

SCAQMD Installs Hydrogen Sulfide Monitoring Network Near Salton Sea

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Air quality officials this week installed two hydrogen sulfide monitors in the Coachella Valley to monitor the presence of the gas, which smells like rotten eggs, during odor events at the Salton Sea.

South Coast Air Quality Management District (SCAQMD) officials installed the monitors at Saul Martinez Elementary School in Mecca and on the Torres Martinez Desert Cahuilla Indian Tribal land near the north end of the Salton Sea.

"The Salton Sea is expected to recede dramatically in coming years, and this may bring more foul odors to our communities," said John J. Benoit, SCAQMD Board member and Riverside County Supervisor. "This air monitoring network will help us communicate with residents regarding the strength and potential health impacts of future odor events."

SCAQMD's Governing Board called for the creation of the hydrogen sulfide monitoring network after an incident that began on Sept. 10th, 2012, after a strong thunderstorm over the Salton Sea wafted rotten-egg type odors for more than 150 miles across Southern California. The odors were detected across the Coachella Valley, through the Banning Pass and into the Temecula, San Bernardino, San Gabriel and San Fernando valleys. By the following day SCAQMD had received more than 235 complaints of sulfur and rotten-egg type odors.

Hydrogen sulfide, a product of organic decay, is present in the Salton Sea and has the unmistakable odor of rotten eggs. Scientists theorized that the strong winds from the thunderstorm pushed surface waters aside and allowed water from the bottom of the sea, rich with decaying and odorous bacteria, to rise to the surface and release hydrogen sulfide gas to the air.

The Salton Sea's receding shorelines may create the potential for an increased number of large-scale odor events to occur in the future. The SCAQMD network will monitor hydrogen sulfide concentrations during Salton Sea odor events and provide data that can be used to assess population exposure.

Humans can detect hydrogen sulfide odors at extremely low concentrations, down to a few parts per billion. At concentrations equal to the state standard -- 30 parts per billion averaged over one hour -- individuals may experience symptoms such as headaches and nausea. However the symptoms associated with this level of exposure are temporary and do not cause any long-term health effects.

SCAQMD is the air pollution control agency for Orange County and major portions of Los Angeles, San Bernardino and Riverside counties.