RURAL COUNTY REPRESENTATIVES OF CALIFORNIA

November 10, 2025

Clerks' Office
California Air Resources Board
1001 I Street
Sacramento, California 95814

Submitted electronically to: https://ww2.arb.ca.gov/lispub/comm/bclist.php

RE: Comments Regarding Proposed Amendments to the Regulation on Methane Emissions from Municipal Solid Waste Landfills

To Whom It May Concern:

On behalf of the Rural County Representatives of California (RCRC), we are pleased to provide comments on the Air Resources Board's (ARB's) proposed amendments to the landfill methane regulation (LMR). These comments are intended to supplement, not supplant the comments contained in a joint industry/public agency coalition letter. RCRC is an association of forty rural California counties and the RCRC Board of Directors is comprised of elected supervisors from each of those member counties.

Our member counties operate and/or maintain both open and closed public landfills. A large majority of our member counties operate landfills currently subject to the LMR landfill gas collection and control system requirements; however, many of our counties operate landfills with under 450,000 tons of waste-in-place. As county governments, our members are also keenly interested in protecting public health and safety and ensuring that subsurface smoldering and elevated temperatures like those occurring at Chiquita Canyon Landfill are detected early and remediated as quickly as feasible.

RCRC welcomes the opportunity to update the LMR to facilitate the use of emerging technologies to monitor and respond to emissions at landfills. While we support many of the proposals included in the regulatory package, we believe a number of revisions are required to make it implementable, avoid unnecessary burdens, and provide the flexibility that public facility owners/operators need.

Proposed Changes to Exemptions and Requirements for Landfills With Less Than 450,000 Tons Waste-in-Place Should Be Revised

Section 95462 (b) changes the scope of the exemption for landfills that only "receive" construction and demolition wastes, inert wastes, or non-decomposable wastes by limiting the exemption to those facilities that "contain" only these waste types. Wastes contained within sites that may have once received other types of waste likely do not contain enough organic materials to generate methane emissions. As a result, the proposed regulatory expansion is unwarranted and will have little, if any, environmental benefit.

Section 95463 subjects landfills with less than 450,000 tons waste-in-place and that install a gas collection and control system to the full scope of the proposed regulations. These smaller landfills may not have sufficient landfill gas to maintain continuous gas collection and control and can only operate intermittently. Unfortunately, intermittent operation of a gas collection and control system is not adequately considered in the proposed regulations. Under existing law, these active MSW landfills with less than 450,000 tons waste-in-place are only required to submit a waste-in-place report and maintain the system. Imposing the full scope of the regulatory requirements on smaller landfills will disincentivize owners/operators from installing a landfill gas collection and control system.

The Economic Analysis in Appendix B does not reflect the impact of the proposed regulations on these smaller landfills. The cost per ton of implementing the proposed regulations on these smaller landfills is significantly greater than larger sites and would make voluntary installation and operation of a gas collection and control system unaffordable.

Maintaining the current ability for active landfills with less than 450,000 tons waste-in-place to continue to submit the annual waste-in-place report would better incentivize the voluntary installation of gas collection and control systems before exceeding the 450,000 tons waste-in-place threshold.

For these reasons, ARB should instead continue to allow active MSW landfills with less than 450,000 tons waste-in-place to submit the annual waste-in-place report.

The Calculation of Heat Input Capacity for Uncontrolled MSW Landfills Should Allow Site Specific Values

Under the proposed regulations, uncontrolled MSW landfills shall submit an Annual Uncontrolled Landfill Report to the Executive Officer, which includes a calculation of the landfill gas heat input capacity based upon the formula in Appendix I. That formula in Tables 2A and 2B is based upon Facility and Disposal-Based Characterization of Solid Waste in California conducted by CalRecycle and its predecessor the California Integrated Waste Management Board. These values are based upon average compositions of various landfills. As jurisdictions implement the organics diversion

programs associated with CalRecycle's SB 1383's regulations, the organics compositions will decrease and result in less methane-generating materials being disposed in landfills. Some of these jurisdictions are conducting site specific waste characterization studies at the landfill that would be more valid than the standard values used in Appendix I.

For this reason, the proposed regulations should provide an option to use site specific waste characterization when calculating the landfill gas heat input capacity.

Deadline for Completion of Component Leak and Cover Monitoring Plans Should be Clarified

Section 95464(b)(5) and (6) require owners or operators to develop a component leak monitoring plan and cover integrity monitoring plan within 90 days after the effective date of the regulation. If a local agency lacks the internal capacity to prepare those reports itself, it may seek to have a consultant prepare those plans. In that case it is unlikely that 90 days would be enough time for a public agency to request proposals, obtain approval of the elected local governing body for the funds, select a consultant, and leave the consultant enough time to prepare the plans. *For this reason, we suggest providing owners/operators at least 180 days to prepare and begin implementing these plans*.

120-Hour System Downtime Is Unrealistic and Must Accommodate Situations Beyond the Facility's Control

Section 95464(b)(1)(A)(2) requires owners/operators to limit gas control system downtime to 120 hours in a calendar year. While we understand and agree with ARB's intent to minimize system downtime, this limit is unrealistic in many of the areas in which rural landfills are located and far more restrictive than the most aggressive air pollution control district regulations.

California has seen a dramatic decline in energy reliability over the last few years, particularly rural areas in Pacific Gas and Electric's service territory. Some communities continue to experience planned Public Safety Power Shutoffs (PSPS) that can last one or more days. Far more common are the more than 2,000 Enhanced Powerline Safety Settings (EPSS or Fast Trip) shutoffs that occur each year in PG&E territory. These EPSS shutoffs often last several hours to a full day. Some circuits have experienced 30 outages in a single year and up to 9 outages in a 30-day period. Our member counties have also experienced power outages related to lightning strikes on utility infrastructure, cars crashing into utility poles, severe storms that damage utility infrastructure, and wildfires. These outages often take utilities several hours to a few days to address before power is restored. Wildfire-related outages can last even longer. Unfortunately, the proposed regulations fail to anticipate or accommodate these types of events that are beyond the control of the owner/operator.

For these reasons, RCRC strongly urges ARB to modify the proposal to limit system downtime to 240 hours in a calendar year and specify that system downtime

resulting from power outages or disasters that are beyond the control of the owner/operator do not count towards those limits.

Timeframe for Installation and Operation of Gas Collection and Control System Must Be Adjusted

Section 95464(a)(3) reduces the time an owner/operator of an active landfill has to install and operate a gas collection and control system from 18 months to six months after the system design plan is approved.

While we understand ARB's interest in expediting system installation, RCRC is deeply concerned that six months is not enough time for a public agency to comply with existing state contracting and procurement laws to issue proposals, select a contractor, and construct the system. Some landfills are impacted by adverse weather conditions that limit construction season to limited times of year that could delay installation of a gas collection and control system. In addition, some gas collection and control systems may require changes to the Solid Waste Facility permit which will trigger a lengthy process for CalReycle and the Regional Water Quality Control Board review – often at least 180 days. Adding to the complexity, many rural county facilities are owned by different federal or local agencies whose approval may be required and extend the project delivery timeframe. While private owners/operators are not subject to all of these requirements, we understand that six months may still be too aggressive a timeframe for them.

For these reasons, RCRC suggests retaining the 18-month project completion timeframe for public facilities or providing not less than a 12-month compliance window with an ability to extend that deadline for owners/operators making a good faith effort to comply.

Timeframe and Requirements for Initiating Corrective Actions Must be Clarified

Sections 95469(a)(1)(B) and (2)(B) require owners/operators to initiate corrective actions triggered by surface emission monitoring within three calendar days of detecting the exceedance. Existing law simply requires correction and re-monitoring to occur within ten days of detecting the exceedance.

While we understand and support ARB's intent to expedite the timeframe in which corrective actions are taken, we are concerned about what "initiate" means in light of the three calendar day window. Three calendar days may simply not be enough time to get a consultant or contractor out to landfills located in rural areas. While owners/operators can certainly reach out to consultants and contractors within three days to schedule diagnostic and remedial actions, it may be very difficult to have the actual response action begun within three calendar days of detection.

For this reason, RCRC suggests that ARB clarify in the Final Statement of Reasons that "initiate" may include the process of reaching out to an individual to perform the remedial action. This would not change the existing requirement that actions be

completed and re-monitored within ten days of detecting the exceedance, but would instead recognize the operational realities and challenges of operating facilities in rural areas.

Trigger for Installing Horizontal Collectors or Cassion Wells Must Be Clarified

Section 95464(a)(5) requires an owner/operator of a landfill that accepted at least 200,000 tons of solid waste per year in any of the three prior calendar years to install horizontal collectors or caisson wells in areas of new waste placement. RCRC is concerned that the 200,000 ton trigger is not limited to solid waste accepted for disposal, but could also include organic waste accepted for processing at an on-site composting facility, alternative daily cover materials, etc. *We do not believe this is ARB's intent and so suggest clarifying that the trigger is 200,000 tons of solid waste accepted* ***for disposal*****.**

ARB Should Provide Flexibility for Alternatives to Requirement to Install Caisson Wells or Horizontal Collectors

For landfills that "accept" more than 200,000 tons of solid waste per year, Section 95464(a)(5) requires an owner/operator to install horizontal or caisson wells in areas of new waste placement after 15 vertical feet of solid waste has been placed over the collector or bottom of the well *and* positive pressure exists.

RCRC strongly urges ARB to provide additional flexibility for owners/operators to integrate early gas collection procedures. Horizontal collectors and caisson wells are just two of many options available and may not be suitable for use in all situations. Stakeholders have suggested that facilities may instead effectively collect from the leachate collection and control system, install collection layers in bottom liners, or use shallow vertical wells. Additionally, stakeholders have raised concerns that 15 feet of vertical depth may not be enough waste to prevent the well from pulling in ambient air and causing compliance problems with other aspects of the proposed rule.

Rather than impose prescriptive requirements, we suggest ARB provide greater discretion to the system engineer and operator as to what gas collection systems should be used and when they should be integrated into the system. Similarly, rather than only triggering system installation when a certain depth of waste is deposited, we suggest also providing a deadline-based option for owners/operators.

Another concern is related to the acceptance of disaster debris, which could result in a landfill that historically accepted less than 200,000 tons per year exceeding that threshold, possibly for two years in a row. That landfill would be required to install horizontal collectors, caisson wells, or other collection systems because of that unique situation. This additional gas system infrastructure would be a significant cost to add to a community already significantly impacted by the disaster. *We recommend creating an exemption when the exceedance is due to disaster debris and unlikely to continue in perpetuity.*

Requirements for Cover Integrity and Remediation are Over-Prescriptive and Will Create Additional Operational Challenges

Section 95471(k) imposes overly-prescriptive requirements for cover integrity assessment and remediation.

First, RCRC is concerned that the trigger for performing a cover integrity assessment is unreasonably low and could require an owner/operator to frequently conduct assessments several times a year.

Second, RCRC is concerned that the cover remediation requirements create regulatory overlap and risk further complicating an already complex regulatory environment. This will inhibit compliance. Overlapping regulatory authority among multiple state and federal regulatory agencies is partly to blame for some of the state's worst recent environmental challenges, including the Exide battery recycling facility and the Chiquita Canyon Landfill. Both disasters were exacerbated by an overly-complex regulatory environment without effective coordination among different agencies. That fragmentation can inhibit effective response actions once problems are detected. CalRecycle and local enforcement agencies (LEAs) already have regulatory and enforcement authority over landfill covers. Those covers are designed and approved in accordance with standards established by CalRecycle, the LEA, and (frequently) regional water control boards. Any changes to the covers may trigger additional regulatory review and approval by ARB's sister agencies, which will complicate compliance and completion. Corrective action measures proposed in the regulations could require a significant change to the solid waste facility permit that is subject to approval by CalRecycle and the Regional Water Quality Control Board.

Third, RCRC is concerned that Section 95471(k)(1) is overly prescriptive in terms of the types of remedial actions that must be performed in order for deficiencies to be considered corrected. Doubling the amount of material may be unnecessary to address the underlying cause of the exceedance, as may forcing the use of soil or intermediate daily cover in place of alternative daily cover. Furthermore, owners/operators cannot modify the final cover without first obtaining approval from other state, local, and/or regional agencies.

Rather than overly complicating the regulatory environment for cover maintenance, imposing arbitrary requirements (like doubling the required thickness of material), or undermining CalRecycle's regulatory authority by precluding the use of alternative daily cover, ARB should simply provide owners/operators with greater discretion as to how to remediate any cover deficiencies.

Notification Method for Remotely Detected Plumes Is Inadequate and Must Be Supplemented with Traditional Notice

Section 95469(b) inappropriately allows the Executive Officer to notify an owner/operator of a remotely detected methane emission plume by e-mail, which will trigger response and remedial actions.

To be clear, RCRC does not dispute expanding the LMR to integrate remote plume monitoring or requiring response and remedial actions when those exceedances are verified by the system owner/operator. RCRC appreciates and supports the utilization of newer technology to better identify and focus response and remedial actions. That being said, RCRC strongly objects to the *method of notification* in the proposed regulations.

An e-mailed notification does not provide sufficient notice, standing alone, to require owners/operators to perform expedited monitoring and mitigation. While e-mail notification may be helpful to prompt quick action, an e-mailed notice cannot and should not trigger a requirement to perform surface emissions and component leak monitoring within five days of receiving the e-mail. Local governments have high staff turnover and are often subject to electronic attacks. There is an unacceptably high risk that an official email from ARB would either go to an old e-mail, be caught in a spam filter, or otherwise go unnoticed. These risks are unique to e-mail notifications and are easily avoided with official mailed notifications. *To provide adequate notice, the Executive Officer's e-mail must be sent in conjunction with an official mailed notice of the detection and instructions for required follow-up monitoring and remediation*.

RCRC urges ARB to modify the proposed regulations to provide owners/operators at least 14 calendar days after an official notice is mailed to perform any required monitoring and remedial actions. An e-mail may be helpful to provide early notice so the facility can expedite monitoring and remediation, but must be supplemented by an official, mailed notice.

Process for Review and Repeal of Existing Alternative Compliance Measures is Troubling

RCRC is concerned by ARB's attempt to substantially shorten the list of examples of alternative compliance measures that may be issued by the Executive Officer. While the existing LMR contains six examples, the proposed regulations eliminate four of those and leave only two in place, including allowing owners/operators to require additional time for repairs or requesting alternative wind speed or precipitation requirements.

While we understand that the list in Section 95468 remains illustrative and is not limited to those enumerated examples, it is unclear why ARB is seeking to eliminate those alternative compliance options if they truly remain available to owners/operators. The ISOR seems to indicate that the changes are cleanup rather than substantive changes and that the "removed examples" are no longer necessary due to other changes in the proposed amendments. These statements are inconsistent and appear to signal that

ARB will be significantly limiting the types of alternative compliance measures available to owners/operators.

Some of the alternatives proposed for deletion are still necessary despite ARB believing they are no longer necessary in light of other regulatory changes. Alternative compliance measures are needed to provide flexibility and respond to specific conditions at a given site, so it is disturbing that ARB is trying to take some of those alternatives off the table. For example, the existing alternative (proposed for deletion) for "(1) Semi-continuous operation of the gas collection and control system due to insufficient landfill gas flow rates" is still needed. The only other mention of insufficient gas flow is in Section 95464 (b)(2)(B)2 for routing collected gas to an open flare. Insufficient gas flow can occur with control systems that are not open flares. Attempting to collect gas when there is insufficient gas flow can result in subsurface fires. The proposed allowance for semi-continuous operation is limited to closed landfills and so will be unavailable for active landfills with low gas volumes (exactly where the allowance is needed). The existing alternative (proposed for deletion) allowing "(4) Alternative walking patterns to address potential safety and other issues, such as: steep or slippery slopes, monitoring instrument obstructions, and physical obstructions" may be needed for field verification of remote monitoring measurements. Similarly, the existing alternative (proposed for deletion) allowing flexibility to discontinue surface inspection of construction areas and other dangerous areas may be needed on a case-by-case basis.

ARB should maintain the existing list of alternative compliance options to ensure regulatory responses can be tailored to site specific conditions when the proposed one-size-fits-all solution is inadequate. ARB should also specifically allow for the issuance of alternative compliance measures to address safety-related concerns.

Section 95468 effectively repeals all existing alternative compliance measures approved by either ARB or local air districts unless and until those measures are re-approved by ARB. The regulations require owners/operators to submit all information regarding previously approved alternative compliance options by April 1, 2027, with any alternatives not resubmitted repealed effective January 1, 2028. Local owners/operators may not be able to resubmit all materials contained in the initial application, as it is not clear there was any expectation or requirement that they retain those materials once the measure was approved. If the previously approved alternative compliance option is revoked, the Executive Director should be required to provide written reasons for the revocation similar to the current requirement to "provide written reasons for the denial" of a new requested alternative that is in Section 95468 (c)(1).

Aside from undermining the authority of local air districts that have already approved alternative compliance measures, these provisions effectively give ARB a second bite at the apple to create a one-size-fits-all regulatory approach that experience has often proven is inappropriate in a state with as much regional, climactic, and operational diversity as California.

At a minimum, the regulations should be modified to provide owners/operators with adequate time to come into compliance with changes to previously approved alternative compliance measures rather than requiring immediate compliance upon revocation. The regulations should also allow adequate time and establish a process to appeal a revocation.

More Flexibility Needed for Monitoring and Addressing Issues on the Working Face and Unsafe-to-Walk Areas

Section 95471(d) limits the procedures for Surface Emissions Screening Procedures for Unsafe-to-Walk Surface Areas. The Alternative Surface Emissions Monitoring Procedures in Section 95471(e) are limited to 95471 (c) for Surface Emissions Monitoring Procedures. More flexibility is needed for all monitoring requirements, especially in unsafe areas. Operators should be provided the opportunity to propose alternative monitoring equipment and methods including, but not limited to, those proposed in Section 95471 (e), which may include other remote sensing tools that can identify emissions from areas that are unsafe to walk even if those tools do not possess the same measurement capabilities as other methods noted in this section.

Temperature Triggers for Assessments Should Be Adjusted and Recalibrated

Exceedances of wellhead temperatures at 131 degrees Fahrenheit are not indicative of major gas collection system problems. As proposed in Section 95469 (e)(3), any well exceeding 131 degrees will require an extensive collection system assessment and cover integrity assessment and force a reductions in the oxygen content in the wellhead. These full assessments are not warranted based upon a single exceedance. Additional cover material can be used to fill in cracks and other surface openings, with remeasuring after a suitable period to determine whether the responses adequately resolved the issue. Continued exceedances may warrant additional measures such as a review of the area around the specific well.

While most landfills appear to operate with temperatures below 131 degrees, it appears that some operate normally at temperatures up to 145 degrees without causing any adverse internal or external consequences. It would be more appropriate for the full gas collection control system assessment and cover integrity assessment to be triggered by exceedances of the 145-degree Fahrenheit temperature threshold.

For these reasons, we recommend setting the threshold triggering assessments of the collection system and cover integrity, and oxygen content monitoring, at 145 degrees, rather than the 131 degrees currently proposed.

Regulations Contain Excessive Reporting and Notification Requirements

RCRC is concerned that the LMR revisions significantly increase reporting and notification requirements. We are particularly concerned that this increase in frequency

and volume could have negative repercussions, including oversaturation causing desensitization and complacency among regulators.

For example, under the proposed regulations owners/operators of every facility must notify the Executive Office of the scheduled date of all quarterly surface emission monitoring events at least 15 calendar days prior to the event. This means that ARB will receive four notifications each year from each of the 153 controlled facilities for a total of over six hundred notifications a year. For what purpose? It seems far-fetched to think that ARB has the program staff or capacity to travel to even a small fraction of those facilities to observe quarterly monitoring. As such, this merely creates another regulatory burden on owners/operators with practically no benefit to the state other than to create opportunities for ARB to determine an owner/operator was noncompliant with the regulations by failing to provide adequate notice of the monitoring event.

RCRC strongly encourages ARB to carefully consider which monitoring and reporting obligations are of sufficient public interest to retain in the regulations and discard the rest – particularly the notification of scheduled surface emission monitoring.

Conclusion

RCRC appreciates your consideration of these comments and looks forward to working with you to resolve the issues we have raised. If you should have any questions, please do not hesitate to contact me at jkennedy@rcrcnet.org.

Sincerely,

JOHN KENNEDY
Senior Policy Advocate