steven heath

My name is Steven Heath, I am a commercial plumber, inventor, and student in environmental science.

I propose that the state update the RACT definition for the 'Consumer and Commercial Products' category to include vapor-lock barrier standards for consumer solvent and adhesive vessels.

The Proposal: Moving from open-neck containers to containers with vapor lock barriers.

Technical Feasibility: As the inventor of this specific technology (Provisional Patent (#63/993,270), I can confirm that this modification is both economically and technologically feasible for immediate mass-market adoption.

My data:Comparitive emission analysis.
(dm/dt=-M*A*Km*(Cs-Cinf)) the primary variable for the fugitive emission control is (A) surface area.

1.) Baseline.
Standard can neck diameter=1.75in
Surface area (A)=2.40sq inches
Emission profile=100% unrestricted fugitive emission loss.

2.)Patent pending Vapor lock barrier
Standard can neck diameter=1.75in
Surface area (A)=0.012
Emission profile=0.5% fugitive emission loss.

Results.
By reducing the surface area of the open solvent and adhesive cans while the can is open or in use results in a 99.5% reduction in voc emissions.

The Proposal: The state should encourage or mandate thermal storage standards that reduce peak energy demand during Ozone Action Days.

Technical Feasibility: My proprietary modular thermal buffering system and phase change heat exchange apparatus for electronic equipment racks. (Provisional Patent #64/016,026) demonstrate that 90% thermal efficiency is achievable. Including this category of cooling in the RACM ensures the state is utilizing 'Reasonably Available' methods to lower the NO_x precursors created by peak-load power generation.

My data.
Notice: The performance metrics cited in this proposal (90% efficiency) are for comparative purposes.
Variability of Results: Actual efficiency gains and resource savings are subject to a "case-to-case" evaluation and may vary based on multiple critical factors.

Baseline for Calculations: The 90% efficiency benchmark cited herein is modeled based on a 30kW high-density AI rack utilizing a salt-hydrate PCM with a latent heat of 250 kJ/kg, comparing passive thermal buffering against a traditional air-cooled Sensible Heat system ($C_p = 1.005$) during a 4-hour peak-load window.

The technical details provided herein are subject to a pending provisional patent application (PPA #64/016,026.) (PPA #63/993,270) This submission is for regulatory review purposes only and does not constitute a waiver of intellectual property rights.

Request for Technical Data: Detailed engineering blueprints, material specifications, and proprietary "Confidential Business Information" (CBI) are withheld from this public record to protect trade secrets. Any government agency or private entity seeking full technical disclosures or licensing information for implementation must contact the commenter directly to execute a formal mutual non disclosure agreement (MDNA).

FRAND Licensing Commitment: The intellectual property associated with these technological solutions is available for FRAND (Fair, Reasonable, and Non-Discriminatory) licensing. It is the intent of the commenter to ensure that these essential environmental control measures are accessible for widespread industrial adoption to meet Californias 2026 attainment goals.