SENATE COMMITTEE ON ENVIRONMENTAL QUALITY
Senator Blakespear, Chair
2025 - 2026 Regular

Bill No:	AB 28		
Author:	Schiavo		
Version:	9/3/2025	**Hearing Date:**	7/1/2026
Urgency:	No	**Fiscal:**	Yes
Consultant:	Brynn Cook		

SUBJECT: Solid waste landfills: subsurface temperatures

DIGEST: This bill establishes a protocol for CalRecycle to require a corrective action plan in the event of a subsurface elevated temperature event at a landfill. The bill also authorizes the Secretary of the California Environmental Protection Agency (CalEPA) to establish a multiagency coordination group (MCG) to investigate and provide recommendations for addressing a landfill's subsurface elevated temperature event, and specifies that CalRecycle may impose a penalty of up to $100,000 per day to landfill operators that do not follow the requirements of the corrective action plan or recommendations of the MCG, among other provisions.

ANALYSIS:

Existing law:

1) Gives local and regional authorities the primary responsibility for controlling stationary source air pollution and establishes 35 air pollution control districts in the state (Health & Safety Code (HSC) §40000 et seq.).

2) Establishes requirements for handling and disposing of solid waste, as well as the permitting and operation of solid waste facilities (Public Resources Code (PRC) §43000 et seq.).

3) Requires the Department of Resources Recycling and Recovery (CalRecycle) to adopt certification requirements for local enforcement agencies (LEAs) that cover the permitting, inspection, and enforcement of regulations at solid waste facilities, as well as inspection and enforcement of litter, odor, and nuisance regulations (PRC §43200).

4) Authorizes a city or county to declare a local emergency, giving them full power to provide mutual aid to any affected area. Under a locally declared emergency, state agencies can provide mutual aid, personnel, equipment, and other available resources (Government Code (GC) §8630-8634).

5) Requires, under Section 60.36f of Title 40 of the Code of Federal Regulations, municipal solid waste (MSW) landfills to install gas collection and control systems to comply with various federal regulations on landfill emissions.

This bill:

1) Requires that landfill operators take certain actions in the case of a subsurface elevated temperature event, including:
   a) Notify the department, state water board, State Air Resources Board, local enforcement agency, local air pollution control district, local health department, State Department of Public Health, and the appropriate regional water quality control board;
   b) Provide subsurface gas and waste temperature data to those agencies;
   c) Take any action that CalRecycle deems necessary to mitigate and resolve the subsurface elevated temperature event, including, but not limited to, creating a corrective action plan.

2) Specifies requirements for the owner or operator of the solid waste landfill to meet if they are required to have a corrective action plan, including:

   a) Complete a cost assessment for implementing the corrective action plan and for reimbursing the multiagency coordination group, and furnish evidence of financial ability to implement the corrective action plan;

   b) Revise the closure and postclosure maintenance plan to account for additional costs resulting from the subsurface elevated temperature event;

3) Specifies that if the owner and operator of a solid waste landfill cannot sufficiently cover the cost to manage and implement a corrective action plan, the Attorney General may, if warranted, pursue an action against the parent company of the owner and operator of the solid waste landfill.

4) Authorizes CalRecycle to become the enforcement agency for all or part of the solid waste landfill, and to recover its reasonable and necessary costs for being the enforcement agency.

5) Specifies that CalRecycle will adopt regulations to implement the reporting and corrective action plan requirements of the bill and that CalRecycle will provide regular updates to the affected communities on the subsurface elevated temperature event.

6) Authorizes The Secretary for Environmental Protection to coordinate a multiagency coordination group (MCG) to investigate and provide

recommendations on how to achieve resolution of a subsurface elevated temperature event. The owner and operator of a solid waste landfill that experiences a subsurface elevated temperature event shall reimburse the multiagency coordination group for all reasonable and necessary costs.

7) Requires that within 60 days of the MCG developing recommendations, the county public health department shall conduct an initial community health needs assessment and the owner or operator of the solid waste landfill shall post that information on its internet website. Specifies that the MCG can request subsequent community health needs assessments, and the local county public health department shall hold at least two public hearings in the affected communities to discuss the findings of the health needs assessment.

8) Requires the owner or operator of the solid waste landfill to submit or revise and submit an air monitoring and sampling plan to the MCG and the local air district within 30 days of MCG requesting the plan, and begin implementing the plan 30 days after submitting it.

9) Authorizes CalRecycle or local enforcement agencies to impose an administrative civil penalty up to of $100,000 per day for failing to contact agencies or meet the conduct a corrective action plan as described above in (1) and (2).

    a) Specifies that the penalties will be deposited into a new Landfill Subsurface Fire Mitigation Community Fund at the State Treasury, and CalRecycle will continuously appropriate the funds to mitigate harm to people and communities impacted by a subsurface elevated temperature event.

10) Defines "Subsurface elevated temperature event" to mean an event where subsurface gas or waste temperatures at a solid waste landfill persistently exceed 131 degrees Fahrenheit over a substantial area, as determined by CalRecycle.

Background

1) *Landfill Construction.* Landfill construction is governed by a comprehensive regulatory framework encompassing federal, state, and local statutes administered by multiple agencies. Site development requires the installation of engineered infrastructure systems, including, at minimum:
   a) Gas monitoring and extraction wells
   b) Lateral piping for gas conveyance
   c) Groundwater monitoring and extraction wells

d) Instrumentation for continuous or periodic measurement of temperature, gas concentration and composition, and moisture content

Design specifications—including well spacing, monitoring device selection, and monitoring frequency—are determined by site-specific factors such as landfill footprint, depth, operational age, and active or closed status.

2) *Landfill Fires.* According to CalRecycle, California currently has 299 operating and closed landfills. While surface fires at landfills are relatively common, large-scale subsurface fires of the type addressed by this legislation have been rare; CalRecycle has documented only 3–4 such incidents over the past 20–30 years. No federal or state agency maintains comprehensive statistics on landfill fire occurrences landfill fires are classified into two primary categories:

Surface Fires. Surface fires typically result from the inadvertent acceptance of flammable materials, which ignites at or near the landfill surface. These events are characterized by visible flames and are generally detected and suppressed rapidly.

*Subsurface Fires***.** Subsurface fires do not produce visible flames but involve sustained combustion analogous to smoldering charcoal, continuing as long as fuel remains available. There are two types of subsurface fire:

- Subsurface Elevated Temperature (SET) Fires. SETs generally occur at shallower depths in a landfill and result from excessive oxygen infiltration, which accelerates microbial activity and elevates internal temperatures. Indicators include rapid landfill settlement, smoke or smoldering odors emanating from the landfill or gas extraction system, and thermal damage to gas collection wells (e.g., melting or collapse).

- Elevated Temperature Landfill (ETLF) Fires. ETLFs typically occur at greater depths and are initiated by exothermic chemical reactions triggered by heat generated during biological decomposition. Characteristic indicators include elevated moisture content (produced by chemical reactions), increased oxygen, carbon dioxide, and dihydrogen concentrations, elevated gas pressure and flow rates, and altered leachate chemistry.

Once initiated, both SET and ETLF fires can propagate through the landfill mass, sustained by oxygen and waste, while remaining undetectable by visual observation.

3) *Landfill Monitoring 101.* Municipal Solid Waste landfill monitoring requirements are set by federal regulations established by the U.S. EPA, and the frequency of the monitoring depends largely on what is being monitored. Generally speaking, the following requirements apply to most large-scale landfills that are actively accepting waste:

Monthly Monitoring

- Wellheads at landfills using gas collection and control systems (GCCS) must conduct monthly monitoring of items such as temperature, oxygen, nitrogen, methane and pressure levels.
- Landfill covers are inspected monthly to identify and repair issues such as exposed waste, leachate breakouts, and erosion gullies.

Quarterly Monitoring

- Surface emissions monitoring (SEM) is done quarterly to ensure methane emissions are kept below a certain level and to assess how effectively the GCCS is working.
- Components containing landfill gas under pressure must be monitored for leaks.
- Groundwater elevations are typically measured to determine groundwater gradient and direction.
- Chemical analysis of groundwater samples may also be required, especially if certain constituents are detected at elevated levels.

Weekly Monitoring

- The overall integrity of a landfill site, including the cover material, drainage structures, potential erosion areas, and leachate piping and storage facilities, is often inspected weekly.

Pursuant to Federal Law in 40 CFR 60.34(f), landfill operators are required to operate gas collection systems for each area, cell, or group of cells. Landfill gas wellheads must generally maintain temperatures below 131°F. Operators may request a waiver to operate at higher temperatures if they can demonstrate that the elevated temperature will not result in fire initiation or significantly impair anaerobic decomposition by killing methanogenic organisms. Such waivers require U.S. EPA approval.

Landfill design and operational practices influence subsurface fire risk, severity, and duration. The U.S. EPA provides general guidance correlating internal landfill temperatures with operational status:

- 90–131°F: Normal operating range
- 131–145°F: Potential presence of exothermic chemical reactions

- Above 145°F: Inhibition of methane generation
- Above 165°F: Cessation of biological activity; elevated fire risk

While temperature is an important characteristic indicating the presence of a landfill fire, temperature alone is not a definitive indicator of an active or imminent subsurface fire. Additional diagnostic parameters include the carbon dioxide-to-methane ratio, hydrogen concentration, rate of landfill settlement, and excess leachate generation.

5) *How to prevent or stop a landfill fire?* Containing and putting out a subsurface landfill fire is challenging for a number of reasons. To begin with, it is impossible to see where the fire is and where it is spreading. Some of the steps landfill operators can take are:

- Installing more gas extraction wells to remove heat-generating gases and reduce pressure buildup;
- Removing the liquid from landfills, which will help to reduce heat;
- Removing oxygen;
- Installing geomembrane covers to prevent oxygen from entering the landfill; and/or
- Creating physical barrier – such as digging into the landfill and pouring in concrete – to cut off the fire's access to fuel.

6) *The Chiquita Canyon Landfill Fire.* The Chiquita Canyon Landfill is a 639-acre facility located in Castaic, an unincorporated community of approximately 19,000 residents in northern Los Angeles County. Approximately 400 acres were permitted for solid waste disposal; prior to closure in December 2024, the facility received nearly 25% of Los Angeles County's municipal solid waste. Since at least May 2022—a period exceeding four years—a subsurface fire has been active at Chiquita Canyon. The fire originated in a deep, inactive portion of the landfill and has since expanded to an estimated footprint of more than 90 acres. The incident has generated over 27,000 complaints to the South Coast Air Quality Management District (SCAQMD) and has produced substantial volumes of leachate containing elevated benzene concentrations, posing risks to public health and the environment.

7) *Regulation of landfill emissions*. CARB implemented the landfill methane rule (LMR) to monitor and reduce methane emissions from landfills, in 2010. LMR requires owners and operators of certain landfills to install and operate gas collection and control systems, monitor surface methane concentration and other performance parameters, repair emission exceedances and other performance issues, source test, keep records of these actions and data, and

report certain information to CARB or the air districts. LMR allows air districts to voluntarily enter into memoranda of understanding with CARB to implement and enforce the regulation and to assess fees to cover costs. Currently, 22 of the 35 local air districts are implementing and enforcing LMR.

In addition to CARB, federal, State, and local agencies all play a role in regulating landfills including but not limited to:

- Local air districts in California play a lead role in regulating stationary sources of air pollution, including issuing permits for landfill GCCS. Local air districts regulate enclosed flares and other landfill gas combustion devices used to destroy methane and co-pollutants, and respond to nuisance and odor complaints
- CalRecycle regulates solid waste handling, processing, and disposal activities to protect public health and safety and the environment by supporting solid waste local enforcement agencies.
- The State Water Resources Control Board and their nine Regional Water Quality Control Boards (collectively, the Water Boards) regulate discharges to land that could impact surface water and groundwater quality, including regulatory and permitting requirements for landfills.
- The Department of Toxic Substances Control regulates facilities for disposal of hazardous waste.
- U.S. EPA regulates emissions of volatile organic compounds from landfills through requirements similar to those in the LMR.

Comments

1) *Purpose of Bill.* According to the author, "The Chiquita Canyon Landfill has been smoldering and releasing toxic gas into communities within Assembly District 40 for over four years and is the largest on going public health and environmental emergency in Los Angeles. Current regulations and statutes are woefully inadequate to prevent and address this disaster. Assembly Bill 28 will take it a step further by ensuring landfills continually monitor their facilities for increased temperatures, require landfills to be transparent with surrounding communities, and outline progressive enforcement actions that local and state agencies must take if landfill operators fail to successfully implement a corrective action plan."

2) *What has changed in the world since AB 28 left committee?* In November 2025, the CARB board voted to update the State's landfill methane rule for the first time in 15 years. This update includes specific processes for monitoring, reporting, and dealing with elevated subsurface temperature events at landfills. The regulation establishes a tiered response framework for elevated subsurface

temperatures at landfill gas collection wells, triggered at two critical thresholds: 131°F (55°C) and 145°F (62.8°C). These requirements apply to interior wellheads and are designed to detect and prevent subsurface fires. The new provisions include a shorter timeline by which landfill operators must respond to a leak, and new monitoring requirements for landfills with and without gas collection and control systems. The state will also begin requiring operators to respond to detected leaks via third-party technology verified by CARB — including the agency's own California Satellite Methane Project.

3) *What has changed in the bill since AB 28 left committee*? Earlier versions of AB 28 provided more prescriptive identification of what constituted an elevated subsurface temperature event and what should be done at temperatures exceeding 131F vs. 146F. AB 28 instead defers to CalRecycle to identify SETs, defining SET events as temperatures over 131F over some area for some time, with the specifics identified by CalRecycle.

   AB 28 also increases the administrative civil penalty that CalRecycle or local enforcement can levy against non-compliant landfill operators from $10,000 to a staggering $100,000 per day. Those penalties go through CalRecycle to directly mitigate harm to people and communities impacted by a subsurface elevated temperature event.

Related/Prior Legislation
AB 27 (Shiavo, 2025) would have provided a personal and a corporate income tax exemption for any payments a person or a company received as compensation related to the Chiquita Canyon Landfill fire. This bill was held in the Senate Appropriations committee.

SOURCE: Author

SUPPORT:

350 Bay Area Action
350 Conejo / San Fernando Valley
350 Humboldt
350 Sacramento
Breast Cancer Prevention Partners
California Comminuties Against Toxics
California Environmental Voters
California League of United Latin American Citizens (ca Lulac)

Californians Against Waste
Center for Environmental Health
Central California Environmental Justic Network (CCEJN)
Central California Environmental Justice Network
Citizens for Chiquita Canyon Closure
Clean Water Action
Cleanearth4kids.org
Climate Action California
Climate Reality Project, Orange County
Climate Reality Project, San Fernando Valley
Coalition for Clean Air
County of Los Angeles Board of Supervisors
Elder's Climate Action Norcal
Elders Climate Action Socal Chapter
Facts Families Advocating for Chemical and Toxics Safety
Facts: Families Advocating for Chemical & Toxics Safety
Friends Committee on Legislation of California
Full Circle Future
Glendale Environmental Coalition
Green Policy Initiative
Greenaction for Health and Environmental Justice
Mothers Out Front
Mothers Out Front Marin
Mothers Out Front Silicon Valley
Northern California Elders Climate Action
Placer Earth Care Action (PECA)
San Francisco Baykeeper
Santa Cruz Climate Action Network
Socal Elders Climate Action
The Climate Reality Project Orange County Chapter
The Climate Reality Project South Central Coast
The Climate Reality Project, Bay Area Chapter
The Climate Reality Project, California State Coalition
The Climate Reality Project, Los Angeles Chapter
The Climate Reality Project, Riverside County Chapter
The Climate Reality Project, Sacramento Chapter
The Climate Reality Project, San Fernando Valley CA Chapter
Val Verde Civic Association
Valley Improvement Projects

OPPOSITION:

1heartcares of LA Jolla, San Diego, Del Mar, Oceanside and LA Mesa.
AAA Global Trading INC
Apex Diesel Repair
Bluezone Health Solutions
Clever Investor, INC.
Cofacc
County of Kern
Del Mar Dog Rescue
Filipino American Chamber of Commerce of Cerritos (FAC3)
Filipino American Chamber of Commerce of Greater San Diego
First Finance Lending INC
Fix Auto Poway
Jesse Miranda Center for Hispanic Leadership
Mapleview Bnm LLC
Marshall Bnm LLC
Mena Cc INC
Middle Eastern and North American Chamber of Commerce & Clever Community Development, INC.
Mike's Holdings LLC
New Beginnings CDC
Newcomers Support and Development
Orange; County of
Republic Services
Resource Recovery Coalition of California
Robin Hilton Land and Tree Company, INC.
Saban - South Asian Biz America Network
Salon2000 by Je Gems
Sd Business Solutions, INC
Sweetwater Bnm LLC
Time in Destiny
California Council for Environmental & Economic Balance (CCEEB)
Recology
Rural County Representatives of California (RCRC)
Swana California Chapters Legislative Task Force
Waste Connections, INC.
Wm (waste Management)

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