinpoint the source of these odors or the composition. In 2012, the entire South Coast Region was inundated with odors originating in the Salton Sea. The current Air Quality Monitoring District air monitoring network meets or exceeds U.S. EPA monitoring requirements. However, meeting minimum monitoring requirements is just one factor in determining the value of sites and measurements. There are many potential operations that decrease air quality in the East Coachella Valley including diesel particulates, pesticide drift, smoke from burning agricultural residues and at dump sites, windstorms and energy plants. However, without monitoring sites, the emissions from these activities are not recorded and their potential health effects are unknown.

PRE-EXISTING POLICIES

Air quality monitoring stations are located in three locations in or near the Coachella Valley but none of these are close to sites in the East Coachella Valley that may emit air contaminants. The monitor sites are shown on the map below as well as sites reported to emit odors or gases. There are no functioning monitoring stations for particulate matter in the Coachella Valley; all monitoring sites shown here are for ozone. The site in Indio is supposed to collect data on particulate matter but data are unreliable.



In January 2013, the Air Quality Management District approved \$200,000 for a plan to better track the hydrogen sulfide near the Salton Sea. The hydrogen sulfide monitoring network, will have two year-round sensors located in Mecca and along the shore of the Salton Sea.

The US Environmental Protection Agency (EPA) requires that local agencies perform an assessment of the air quality surveillance system every 5 years to determine, at a minimum, if the network meets the monitoring objectives, whether new sites are needed, whether existing sites are no longer needed and can be terminated, and whether new technologies are appropriate for incorporation into the Ambient Air Monitoring Network. According to the most recent assessment, completed in July, 2012, the Indio site was established at its current location in January 1983. AQMD holds a month-to-month lease with the city of Indio and, did not anticipate any changes in the near future. At that time, the existing monitoring platform was a modular wood structure,

which requires extensive maintenance. Money was set aside for a new monitoring platform. The cost to relocate the site to meet probe siting criteria is high due to the number of instruments at the site, cost of rent in the area, and length of service. In July 2010, AQMD noted that the monitor's particulate ratings could be impacted by the monitor's location in an unpaved dirt parking lot.ⁱ However, as of this writing, AQMD has taken no steps to move the monitor to a location from which particulate matter could be measured with greater accuracy and reliability.

Under an agreement reached seven months after the Saul Martinez Elementary School incident, the South Coast Air Quality Management District will be allowed to enforce air quality laws on the Cabazon Band of Mission Indians reservation in the Coachella Valley. Inspectors from the Air Quality Management District will be allowed to enter sovereign tribal land to monitor environmental laws and issue citations.

Recent mitigation funds were distributed to local schools and non-profits in response to the construction of the Sentinel natural gas peaker power plant scheduled to go online in August of 2013. Testing and commissioning of the plant is expected to pump up to 118,000 pounds of particulate matter, a major cause of respiratory disease, into the Valley's air in the coming year, according to figures from the California Energy Commission.

Included in the mitigation funds is a project providing air filtration systems for schools in the Coachella Valley Unified School District. Under a special law, Assembly Bill 1318, authored by Assemblyman V. Manuel Pérez, D-Coachella, 30 percent of the money must go to projects within a six-mile radius of the plant, with another 30 percent going to "environmental justice" areas in the east valley, where more than 10 percent of the population is below federal poverty levels and are also at high risk for cancer. The remaining 40 percent went to other areas in the region.

POLICY OPTIONS

More air monitoring stations should be located in proximity to possible air pollution emitting sites in the East Coachella Valley. The potential sites that were identified by community members for location of air quality monitoring stations are in the communities of North Shore, Oasis, Thermal, Mecca, and Coachella.

If the AQMD is considering investment in relocating or upgrading the monitor in Indio, it could move the site into the Eastern Coachella Valley and upgrade it to monitor for volatile organic compounds as well as ozone and particulate matter. Closing, relocating or creating monitoring sites requires significant resources and often a long period of concurrent monitoring to show comparability. Most changes to the monitoring network are subject to approval by the U.S. EPA Regional Administrator.

If the AQMD is unable or unwilling to increase monitors in the region, local non-profits can introduce a grassroots air quality monitoring program. Arvin residents in the San Joaquin Valley test their own air quality using a grassroots air monitoring program known as "bucket brigades." Bucket brigades have been introduced into 27 different countries and have a proven success cleaning up the environment in regions with environmental injustice. With the support of the non-profit organization Global Community Monitorsⁱⁱ, residents test the air they breathe for pollutants and can also use the monitors to find out what pollution sources are emitting those particles. In 2006 Global Community Monitors in Port Arthur, Texas were successful in blocking a permit for the expansion of an oil refinery. The expansion would have made the refinery the largest in the US. In addition to blocking the expansion, community members were also able to reduce existing pollution, garner investment for a community development foundation and improve community safety measures at the existing refinery

The South Coast Air Quality Management District develops, adopts and implements an Air Quality Management Plan for bringing the area into compliance with the clean air standards established by national and state governmental legislation. John J. Benoit is the Riverside County member on the governing board.

Members of the State Air Resources Board are appointed by the governor. Currently Ronald Loveridge of Riverside, Ron Roberts of San Diego, Hector de la Torre of LA and Barbara Riordan of San Bernardino are on the state Board, along with seven other members from regions throughout the state. East Coachella Valley can lobby the Board for a representative from their region.

ⁱ South Coast Air Quality Management District 5 Year Network Assessment. July 2010. Prepared by Rene M. Bermudez, Principal Air Quality Instrument Specialist and Philip M. Fine, Atmospheric Measurements Manager

ⁱⁱ Global Community Monitor Bucket Brigade website, <http://www.gcmonitor.org/section.php?id=9>



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