

AMENDED IN ASSEMBLY SEPTEMBER 1, 2023

AMENDED IN ASSEMBLY JULY 12, 2023

AMENDED IN ASSEMBLY JUNE 19, 2023

AMENDED IN SENATE APRIL 10, 2023

AMENDED IN SENATE APRIL 10, 2023

SENATE BILL

No. 674

Introduced by Senator Gonzalez
(Coauthors: Senators Skinner, Stern, and Wiener)
(Coauthors: Assembly Members Lowenthal and Muratsuchi)

February 16, 2023

An act to amend Section 42705.6 of the Health and Safety Code, relating to air pollution.

LEGISLATIVE COUNSEL'S DIGEST

SB 674, as amended, Gonzalez. Air pollution: refineries: community air monitoring systems: fence-line monitoring systems.

Existing law requires a refinery-related community air monitoring system to be installed near each petroleum refinery that meets certain requirements. Existing law requires the owner or operator of a petroleum refinery to develop, install, operate, and maintain a fence-line monitoring system in accordance with guidance developed by the appropriate air quality management district or air pollution control district. Existing law requires the air districts and the owners or operators of refineries to collect real-time data from those monitoring systems, to maintain records of that data, and, to the extent feasible, provide to the public ~~those~~ *the* data in a publicly accessible format.

This bill would ~~extend the above requirements to~~ *expand the definition of a refinery for these purposes to include related facilities located on contiguous or adjacent properties and to include refineries engaging in other types of refining processes, including those using noncrude oil feedstock, and to auxiliary facilities.* ~~feedstock.~~ The bill would require the refinery-related community air monitoring system and the fence-line monitoring system to be *updated or* installed on or before January 1, 2026, 2028, after a 30-day public comment period, ~~and would require the refinery-related community air monitoring system to be updated,~~ as specified. The bill would require the appropriate air district to establish pollutants for the monitoring systems to monitor and would include certain pollutants identified by the Office of Environmental Health Hazard Assessment. The bill would authorize the air district to exclude a pollutant for monitoring at those monitoring systems, as provided. The bill would require air districts, on a 5-year basis, to review the list of pollutants being measured and would authorize the air districts to revise the list, as provided. The bill would require the air districts and the owners and operators of refineries to maintain records of the data collected from those systems for at least 5 years and would require the owners and operators to post online, and to notify the public of the availability of, quarterly reports containing certain information. The bill would require owners and operators of refineries to notify the air district and the public, as provided, as quickly as possible of any exceedances of ~~the lowest available one-hour average reference exposure levels set by the office or the United States Environmental Protection Agency.~~ *specified pollutant thresholds.* The bill would require the owners or operators of refineries, within 24 hours of a fence-line monitoring system detecting an exceedance of ~~a historical one-hour average concentration of any measured pollutant,~~ *those thresholds,* to initiate a root cause analysis and to determine appropriate corrective action, as provided. The bill would require the owners or operators of refineries to conduct third-party audits of its fence-line monitoring system, as provided, to ensure the accuracy of the system. Because the bill would impose additional duties on air districts, the bill would impose a state-mandated local program.

Under existing ~~law~~ *law*, a violation of requirements for stationary ~~sources,~~ *sources* or any rule, regulation, permit, or order of the state board or of an air district is a crime.

Because this bill would impose the monitoring systems requirement on owners or operators of refineries engaging in other types of refining

~~processes, as defined,~~ *processes* and would impose additional requirements on owners and operators of refineries, a violation of which would be a crime, the bill would impose a state-mandated local program.

The California Constitution requires the state to reimburse local agencies and school districts for certain costs mandated by the state. Statutory provisions establish procedures for making that reimbursement.

This bill would provide that no reimbursement is required by this act for specified reasons.

Vote: majority. Appropriation: no. Fiscal committee: yes.
State-mandated local program: yes.

The people of the State of California do enact as follows:

1 SECTION 1. This act shall be known, and may be cited, as the
2 Refinery Air Pollution Transparency and Reduction Act.

3 SEC. 2. Section 42705.6 of the Health and Safety Code is
4 amended to read:

5 42705.6. (a) For purposes of this section, the following
6 definitions apply:

7 (1) ~~“Auxiliary facilities” means any site necessary to support~~
8 ~~refining processes at a refinery, including storage tanks, hydrogen~~
9 ~~plants, sulfuric acid plants, port terminals, and electrical generation~~
10 ~~plants that receive or provide more than 50 percent of their input~~
11 ~~from, or production output to, the refinery. “Auxiliary facilities”~~
12 ~~does not include gas stations.~~

13 (2)

14 (1) “Biofuel” means biodiesel, renewable diesel, and renewable
15 aviation fuel, and other liquid products derived from ~~noncrude oil~~
16 ~~feedstock~~; *alternative feedstock, if the alternative feedstock is*
17 *refined through coprocessing or at a refinery that was converted*
18 *from petroleum to alternative feedstock.*

19 (3)

20 (2) “Fence-line monitoring system” means equipment that
21 measures and records ambient air pollutant concentrations at or
22 adjacent to a refinery and that detects and estimates the quantity
23 of fugitive emissions, gas leaks, and other air emissions from the
24 refinery and that may be useful for estimating associated pollutant
25 exposures and health risks and in determining trends in air pollutant
26 levels over time.

27 (4)

1 (3) “Refinery” means an establishment ~~that is and related~~
2 *facilities, including storage tanks, sulfur recovery plants, port*
3 *terminals, electrical generation plants, and hydrogen plants, that*
4 *are located on one or more contiguous or adjacent properties that*
5 ~~is primarily involved in refining processes and related auxiliary~~
6 ~~facilities. and that produce gasoline, diesel fuel, aviation fuel,~~
7 *biofuel, lubricating oil, asphalt, petrochemical feedstock, or other*
8 *similar products through the processing of crude oil or alternative*
9 *feedstock, redistillation of unfinished petroleum derivatives,*
10 *cracking, or other processes.*

11 (5)

12 (4) “Refinery-related community air monitoring system” means
13 equipment that measures and records air pollutant concentrations
14 in the ambient air at or near sensitive receptor locations near a
15 refinery and that may be useful for estimating associated pollutant
16 exposures and health risks and in determining trends in air pollutant
17 levels over time.

18 (6) ~~“Refining processes” means the production, separation,~~
19 ~~conversion, treating, handling, or blending of gasoline, diesel fuel,~~
20 ~~aviation fuel, biofuel, petroleum distillates, lubricating oils,~~
21 ~~petroleum coke, asphalt, or petrochemicals, among other products~~
22 ~~derived from petroleum and alternative feedstock, if the alternative~~
23 ~~feedstock is refined through coprocessing or at a refinery that was~~
24 ~~converted from petroleum to alternative feedstock.~~

25 (7)

26 (5) “Sensitive receptor” has the same meaning as set forth in
27 Section 42705.5.

28 (b) Notwithstanding Section 42708, and on or before January
29 1, ~~2026, 2028~~, a refinery-related community air monitoring system
30 shall, after a 30-day public comment period, be *updated or* installed
31 near each refinery that is consistent with the requirements and
32 guidance applicable to the siting of air quality monitors as
33 established by the United States Environmental Protection Agency,
34 and be updated, as deemed necessary by the state board, within
35 120 days of amendments to the guidance by the United States
36 Environmental Protection Agency, that meets both of the following
37 requirements:

38 (1) A district shall *update an existing refinery-related community*
39 *air monitoring system to implement this section or* design, develop,
40 install, operate, and maintain ~~the a new~~ refinery-related community

1 air monitoring system, which shall be operated and maintained in
2 accordance with guidance from the appropriate district. A district
3 may contract with a third party to implement this paragraph.

4 (2) The refinery-related community air monitoring system shall
5 include equipment capable of measuring compounds emitted to
6 the atmosphere from refinery processes, meteorological parameters,
7 and digital components capable of enabling real-time access to air
8 pollution and meteorological measurements via an internet website
9 and application programming interface, as determined by the
10 appropriate district.

11 (c) On or before January 1, ~~2026~~, 2028, the owner or operator
12 of a refinery shall, after a 30-day public comment period and
13 approval by the appropriate district, *update an existing fence-line*
14 *monitoring system to implement this section or* develop, install,
15 operate, and maintain a *new* fence-line monitoring system in
16 accordance with guidance developed by the appropriate district.
17 The fence-line monitoring system shall cover the entire perimeter
18 of the refinery, unless it is infeasible based on substantial evidence.
19 *The fence-line monitoring system shall cover all facilities at the*
20 *refinery, including related facilities as described in paragraph (3)*
21 *of subdivision (a).* The fence-line monitoring system shall include
22 equipment capable of measuring compounds emitted to the
23 atmosphere from refinery processes, meteorological parameters,
24 and digital components capable of enabling real-time access to air
25 pollution and meteorological measurements via an internet website
26 and application programming interface.

27 (d) (1) The appropriate district shall establish pollutants for
28 monitoring at refinery-related community air monitoring systems
29 and refinery fence-line monitoring systems and shall include
30 pollutants identified by the Office of Environmental Health Hazard
31 Assessment, including, but not limited to, the following pollutants
32 identified in the office's March 2019 Analysis of Refinery
33 Chemical Emissions and Health Effects as candidates for air
34 monitoring at a refinery:

- 35 (A) Acetaldehyde.
- 36 (B) Ammonia.
- 37 (C) Benzene.
- 38 (D) 1,3-butadiene.
- 39 (E) Cadmium.
- 40 (F) Diethanolamine.

- 1 (G) Formaldehyde.
- 2 (H) Hydrogen fluoride.
- 3 (I) Hydrogen sulfide.
- 4 (J) Manganese.
- 5 (K) Naphthalene.
- 6 (L) Nickel.
- 7 (M) Oxides of nitrogen.
- 8 (N) Polycyclic aromatic hydrocarbons.
- 9 (O) Particulate matter.
- 10 (P) Sulfur dioxide.
- 11 (Q) Sulfuric acid.
- 12 (R) Toluene.
- 13 (2) A district may exclude a pollutant for monitoring at a
- 14 refinery-related community air monitoring system and refinery
- 15 fence-line monitoring system if substantial evidence supports that
- 16 real-time monitoring of the pollutant is technologically infeasible
- 17 or the pollutant would not be released by refining processes during
- 18 routine and nonroutine operations at the refinery.
- 19 (3) A district shall, on a five-year basis, review the list of
- 20 pollutants being measured and may revise the list of pollutants
- 21 after considering advances in monitoring technology, reported
- 22 refinery emissions, ambient air data collected by the refinery
- 23 fence-line and refinery-related community monitoring systems,
- 24 and any other relevant emissions information.
- 25 (e) (1) The district and the owner or operator of a refinery shall
- 26 collect real-time data from the refinery-related community air
- 27 monitoring system and the fence-line monitoring system and shall
- 28 maintain records of that data for at least five years. The owner or
- 29 operator of a refinery shall post online quarterly reports that
- 30 summarize pollutant levels, variations, and trends over a
- 31 three-month period timeframe and notify the public of the
- 32 availability of the reports.
- 33 (2) The data generated by these systems shall be provided to
- 34 the public within 24 hours in a publicly accessible and
- 35 machine-readable format. The data shall be archived and made
- 36 available to the public online for download through an application
- 37 programming interface or other widely recognized standard and
- 38 backend components shall be optimized to minimize delays in
- 39 accessing data. The data shall include all historical and
- 40 meteorological data, and pollution measurements and metadata,

1 including latitude and longitude, detection limits, signal strength,
2 calibration, and quality control checks.

3 (f) The owner or operator of a refinery shall conduct third-party
4 audits, using an auditor approved by the district, of its fence-line
5 monitoring system to ensure the system is providing accurate data,
6 including conducting quality control checks, system calibration,
7 and evaluation of quality control and assurance plans. The audit
8 reports shall be submitted to the district and made available to the
9 public online by the refinery. The third-party audits shall be
10 conducted in accordance with the following schedule:

11 (1) An initial audit shall be conducted as follows:

12 (A) For a fence-line monitoring system installed on or after
13 January 1, 2024, within ~~three~~ *six* months after the installation and
14 operation of the system.

15 (B) For a fence-line monitoring system installed before January
16 1, 2024, by July 1, 2024.

17 (2) Subsequent audits shall occur every two years and review
18 at least one year of monitoring data.

19 (3) If an audit makes recommendations or identifies deficiencies
20 in a fence-line monitoring system, the owner or operator of the
21 refinery shall develop a corrective action plan within one month
22 of the audit report to describe actions that will be taken to address
23 all recommendations and deficiencies within a timeline of no more
24 than six months. A followup performance audit shall be conducted
25 within one month of completion of the corrective action plan to
26 document the resolution of the recommendations and deficiencies
27 identified in the audit. The owner or operator of a refinery shall
28 implement all recommendations of the auditor for correcting
29 deficiencies, except those that would cause a safety concern. The
30 corrective action plan shall be submitted to the district and made
31 available to the public online by the refinery.

32 (g) The owner or operator of a refinery shall notify the district
33 and public as quickly as possible of any exceedances of the ~~lowest~~
34 ~~available one-hour average reference exposure or concentration~~
35 ~~levels set by the Office of Environmental Health Hazard~~
36 ~~Assessment or the United States Environmental Protection Agency~~
37 *notification threshold* that are detected by the fence-line monitoring
38 system. *The notification threshold shall be established as the lowest*
39 *available one-hour average of the National Ambient Air Quality*
40 *Standards, California Ambient Air Quality Standards, and the*

1 acute reference exposure levels as assessed by the Office of
2 Environmental Health Hazard Assessment, or, if not established,
3 the historical concentration of any measured pollutant, if historical
4 data is available. At a minimum, the notification to the public
5 shall include email and text message notifications to members of
6 the public requesting notification by email or text message
7 notification, as appropriate.

8 (h) (1) Within 24 hours of a fence-line *monitoring* system
9 detecting an exceedance of ~~a historical one-hour average~~
10 ~~concentration~~ *the notification threshold* of any measured pollutant,
11 the owner or operator of a refinery shall initiate a root cause
12 analysis to locate the cause of the exceedance and to determine
13 appropriate corrective action. The owner or operator of the refinery
14 shall prepare and submit a report to the district and post online
15 within ~~five~~ 14 days of the exceedance explaining the root cause
16 analysis findings and corrective action performed by the refinery.
17 The root cause analysis shall include a visual inspection to
18 determine the cause of the exceedance and any of the following:

19 (A) Optical gas imaging.

20 (B) Leak inspection using Method 21 under Appendix A-7 of
21 Part 60 (commencing with Section 60.1) of Title 40 of the Code
22 of Federal Regulations.

23 (C) Other test or monitoring method approved by the district,
24 ~~the State Air Resources Board, state board,~~ or the United States
25 Environmental Protection Agency.

26 (2) If the root cause analysis requires corrective action, the
27 refinery shall conduct a reinspection of the source within 14 days
28 of the corrective action and submit a report to the district and post
29 online.

30 (3) The refinery shall be assessed a civil penalty pursuant to
31 Article 3 (commencing with Section 42400) of Chapter 4 by the
32 district for failing to conduct a root cause analysis and take
33 corrective action within ~~five~~ 14 days.

34 (4) (A) A fence-line monitoring system approved by the district
35 shall presumptively yield credible evidence that may be used to
36 establish whether a refinery has violated or is in violation of any
37 plan, order, permit, rule, regulation, or law.

38 (B) A refinery may rebut the presumption established in
39 subparagraph (A) by providing evidence that the refinery was not

1 the source of pollution that triggered the fence-line monitoring
2 system.

3 (i) (1) Guidance developed by a district pursuant to this section
4 shall require the preparation of a quality control and assurance
5 plan to ensure data quality and take into account technological
6 capabilities and incorporate input from affected parties and, to the
7 extent feasible, shall be informed by refinery-related guidance in
8 the monitoring plan prepared pursuant to subdivision (b) of Section
9 42705.5 and the United States Environmental Protection Agency
10 guidance on quality assurance and management plans.

11 (2) Guidance and rules or regulations developed by a district
12 pursuant to this section shall be reviewed and updated every five
13 years through a public process.

14 (j) (1) Except as provided in paragraph (2), the owner or
15 operator of a refinery shall be responsible for the costs associated
16 with implementing this section.

17 (2) To the extent a refinery-related community air monitoring
18 system is intentionally used by a district to monitor emissions from
19 sources under its jurisdiction other than a refinery, the district shall
20 ensure the costs of the system are shared in a reasonably equitable
21 manner.

22 (k) *No later than July 1, 2027, the appropriate district shall*
23 *provide notice to the appropriate policy committees of the*
24 *Legislature regarding its progress toward meeting the January 1,*
25 *2028, implementation deadline pursuant to subdivisions (b) and*
26 *(c).*

27 (l) *All fence-line monitoring systems and refinery-related*
28 *community air monitoring systems installed before January 1,*
29 *2024, shall continue in operation during the implementation of*
30 *any additional requirements pursuant to this section.*

31 ~~(k)~~

32 (m) This section does not limit the authority or jurisdiction of
33 the Environmental Protection Agency, the ~~State Air Resources~~
34 ~~Board~~, *state board*, or the districts, and does not prohibit a city,
35 county, or city and county from imposing more stringent
36 regulations, limits, or prohibitions on a refinery.

37 SEC. 3. No reimbursement is required by this act pursuant to
38 Section 6 of Article XIII B of the California Constitution because
39 a local agency or school district has the authority to levy service
40 charges, fees, or assessments sufficient to pay for the program or

1 level of service mandated by this act or because costs that may be
2 incurred by a local agency or school district will be incurred
3 because this act creates a new crime or infraction, eliminates a
4 crime or infraction, or changes the penalty for a crime or infraction,
5 within the meaning of Section 17556 of the Government Code, or
6 changes the definition of a crime within the meaning of Section 6
7 of Article XIII B of the California Constitution.

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