

**SENATE JUDICIARY COMMITTEE**  
**Senator Thomas Umberg, Chair**  
**2023-2024 Regular Session**

SB 674 (Gonzalez)  
Version: April 10, 2023  
Hearing Date: April 18, 2023  
Fiscal: Yes  
Urgency: No  
AM

**SUBJECT**

Air pollution: refineries: community air monitoring systems: fence-line monitoring systems

**DIGEST**

This bill makes several changes to the fence line monitoring system program for communities and petroleum refineries, including expanding the program to include monitoring for biofuel refineries and additional chemicals, increasing the standards for data quality, and providing enhanced processes for notifying affected communities.

**EXECUTIVE SUMMARY**

AB 1647 (Muratsuchi, Ch. 1647, Stats. 2017) established a statutory fence line monitoring system program that required community air monitoring and fence-line monitoring systems to be installed on and near petroleum refineries. The author and sponsors of the bill state that several deficiencies regarding the implementation of the program have arisen that undermine the intent of the program to increase transparency around refinery emissions and reduce these emissions when dangerous levels are reached. This bill seeks to address those deficiencies and strengthen the program to ensure that communities near refineries are being protected.

The bill is sponsored by Earthjustice and East Yard Communities for Environmental Justice and supported by numerous environmental organizations. The bill is opposed by the Western States Petroleum Association. This bill passed the Senate Environmental Quality Committee on a vote of 4 to 2.

**PROPOSED CHANGES TO THE LAW**

Existing law:

- 1) Provides shared authority over toxic air contaminant emissions between the California Air Resources Board (CARB) and local air districts. (Health & Saf. Code § 39650 et. seq.)
- 2) Requires, subject to the powers and duties of CARB, the local air districts to adopt and enforce rules and regulations to achieve and maintain the state and federal ambient air quality standards in all areas affected by emission sources under their jurisdiction, and to enforce all applicable provisions of state and federal law. (Health & Saf. Code § 40001.)
- 3) Specifies various penalties, including civil penalties, for the violation the requirements related to non-vehicular air pollution control regulated by CARB and local air districts. (Health & Saf. Code § 42400 et. seq.)
- 4) Requires the owner or operator of all petroleum refineries in California to, on or before January 1, 2020, install, operate, and maintain a fence-line monitoring system in accordance with guidance provided by the appropriate district, as specified. (Health & Saf. Code § 42705.6.)

This bill:

- 1) Expands the existing fence-line monitoring system program to also include biofuel refineries and requires the fence-line monitoring system to cover the entire perimeter of the refinery, unless it is infeasible based on substantial evidence.
- 2) Expands the requirements for the data generation capabilities of the refinery-related community air monitoring system.
- 3) Requires that the air monitoring systems monitor pollutants identified by OEHHA, including, but not limited to, eighteen specific recommended chemicals or classes of chemicals.
  - a) Expands the requirements for the data generation capabilities of the fence-line monitoring system, including, but not limited to, covering the entire perimeter of the refinery and enabling real-time access to data.
  - b) Provides that an air district may exclude a pollutant for monitoring at a refinery-related community air monitoring system and refinery fence-line monitoring system if substantial evidence supports that real-time monitoring of the pollutant is technologically infeasible or the pollutant would not be released by refining processes during routine and nonroutine operations at the refinery.

- c) Requires an air district to, on a five-year basis, review the list of pollutants being measured and may revise the list of pollutants after considering advances in monitoring technology, reported refinery emissions, ambient air data collected by the refinery fence-line and refinery-related community monitoring systems, and any other relevant emissions information.
- 4) Requires an owner or operator of a refinery to conduct third-party audits, using an auditor approved by the district, of its fence-line monitoring system to ensure the system is providing accurate data, including conducting quality control checks, system calibration, and evaluation of quality control and assurance plans, as specified.
- 5) Provides for more enhanced notice to communities, including that data generated by these systems is to be provided to the public within 24 hours in a publicly accessible and machine-readable format.
  - a) The data must be archived and made available to the public online for download through an application programming interface or other widely recognized standard and backend components are to be optimized to minimize delays in accessing data.
- 6) Requires an owner or operator of a refinery, within 24 hours of a fence-line system detecting an exceedance of a historical one-hour average concentration of any measured pollutant, to initiate a root cause analysis to locate the cause of the exceedance and to determine appropriate corrective action.
  - a) The owner or operator of the refinery must prepare and submit a report to the district and post online within five days of the exceedance explaining the root cause analysis findings and corrective action performed by the refinery.
  - b) The root cause analysis must include a visual inspection to determine the cause of the exceedance, as specified.
- 7) Provides that a fence-line monitoring system approved by the district presumptively yields credible evidence that may be used to establish whether a refinery has violated or is in violation of any plan, order, permit, rule, regulation, or law.

### COMMENTS

#### 1. Stated need for the bill

The author writes:

Refining is an inherently dangerous process and a significant source of air pollution. Incidents at these refineries- including explosions, fires, and flaring

events- threaten nearby community members, first responders, and refinery workers. These communities, which are often low-income, communities of color, are already at a higher risk for asthma, cancer, birth defects, and neurological and cardiovascular damage among other conditions, and these risks are amplified the closer a person lives to a refinery. Assembly Bill 1647 (Muratsuchi, 2017), which created the Refinery Fence-line and Community Air Monitoring Program, sought to create statewide standards and practices to detect air pollution at refinery fencelines, notify community members when there were dangerous levels of pollution, and aggregate the fence-line air monitoring data online for public access. It has been six years since the passage of AB 1647, and there are serious deficiencies in the implementation of the program. These flaws include an inconsistent implementation by air quality management districts, a failure to include a mechanism to ensure refineries notify the public of detected emission exceedances and follow up to locate and mitigate sources of toxic emission, and numerous other shortcomings in public notification. Senate Bill 674 will address these flaws and fortify the statewide standard for the refinery fence-line air monitoring program to ensure that adequate noxious pollutants are measured, and that best practices and technologies are deployed in order to protect the health and wellbeing of refinery fence-line communities.

## 2. Background

This bill expands the existing fence-line monitoring system established by AB 1674 to also apply to biofuel refineries, and defines “biofuel” as biodiesel, renewable diesel, and renewable aviation fuel, and other products derived from noncrude oil feedstock. The bill also enhances the existing program by including more chemicals that need to be monitored, higher standards on data quality, and stronger notice provisions to the community. The Senate Environmental Quality Committee analysis of the bill notes that:

California is home to nineteen refineries. According to the American Lung Association’s State of the Air 2022 Report Card, all nineteen of those refineries are in counties with a failing grade for PM pollution, and eighteen of the nineteen are in counties with failing grades for ozone pollution as well. According to the US EPA’s EJScreen tool, the communities within 5 miles of those refineries are on average over 70% people of color, with some being as high as 95% people of color. Taken together, these communities (according to the CalEnviroScreen 4.0 tool) are, on average, among the most pollution-burdened communities in the state. [...]

The nineteen refineries in the state are clustered in three regions, each of which is regulated by a different air district. The South Coast Air Quality Management District (SCAQMD) regulates the ten refineries in the greater Los Angeles region, the Bay Area Air Quality Management District (BAAQMD) regulates the five refineries in the San Francisco Bay area, and the San Joaquin Valley Air Pollution Control

District (SJVAPCD) regulates the four refineries in the Central Valley. Each of these three air districts has established a rule implementing the requirements of AB 1647, though the rules and processes differ between all three.<sup>1</sup>

Earthjustice, one of the sponsors of the bill, raised concerns with the implementation of AB 1647 in their 2022 report, *Crossing the Fenceline*.<sup>2</sup> These concerns include, among others, that the number of pollutants required to be measured range from 5 to 20 between the districts; not all districts have specific requirements for thresholds, notifications, and quarterly data reports; the requirements for placement of fenceline monitors vary greatly, only one district specifically includes biorefineries in its rule; only one district requires a root cause analysis or corrective action by refineries; and all three districts have, at various times, exempted certain facilities even though AB 1647 does not authorize an exemptions to be granted to refineries. The Earthjustice report states, “Without meaningful statewide oversight, each air district has created deeply flawed fenceline monitoring programs with massive loopholes that benefit oil companies and negate many of the community protections that the legislation envisioned.”

### 3. Enforcement

The bill provides that a refinery that fails to conduct a root cause analysis and take corrective action within five days refinery is to be assessed a civil penalty the district pursuant to existing provisions of law in Article 3 (commencing with Section 42400) of Chapter 4 of the Health and Safety Code. This article provides for the enforcement for the entire part of law that applies to non-vehicular pollution control. It specifies that a court is to consider all relevant circumstances when deterring the fine to impose pursuant to specified sections, including, among others, the extent of harm caused, record of maintenance, the unproven or innovative nature of the control equipment, and financial burden on the defendant. (Health & Saf. Code § 42400.8.) The article also specifies various procedures for assessing certain civil penalties. (Health & Saf. Code § 42403.)

The bill provides that a fence-line monitoring system approved by the district shall presumptively yield credible evidence that may be used to establish whether a refinery has violated or is in violation of any plan, order, permit, rule, regulation, or law. Additionally, it requires, within 24 hours of a fence-line system detecting an exceedance of a historical one-hour average concentration of any measured pollutant, for the owner or operator of a refinery to initiate a root cause analysis to locate the cause of the exceedance and to determine appropriate corrective action.

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<sup>1</sup> Sen. Environmental Quality Comm. analysis of SB 674 (2023-24 reg. session) as introduced Feb. 16, 2023, at p. 3-4.

<sup>2</sup> *Crossing the Fenceline*, Earthjustice (2022), available at <https://earthjustice.org/document/crossing-the-fenceline-critical-reforms-to-californias-petroleum-refinery-emissions-monitoring-law>.

4. Statements in support

A coalition of nearly 40 organizations, including the sponsors of the bill, write in support stating:

Petroleum refineries and refineries of other fuel products are inherently dangerous operations and are significant sources of air pollution that put nearby community members at risk. California is home to numerous refineries that are some of the largest stationary emitters of toxic air contaminants, criteria pollutants, and greenhouse gases. Incidents at these refineries - including explosions, fires, and flaring events - threaten nearby community members, first responders, and refinery workers. Research has shown many documented health risks for refinery fence-line communities, including increased risk of asthma, cancers, and birth defects, as well as neurological and cardiovascular damage, among other conditions. These risks are amplified the closer a person lives to a refinery. [...]

It has been almost six years since the passage of AB 1647 and it is clear that there are serious flaws in the implementation of the statute's requirements.

SB 674 will address and remedy these flaws by requiring refineries, as part of their fence-line monitoring obligations, to: conduct third-party audits of their monitoring systems; identify the root cause of excess emissions and perform corrective action; ensure proper facility coverage; provide adequate public notification when emission thresholds are exceeded; and make data from the fence-line monitors readily available to the public.

5. Statements in opposition

The Western States Petroleum Association writes in opposition unless amended stating:

Refineries are unique, critical infrastructure, and should only be responsible for monitoring emissions from the refining process under the ownership and control of a company. The appropriate perimeter coverage should be a site-specific determination made by the District with input from the local community, as it currently is today. Monitoring sections of a refinery perimeter that does not have receptors downwind of emissions sources will not provide meaningful and actionable data to the public.

Additionally, site-specific conditions including space, topography, adjacent non-refinery sources, and meteorology may severely limit the utility of installing a fence-line monitor, such as predominantly monitoring prevailing winds blowing into a refinery or from a non-refinery source. The determination of which pollutants to monitor should continue to reside with districts, so site-specific refinery configurations can be taken into account. For example, a refinery

without a Hydrogen Fluoride Alkylation unit should not be required to monitor for hydrogen fluoride.

Fence-line monitoring systems should not presumptively be credible evidence to establish a violation because fence-line monitoring systems cannot distinguish refinery emissions from non-refinery emissions, and violations can only be determined based on applying prescriptive measurement methods at specific locations on an emissions source.

### SUPPORT

Earthjustice (sponsor)  
East Yard Communities for Environmental Justice (sponsor)  
350 Bay Area Action  
350 Conejo / San Fernando Valley  
Action Now  
Active San Gabriel Valley  
Air Watch Bay Area  
Asian Pacific Environmental Network (APEN)  
Azul  
Bay Area-system Change Not Climate Change  
Biofuelwatch  
Breast Cancer Prevention Partners  
California Communities Against Toxics  
California Environmental Justice Alliance (CEJA) Action  
California Environmental Voters  
California Interfaith Power and Light  
Center for Biological Diversity  
Center for Climate Change and Health  
Center for Race, Poverty, and The Environment  
Central California Environmental Justice Network  
Central Valley Air Quality Coalition  
Clean Seas Lobbying Coalition  
Clean Water Action  
Climate Action California  
Climate Reality Project, San Fernando Valley  
Coalition for Clean Air  
Comite Pro Uno  
Communities for A Better Environment  
Del Amo Action Committee  
Democrats of Rossmoor  
Drexel University College of Arts and Sciences  
Ella Baker Center for Human Rights  
Environmental Defense Fund

Environmental Working Group  
Good Neighbor Steering Committee  
Indivisible CA Statestrong  
Interfaith Climate Action Network of Contra Costa County  
Mono Lake Committee  
Natural Resources Defense Council (NRDC)  
Open Environmental Data Project  
Physicians for Social Responsibility - Los Angeles  
Regional Asthma Management and Prevention (RAMP)  
Richmond - North Richmond - San Pablo AB 617 Steering Committee  
Sacramento Area Congregations Together  
San Francisco Baykeeper  
Sierra Club California  
Silicon Valley Youth Climate Action  
Sunflower Alliance  
Sustainable Rossmoor  
Torrance Refinery Action Alliance  
Union of Concerned Scientists  
West Berkeley Alliance for Clean Air and Safe Jobs

**OPPOSITION**

Western States Petroleum Association

**RELATED LEGISLATION**

Pending Legislation: AB 1465 (Wicks, 2023) would increase specified civil penalties for the violation of the certain requirements related to non-vehicular air pollution control. AB 2023 is pending in the Assembly Natural Resources Committee.

Prior Legislation: AB 1647 (Muratsuchi, Ch. 1647, Stats. 2017) established a fence line monitoring system program that required community air monitoring and fence-line monitoring systems to be installed on and near petroleum refineries.

**PRIOR VOTES:**

Senate Environmental Quality Committee (Ayes 4, Noes 2)

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