
SENATE COMMITTEE ON ENVIRONMENTAL QUALITY

Senator Allen, Chair

2019 - 2020 Regular

Bill No: AB 1299
Author: Salas
Version: 9/10/2019
Urgency: No
Consultant: Eric Walters

Hearing Date: 9/11/2019
Fiscal: Yes

SUBJECT: Petroleum refineries: air monitoring systems.

DIGEST: This bill would redefine “petroleum refinery” to exclude refineries under 55,000 barrel per day capacities and within 1 mile of communities under 3,000 residents from requirements to establish and maintain a refinery-related community air monitoring system.

ANALYSIS:

Existing federal law:

- 1) The Federal Clean Air Act (FCAA) and its implementing regulations set National Ambient Air Quality Standards (NAAQS) for six criteria pollutants, designate air basins that do not achieve NAAQS as nonattainment, allow only California to set vehicular emissions standards stricter than the federal government, and allow other states to adopt either the federal or California vehicular emissions standards. (42 U.S.C. §7401 et seq.)

Existing state law:

- 1) Establishes the Air Resources Board (ARB) as the air pollution control agency in California and requires the ARB, 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 FCAA. (Health and Safety Code (HSC) §39500 et seq.)
- 1) Provides shared authority over toxic air contaminant emissions between ARB and local air districts. (HSC §39650 et seq.)
- 2) Requires, subject to the powers and duties of the ARB, 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. (HSC §40001)

- 3) Requires each local air district to appoint an Air Pollution Control Officer (APCO) with specified duties and responsibilities. (HSC §40750 et seq.)
- 4) Authorizes an APCO, at any time, to require from an applicant for, or the holder of, any permit information, analyses, plans, or specifications that will disclose the nature, extent, quantity, or degree of air contaminants which are, or may be, discharged under the permit. (HSC §42303)
- 5) Requires, under AB 1647 (Muratsuchi, Chapter 589, Statutes of 2017), 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.

This bill, for the purposes of refinery-related community air monitoring systems, narrows the definition of “petroleum refinery” to exclude refineries that have capacity of not more than 55,000 barrels per stream day and are within one mile of a community of under 3,000 residents.

Background

- 1) *Petroleum refineries.* Petroleum refineries separate crude oil into a wide array of petroleum products through a series of physical and chemical separation techniques. The refining industry supplies several widely used everyday products including petroleum gas, kerosene, diesel fuel, motor oil, asphalt, and waxes. According to the US Environmental Protection Agency, “Petroleum refineries are a major source of hazardous and toxic air pollutants such as BTEX compounds (benzene, toluene, ethylbenzene, and xylene). They are also a major source of criteria air pollutants: particulate matter (PM), nitrogen oxides (NO_x), carbon monoxide (CO), hydrogen sulfide (H₂S), and sulfur dioxide (SO₂). Refineries also release less toxic hydrocarbons such as natural gas (methane) and other light volatile fuels and oils.”

According to a March 2019 report from the Office of Environmental Health Hazard Assessment (OEHHA), done in collaboration with ARB and the California EPA’s Interagency Refinery Task Force, there were 188 chemicals identified as being emitted from California refineries at various levels. Of those, 18 were designated as candidates for air monitoring: acetaldehyde, ammonia, benzene, 1,3-butadiene, cadmium, diethanolamine, formaldehyde, hydrogen fluoride, hydrogen sulfide, manganese, naphthalene, nickel, nitrogen oxide, polycyclic aromatic hydrocarbons, particulate matter, sulfur dioxide,

sulfuric acid, and toluene. OEHHA stated that, "...the release of these chemicals from refineries does not necessarily mean that local communities face substantial exposures or significant health risks. However, it does increase their likelihood of exposure. Air monitoring of these chemicals may inform decisions that could reduce exposures."

The bill's supporters maintain that constraints on the exemption in AB 1299 (under 55,000 barrels per day capacity, within 1 mile of a community with under 3,000 residents) will effectively limit the scope of this exemption to a single refinery, Kern Oil & Refining Company (Kern Oil). Due to time constraints, staff has not been able to definitively verify that claim.

- 2) *Kern Oil and its community.* Kern Oil is an independent refinery that has operated for 85 years, headquartered in Bakersfield, California, which produces up to 27,000 barrels of oil per day. Specifically, Kern Oil is located in the Fuller Acres area of Kern County. As of the 2010 census, Fuller Acres had a population of 991, with 77.1% identifying as Hispanic or Latino.

Kern Oil provides 100% of the gasoline and 87% of the diesel to the southern San Joaquin Valley. The refinery co-processes and blends various biofuels in with their fossil fuel production process in order to reduce the associated carbon footprint. According to Glassdoor.com, Kern Oil's profits are in the range of \$10 to \$25 million annually.

Kern Oil is located within the San Joaquin Valley Air Pollution Control District (SJVAPCD), which has not attained NAAQS for ozone and PM2.5 pollutants. According to SJVAPCD's website, 6% of the district's volatile organic compound emissions (one of the constituent chemicals of ground-level ozone, or smog) come from petroleum production and marketing.

Comments

- 1) *Purpose of Bill.* According to the author, "The very large refineries targeted by AB 1647 process between 85,000 and 269,000 barrels of oil per day, as much as ten times the amount processed by Kern Oil & Refining Co. (Kern Oil), which processes 25,000 barrels per day. The South Coast Air Quality Management District has adopted rules to implement AB 1647 which exempt any refinery which processes less than 40,000 barrels of oil a day. The narrowly-crafted exemption language will apply only to a small refinery (as currently defined) that also operates in an area with very low population density such as Kern Oil."

- 2) *A balancing act.* The proponents of this bill have estimated that the upfront costs to establish the systems required under AB 1647 would cost at least \$2.6 million, which they claim is untenable for a refinery of their size. Given that South Coast Air Quality Management District, in their Rule 1180 to implement AB 1647 requirements, has exempted refineries with maximum capacities under 40,000 barrels per day, Kern Oil's capacity would exempt them under that air district's rules. Opponents of the bill posit that just because the Fuller Acres community is small, its residents should still be granted the same protections and information about nearby air pollution as others receive.

In regards to timing, the monitoring systems required under AB 1647 will need to be effective as of January 1, 2020. In order to fulfil these requirements, Kern Oil will need SJVAPCD to establish regulations, which the district has not yet created. Given the absence of implementing regulations, all SJVAPCD oil refineries, including Kern Oil, would be expected to not be in compliance with AB 1647 upon January 1, 2020.

Despite the timing issues for SJVAPCD refineries to achieve AB 1647 compliance, the authors of AB 1299 are not seeking relief by way of an extension; they are seeking a wholesale exemption for Kern Oil from refinery-related community air monitoring requirements.

The question before the committee is whether the relative value of ensuring the fullest air pollution protection measures for communities surrounding Kern Oil justifies the financial impact on Kern Oil of establishing the required monitoring systems.

SOURCE: Author

SUPPORT:

Karen Goh, Mayor of Bakersfield
Kern Oil & Refining Company
Leticia Perez, Supervisor, 5th District, County of Kern

OPPOSITION:

Alliance of Nurses for Healthy Environments
American Lung Association
Audubon California
California Environmental Justice Alliance
California League of Conservation Voters

Center for Biological Diversity
Center for Race, Poverty, and the Environment
Central California Environmental Justice Network
Central Valley Air Quality Coalition
Climate Hawks Vote
Coalition for Clean Air
Communities for a Better Environment
Community Water Center
Earthjustice
Greenpeace
Leadership Council for Justice & Accountability
Mothers Out Front
Natural Resources Defense Council
Sierra Club California
Voices in Solidarity Against Oil in Neighborhoods (VISION)

ARGUMENTS IN SUPPORT: According to Kern Oil & Refining Company, “California’s large refineries process between 85,000 and 269,000 barrels per day. Kern’s small production volume using lower hazard processes means the overall risk of emissions is magnitudes lower than the big refineries. Kern’s refinery operations are in a sparsely populated, rural area of Kern County, as opposed to the densely populated, urban centers of its larger counterparts. The monitoring system contemplated in the legislation does not make sense for a facility of the size and emission profile of Kern, which nonetheless already complies with daily and monthly requirements imposed by its local Air Pollution Control District.”

ARGUMENTS IN OPPOSITION: According to a coalition of opposed groups, “This bill would weaken current refinery monitoring requirements for small refineries in rural communities... Monitoring systems are important preventative and informational measures that help ensure public health and safety. Rural communities are entitled to the same protections as urban communities.”

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