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Controversies in France over the reintroduction of acetamiprid, a pesticide, led me to look at California’s own protections. In France, the push to reinstate the neonicotinoid insecticide, banned since 2018 over risks to bees and human health, was ultimately blocked by the Constitutional Council after a petition gathered over two million signatures. Is the grass greener (cleaner) here in the Golden State?

California is widely regarded as a national leader in environmental law. But regarding pesticide regulation, that reputation obscures a concrete problem: the state currently permits 72 pesticides that are banned in the European Union.

The communities bearing the greatest burden are not random. Latino and immigrant farmworker families, low-income residents living near agricultural fields, and communities of color face the highest pesticide exposures in the state. Exposure to pesticides has been linked to respiratory distress, cognitive impairment, and increased cancer risk. The pattern follows directly from how the regulatory system is built: it prioritizes cost-benefit analysis over precaution, and

places the burden of proving harm on the very communities already being harmed.

Two Frameworks, Two Philosophies

The EU and California approach pesticide regulation from fundamentally different starting points. Under EU Regulation EC No. 1107/2009, the burden of proof falls on industry: companies must demonstrate that a substance is safe before it can be approved. If safety cannot be established, including when data gaps or scientific uncertainties remain, the substance is rejected.

California's framework, administered by the Department of Pesticide Regulation (DPR), operates in reverse. Pesticides are approved unless regulators can prove harm, and data gaps do not constitute grounds for restriction. The agency relies heavily on mitigation measures rather than on precautionary refusal. As DPR's own guidance puts it, enforcement *"must be reasonable, avoiding hysteria."*

The Soil Fumigant Case: A Regulatory Failure in Plain Sight

No case illustrates this gap more clearly than 1,3-Dichloropropene (1,3-D), a soil fumigant and the third most-used pesticide in California. In 2022, the EU formally rejected 1,3-D authorization, citing insufficient data to assess risks to consumers, workers, bystanders, and the environment. California's own health agency, OEHHA, established a cancer risk threshold for 1,3-D at 0.04 parts per billion. DPR set its residential bystander exposure target at 0.56 parts per billion, fourteen times higher than OEHHA's health-protective level, and directly in line with recommendations submitted by Dow Chemicals, the sole manufacturer of 1,3-D.

Over 11 million pounds of 1,3-D are applied annually in California, primarily in the San Joaquin Valley and Central Coast, in disproportionately low-income communities. The health stakes are significant: the U.S. Department of Health and Human Services has determined that 1,3-D is reasonably anticipated to be a human carcinogen, and the EPA has classified it as a probable human carcinogen. Beyond long-term cancer risk, acute and short-term inhalation causes upper respiratory symptoms, including chest tightness, dizziness, and watery eyes. For communities living near treated fields, the risks extend beyond the workforce. Children in nearby homes and schools face exposure through pesticide drift. The populations absorbing this risk had no meaningful role in setting the exposure standard that governs them. Further complicating this landscape, DPR enacted a secondary "occupational bystander" rule in January 2026, creating a separate exposure threshold (0.21 ppb)

for those working near the application. The discrepancy between the two thresholds sparked a lawsuit by farmworker advocacy groups, who argue that maintaining dual, conflicting standards for populations who both live and work in these zones is internally inconsistent and violates the state's Administrative Procedure Act.

Why California's Policies Matter Beyond the Golden State

California's market power means its subnational regulatory decisions carry weight well beyond the state's borders for manufacturers and consumers across the country. When companies face Proposition 65 warning obligations, they often reformulate for the entire U.S market rather than maintain separate product lines. This is the "California effect": state-level precaution can ultimately become national precaution. The law does not ban substances outright, but its warning-level requirements and private enforcement mechanism have pushed many manufacturers to reformulate products sold nationwide to avoid litigation exposure. At the same time, the proliferation of warnings on products ranging from coffee cups to parking garages has bred consumer fatigue, diluting the signal where it matters most. Even an imperfect mechanism produces real market pressure, offering hope for the future of the precautionary principle.

The Path Forward: How the Precautionary Principle Can Be Introduced into California Law

California has clear legal authority to act. Under Section 24(a) of the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA), states may regulate the sale and use of pesticides more stringently than federal standards, provided they do not permit what federal law prohibits. FIRFA does preempt state pesticide labeling requirements, but that narrow carveout leaves California's broader registration and use restrictions intact. Two legal pathways exist to incorporate the precautionary principle into California's pesticide framework. The Legislature could amend the Food and Agricultural Code to require DPR to treat data gaps as independent grounds for restricting or denying registration, placing an affirmative burden on the agency and the applicant to demonstrate the sufficiency of available data before approval can proceed. Alternatively, DPR could pursue rulemaking under the California Administrative Procedure Act to establish binding rules that formalize precaution triggers without waiting for legislative action.

Both paths face real obstacles: opposition from the agricultural industry, the

political weight of county agricultural commissioners, and potential federal preemption arguments under FIFRA. While Section 24(a) clearly preserves California's authority to restrict pesticide sale and use, the pending Supreme Court case *Monsanto v. Durnell* raises broader questions about the scope of federal preemption under FIRFA, even if its immediate focus is on labeling and failure-to-warn tort claims rather than state regulatory authority directly. However, California precedents demonstrate that precautionary regulation is not foreign to the state. San Francisco's Precautionary Principle Ordinance, Proposition 65, and Assembly Bill 617 (which requires community-level air-monitoring and emissions-reduction plans in disadvantaged communities) all embed precautionary logic in different domains. The challenge is extending that logic to pesticide registration statewide.

Any reform must also center on community participation. Not as a procedural checkbox, but as a genuine seat at the table. This means addressing two distinct failures. The first, structural, is the fact that the formal comment period remains largely inaccessible to low-income, non-English speaking residents. Meaningful participation requires translated documents, hearings held in the Central Valley, and technical assistance so that frontline communities can engage on equal footing. The second is evidentiary: agencies routinely discount lived experience as a legitimate form of evidence, demanding peer-reviewed toxicology. The precautionary principle, properly applied, removes that burden entirely.

Pesticide regulation in California is an environmental justice issue, and the EU's rejection of 1,3-D shows that a different framework is both legally coherent and practically within reach. California has the legal tools, the market power, and the environmental justice infrastructure, including established communities and decades of organizing, to lead on this. What it currently lacks is a regulatory framework that treats prevention as the default. Closing that gap would not only protect farmworker communities; it would send a signal, as California often does, about the demands of ambitious environmental governance.

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