VIA ELECTRONIC MAIL

May 7, 2026

Michael Cacciotti, Chair
South Coast Air Quality Management District
21865 Copley Drive
Diamond Bar, CA 91765

RE: Request to Strengthen and Advance Proposed Rule 1495

Dear Chair Cacciotti:

On behalf of the undersigned organizations, we write to urge the South Coast Air Quality Management District ("SCAQMD") Governing Board to strengthen and advance Proposed Rule 1495 ("PR 1495"). This rule is necessary to protect children, workers, and families from toxic fumigants seeping into their communities. These chemicals directly impact public health and life expectancy throughout the South Coast Air Basin and beyond. As you know, communities throughout the South Coast region have been harmed by unsafe commodity fumigation facility operations for generations, experiencing disproportionately high rates of asthma, cancer, and reduced life expectancy.[1] Too often, these same communities are disproportionately burdened by surrounding freight operations that emit nitrogen oxides and particulate matter, driving elevated risks of acute and chronic respiratory and cardiovascular disease and higher mortality.[2] The cumulative impacts of fumigation facilities processing cargo from the ports, alongside emissions

[1] Brad Smith, *Methyl bromide remains in use in 36 of 58 California counties, and in both urban and rural areas,* UCLA NEWSROOM, (Jan. 15, 2026), https://newsroom.ucla.edu/releases/methyl-bromide-remains-in-use-in-36-of-58-california-counties.
[2] South Coast Air Quality Management District, *2022 Air Quality Management Plan: Appendix I* (2022), https://www.aqmd.gov/docs/default-source/clean-air-plans/air-quality-management-plans/2022-air-quality-management-plan/final-2022-aqmp/appendix-i.pdf.

from port equipment, and downstream freight activities, must be addressed. These burdens are especially severe in communities designated under AB 617. Methyl bromide continues to be released in neighborhoods near fumigation facilities, placing Los Angeles County residents in harm's way. Methyl bromide also contributes to depletion of the ozone layer that shields us from harmful UV radiation, exacerbating the climate crisis. It is our position that PR 1495 must eliminate the climate, health, and safety harms associated with commodity fumigation facilities.

1. Methyl Bromide Harms Public Health

As a fumigant, methyl bromide is highly toxic via inhalation, ingestion, or skin contact, and extremely irritating to skin, eyes, and airways.[3] In workplace environments, methyl bromide exposure has been associated with adverse health effects such as shortness of breath, headaches, dizziness, lung irritation, chest pain, coughing, and nasal irritation. Long-term exposure has been associated with asthma attacks and chronic bronchitis.[4] Symptoms of methyl bromide toxicity include an acute toxicity phase followed by a chronic toxicity phase, which can last for years depending on the initial dose.

Methyl bromide is a Proposition 65-listed structural fumigant, known to the State of California to cause reproductive or developmental harm.[5] This chemical has also been recognized to affect the autonomic nervous system. Impaired function of the autonomic nervous "may trigger inflammation and arrhythmia and may alter dynamics between blood pressure and blood flow, all of which may increase the risk of adverse cardiovascular health effects."[6] Methyl bromide has also been shown to accumulate in the kidneys, which can lead to renal damage and kidney dysfunction.[7] Acute poisoning cases have resulted in acute renal failure, anuria, and other instances of severe kidney damage.[8] Children may be particularly vulnerable to methyl bromide "due to a greater inhalation rate-to-body weight ratio."[9]

2. SCAQMD Must Eliminate Ongoing Public Health and Safety Threats from Commodity Fumigation Facilities

It is critical that SCAQMD's PR 1495 is designed to prevent risks associated with commodity fumigation facilities by creating mandatory best practices, such as improved enclosure practices (multi-tarping, chamber/vacuum fumigation, etc.), extensive monitoring within and near fumigation facilities, and consistent community notification. In addition, we urge SCAQMD to develop incentives that encourage facilities to reduce the amount of methyl bromide used to prepare for its eventual phaseout.

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[3] *Methyl Bromide (Bromoethane)*, EPA (Sep. 2016), https://www.epa.gov/sites/default/files/2016-09/documents/methyl-bromide.pdf.
[4] *See* Letter from Dr. Jill Johnston, Assoc. Professor of Env't & Occupational Health, Univ. of Cal., Irvine, et al. to South Coast AQMD (Mar. 23, 2026).
[5] *Proposition 65 Maximum Allowable Dose Level (MADL) for Reproductive Toxicity for Methyl Bromide as a Structural Fumigant*, OFFICE OF ENVIRONMENTAL HEALTH HAZARD ASSESSMENT (June 2004), https://oehha.ca.gov/sites/default/files/media/oehha2004h.pdf.
[6] *Id*. at 1.
[7] *Id*.
[8] *Id*.
[9] *Id*. at 2.

Best available control technologies such as chamber and vacuum fumigation methods must be investigated for broad implementation in facilities across the South Coast Air Basin. During the rulemaking process, existing fumigation facilities should be assessed to identify the facilities of highest concern. Following rule adoption, SCAQMD must also provide resources and training opportunities to guide facilities as they are required to implement safer operating and management practices to reduce methyl bromide emissions. PR 1495 should also require mailed and electronic notices detailing when and where fumigation events take place. These notices should be sent to all South Coast communities impacted by facility operations.

Frontline residents must always have a seat at the decision-making table, not just after decisions are drafted, but throughout the rulemaking process. Regular public engagement opportunities and consultation with SCAQMD advisory groups such as the recently restructured Environmental Justice Advisory Group will ensure community voices are not just heard but meaningfully shape PR 1495. Community participation is essential to ensure the final rule is responsive to community needs and concerns, and accounts for the harms shouldered by people living near and working at commodity fumigation facilities. We urge the District to develop a strong rule that includes the following non-exhaustive demands:

- All fumigation be performed in an airtight facility with no residual fumigant released into the atmosphere;[10]
- Community notification prior to and following fumigation;
- Fumigators must manage treatments to ensure that nearby air doesn't exceed short or long-term inhalation safety levels;
- Institution of at least three additional air quality monitors near active fumigation facilities in Los Angeles County, given the large number and clustering of fumigation facilities in this region;
- Increased reporting and health risk assessments for all fumigation facilities in the South Coast Air Basin, given the prolonged lack of disclosure, violations, and outdated data;
    - Collection and disclosure of up-to-date fumigant totals by date and facility;
    - Pending facility health risk assessments must be completed within 18 months of the effective date of Proposed Rule 1495;
    - Sharing of fumigation permits and inspection records from 2015–2026 for the 18 facilities located in the South Coast Air Basin;
- Review of South Coast fumigation facilities' compliance with proper fumigation practices and a detailed disclosure of prior violations;
- Establishment of PR 1495 enforcement mechanism against noncompliant facilities, such as civil penalties;
- Interagency coordination to explore non-chemical alternatives and pathways for fumigant reduction;

[10] New Zealand has implemented a potential model, requiring a gradually increasing percentage of fumigant recapture. *Methyl bromide guidance for business*, ENVIRONMENTAL PROTECTION AUTHORITY (2021), https://www.epa.govt.nz/hazardous-substances/rules-notices-and-how-to-comply/specific-substance-guidance/methyl-bromide/.

- Investigate capture-and-destroy technologies and implement where feasible and effective;[11] and
- Long-term coordination with concerned community groups and residents.

Finally, we urge SCAQMD to reach a final agreement with the Los Angeles County Agricultural Commissioners to restore its permitting and oversight authority over methyl bromide. Moving forward, SCAQMD must ensure robust community outreach and engagement on any SCAQMD proposal to streamline permitting frameworks. Deepening community engagement on this topic will help SCAQMD identify and avoid unintended consequences in the future, including incidents like the methyl bromide exposure in Los Angeles County.[12] The SCAQMD is tasked with ensuring equitable access to clean air. Adopting strong public health protections in PR 1495 will advance this commitment.

Sincerely,

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San Pedro Homeowners Association

Attachment: Letter from Dr. Jill Johnston, Assoc. Professor of Env't & Occupational Health, Univ. of Cal., Irvine, et al. to SCAQMD (Mar. 23, 2026)

BCC:
SCAQMD Governing Board
Dr. Anissa Cessa Heard-Johnson, Deputy Executive Officer, Diversity, Equity & Inclusion

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[11] *See, e.g.,* Yuanqing Li et. al., *Destruction of Methyl Bromide Sorbed to Activated Carbon by Thiosulfate or Electrolysis*, 49 (7) ENV. SCI. & TECH. 4515 (2015); Yuanqing Li et. al., *Development of an Activated Carbon-Based Electrode for the Capture and Rapid Electrolytic Reductive Debromination of Methyl Bromide from Postharvest Fumigations*, 50 (20) ENV. SCI. & TECH. 11200 (2016); Hsin-Se Hsieh & Joseph J. Pignatello, *Modified carbons for enhanced nucleophilic substitution reactions of adsorbed methyl bromide*, 233 APPLIED CATALYSIS B: ENV. 281 (2018).

[12] *See Ambient Air Monitoring for Methyl Bromide in West Long Beach*, CALIFORNIA AIR RESOURCES BOARD, https://ww2.arb.ca.gov/capp/cst/ch2/wcwlb/methyl-bromide (last visited May 7, 2026).

Attachment

Letter from Dr. Jill Johnston, Assoc. Professor of Env't & Occupational Health, Univ. of Cal., Irvine, et al. to SCAQMD (Mar. 23, 2026)

UCI University of California, Irvine

South Coast Air Quality Management District
21865 Copley Drive
Diamond Bar, CA 91765

March 23, 2026

RE: Fumigation Facilities and Proposed Rule 1495

Dear Chair Cacciotti,

This letter is to discuss public health concerns for residents living near fumigation facilities.

Pesticide exposure broadly, including fumigants, is linked to a higher risk of asthma-related complications, decreased lung function, and increased wheezing. Methyl bromide (MeBr) is an odorless, colorless gas. It is a highly reactive chemical with a broad toxicological profile, ranging from respiratory toxicity to neurotoxicity.[3, 4] Three decades ago, MeBr was formally listed under CA Proposition 65 as a known toxicant.[5, 6] MeBr, which is quickly absorbed following inhalation, can accumulate in the lungs and is associated with respiratory damage in animals studies.[7-11] In workplace environments, MeBr exposures have been associated with various adverse health symptoms, including shortness of breath, headaches, dizziness, lung irritation, chest pain, coughing, and nasal irritation.[13, 14] Long-term studies of the wives of MeBr pesticide applicators found an increased risk of chronic bronchitis.[15] In CA, significant associations were observed between asthma emergency department (ED) visits and ambient air concentrations of MeBr among children (age 6-18).[16] Examining data from 2005 to 2011, each 0.01-ppb increase in ambient MeBr concentration was associated with a 7.1% (95% CI, 2.9%-10.8%) greater likelihood of an asthma-related ED visit.[16] Proximity to agricultural applications of MeBr correlates with lower lung function among asthmatic children in rural communities.[1]

A recognized toxic effect of MeBr exposure is its impact on autonomic nervous system regulation.[3, 18, 19] Impaired autonomic nervous system function may trigger inflammation and arrhythmia and may alter dynamics between blood pressure and blood flow, all of which may increase the risk of adverse cardiovascular health effects.[20] Among healthy port fumigation workers, urinary bromide ions were associated with lower HRV and weakening of the autonomic nervous system,[19] as well as decreases in blood vessel volume.[21] Animal studies of chronic exposure to MeBr found an increased incidence of cardiovascular damage, including lesions in the heart, thrombi, and myocardial degeneration.[10]

Further, MeBr has also been shown to accumulate in the kidneys. Renal damage and dysfunction have been observed with exposure to a range of pesticides, including MeBr.[22, 23] Acute poisoning cases of MeBr have resulted in severe kidney damage, including acute renal failure and anuria. Studies have seen associations between biomarkers of pesticide exposure and reduced kidney

function among occupationally exposed adults with chronic kidney disease.[24-27] Given that early renal development and maturation is susceptible to nephrotoxic exposures, as well as the intertwined nature of kidney function and cardiovascular health in children, MeBr exposure could have multifactorial impacts on these systems.[28-30]

MeBr is heavier than air, and therefore, children's exposure to this pesticide may be greater than that of adults, due to their smaller stature.[31] Risks to children are uniformly higher than those of adults due to a greater inhalation rate-to-body weight ratio and other factors. Inhalation of fumigation pesticides is a children's exposure pathway that is rarely investigated.[32] While few studies have specifically examined the health effects of MeBr in children, a vast body of literature supports a role for early-life pesticide exposure in myriad health consequences.[2, 33-38] Environmental exposures at different life stages can differently influence the risk of developing chronic diseases later in life, and measures of child health, including respiratory, cardiovascular, and renal outcomes, are important predictors of chronic conditions in adulthood.

Levels of concern detected in the community. Regional monitoring of toxic air contaminants conducted by the South Coast Air Basin through the Multiple Air Toxics Exposure Study V (MATES V) in 2018 across Southern CA revealed the average concentrations of MeBr in West Long Beach, identified as an AB 617 community, were 10 times higher than other monitoring stations (1.4 ppb vs 0.139 ppb).[41, 42] The CA Office of Environmental Health Hazard Assessment set non-cancer reference exposure level (REL) values for acute air exposure to methyl bromide at 0.05 parts per million (neurologic targeted toxicity) and for chronic REL for the respiratory tract target (based on degenerative and proliferative lesions of the olfactory epithelium of the nasal cavity) to be 0.005 mg/m^3 (0.0012 ppm).[43] Data from the MeBr monitor in West Long Beach from January 2023 to April 2024 showed that, on average, *more than double* the long-term health-protective reference exposure level — 2.1 parts per billion (ppb) compared to 1.0 ppb as measured CARB's ambient air monitor in the community.

Episodic spikes in methyl bromide continue in 2026, but large data gaps remain. Of the ~35 facilities with active methyl bromide permits in the SCAQMD region, only two (located in the same complex) have an active methyl bromide monitor. From January 1st to March 15th, 2026, the monitor located in West Long Beach recorded data for a total of 1369 hours. This means that approximately 406.8 hours (~23% of the time) the monitor was not actively recording or reporting data. The missing data limits accurate assessment of potential exposure.

Of the 1369 hours of data available from January 1st to March 15th, 2026, the average concentration during this time is 1.19 ppb; the OEHHA Chronic REL is 1.2 ppb. The measured concentrations exceeded the OEHHA Chronic REL of 1.2 ppb for a total of 118 hours, or 8.6% of the time. When the monitor is above the 1.2 ppb REL, the average hourly concentration was 11.6 ppb (hourly range:1.23-265 ppb). The concentrations were the highest in the evening and late-night hours. This suggests that methyl bromide continues to be released from the facility during fumigation activities.

Reducing MeBr use or capturing emissions would reduce potential public health impacts for local residents.

Sincerely,

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