SENATE COMMITTEE ON APPROPRIATIONS
Senator Anna Caballero, Chair
2025 - 2026 Regular Session

AB 28 (Schiavo) - Solid waste landfills: subsurface temperatures

Version: July 18, 2025
Urgency: No
Hearing Date: August 18, 2025
Policy Vote: E.Q. 7 - 0
Mandate: Yes
Consultant: Ashley Ames

Bill Summary: This bill would establish a series of reporting requirements for municipal solid waste landfill operators should the landfill exceed certain limits that the bill would require the Department of Resources Recycling and Recovery (CalRecycle) to establish. State and local entities would be required to take certain actions under the bill and landfill operators who do not adhere to the law would face certain penalties.

Fiscal Impact:

- CalRecycle estimates ongoing costs beginning of $514,000 annually (Integrated Waste Management Act Fund) for two positions to inspect, assess, and analyze landfills and to provide all necessary legal assistance, including rulemaking and issuing corrective action orders.
- The California Air Resources Board (CARB) estimates ongoing costs of about $610,000 annually (Cost of Implementation Account) to update regulations, provide technical expertise and analysis, and support development guidelines, among other things.
- The Department of Justice (DOJ) estimates unquantifiable but potentially significant ongoing costs (Legal Services Revolving Fund) related to client representation and enforcement work arising from this bill.
- The Office of Health Hazard Assessment (OEHHA) estimates ongoing annual costs of approximately $459,000 for two positions and $250,000 (General Fund) in contracting costs to implement the additional risk communication mandates and community survey requirements in the bill. OEHHA estimates additional and variable costs of an unknown but potentially significant amount to conduct a community health needs assessment using the CASPER toolkit to identify effects of the subsurface elevated temperature event on the surrounding community as necessary.
- The State Water Resources Control Board (State Water Board) anticipates ongoing annual costs of approximately $750,000. This includes $250,000 for the Los Angeles Regional Water Quality Control Board, and $250,000 for the Santa Ana Regional Water Quality Control Board, for anticipated participation in the multiagency coordination group (MCG) to develop the corrective action plans (CAP) for subsurface elevated temperature events (SET) to respond to the SETs at the Chiquita Canyon Landfill and the El Sobrante Landfill respectively, and any other potentially impacted landfills in the future.

Background:

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.

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 *sub*surface 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.

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.

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Proposed Law: This bill would:

1. Define terms.

2. Require the operator of a MSW landfill to monitor landfill gas temperatures in accordance with regulations adopted by CARB.

3. Require the operator of an MSW landfill to monitor landfill gas temperature in accordance with those regulations.

    a. If the gas temperature is 131 degrees Fahrenheit or higher for longer than 2 consecutive monthly monitoring periods covering 60 consecutive days, and if other criteria established by CalRecycle are met, the bill would require the operator of the MSW landfill to take specified actions, including, but not limited to, working collaboratively with CalRecycle and the local enforcement agency, as defined, to develop and implement a corrective action plan.

    b. If the gas temperature is 146 degrees Fahrenheit or higher for longer than 2 consecutive monthly monitoring periods covering 60 consecutive days, and if other criteria established by CalRecycle are met, the bill would require additional actions, including, but not limited to, the CalEPA forming a multiagency coordination group (MACG) to collaborate with the operator of the MSW landfill to develop and implement another corrective action plan, as specified.

    c. If the gas temperature is 162 degrees Fahrenheit or higher for longer than 2 consecutive monthly monitoring periods covering 60 consecutive days, and if other criteria established by CalRecycle are met, the bill would require additional actions, as specified. The bill would require CalRecycle to establish the other criteria by emergency regulation.

4. Require 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.

5. Authorize, in addition to any other remedies provided by law, the LEA or CalRecycle to impose an administrative civil penalty of $10,000 per day for cases where an MSW landfill operator fails to provide notice of a sustained gas temperature by the specified due date.

6. Require CalRecycle or a local enforcement agency to impose a penalty not to exceed $1,000,000 for each week that the gas temperature is 162 degrees Fahrenheit or higher for longer than 2 consecutive monthly monitoring periods covering 60 consecutive days, if specified criteria are met.

7. Require all penalties to be deposited into the Landfill Subsurface Fire Mitigation Account, which the bill would create, to be used upon appropriation by the Legislature to mitigate harm to a person or community adversely affected by a solid waste landfill with a gas temperature of 131 degrees Fahrenheit or higher for longer than 2 consecutive monthly monitoring periods covering 60 consecutive days.

8. Require any permit suspended pursuant to these provisions to be reinstated when, among others, gas temperature decreases to below 131 degrees Fahrenheit for 3 consecutive monthly monitoring periods covering 60 consecutive days or longer, as specified.

9. Make an operator of an MSW landfill liable to CalRecycle and the local enforcement agency for their costs, as specified.

10. Exempt from the Administrative Procedure Act specified requirements that the bill authorizes CalRecycle to impose on the operator of an MSW landfill.

11. By creating new duties for a local enforcement agency, the bill would impose a state-mandated local program.

12. Require 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.

13. Require 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.

14. Make the MSW landfill operator liable for any costs incurred by the LEA and CalRecycle.

15. 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.

16. Exempt 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.

Related 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.

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