

Update on Methyl Bromide Rule-Making

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Methyl Bromide - Air Quality Rule-Making

- April 2019 SAB recommendation
 - Range of Acceptable Ambient Levels (AALs)
 - 0.002 mg/m3 lower bound
 - 0.005 mg/m3 upper bound
 - · 24-hour averaging time
 - · Basis: EPA's IRIS chronic RfC
- May 2019 Environmental Management Commission (EMC)
 - · Approves to proceed to public comment/hearing
 - 0.005 mg/m3 (24-hr avg time) based on upper bound value recommended by SAB.
 - 0.078 mg/m3 (24-hr avg time) minimal risk level (intermediate) from the April 2018 Draft for Public Comment Toxicological Profile for Bromomethane prepared by the Agency for Toxic Substances and Disease Registry (ATSDR)

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- June 17 August 30 Public comment period on draft rules
- 2 public hearings
 - July 22 Raleigh
 - July 23 Wilmington
- >1300 comments received
- General agreement/support for rule and use of 0.005 mg/m3 RfC
- Matter of concern: 24-hr averaging time



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Averaging time rationale from SAB recommendations:

- Rapid adsorption and distribution to sensitive target organs following inhalation exposures.
- Steep inhalation exposure-effect curve.
- Potential for large segments of the human populations to have increased sensitivity to neurotoxic effects not captured by animal studies used to develop the RfC.
- Potential for delayed onset of adverse effects following exposures from a colorless, odorless gas.



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Averaging time comments of concern:

- Use a definition of chronic exposure that's consistent with the most up-to-date scientific methods
- A 24-hr averaging time is not supported for addressing chronic exposures.
- An annual averaging time is appropriate for application of a chronic RfC.
- California, New Jersey and other states use the chronic RfC of 0.005 mg/m3, but apply it using an annual averaging time.



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Discussion of averaging time



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