Office of Senate Floor Analyses
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UNFINISHED BUSINESS

Bill No: SB 58
Author: Padilla (D), et al.
Amended: 8/13/26
Vote: 21

SENATE ENVIRONMENTAL QUALITY COMMITTEE: 7-0, 1/13/26
AYES: Blakespear, Valladares, Dahle, Gonzalez, Menjivar, Pérez, Reyes
NO VOTE RECORDED: Hurtado

SENATE APPROPRIATIONS COMMITTEE: 7-0, 1/22/26
AYES: Caballero, Seyarto, Cabaldon, Dahle, Grayson, Richardson, Wahab

SENATE FLOOR: 39-0, 1/26/26
AYES: Allen, Alvarado-Gil, Archuleta, Arreguín, Ashby, Becker, Blakespear, Cabaldon, Caballero, Cervantes, Choi, Cortese, Dahle, Durazo, Grayson, Grove, Hurtado, Jones, Laird, Limón, McGuire, McNerney, Menjivar, Niello, Ochoa Bogh, Padilla, Pérez, Reyes, Richardson, Rubio, Seyarto, Smallwood-Cuevas, Stern, Strickland, Umberg, Valladares, Wahab, Weber Pierson, Wiener
NO VOTE RECORDED: Gonzalez

ASSEMBLY FLOOR: Passed, 8/27/26

**SUBJECT:** Air quality: standard: hydrogen sulfide

**SOURCE:** Author

**DIGEST:** This bill requires the California Air Resources Board (CARB) to develop a response framework to address hydrogen sulfide gas, as described, and the Office of Environmental Health Hazard Assessment (OEHHA) to update and develop health-based levels for hydrogen sulfide, if necessary.

*Assembly Amendments* require CARB to develop a response framework to address fugitive and natural sources of hydrogen sulfide gas and require OEHHA to update the acute and chronic reference exposure levels for hydrogen sulfide and determine

additional health guidance values during the development of the response framework.

**ANALYSIS:**

Existing federal law:

1) The federal Clean Air Act (CAA) and its implementing regulations set National Ambient Air Quality Standard (NAAQS) for six criteria pollutants, designate air basins that do not achieve NAAQS as nonattainment, and require states with nonattainment areas to submit a State Implementation Plan (SIP) detailing how they will achieve compliance with NAAQS. (42 U.S.C. 7401 et seq.)

Existing state law:

1) Establishes OEHHA under the California Environmental Protection Agency and authorizes OEHHA to perform activities relating to the assessment of human health risks of chemicals, toxicology, or scientific consultation. (Health & Safety Code (HSC) § 59000 et seq.)

2) Establishes CARB as the air pollution control agency in California and requires CARB, among other things, to control emissions from a wide array of mobile sources and coordinate with local air districts to control emissions from stationary sources in order to implement the CAA. (Health and Safety Code (HSC) § 39000 et seq.)

3) Requires CARB to adopt ambient air quality standards for each air basin in consideration of the public health, safety, and welfare, and based upon the recommendations of OEHHA. (HSC § 39606(a)(2))

4) Authorizes CARB or local air districts to adopt regulations to control pollutants associated with state ambient air quality standards, including hydrogen sulfide. (HSC § 40926)

5) Required CARB, in consultation with OEHHA, to review all existing health-based ambient air quality standards, including hydrogen sulfide, to determine whether they adequately protect the health of the public, including infants and children, before December 31, 2000. (HSC § 39606(d))

6) Requires, subject to the powers and duties of CARB, local air districts to adopt and enforce rules and regulations to achieve and maintain the state and federal air quality standards in all areas affected by emission sources under their jurisdiction, and to enforce all applicable provisions of state and federal law. (HSC § 40001)

7) Authorizes local air district rules and regulations to provide for the prevention and abatement of air pollution episodes which cause discomfort or health risks to a significant number of persons. (HSC § 40001(b))

8) Authorizes local air districts to sponsor, coordinate, and promote projects that will lead to the prevention, mitigation, or cure of the adverse effects of air pollution, including the adverse health effects of air pollution. (HSC § 40004)

This bill:

1) Defines "fugitive source" to mean any source of emissions of hydrogen sulfide gas that is not currently regulated as a stationary source by a local air pollution control district or air quality management district.

2) Defines "natural source" to mean a source of hydrogen sulfide occurring in nature as a result of environmental circumstances that is not regulated as a stationary source by a local air pollution control district or air quality management district.

3) Requires CARB to develop a response framework that establishes best practices and guidance for addressing fugitive and natural sources of hydrogen sulfide gas and for community preparation and response to hydrogen sulfide exposure events originating from these sources in consultation with specified agencies and entities.

4) Requires the response framework to do all of the following:
   a) Consider cross-media releases;

   b) Develop integrated, multiagency approaches to identify and address fugitive and natural sources;

   c) Develop methods for reducing identified fugitive and natural sources of hydrogen sulfide gas in impacted communities;

   d) Consider threshold levels, including the acute and chronic reference exposure levels developed by OEHHA, and corresponding actions and

evaluate the need for additional threshold levels, averaging durations, and corresponding actions for sub-chronic exposures or short-term exposures;

e) Develop best practices for measuring hydrogen sulfide levels in air and using monitoring data;

f) Consider the influence of local and regional climates, and outdoor and indoor settings, on exposure; and

g) Include an estimate of resources needed for its implementation by local and state agencies.

5) Requires OEHHA to update the acute and chronic reference exposure levels for hydrogen sulfide and develop additional health guidance values for hydrogen sulfide, if the need is identified by CARB, in consultation with OEHHA, during development of the response framework.

6) Requires CARB, in developing the response framework, to conduct at least three public workshops located in all of the following:
   a) At least one in the Tijuana River Valley region;

   b) At least one in the Salton Sea region; and

   c) At least one selected in consultation with a community that has experienced significant hydrogen sulfide exposure.

7) Makes related findings and declarations.

## Background

*Hydrogen sulfide*. Hydrogen sulfide, commonly associated with sewage, landfills, geothermal fields, and oil and natural gas extraction, is a toxic gas that produces a foul odor. Hydrogen sulfide is known to cause negative respiratory and neurological impacts at the acute exposure level, and while epidemiological information for chronic effects is limited, some studies suggest chronic exposure levels may be associated with ocular, cardiovascular, respiratory, and neurological impacts.[1,2,3,4]

[1] Office of Environmental Health and Hazard Assessment. (2000). Chronic Toxicity Summary: Hydrogen Sulfide.
[2] Office of Environmental Health and Hazard Assessment. (2008). Acute Toxicity Summary: Hydrogen Sulfide.
[3] Batterman, S., et. al. (2023). Low level exposure to hydrogen sulfide: a review of emissions, community exposure, health effects, and exposure guidelines.
[4] Nuvolone, D., et. al. (2019). Health effects associated with chronic exposure to low-level hydrogen sulfide from geothermoelectric power plants.

*The odd ones out*. Unlike the emissions from entities that CARB and local air districts regulate, there have been incidents of air emissions across the state that do not have a clear responsible party, but may far exceed established standards and have significant impacts on neighboring communities. The two situations highlighted by this bill are examples of these "orphan incidents":

a) *Tijuana River Valley*. Near the California-Mexico border, raw sewage from Tijuana crosses into San Diego County polluting the Tijuana River Valley with industrial chemicals, pesticides, and trash.[5,6] As this transboundary pollution meanders through the valley, it generates hydrogen sulfide emissions and local scientists and communities have raised alarms about a particular emission site on Saturn Blvd, infamously known as the "hot spot".[7] A constricted culvert under Saturn Blvd accelerates the untreated wastewater, generating turbulence and emitting hydrogen sulfide. When the wastewater is not diverted in Mexico, hydrogen sulfide has been detected at 2100 ppb (1-hour average), which is 70 times the nuisance standard, and frequently spikes depending on the flow rate of the sewage. Local scientists have demonstrated that averaging the hydrogen sulfide data over 1 hour to compare to the 30-ppb standard does not capture exceedances that occur within minutes and are suspected to have negative public health implications. The community has called for standards that consider different averaging times to capture these spikes and subsequent public notice and response.

b) *Salton Sea*. Located in Riverside and Imperial counties, the Salton Sea tends to be a major source of hydrogen sulfide emissions due to a large influx of nutrients through agricultural runoff and the declining water levels, which increase the sea's ability to mix.[8,9,10,11] With summer conditions, monitoring efforts have shown that hydrogen sulfide frequently exceeds the 30 ppb

[5] McLamb, F., et. al. (2024). Evidence of transboundary movement of chemicals from Mexico to the U.S. in Tijuana River Estuary sediments.
[6] Cooper, A., et. al. (2025). Identifying wastewater chemicals in coastal aerosols.
[7] Rico, B., et. al. (2025). Heavily polluted Tijuana River drives regional air quality crisis.
[8] Reese, B., et. al. (2008). Hydrogen sulfide production and volatilization in a polymictic eutrophic saline lake, Salton Sea, California.
[9] Centeno, D., et. al. (2025). Hypereutrophication, Hydrogen Sulfide, and Environmental Injustices: Mechanisms and Knowledge Gaps at the Salton Sea.
[10] Márquez, C., et. al. (2025). Inadequate Government-Led Water-Quality Monitoring Hinders Improvement Efforts in the Salton Sea.
[11] Wilson, J. (2024). This stinks: Salton Sea now emitting bad smells year round. Here's why.

standard, for hundreds of hours over the course of the season.[12] The humid climate of the region anecdotally exacerbates health effects and the current standard does not take humidity into account. These emissions impact communities already overburdened and suffering respiratory impacts from other emissions originating from the progressively declining Salton Sea, such as aerosolized seawater containing toxins and particulate matter released from the exposed seabed.[9]

Differences between monitoring techniques and deployment locations between local agencies and external groups have highlighted discrepancies in exceedances of the hydrogen sulfide standard.[12] While there are jurisdictional limitations and particular considerations that influence where air quality management districts deploy their monitors, universities and non-governmental organizations have called for more comprehensive monitoring that factors in wind direction.[9,12,13]

These incidents fall outside existing regulatory frameworks because attainment plans, and any subsequent action, may not be applicable to sources without specific and identifiable responsible parties. This bill addresses this regulatory gap by requiring CARB to develop a response framework for addressing such incidents and OEHHA to develop additional health guidance values to complement mechanisms in the response framework, if necessary.

**Comments**

*Purpose of Bill.* According to the author, "For generations, families in some of the most economically strained parts of the state have suffered from millions of gallons of sewage and pollution flowing through the Tijuana River and emissions from the Salton Sea. This pollution has been harming our community for decades and yet our air quality standards haven't been updated in nearly half a century. It is unacceptable that the regulatory standard monitoring the very air our families breathe is so woefully out of date, leaving communities at risk. Making this critical change is a long overdue step towards addressing an issue that has been allowed to fester for decades. It is critical that Sacramento finally act to help our community."

**FISCAL EFFECT:** Appropriation: No Fiscal Com.: Yes Local: No

According to the Assembly Appropriations Committee:

[12] Márquez, C., et. al. (2025). Salton Sea Exceedances of California's Air Quality Standards Highlight Governance Gaps and Monitoring Needs.
[13] Wilson, J. (2025). Study: Salton Sea is emitting foul gas at levels worse than official monitors show.

1) CARB estimates costs of $1.8 million in fiscal year (FY) 2027-28 for about six new positions, contract dollars, and equipment, followed by ongoing annual costs of $1.3 million in FY 2028-29 and ongoing (Air Pollution Control Fund).

   Specifically, CARB expects to serve as a subject matter expert on $H_2S$ emission sources, health effects from ambient exposures, cross-media releases, exposure mitigation strategies, health-based Reference Exposure Levels (RELs), and health- and nuisance-based standards; draft the required framework and manage subsequent updates; consult and coordinate with a diverse group of stakeholders; lead public workshops and engage in targeted outreach to affected communities; develop region-specific and multilingual educational resources on the response framework in coordination with community-based organizations; serve as the technical lead on developing monitoring plans; serve as the response and outreach lead for incident operations; provide technical support and deliver guidance and training to local air districts and health agencies on monitoring and response planning; and various other tasks.

   As part of the costs outlined above, CARB anticipates needing portable field instruments as well as air monitoring equipment to respond to planned and unplanned releases, spikes in air quality, and emergency incidents.

2) The Office of Environmental Health Hazard Assessment (OEHHA) estimates ongoing annual costs of approximately $423,000 for two positions, a one-time contracting cost of $400,000, and ongoing annual contracting costs of $150,000 (General Fund). While the bill directs CARB to develop a response framework to address sources of $H_2S$, in practice, CARB is very likely to consult with OEHHA in developing the required framework. OEHHA has previously developed RELs for $H_2S$, which are used by CARB, local air districts, and others when evaluating emissions from facilities, permitting, and conducting health risk assessments. Accordingly, OEHHA expects to lend its technical expertise to CARB in the development and updating of $H_2S$ thresholds, participate in the required public workshops, and rely on a contractor for some of its technical support needs.

3) OES and CDPH anticipate minor and absorbable costs to consult with CARB.

4) Costs of an unknown, likely absorbable, amount for the regional water quality control boards to consult with CARB.

**SUPPORT:** (Verified 8/27/26)

Alianza Coachella Valley
Alliance San Diego
Azul
Cactustocloud Institute
City of Imperial
City of Imperial Beach
City of Indian Wells
City of Indio
City of Needles
Cleanearth4kids.org
Coachella Valley Association of Governments
Coalition for Clean Air
Coronado Democratic Club
Desert Care Network
Desert Recreation District
Environmental Health Coalition
Imperial Valley Equity & Justice Coalition
Imperial Valley Healthcare District
LA Cooperativa Campesina De California
Latino Outdoors
Leadership Counsel for Justice and Accountability
Loma Linda University Adventist Health Sciences Center and its Affiliated Entities
Los Amigos De LA Comunidad, INC.
Outdoor Outreach
Palm Desert Area Chamber of Commerce
San Diego for Every Child
San Diego; County of
Sierra Club
Sierra Service Project
Solana Beach Eco Rotary Club
Surfrider Foundation
Sustainable Socal
The Border Group
Tijuana River Coaliton
Un Mar De Colores
Wildcoast
YMCA of San Diego County
29 Individuals

**OPPOSITION:** (Verified 8/27/2026)

1 Individual

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