



January 24, 2025
CARB Landfill Methane Rule Team
California Air Resources Board
1001 I Street
Sacramento, CA 95814

Submitted via Internet Upload

RE: Comments, December 18, 2024, Public Workshop, Potential Updates to the Landfill Methane Regulation (LMR)

Waste Connections (WCN) appreciates the time and effort invested by California Air Resources Board (CARB) personnel in developing and presenting the December 18, 2024, Public Workshop on potential updates to the LMR. WCN is a vertically integrated solid waste company, operating in multiple California markets. During its public workshop, CARB personnel discussed numerous potential updates to the LMR and invited stakeholders to submit comments. Responding to this invitation, WCN respectfully submits the following topics as the most critical, reserving comment on others until further along the rulemaking process.

One Size Does Not Fit All

Holistically, WCN agrees with and supports the many comments during the workshop that “One size does not fit all.” Decades of landfill design, construction, operation, and monitoring have demonstrated that conditions at landfills vary considerably from one landfill to the next. Due to these varying site conditions, applying strict, prescriptive standards without considering site-specific conditions is not appropriate and may impede achieving the desired overall, state-wide reduction in methane emissions from landfills. Flexibility to consider and incorporate site-specific conditions into methane control at any given landfill is essential to achieving the goal. The flexibility provided by Section 20080(b) of Title 27 of the California Code of Regulations is an excellent example of appropriate flexibility regarding prescriptive landfill standards. WCN notes that this regulation states explicitly the following items (among others):

- Engineered alternatives are allowed.
- Engineered alternatives must be consistent with the applicable regulatory performance goal and must provide equivalent environmental protection.
- The landfill must demonstrate that complying with the prescriptive standard is not feasible because:
 - It is unreasonably and unnecessarily burdensome and will cost substantially more than alternatives which meet the required criteria, or

- It is impractical and will not promote attainment of applicable performance standards.

Satellite Detected Emissions Plumes and Alternative Technologies for Leak Screening

USEPA approvals for “Other” or “Alternative” test methods such as OTM 51 require extensive research to prove equivalency, often requiring many hours of both technology and regulatory staff hours. Considering the multitude of requests that are likely to be submitted to CARB for approval, WCN requests that CARB staff grant acceptance to any USEPA-approved OTM’s for State compliance. Further, WCN requests that technology should not be limited to “clear advantage” but to a similar ‘equivalency’ type framing – the more options, the more opportunities for landfills to implement innovative technologies to reduce methane emissions. For example, if there is only one option and they cannot staff up sufficiently, then there is essentially no option.

WCN further notes that there are no current landfill methane emissions quantification solutions that have been field verified despite years of research, so satellite detections should not include estimated plume emissions rates. Further, repair timelines should be based upon operator receipt from CARB, especially for rural sites to which resources might have to be mobilized. Last, because there are no reliable methane quantification methods, there is no way to reliably quantify emissions reductions.

SEM Exclusions and Determining the Full Extent of Surface Leaks

Current area exclusions are based in part on the safety of inspectors to access the area. Other operators incorrectly excluding areas is not the basis for tightening acceptable exclusions being properly followed at a landfill, especially since some area exclusions are such due to safety concerns.

Similarly, adjacent grid cells should not trigger additional re-monitoring based solely on a nearby grid cell experiencing an exceedance. This would lead to onerous rechecking burdens, especially at small or rural sites where SEM operators must mobilize to the site.

GCCS Downtime

The “active” or “working face” of a landfill, where incoming waste is received for disposal, varies in size and shape across every individual landfill, and further varies at the same landfill over time and stage of development. Since heavy equipment and waste trucks sometimes operate in close proximity to landfill gas wellheads and/or gas headers, operators will sometimes turn these parts of its GCCS infrastructure off. If left operating, an impact from heavy equipment could cause oxygen intrusion into the gas system – a dangerous situation – as well as causing landfill gas releases. A blanket rule for working face size or which wells would need to be taken offline is neither prudent nor realistic, since this is safety driven and highly dependent on not only site specifics but specifics to each new working face area. In addition, WCN agrees with, and supports the comments during the workshop that the working face size and progression/movement will vary considerably depending on the volume of refuse received per day by a landfill.

WCN further encourages CARB staff to consider the effect that increasing cover soils without subsequent removal could negatively impact downward liquids migration through the landfill and lead to increased leachate seeps.

Third Party Gas Control System Operators

WCN has been involved in landfill gas beneficial reuse in the State for several decades, and further notes, anecdotally, that at one landfill in California there is a landfill gas beneficial reuse contract signed by a previous landfill owner in the 1990's that is still in force today, through various minor amendments over the years. As the landfill gas industry has grown and evolved over the decades, many different types of agreements have been promulgated; as such, there are not "typical" purchasing agreements for third-party gas control operators. Because these installations typically require large capex investment and permitting by local building and planning jurisdictions, they typically have long lead times for construction and once in effect, long-term agreements that remain in effect for decades.

WCN further stresses that these contracts are almost always (old and new) structured around change in control of the gas. This is important, because a landfill should not be held liable for a third-party gas developer that does not repair their own leaks in a timely manner. Taken together with the above discussion of long-term contracts, we are typically locked into relationships that are normally mutually beneficial and compliant, but in the event something happens on their facility, we cannot perform maintenance on their equipment. WCN requests the regulations address the party responsible for landfill gas control.

Advanced Monitoring and Wellhead Tuning

WCN notes that at various locations across its footprint, certain automated wellfield tuning technologies have been implemented, with mixed results. Anecdotally, sites already implementing BMP's do not show any significant improvements in gas collection quantity or quality when automated wellhead tuning is implemented. These systems are also a significant capital investment. For smaller and/or rural sites, this could be an onerous burden for possibly no perceptible benefit.

WNC appreciates the opportunity to comment on the potential updates to the LMR. We look forward to discussing these comments with CARB and continuing our participation in this important regulatory activity.

Sincerely,



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Waste Connections