
SENATE COMMITTEE ON ENVIRONMENTAL QUALITY

Senator Blakespear, Chair

2025 - 2026 Regular

Bill No: AB 28

Author: Schiavo

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Urgency: No

Fiscal: Yes

Consultant: Evan Goldberg

SUBJECT: Solid waste landfills: subsurface temperatures.

DIGEST: Establishes a series of reporting requirements for municipal solid waste landfill operators should the landfill exceed certain limits the bill requires the Department of Resources Recycling and Recovery to establish. State and local entities are required to take certain actions under the bill and landfill operators who do not adhere to the law will face certain penalties.

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).

Existing federal regulation:

- 1) 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) Creates a number of definitions, including:
 - a) “Gas temperature” is the temperature of underground landfill gas as reported by a temperature sensor located at a wellhead.
 - b) “Multiagency coordination group” (MACG) means a group of agencies selected and coordinated by the California Environmental Protection Agency (CalEPA) to investigate a subsurface elevated temperature event and provide advice on how to resolve it.
 - c) “Subsurface elevated temperature (SET) event” means an elevated landfill gas temperature above *131 degrees* Fahrenheit that persists for two or more consecutive monthly monitoring periods covering 60 consecutive days.
 - d) “Resolution” means both of the following have occurred:
 - i. After a SET event occurs, the gas temperature drops below *131 degrees* Fahrenheit and stays under that level for three consecutive monthly monitoring periods covering 60 days or longer; and
 - ii. The operator of the MSW landfill informs residents within four miles of the MSW landfill of the temperature decrease.
 - e) “Temperature sensor” means a sensor that accurately measures the temperature of a facility.
- 2) Requires the operator of a MSW landfill to monitor landfill gas temperatures in accordance with regulations adopted by the California Air Resources Board (CARB).
- 3) Requires the MSW landfill operator to, if the gas temperature is *131 degrees* Fahrenheit or higher for two consecutive monthly monitoring periods covering 60 consecutive days, and if other criteria established by CalRecycle are met including, but not limited to, the gas and moisture threshold levels permitted in the landfill and the number of wellheads exceeding these limits over a particular geographic area:
 - a) Notify the LEA and CalRecycle about the SET event within 48 hours;

- b) File with the LEA and CalRecycle both the actions it has taken in response to the SET event and the root cause analysis prepared pursuant to Section 60.36f of Title 40 of the Code of Federal Regulations within 14 days;
 - c) Work with the LEA and CalRecycle to resolve the issue within 21 days. The LEA and CalRecycle must inspect the MSW landfill and independently assess the nature and extent of the SET event within 21 days;
 - d) Report the average weekly temperatures recorded by each temperature monitor at the MSW landfill to the LEA within 30 days and then on a monthly basis going forward; and
 - e) Work with the LEA and CalRecycle to collaboratively develop and implement a corrective action plan within 45 days.
- 4) Requires the MSW landfill operator to, if the gas temperature is *146 degrees* Fahrenheit or higher for two consecutive monthly monitoring periods covering 60 consecutive days:
- a) Notify the LEA and CalRecycle within 48 hours;
 - b) Do everything listed in (3) above;
 - c) Within 9 days, engage with the LEA and CalRecycle to work towards resolution. The LEA and CalRecycle must inspect the MSW landfill and independently assess the SET event to determine why earlier actions did not resolve the issue;
 - d) Post on its internet website the average weekly temperatures recorded by each temperature monitor at the MSW within 30 days and then on a monthly basis going forward; and
 - e) Within 45 days, work with the MACG formed by CalEPA to collaboratively develop and begin implementing a corrective action plan to resolve the issue.
- 5) Requires the MACG to continue to monitor the situation and provide advice.
- 6) Requires CalEPA, after the MACG is formed, to develop a fact sheet specific to the SET event and have the landfill operator send it to residents within two miles of the landfill. The operator must send monthly updates to the residents describing, at a minimum, the sustained elevated gas temperature, what the MSW landfill operator has done to address the issue, and “other relevant information” until the issue has been resolved.
- 7) Requires the Office of Environmental Health Hazard Assessment (OEHHA) to, as quickly as possible, use the Community Assessment for Public Health Emergency Response (CASPER) Toolkit, established by the federal Centers

for Disease Control and Prevention (CDC) to provide information regarding the effects of the SET event on the community, and post this information on its internet website.

- 8) Requires, if the gas temperature is *162 degrees* Fahrenheit or higher for longer than two consecutive monthly monitoring periods covering 60 consecutive days, then in addition to (3), (4), (5), (6) and (7):
 - a) The MSW landfill operator must notify the LEA and CalRecycle within 48 hours of the SET event;
 - b) The LEA and CalRecycle must engage with the operator to work towards resolving the issue within 9 days. The LEA and CalRecycle must inspect the MSW landfill and independently assess the nature and extent of the SET event and why earlier actions did not resolve the issue; and
 - c) Within 45 days, the operator and the MACG must collaboratively develop and begin implementing a corrective action plan to resolve the issue.
- 9) If the gas temperature is *162 degrees* Fahrenheit or higher for two consecutive monthly monitoring periods covering 60 consecutive days, then:
 - a) If the LEA or CalRecycle determine the SET event poses an imminent and substantial risk to the public health, safety, or environment of the surrounding community, the LEA or CalRecycle may suspend the operator's permit to operate the portion of the MSW landfill affected by the SET event; and
 - b) If the LEA is permitted to proclaim a local emergency pursuant to Government Code §8630, it may proclaim a local emergency. If the LEA has not been designated to proclaim a local emergency, it may ask the appropriate city, county, or city and county to proclaim an emergency.
- 10) Requires an LEA to maintain constant communication with the CalRecycle to ensure there is a corrective action plan in place for any SET event.
- 11) Requires, in addition to any other remedies provided by law, the LEA or CalRecycle to impose an administrative civil penalty not to exceed \$10,000 per day for cases where an MSW landfill operator fails to:
 - Notify an LEA and CalRecycle of an SET event within 48 hours *after* the 60-day clocks in (3), (4), and (8) above have run;
 - Report to the LEA the average weekly temperatures recorded by each temperature monitor at the MSW landfill within 30 days and every month thereafter; and

- Post on its internet website the average weekly temperatures recorded by each temperature monitor at the MSW landfill within 30 days and every month thereafter.
- 12) Requires the LEA or CalRecycle to impose a penalty of up to \$1 million for each week of an SET event where the gas temperature is *162 degrees* Fahrenheit or higher for longer than 60 days. This can only be imposed if CalRecycle determines:
- The event poses an immediate and substantial risk to the public health, safety, or environment of the surrounding community; and
 - The operator's gross negligence either caused the SET event itself or a failure to resolve the SET event.
- 13) Requires all penalties collected under this bill to be deposited into the Landfill Subsurface Fire Mitigation Account, which the bill creates. Upon appropriation by the Legislature, the money can be spent to mitigate harm to a person or a community adversely affected by an SET event and must be prioritized to help people affected by the MSW landfill where the incident occurred.
- 14) Requires a permit suspended pursuant to this bill to be reinstated – subject to additional operating conditions imposed by CalRecycle – once an issue has been resolved.
- 15) Requires CARB to create mandatory requirements for landfill gas temperature monitoring as part of its regulations on methane emissions from MSW landfills to help identify and mitigate SET events.
- 16) Requires CalEPA to – by January 1, 2027 – establish minimum guidelines to identify and manage SET events and set minimum standards for a corrective action plan. When developing these guidelines and standards, CalEPA must consider federal, state, and local standards, recommendations, and guidance, and may consider information provided by stakeholders with expertise in operating and managing solid waste facilities and SET events.
- 17) Makes the MSW landfill operator liable for any costs incurred by the LEA and CalRecycle.
- 18) Within 48 hours of asking for federal approval to establish a higher operating temperature value at a particular well, the landfill operator must notify the LEA and a state agency designated by CalEPA. The notice must include a

copy of the request and the landfill operator must also provide notice of approval or denial of the request, including any conditions attached to an approval, within five days of receiving any approval or denial from the federal agency.

19) Exempts from the state's Administrative Procedures Act (APA):

- a) The criteria CalRecycle must develop requiring a landfill operator to notify the LEA and CalRecycle that an SET as defined by this bill is occurring;
- b) The development of any corrective action plan; and
- c) The development of any additional operating requirements CalRecycle may impose when reinstating a suspended landfill operating permit.

Background

- 1) *Landfill Construction 101*. When a landfill is built, it's not simply a matter of finding a large open area where waste can be dumped. Rather, there is a labyrinth of state and federal laws and regulations involving multiple federal, state and local agencies.

For the purpose of this bill, it may be useful to know that landfill construction involves – at a minimum – a series of:

- Gas monitoring and extraction wells;
- Lateral pipes to remove gas;
- Water monitoring and removal wells;
- Devices for monitoring temperatures, gas levels and composition, water content, and more.

The number of monitoring and extraction wells, how far apart they are, what devices are used to conduct the monitoring, how frequently wells are monitored, and many other items will vary based on how large a landfill is, how deep it is, how old it is, and whether it is still accepting waste.

- 2) *Landfill Fires 101*. According to CalRecycle, there are 299 operating and closed landfills in California. While most people never hear about landfill fires in the same way they hear about wildfires, certain types of landfill fires aren't uncommon. While no federal or state agency tracks the number of landfill fires, reported large subsurface landfill fires of the type this bill attempts to address have been relatively rare in California – CalRecycle only knows of 3-4 in the past 20-30 years.

There are generally two types of fires that happen in landfills – surface fires and *subsurface* fires.

Surface fires typically occur when a landfill inadvertently accepts flammable waste that ignites on the landfill's surface. These fires tend to be accompanied by flames and because they are easier to spot, they generally can be quickly identified and put out.

The term “subsurface fire” is a bit of a misnomer in the sense these events aren't accompanied by the flames most people think of when they hear or read the term “fire.” However, similar to the “fire” associated with charcoal briquettes in a barbeque that will continue to burn until the briquettes are gone, a subsurface landfill fire will continue to burn as long as it has access to fuel.

Subsurface fires fall into one of two categories – subsurface elevated temperature (SET) fires and elevated temperature landfill (ETLF) fires. While the language in AB 28 only refers to SET fires, its requirements will apply to all subsurface fires and events.

An SET fire generally happens much shallower[^] in the landfill than an ETLF and is generally driven by access to too much oxygen, which makes the bacteria in the landfill more active and raises the temperature inside the landfill. Other characteristics of SET fires include substantial settling of the landfill over a short period of time, smoke or smoldering odors coming from the landfill or its gas extraction system, and the melting or collapsing of gas collection wells.

An ETLF fire generally occurs much deeper[^] within a landfill and generally stems from chemical reactions triggered when waste is heated by biological decomposition. ETLF fires tend to be characterized by a high water content produced by the chemical reactions, elevated oxygen, carbon dioxide, and dihydrogen levels, increases in both the pressure and flow of the gases, and a change in the makeup of the water coming from the landfill.

Once an SET or an ETLF fires starts, it can spread within the landfill – using oxygen and waste fed by more and more oxygen and waste – to spread further and further, all while remaining hidden from the naked eye.

[^] How “shallow” is shallow and how “deep” is deep depends on a number of different factors. Generally, landfills range from 100 feet to 500 feet deep, so in a landfill that's 400-500 feet deep, an ETLF fire is likely to be at least 250-300 feet below the surface and

anything less than that is likely considered “shallow,” meaning it is more likely to be an SET fire. What distinguishes an SET from an ETLF is more about the chemical reactions taking place and less about how deep it is in the landfill.

- 3) *Landfill Monitoring 101.* MSW 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.

- 4) *Temperature Monitoring Is Important, But High Temperatures Alone Aren't Necessarily Indicative Of A Fire.* How a landfill is designed and managed plays a role in whether a subsurface landfill fire can occur, and how bad it may be, and how long it may last.

The U.S. EPA has laid out some general guidance about what may be happening inside a landfill when the temperature is at a certain level:

- Normal landfill temperatures are between 90-131 degrees Fahrenheit;
- Temperatures from 131 to 145 degrees suggest heat-generating chemical reactions may exist;
- Temperatures above 145 degrees generally will slow methane generation; and
- Temperatures above 165 degrees are generally when biological activity begins to cease, which may trigger a landfill fire.

However, a landfill's temperature is not the sole indicator that a landfill fire is occurring or is eminent. Other items – such as the ratio of carbon dioxide to methane, hydrogen levels, the amount of settlement occurring at the landfill, and whether the landfill is producing excess liquid – all play a role in helping determine whether a subsurface landfill fire is underway or may be on the horizon.

5) *What Could A Landfill Operator Do If It Fears A Subsurface Fire Is Eminent Or Happening?* Containing and putting out a subsurface landfill fire is challenging for a number of reasons, the main one being it's impossible to see where it's burning and where it's heading. 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) *Some Federal Requirements Affecting Landfills.* Federal regulations (40 Code of Federal Regulations 60.34(f)) require landfill operators to operate a gas collection system for each area, cell, or group of cells.

Landfill gas wellheads must generally work to keep landfill gas temperatures below 131 degrees, but the regulation authorizes a landfill operator to set a higher operating temperature at a particular well if they can show the higher temperature won't lead to a fire or significantly inhibit anaerobic

decomposition by killing methanogens. These waiver requests must be approved by the U.S. EPA.

- 7) *The Chiquita Canyon Landfill Fire.* The 640-acre Chiquita Canyon Landfill is located in Castaic – an unincorporated community of about 19,000 people in northern Los Angeles County – about six miles west of Six Flags Magic Mountain near Interstate 5.

The facility – which had about 400 acres permitted for solid waste disposal – accepted nearly 25% of Los Angeles County's solid waste prior to closing in December 2024.

Since at least May 2022 – for more than three years now – a subsurface fire has been burning at Chiquita Canyon. The fire, located deep in an inactive area of the landfill, has grown significantly – it's now estimated at more than 90 acres – since first being identified and has had a direct and substantial impact on people living and working in the surrounding community.

The fire has generated more than 27,000 complaints to the South Coast Air Quality Management District (SCAQMD) and has produced a great deal of liquid waste (leachate) containing high levels of benzene, a chemical that poses risk to public health and the environment.

- 8) *What Have State & Local Governments Been Doing?* Regulatory agency responses to the fire picked up following a spike in complaints about odors coming from the landfill in late 2023. That November, local, state, and federal agencies formed a Multi-Agency Critical Action Team (MCAT), led by the U.S. EPA, to coordinate investigations and enforcement. The MCAT is comprised of CalEPA, CalRecycle, the Department of Toxic Substances Control (DTSC), CARB, the Los Angeles Regional Water Board, SCAQMD, and the Los Angeles County Department of Public Works. OEHHA has provided support to the MCAT by identifying potential health risks associated with the fire and providing technical expertise.

Using the MCAT has resulted in better coordination between oversight entities and led the SCAQMD to issue a “stipulated order of abatement” to address odor issues and the U.S. EPA to issue a “unilateral administrative order” requiring the landfill operator to comply with the law.

In February 2024, U.S. EPA, CalEPA, and Los Angeles County set up a second entity – the Response Multi-Agency Coordination Group – to monitor the fire and advise the landfill operator on the ongoing response to it. The LEA,

DTSC, the regional board, and the U.S. EPA have issued various violations and penalties related to the fire.

In June 2024, the U.S. EPA cited the landfill company for violating various regulations intended to safeguard human health. The company is facing potential civil penalties of up to \$59,114 for each day of violation.

The SCAQMD and other state regulators have issued dozens of violation notices. Last November, the SCAQMD ordered the landfill's owner to create a webpage that includes real-time air monitoring of smelly or potentially harmful pollutants, including hydrogen sulfide, methane, dimethyl sulfide and volatile organic compounds.

On April 1, 2025, DTSC imposed a fine of up to \$70,000 per day on the landfill operator for failing to minimize the possibility of hazardous waste releases and failing to comply with land disposal restriction requirements.

9) *CalRecycle's Review.* According to CalRecycle's review of the Chiquita Canyon Landfill fire, a partial list of issues caused by the fire include:

- Significant emissions and odors that have impacted the community of Val Verde and surrounding areas from 2023 to 2025;
- The interim cover (over the landfill) has experienced significant damage from settlement, leachate outbreaks, slope instability, and fissures;
- The leachate contains hazardous levels of benzene;
- Temperatures have reached the maximum detectable limit of 250 degrees Fahrenheit in some wells;
- Nine wellhead temperature have exceeded 200 degrees Fahrenheit and 83 have exceeded 170 degrees Fahrenheit since 2023;
- Two slope instability incidents have occurred on the west slope;
- Carbon monoxide levels have exceeded 1,500 parts per million by volume (ppmv); and
- Temperatures exceeding 140 degrees Fahrenheit have affected the service life of a portion of the landfill's liner.

10) *CalRecycle's Determinations.* Based on its findings, CalRecycle staff concluded:

- The landfill operator's barrier plan will not contain or control the reaction and there is no proposed barrier to prevent the fire from consuming the entire facility;
- The fire is expanding, and the current containment strategy has failed;

- More than one independent fire is developing due to the current gas collection and control system operations; and
- The expansion of the fire into an additional cell must be prevented.

11) *Chiquita Canyon, LLC*. Waste Connections, which owns and operates the Chiquita Canyon Landfill, prepared its own report, stating that as of October 2024, the landfill operator has:

- Installed over 41 acres of geosynthetic cover over the reaction area to reduce the volume of fugitive gas emissions;
- Installed more than 110 dewatering pumps to remove leachate and the corresponding heat;
- Installed more 220 vertical dual extraction wells to reduce pressures and remove gas and heat; and
- Evaluated data on a monthly basis to see if the fire spread to other cells or modules within the landfill.

12) *Community Outreach*. According to Waste Connections, it began a community relief program in March 2024 to help people in communities near the landfill offset costs associated with odor mitigation. Those costs – which are expected to total \$25 million – included funding for:

- Temporary relocation;
- Home hardening;
- Increased utility bills;
- Providing nearly 1,800 air filters to the community, including filters for the Castaic Union School District; and
- An air monitoring station at Castaic Middle School at an annual cost of approximately \$330,000.

13) *Chiquita Canyon Isn't The Only Subsurface Landfill Fire Happening Now*. The El Sobrante Landfill in Riverside County has been experiencing its own landfill fire that may have been burning since 2018.

About four acres of the permitted landfill's 468-acre footprint are affected by the event and beginning in 2024, 64 pumps were installed to remove water and bring down the temperature inside the landfill. Approximately 25.5 million gallons of water have been removed over the past 17 months.

According to an article in the *Los Angeles Times*, temperatures inside the El Sobrante Landfill were over 200 degrees Fahrenheit at one point last August.

Beyond Chiquita Canyon and El Sobrante, it is worth noting there *may* be at least eight other landfill sites experiencing elevated temperatures.

The Fire Information for Resource Management System (FIRMs), which compiles satellite temperature data from the National Aeronautics and Space Administration (NASA), has identified eight landfill sites in Southern California where the temperatures are over 125 degrees Fahrenheit – which could mean temperatures inside the subsurface of the landfill are even higher.

- 14) *JLAC Audit.* On June 18, 2025, the Joint Legislative Audit Committee (JLAC) approved a request from Assemblymember Schiavo on a 7-0 vote to direct the California State Auditor to conduct an audit of the Los Angeles County Department of Public Health’s response to the Chiquita Canyon Landfill fire.

The State Auditor estimates the audit will cost \$449,350 and take 2,365 hours to complete. There is no estimated completion date for the audit, though absent unique or unusual circumstances, most audits are generally completed within a year.

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 three 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) *Adapting The Response To Chiquita Canyon To Prevent Potential Future Subsurface Landfill Fires.* It is difficult to overstate the level of suffering the residents of communities surrounding the Chiquita Canyon Landfill have endured since the landfill fire broke out more than three years ago – and there doesn’t appear to be any end in sight.

Whether the responses from federal, state, and local governments have been quick enough and thorough enough is the subject of much debate. What is not the subject of debate is this bill will have no impact on the Chiquita Canyon situation. Rather – as discussed in more detail below – this bill takes many of

the things government agencies did in response to the Chiquita Canyon Landfill fire and turns them into mandatory actions state and local governments must take in the hopes of preventing – and if necessary, responding to – subsurface landfill fires.

Whether these actions are necessary, appropriate, workable, and implementable is the central question posed by this bill.

- 3) *Putting Someone In Charge To Prevent Subsurface Landfill Fires From Occurring.* One of the issues when it comes to landfills is there are a number of federal, state, regional, and local entities that can apply various regulations and issue permits, but arguably no one entity is truly in charge.

Under this bill, CalEPA is required to form a MACG once a landfill reports it has experienced landfill temperatures of 146 degrees Fahrenheit or higher for two consecutive monthly monitoring periods covering 60 consecutive days. It is then in charge of deciding what state and local agencies should be a part of the MACG, and those participating entities are likely to vary from incident to incident.

- 4) *Requiring One Entity To Lead Preventative Activity Sooner.* Whether a single entity should be in charge of this issue beginning at the landfill permitting stage is a question perhaps for another bill and another day.

This bill requires a landfill operator to begin reporting information to CalRecycle and an LEA when the landfill temperature is at or above 131 degrees Fahrenheit – the level at which the U.S. EPA says suggests heat-generating chemical reactions may exist – and other benchmarks to be established by CalRecycle have been met for two consecutive monthly monitoring periods covering 60 consecutive days. The bill then requires CalRecycle and the LEA to engage with the landfill operator within 21 days to examine the nature and extent of the landfill fire and work to resolve it.

- 5) *Current Monitoring Requirements vs. The Bill's Monitoring Requirements.* As noted in the “Background” section, wellheads at landfills using gas collection and control systems (GCCS) are already monitored monthly where information on temperature, oxygen content, nitrogen content, pressure levels, and more is collected.

AB 28 requires if the temperature is at 131 degrees Fahrenheit or higher at X number of wellheads (the number to be established by CalRecycle) and other criteria (oxygen content levels, pressure levels, etc.) set by CalRecycle occur

for two monthly monitoring periods covering 60 days, the event must be reported to the LEA and CalRecycle.

After that, one of the requirements of this bill is the landfill operator must begin reporting the “average weekly temperatures recorded by each temperature monitor” to CalRecycle and the LEA. Given that the criteria established by CalRecycle may only be exceeded at a small percentage of a landfill’s wellheads, *the author and committee may wish to consider applying the weekly temperature reporting requirement only to those affected wellheads and to delete the term “average” to ensure the raw data is reported.*

The weekly reporting requirement also exists should the temperature in the landfill continue to rise and hit the 146 and 162 degrees Fahrenheit levels delineated in the bill and making the change noted above will also apply the change to these higher levels as well.

- 6) *Multi-Agency Coordination Group.* Following the Chiquita Canyon Landfill fire, the U.S. EPA formed and led a Multi-Agency Critical Action Team (MCAT) that consisted of four state agencies and three regional or local agencies.

This bill requires CalEPA to form a similar multi-agency coordination group (MACG) after every subsurface landfill fire where the gas temperature in the landfill is at 146 degrees Fahrenheit or higher for two consecutive monthly monitoring periods covering 60 consecutive days or longer and other criteria established by CalRecycle has been met.

- 7) *OEHHA Study.* The bill requires the Office of Environmental Health Hazard Assessment (OEHHA), in a subsurface landfill fire where the criteria noted in (6) above has been met, to use the Community Assessment for Public Health Emergency Response (CASPER) Toolkit established by the federal Centers for Disease Control and Prevention (CDC) to identify potential health risks to the surrounding community.

According to information on its website, CASPER is an epidemiologic technique designed to provide household based information about a community quickly and at a relatively low cost. The CASPER toolkit is designed to help local, state, regional, or federal offices conduct a rapid needs assessment to determine the health status, basic needs, or knowledge, attitudes, and practices of a community so other organizations can provide people with the assistance they need.

The bill requires OEHHA to post the results of the CASPER review on its website. *The author and committee may also wish to consider requiring the landfill operator to post the results of the CASPER review on its website.*

- 8) *Penalties & Reimbursements.* The bill sets up a fine structure and requires any money collected from landfill operators to be deposited into the Landfill Subsurface Fire Mitigation Account created by the bill. That money could be spent – upon appropriation by the Legislature – by CalRecycle to help people impacted by a subsurface landfill fire.

Beyond the fines a landfill operator faces – up to \$10,000 a day for some violations, up to \$1 million a week for violations where it's been determined the landfill fire was caused by operator's gross negligence – the bill makes a landfill operator liable for the "actual and reasonable costs" CalRecycle and the LEA incur in enforcing this law.

While not unheard of, it is certainly not common practice to make private entities liable for the costs government entities incur as a part of carrying out their duties.

- 9) *Temperature Waivers.* As noted in the "Background" section, the U.S. EPA requires landfill temperatures to generally be kept at no more than 131 degrees. However, U.S. EPA can issue waivers to allow a landfill operator to set a higher operating temperature.

The state certainly cannot preclude the U.S. EPA from issuing such waivers. However, to increase transparency and provide valuable information to California regulators, this bill requires landfill operators to (a) report to a state entity designated by CalEPA and the local LEA any time it requests a waiver from the U.S. EPA; (b) report if and when it receives the waiver or is denied a waiver; and (c) report any conditions attached to the waiver. While this requirement would apply to any requests made after the bill, if signed into law, takes effect, it would not provide any information about waivers that have been previously granted. As such, *the author and committee may wish to consider amending the bill to require landfill operators to provide information on temperature waivers they have previously requested and received. Furthermore, the author and committee may wish to consider requiring CalEPA and the LEA to post this information on their websites.*

- 10) *What About Landfills Where No Monitoring Is Required?* As noted in the "Background" section, the U.S. EPA sets the monitoring requirements for

landfills under the New Source Performance Standards (40 CFR Part 60 Subpart WWW) or the National Emission Standards for Hazardous Air Pollutants (40 CFR Part 63 Subpart AAAAA) – more affectionately known as the NSPS and NESHAP standards.

Under the NSPS and NESHAP standards, certain landfill facilities are exempt from the federal monitoring requirements:

- Facilities with less than 1.75 million tons of waste on site*;
- Facilities that have been closed for 15 or more years; and
- Facilities that have had their gas collection and monitoring systems removed or where federal authorities have verified gas is no longer being produced.

* For a sense of scale, the Chiquita Canyon Landfill has a permitted capacity of 60 million tons of waste and typically accepted about 2 million tons of waste a year before closing. The El Sobrante Landfill has a permitted capacity of 109 million tons of waste and took in about 3.2 million tons of waste in 2023 alone. The Sunshine Canyon Landfill, which accepts about 33% of the daily waste in Los Angeles County, takes in about 2.5 million tons of waste each year.

Given these facilities are exempt from the NSPS and NESHAP requirements to conduct any type of weekly, monthly, or quarterly monitoring and, in many cases, have had their gas collection and wellhead monitoring systems removed, ***the author and committee may wish to consider exempting these facilities from the provisions of AB 28.***

- 11) *Administrative Procedures Act Exemptions.* When a state agency such as CalRecycle proposes regulations or guidelines, it must go through the state's Administrative Procedures Act (APA) process and have those regulations approved by the Office of Administrative Law. The core reasons for this process are to ensure the public has the opportunity to review and provide input on all proposed regulations and that the regulations adhere to the law.

How long the APA process takes varies in part based on the complexity of the regulatory proposal and how contentious it may be, but it is safe to say the process will take a minimum of three months.

This bill exempts three items from the APA:

- a) The criteria CalRecycle must develop to require a landfill operator to notify the LEA and CalRecycle that an SET as defined by this bill is occurring;
- b) The development of any corrective action plan; and
- c) The development of any additional operating requirements CalRecycle may impose when reinstating a suspended permit to a landfill operator.

While the exemptions (b) and (c) may be warranted given the need for CalRecycle to act quickly in a situation-specific event, ***the author and committee may wish to consider deleting the APA exemption in (a) to ensure the public and the MSW landfill operators have the opportunity to weigh in on any proposed regulations or criteria. At the same time, the author and committee may wish to direct CalRecycle to use the state's emergency regulatory process to adopt this criteria as quickly as possible while still providing for public input.***

12) *Technically Speaking.* There are a number of technical changes and clarifications ***the author and committee may wish to consider making:***

- a) The bill defines “resolution” of an event to mean when a landfill’s temperature drops below a certain level and the community has been notified. However, there is no requirement for a state or local entity to declare those events have occurred and an event has truly been resolved in the eyes of the state. ***The author and committee may wish to consider directing CalRecycle to determine when “resolution” has occurred following an event and to effectively give the “all clear” signal to the community and the landfill operator.***
- b) Rather than have CalEPA establish minimum guidelines to identify and manage landfill fires and set minimum standards for corrective action plans, ***the author and committee may wish to consider assigning this task to CalRecycle.***
- c) The bill restates a provision of existing law allowing an LEA to ask the appropriate city, county, or city and county to declare a local emergency. ***The author and committee may wish to consider adding to that list the ability of an LEA to ask the state to declare an emergency.***
- d) The bill requires a landfill operator to notify the LEA and an agency designated by CalEPA when it requests, receives, or is denied a request to exceed the minimum temperature levels at a landfill. ***The author and committee may wish to consider requiring CalRecycle to be notified as well.***

- e) The bill requires the landfill operator to mail certain information to residents within *two miles* of a facility when an SET is triggered, but then to mail certain information to residents within *four miles* of a facility when an incident has been resolved. ***The author and committee may wish to consider making these two notification requirements consistent at four miles.***
- f) The bill defines “gas temperature” as the landfill temperature “reported by a temperature sensor located at a wellhead.” However, not all landfills use “temperature sensors” – many rely on people to go out with handheld monitoring equipment to take readings. As such, ***the author and committee may wish to consider re-defining “gas temperature” to mean the temperature of the gas measured at the wellhead. The author and committee may also then wish to consider adopting a conforming amendment to strike the definition of “temperature sensor.”***
- g) The bill requires landfill operators to post wellhead temperature readings on their website at certain times. ***The author and committee may wish to consider removing this posting requirement once an event has achieved “resolution.”***
- h) At various places in the bill, the measure requires CalRecycle and the LEA to take certain actions. Given that not every area of the state has an LEA, ***the author and committee may wish to consider stating that “CalRecycle or an LEA that has been certified by CalRecycle” should take certain actions.***
- i) Given this bill has many provisions, ***the author and committee may wish to consider adding a severability clause to ensure that if one portion of the measure – should it be signed into law – is ruled to be invalid, then the entire bill will not be invalidated.***
- j) The bill requires – in addition to any other remedies available under the law – CalRecycle and the LEA to impose an administrative civil penalty not to exceed \$10,000 per day for certain violations. ***The author and committee may wish to consider making this optional, rather than mandatory, and to replace “not to exceed” with “of” to make the only penalty option in this section a flat \$10,000 per day instead of “not to exceed” \$10,000 per day.***
- k) Three other technical changes ***the author and committee may wish to consider making would be to:***
 - i. Move the date by which CalRecycle must establish its minimum guidelines for identifying subsurface events and developing correction action plans from January 1, 2027, to July 1, 2027;

- ii. Strike “or longer” so an event can achieve resolution when certain thresholds have been hit over three consecutive monitoring periods covering 60 days and the community notification has occurred; and
- iii. Change “moisture levels” to “liquid levels” as one of the criteria CalRecycle may consider when developing its standards for when a landfill operator will be required to begin reporting an elevated temperature event.

13) *Amendments. Staff recommends the author and committee adopt the bolded amendments in Comments 5, 7, 9, 10, 11, and 12.*

Related/Prior Legislation

AB 27 (Shiavo) provides 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 approved by the Senate Revenue & Taxation Committee on a 5-0 vote and the Senate Human Services Committee on a 5-0 vote. AB 27 is now pending in the Senate Appropriations Committee.

Prior Actions

Assembly Natural Resources Committee:	11-3
Assembly Appropriations Committee:	11-3
Assembly Floor:	56-9

SOURCE: Author

SUPPORT:

Breast Cancer Prevention Partners
 California Communities Against Toxics
 California Environmental Voters
 Californians Against Waste
 Central California Environmental Justice Network
 Citizens for Chiquita Canyon Closure
 Climate Action California
 Climate Reality Project, Orange County
 Coalition for Clean Air
 County of Los Angeles Board of Supervisors
 Facts Families Advocating for Chemical and Toxics Safety
 Green Policy Initiative
 Greenaction for Health and Environmental Justice

Northern California Elders Climate Action
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
Valley Improvement Projects
2 Individuals

OPPOSITION:

1heartcares of LA Jolla, San Diego, Del Mar, Oceanside and LA Mesa.
AAA Global Trading INC
Apex Diesel Repair
Bluezone Health Solutions
California Council for Environmental & Economic Balance (CCEEB)
Clever Investor, INC.
Cofacc
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
Republic Services
Resource Recovery Coalition of California
Robin Hilton Land and Tree Company, Inc.

Rural County Representatives of California (RCRC)
Saban - South Asian Biz America Network
Salon2000 by Je Gems
SD Business Solutions, Inc.
Swana California Chapters Legislative Task Force
Sweetwater Bnm LLC
Time in Destiny
Waste Connections, Inc.
WM (Waste Management)

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