

Date of Hearing: August 29, 2022

ASSEMBLY COMMITTEE ON NATURAL RESOURCES

Luz Rivas, Chair

SB 1137 (Gonzalez) – As Amended August 27, 2022

SENATE VOTE: Not relevant.

SUBJECT: Oil and gas: operations: location restrictions: notice of intention: health protection zone: sensitive receptors.

SUMMARY: Prohibits the Geologic Energy Management Division (CalGEM) from approving any notice of intention (NOI) within a health protection zone, as defined, except for under specified circumstances. Requires all oil or gas production facilities or wells with a wellhead within a health protection zone to comply with health, safety, and environmental requirements, as provided, and comply with specified community communication and water sampling requirements.

EXISTING LAW:

- 1) Establishes CalGEM in the Department of Conservation, under the direction of the State Oil and Gas Supervisor (Supervisor), who is required to supervise the drilling, operation, maintenance, and abandonment of oil and gas wells in the state and the operation, maintenance, and removal or abandonment of tanks and facilities related to oil and gas production within an oil and gas field, so as to prevent damage to life, health, property, and natural resources.
- 2) Requires the operator of a well to file a written NOI to commence drilling with, and prohibits any drilling until approval is given by, the Supervisor or district deputy.
- 3) Authorizes the Supervisor to require other pertinent information to supplement the NOI.
- 4) Requires the owner of any well to file with the supervisor a monthly statement that provides information relating to the well, as provided. Requires an operator proposing to perform a well stimulation treatment to apply to the Supervisor or district deputy for a permit to perform the well stimulation treatment and imposes other requirements and conditions on the use of well stimulation treatments.
- 5) Establishes the Air Resources Board (ARB) to coordinate efforts to attain and maintain ambient air quality standards, among other responsibilities.
- 6) Establishes the State Water Resources Control Board (State Water Board) to develop statewide water protection plans, establish water quality standards, and guide the nine Regional Water Quality Control Boards (regional water board) located in the major watersheds of the state, among other responsibilities.

THIS BILL:

- 1) Defines “health protection zone” as the area within 3,200 feet of a sensitive receptor. Defines “sensitive receptor” as a residence, education resource, community resource, health care facility, dormitory, or any building open to the public.
- 2) Prohibits, commencing January 1, 2023, CalGEM from approving a NOI within a health protection zone, except NOIs necessary for any of the following:
 - a) To prevent or respond to a threat to public health, safety, or the environment.
 - b) To comply with a court order finding that denying approval would amount to a taking of property, or a court order otherwise requiring approval of a NOI.
 - c) To plug and abandon or reabandon a well, including an intercept well necessary to plug and abandon or reabandon a well.
- 3) Requires an operator of an oil or gas well who submits a NOI to submit a sensitive receptor inventory map of the area within the 3,200-foot radius of the wellhead or proposed wellhead locations. Requires the map to be submitted in compliance with the American Disabilities Act.
- 4) Requires an operator, if a NOI is approved, to provide an individual indemnity bond to cover full costs of properly plugging and abandoning the operator’s well or wells, and decommissioning any attendant production facilities in the health protection zone.
- 5) Exempts underground gas storage wells and attendant production facilities from the bill’s requirements.
- 6) Finds and declares that development of oil and gas fields into nonfossil fuel production and injection and related uses, including, but not limited to, housing, recreation, and commercial development, may have plugged and abandoned wells or may require existing oil and gas wells to be plugged and abandoned, or replugged and abandoned, to current statutory and regulatory standards, and that the creation of health protection zones, and the related restrictions and requirements of this article, do not apply in the context of development for nonfossil fuel production and injection and related uses.
- 7) Authorizes CalGEM to approved a NOI to public and private entities who own, purchase, or lease land containing idle-deserted or previously plugged and abandoned wells for the purposes of those public and private entities plugging and abandoning, or replugging and abandoning, those oil and gas wells so development of nonfossil fuel production and injection and related uses can proceed.
- 8) Requires, commencing January 1, 2025, all oil or gas production facilities with a wellhead in a health protection zone to meet the following: compliance with local, state and federal permit requirements; requirements to post contact information to receive complaints; limits on sound levels; limits on light generation; dust prevention measures; vehicle speed limits; ceased use of all facilities and equipment if in noncompliance with air district requirements; and, submission to CalGEM of chemical analysis for produced water.

- 9) Requires all operators with a production facility or well with a wellhead in a health protection zone to develop a leak detection for target chemical constituents and detailed response plan by specified dates. Establishes requirements for the leak detection and response plan.
- 10) Requires ARB and the State Water Board to adopt regulations to implement and set performance standards for the emissions detection system. Authorizes CalGEM, ARB, and the State Water Board to adopt such regulations under an emergency rulemaking process.
- 11) Requires CalGEM to hold at least three public workshops to inform operators and the public about leak detection systems and response plans.
- 12) Requires, commencing July 1, 2023, and every six months thereafter, the Supervisor to report to the Legislature on the leak detection and response plans.
- 13) Requires an operator to contact property owners and tenants within a health protection zone with a record of delivery and offer to sample and test water wells or surface water on their property before drilling. Specifies the process for conducting sampling and reporting to CalGEM. Requires water quality sampling data to be submitted to the State Water Board and appropriate regional water board.
- 14) Requires, by July 1, 2023, every operator to submit to CalGEM a sensitive receptor inventory and map that includes a list of sensitive receptors in the health protection zone, among other information. Requires CalGEM to review at least 30% of the inventories and maps annually for accuracy and make them available to the public.
- 15) Requires, commencing January 1, 2027, and annually thereafter, an operator to report specified information to CalGEM.
- 16) Requires, on or before July 1, 2027, CalGEM to report to the Legislature on the implementation of health protection zones.
- 17) Provides CalGEM, ARB, and the State Air Resources Board with emergency regulatory authority.
- 18) Requires, by June 1, 2023, ARB, relevant local air districts, the State Water Board, and relevant local water quality control boards to enter into and execute memoranda of understanding (MOU) with CalGEM to clearly delineate respective responsibilities for implementing and enforcing health protection zones.

FISCAL EFFECT: Unknown.

COMMENTS:

- 1) **Need for the bill.** According to the author,

Of the approximately five and a half million Californians who live within a mile of one or more oil and gas wells, one-third live in areas that are the most burdened by environmental pollution, and 92% of Californians living in these overburdened neighborhoods are people of color. Moreover, this proximity brings disastrous health implications including, increased risk of asthma and other respiratory

illnesses, pre-term births and high-risk pregnancies, and cancer. Given these disproportionate, cumulative impacts on communities of color and low-income communities, state action is long overdue –the time is now to limit exposure from toxic contaminants and protect our frontline communities, vulnerable populations, and families.

SB 1137 will mandate a 3,200-foot health and safety buffer zone between new and reworked oil and gas wells and sensitive land uses, which include schools, childcare centers, community resource centers, residential homes and live-in housing, and hospitals. In addition, SB 1137 will require oil and gas facility operators in these protection zones to implement strict air and water pollution controls and to develop response plans to protect the health of over 2 million Californians currently living within 3,200 feet of an existing oil well.

In 2015, the California Council on Science and Technology reviewed existing scientific studies and determined that, from a public health perspective, the most significant exposures to toxic air contaminants occur within one-half mile of a well, and recommended that the State of California develop science-backed setback requirements for wells to limit these exposures. While CalGEM's own public health researchers have determined that there is no safe distance from oil and gas wells for humans—3, 200 feet will avoid some of the worst exposure and harm to public health. Recent studies consistently demonstrate evidence of harm from pollutants and extraction consequences at distances less than 1 kilometer. SB 1137 takes a science based approach to protecting public health and follows other state jurisdictions that have already required setbacks requirements.

- 2) **California oil and gas permits.** Approvals for drilling operations in California are a two-step process. An oil and gas operator must secure approval from local authorities, and then must apply to CalGEM for permits before constructing or operating a new well or modifying an existing one. CalGEM approves permits for the following: well abandonment (to permanently cease production); re-abandonment (to re-plug and abandon a well); rework (well repair); well deepening (to extend the length of an existing well); new drill (a new well); and, sidetrack (cement a portion of the original well path and re-drill). Well permits are good indefinitely, unless the operations have not commenced within 24 months of receipt of the NOI, in which case the notice is canceled.
- 3) **Environmental justice.** Proximity to oil and gas extraction sites poses known significant health risks due to increased air pollution and threats to drinking water quality. Hazardous air pollutants that are known to be emitted from oil and gas development sites include benzene, toluene, ethylbenzene, xylenes, hexane and formaldehyde – many of which are known, probable, or possible carcinogens and/or teratogens and which have other adverse health effects.

The California Oil and Gas Public Health Rulemaking Scientific Advisory Panel (Panel), an advisory body to CalGEM, has noted that close proximity to oil and gas development causes significant adverse health effects, including poor birth outcomes, asthma, and reduced lung function. The millions of Californians living their daily lives—residing, going to work, and attending school—near active wells or other oil and gas production infrastructure experience

higher concentrations of “health-damaging air pollutants” and “measurably higher” exposure to noise and vibration.

These impacts are disproportionately impacting Black, indigenous, and people of color in California, who are most likely to live in close proximity to oil extraction activities and who are the most vulnerable to the negative impacts of climate change. A growing body of research shows direct health impacts from oil extraction as far as two kilometers away from a well.

SB 1137 prohibits NOIs for most new oil and gas wells being drilled in setback zones (“health protection zones”) – areas within 3,200 feet of a sensitive receptor, except to plug-and-abandon a well; in an emergency; or, if a court finds that a well be drilled to in order to prevent a property taking. The bill would prohibit the approval of an NOI to either drill a new well or rework an existing well where the well casing would be altered. Any new wells authorized to be drilled in the setback zone would have to provide an individual indemnity bond to CalGEM.

- 4) **CalGEM regulations.** In early 2020, CalGEM initiated a process to update public health and safety protections for communities near oil and gas production operations. This process began in response to a November 2019 directive by Governor Gavin Newsom and resulted in the release of the Draft Rule for Protection of Communities and Workers from Health and Safety Impacts from Oil and Gas Production Operations (Draft Rule) last October. The Draft Rule proposes establishing a 3,200-foot setback requirement from sensitive receptors (defined as homes, schools, daycares, medical centers, health care facilities, and businesses open to the public) for new NOIs.

On February 1 of this year, a group of legislators sent a letter to CalGEM asserting the Draft Rule should go farther to protect low-income communities and communities of color throughout the state who will continue to experience worsened health outcomes and will be the first to face worsened environmental impacts because of continued oil and gas extraction. SB 1137 proposes both setbacks and engineering controls that go farther than what the Draft Rule proposes.

The primary differences between the Draft Rule and this bill are:

- 1) *Timing for implementation.* The public comment period for the Draft Rule closed last December, and now CalGEM needs to review comments, target stakeholder outreach, finalize regulation text, and then complete the Standardizes Regulatory Impact Assessment (economic analysis) for the Draft Rule. The formal rulemaking process will only begin when the complete regulatory package is submitted to the Office of Administrative Law. Therefore, the regulations will take an indeterminate amount of time to become operational. This bill, however, would go into effect January 1, 2023, thereby effectuating the proposed changes far sooner.
- 2) *Scope of the NOI ban.* The Draft Rule would prohibit NOIs for new wells. SB 1137 would prohibit approvals for new wells and rework permits for existing wells. Because oil wells generally have a limited productive lifespan prior to the need for reworking, a ban on rework permits will serve to start phasing out existing wells as soon as the new

law goes into effect in January 2023. The scope of the bill is much more aggressive in protecting communities surrounding oil and gas facilities.

It is important to note that, should SB 1137 be enacted, there is nothing in the bill that inhibits or precludes CalGEM from pursuing their public health rulemaking or taking more assertive measures in the proposed regulations.

- 5) **Informing residents and public access.** CalGEM has a map application, Well Finder, which the public can access to determine if there is a well on one's property.

This bill would require operators, starting July 1, 2023, to provide a list and map of sensitive receptors within 3,200 feet of any of their wells and production facilities in a health protection zone and update the list and map annually. CalGEM would be required to review at least 30% of the inventories and maps annually, and make them all available to the public online.

Each operator will also be required to clearly post contact information for how to address complaints about noise, odor, and other concerns on the perimeter of the wellhead site in the health protection zone.

- 6) **Emissions leak detection.** Oil and gas wells emit air pollutants that can be toxic to public health. Scientists have observed higher concentrations of particulate matter (PM) 2.5, carbon monoxide, nitrous oxide, and ozone within two miles of pre-production wells (wells that have not been completed for production), and found increased PM2.5, nitrous oxide, and volatile organic compound emissions within 0.6 miles of the active well production sites, and higher ozone concentrations between 0.6 and 1.2 miles from active wells.

This bill would require all operators of oil or gas wells to develop a continuously operating emissions leak detection and response plan for their wells and attendance production facilities in the health protection zones by dates specified. The emissions leak detection system would be required to identify target chemical constituents, including methane and hydrogen sulfide, and other potential toxins of highest concerns identified by ARB and local air district and meet performance standards set by ARB. The leak detection system is required to include an alarm system for leaks so operators can identify and immediately repair the leak as well as an alarm response protocol in compliance with applicable hazardous material requirements.

If the source of the emissions is a leak from a well or production facility, the bill requires the operator to suspend use of the well or production facility until the leak has been corrected and CalGEM has approved the resumption of its use.

- 7) **Water testing.** Produced water is water trapped in underground formations that is brought to the surface along with oil or gas during traditional oil and gas exploration and production. Produced water often contains toxic chemicals from well treatments or injections, as well as naturally occurring contaminants, such as salts, heavy metals, toxic hydrocarbon-associated chemicals and sometimes radioactive materials.

SB 1137 would require an operator of an oil or gas well to do chemical analyses for all produced water transported from the oil field where it was produced, and would require the

operator to contact property owners and tenants within a health protection zone with a record of delivery and offer to sample and test water wells or surface water on their property before drilling and specifies process for conducting sampling. The water quality sampling data from that water quality testing would be reported to the State Water Board and appropriate regional water board, and data from follow-up testing 120-days after drilling would be provided the state and regional water board and any tenant that requests them.

- 8) **Enforcement.** CalGEM has authority over oil and gas well regulation, but much of this proposal straddles the authorities of other local and state agencies as it relates to permitting, water quality, and air quality enforcement.

The ARB and State Water Board would have emergency regulatory authority with CalGEM over the air and water-related provisions, respectively.

SB 1137 would require CalGEM to sign MOUs with the State Water Board, regional water boards, the ARB, local air boards, and local jurisdictions to clarify, in writing, each entity's jurisdiction over the implementation and enforcement of this bill.

In addition, this proposal ensures robust legislative oversight; the Supervisor would be required to report to the Legislature every six months on the development, approval, and implementation of the leak detection systems, and CalGEM would be required to report annually, starting January 1, 2027, to the Legislature on the numbers and types of wells and attendant facilities in health protection zones, the population protected by health protection zones, the number and type of NOIs approved in health protection zones, and the number of violations, among other sources of information.

REGISTERED SUPPORT / OPPOSITION:

Support

350 Conejo
 350 Humboldt
 350 Sacramento
 350 Silicon Valley
 350 Southland Legislative Alliance
 350 Ventura County Climate Hub
 5 Gyres Institute
 Active San Gabriel Valley
 Alliance of Nurses for Healthy Environments
 Azul
 Better World Group; the
 Black Women for Wellness
 California Against Waste
 California Climate Voters
 California Communities Against Toxics
 California Environmental Voters (formerly Clcv)
 California Federation of Teachers
 California Religious Action Center of Reform Judaism
 California Safe Schools

Californians Against Waste
Calpirg, California Public Interest Research Group
Carbon Cycle Institute
Ceja Action
Center for Biological Diversity
Center on Race, Poverty and The Environment
Central California Environmental Justice Network
Central Valley Air Quality Coalition
Citizens Climate Lobby West LA Chapter
Clean Water Action
Climate First: Replacing Oil & Gas (CFROG)
Climate Health Now
Climate Reality Project Bay Area Chapter
Climate Reality Project, San Fernando Valley
Climate Tzedek - Congregation Netivot Shalom
Coalition for A California Green New Deal
Coalition for Clean Air
Coare
Communities for A Better Environment
Community Water Center
Conejo Climate Coalition
Courage California
Dayenu Circle At the Orchard
Dayenu Circle of Jewish Silicon Valley
Dayenu of Jewish Silicon Valley
Dayenu: a Jewish Call to Climate Action
Earthjustice
Ecology Center
Elders Climate Action Norcal Chapter
Elders Climate Action Socal Chapter
Environment California
Environmental Defense Fund
Environmental Working Group
Fierce Courage Consulting
Food & Water Watch
Fossil Free California
Fractracker Alliance
Friends Committee on Legislation of California
Glendale Environmental Coalition
Greenpeace USA
Heal the Bay
Indivisible Sacramento
Indivisible Ventura
Kitchen Sf
Leadership Council for Justice and Accountability
Let's Green Ca!
Liberty Hill Foundation
Local Clean Energy Alliance
Long Beach Alliance for Clean Energy

Mothers Out Front Silicon Valley
Napa Climate Now
Nextgen California
Northern California Recycling Association
Nrdc
Oil & Gas Action Network
Orange County Environmental Justice
Pacific Environment
Pacoima Beautiful
Peninsula Interfaith Climate Action
Peninsula Temple Beth El
Physicians for Social Responsibility - Los Angeles
Physicians for Social Responsibility - Sacramento Chapter
Physicians for Social Responsibility - San Francisco Bay Area Chapter
Physicians for Social Responsibility, Los Angeles
Physicians for Social Responsibility/Sacramento
Planning and Conservation League
Plastic Oceans International
Plastic Pollution Coalition
Protect Playa Now!
Richmond Our Power Coalition
Rincon-vitova Insectaries
San Diego 350
Santa Barbara County Action Network
Save Our Shores
Save the Albatross Coalition
Seventh Generation Advisors
Sierra Club California
So Cal 350 Climate Action
Stand.earth
Strategic Concepts in Organizing and Policy Education
Sunflower Alliance
Sunrise Bay Area
Sunrise Los Angeles Youth
Surfrider Foundation
Temple Beth El, Aptos, CA
The Climate Center
The Greenlining Institute
The Nature Conservancy
Transformative Wealth Management LLC
Upstream
Voices for Progress
Voices in Solidarity Against Oil in Neighborhoods (VISION)
Wishtoyo Chumash Foundation
Zero Waste USA

Opposition

California State Association of Electrical Workers

California State Pipe Trades Council

Analysis Prepared by: Paige Brokaw / NAT. RES. /