California State Assembly

ENVIRONMENTAL SAFETY AND TOXIC MATERIALS

EDUARDO GARCIA
CHAIR

AGENDA

Tuesday, April 23, 2024
1:30 p.m. -- State Capitol, Room 444

HEARD IN FILE ORDER

1.	AB 1963	Friedman	Pesticides: paraquat dichloride prohibition.
2.	AB 2113	Garcia	Pesticides.
3.	AB 2201	Addis	Toxics: air care products.
4.	AB 2214	Bauer-Kahan	Ocean Protection Council: microplastics.
5.	AB 2300	Wilson	Medical devices: Di-(2-ethylhexyl) phthalate (DEHP).
6.	AB 2316	Gabriel	Pupil nutrition: substances: prohibition.
7.	AB 2365	Haney	Public health: kratom.
8.	AB 2454	Lee	Drinking water: rental property: domestic well testing.
9.	AB 2491	Lee	Cosmetic products: safety.
10.	AB 2513	Pellerin	Gas stoves and ranges: warning label.
11.	AB 2671	Weber	Family daycare homes: filtered water.
12.	AB 2827	Reyes	Invasive species: prevention.
13.	AB 2916	Friedman	Environmental health: floating devices: expanded polystyrene.
14.	AB 2933	Low	Multiunit residential structures and mixed-use residential and commercial structures: water conservation.
15.	AB 3090	Maienschein	Drinking water standards: emergency notification plan.
16.	AB 3136	Reyes	Attorney General: Bureau of Environmental Justice.

Date of Hearing: April 23, 2024

ASSEMBLY COMMITTEE ON ENVIRONMENTAL SAFETY AND TOXIC MATERIALS
Eduardo Garcia, Chair
AB 1963 (Friedman) – As Amended April 11, 2024

SUBJECT: Pesticides: paraquat dichloride prohibition

SUMMARY: Prohibits, on and after January 1, 2026, a person from using, manufacturing, selling, delivering, holding, or offering for sale a pesticide product that contains the active ingredient paraquat dichloride (paraquat).

EXISTING LAW:

1) Authorizes the state's pesticide regulatory program and mandates the Department of Pesticide Regulation (DPR) to, among other things, provide for the proper, safe, and efficient use of pesticides essential for the production of food and fiber; for the protection of public health and safety; and, for the protection of the environment from environmentally harmful pesticides by prohibiting, regulating, or ensuring proper stewardship of those pesticides. (Food and Agriculture Code (FAC) § 11401, et seq.)

2) Requires the director of DPR to endeavor to eliminate from use in the state any pesticide that endangers the agricultural or nonagricultural environment, is not beneficial for the purposes for which it is sold, or is misrepresented. (FAC § 12824)

3) Requires the director of DPR, in carrying out the responsibility outlined in FAC § 12824, to develop an orderly program for the continuous evaluation of all pesticides actually registered. (FAC § 12824)

4) Authorizes the director of DPR, in carrying out the responsibility outlined in FAC § 12824 and after a hearing, to cancel the registration of, or refuse to register, any pesticide that, among other things, has demonstrated serious uncontrollable adverse effects; the use of which is of less public value or greater detriment to the environment than the benefit received by its use; for which there is a reasonable, effective, and practicable alternate material or procedure that is demonstrably less destructive to the environment; when properly used, is detrimental to vegetation, except weeds, to domestic animals, or to public health and safety; and, for which the director determines the registrant has failed to report an adverse effect or risk as required by law. (FAC § 12825)

5) Requires the registrant of a pesticide, if they have factual or scientific evidence of any adverse effect or risk of the pesticide to human health, livestock, crops, or the environment that has not been previously submitted to DPR, to submit the evidence to the director in a timely manner. (FAC § 12825.5)

6) Authorizes the director of DPR, if they have reason to believe that any of the conditions stated in FAC § 12825 are applicable to any registered pesticide and that the use or continued use of that pesticide constitutes an immediate substantial danger to persons or to the environment, to, after notice to the registrant, suspend the registration of that pesticide pending a hearing and final decision. (FAC § 12826)

7) Authorizes the director of DPR to cancel a certificate of registration, or refuse to issue certification to any manufacturer, importer, or dealer for any pesticide that repeatedly violates pesticide law or regulations. (FAC § 12827)

8) Prohibits, except for specified health and safety and agricultural activities, the use of the rodenticides brodifacoum, bromadiolone, difenacoum, and difethialone in the state until the director of DPR certifies that DPR has completed a reevaluation of those pesticides and has adopted restrictions to protect wildlife, as specified. (FAC § 12978.7 (c and h))

9) Prohibits, except for specified health and safety and agricultural activities, the use of the rodenticide diphacinone in the state and designates diphacinone as a restricted material until the director of DPR certifies that DPR has completed a reevaluation of diphacinone and has adopted restrictions to protect wildlife, as specified. (FAC § 12978.7 (d and i))

10) Authorizes the director of DPR, at any time, to evaluate a registered pesticide to carry out specified statutory requirements. (Title 3 of the California Code of Regulations (3 CCR) § 6220)

11) Requires the director of DPR to investigate all reported episodes and information received by the director that indicate a pesticide may have caused, or is likely to cause, a significant adverse impact, or that indicate there is an alternative that may significantly reduce an adverse environmental impact. (3 CCR § 6220)

12) Requires, if the director of DPR finds from the above investigation that a significant adverse impact has occurred or is likely to occur or that such an alternative is available, that the pesticide involved be reevaluated. (3 CCR § 6220)

13) Specifies factors under which DPR may initiate a reevaluation, including public or worker health hazard; environmental contamination; pesticide residue overtolerance; fish or wildlife hazard; lack of efficacy; undesirable phytotoxicity; hazardous packaging; inadequate labeling; disruption of the implementation or conduct of pest management; availability of an effective and feasible alternative material or procedure that is demonstrably less destructive to the environment; discovery that data upon which a registration was issued is false, misleading, or incomplete; and, other information suggesting a significant adverse effect. (3 CCR § 6221)

14) Provides, under the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA), for federal regulation of pesticide distribution, sale, and use. Requires all pesticides distributed or sold in the United States to be registered (licensed) by the United States Environmental Protection Agency (US EPA). Requires, before US EPA registers a pesticide, the applicant to show, among other things, that using the pesticide according to specifications will not generally cause unreasonable adverse effects on the environment. (7 United States Code (USC) § 136 (a))

15) Defines, under FIFRA, "unreasonable adverse effects on the environment" to mean any unreasonable risk to man or the environment, taking into account the economic, social, and environmental costs and benefits of the use of any pesticide, or a human dietary risk from

residues that result from the use of a pesticide in or on any food, as specified. (7 USC § 136 (bb))

FISCAL EFFECT: Unknown

COMMENTS:

Need for the bill: According to the author,

"AB 1963 prohibits the sale and use of paraquat dichloride, or paraquat, an herbicide commonly used in California, starting in 2026. Paraquat is a highly toxic herbicide, or weed-killer, used on nut crops like almonds, pistachios, and walnuts, grapes, as well as cotton, soybean, corn and others.

Paraquat is sprayed to "burn down" or clear crop fields before planting, and throughout the growing season to manage weeds between crop rows. Much of the chemical ends up in soil for years, but it can also linger in dust or drift through the air to nearby communities. This poses an increased risk to people living and working near fields who are exposed to paraquat.

The people most at risk of paraquat exposure are primarily agricultural workers who mix, load, or apply paraquat, and enter areas after paraquat has been applied, as well as people living in agricultural communities who could be exposed from pesticide drift in the air or dust. In 2021 just over 430,000 pounds were applied in California, primarily in Kern, Kings, Fresno, Merced, and Tulare counties.

The US EPA and independent scientists have well documented the hazards to public health and wildlife from the use of paraquat. Paraquat use has serious uncontrollable adverse effects.

A considerable amount of evidence from studies in people, especially farmworkers, have linked paraquat exposure to the development of Parkinson’s disease. A 2019 meta-analysis of 13 studies reported a statistically significant association where people exposed to paraquat are 1.64 times more likely to be diagnosed with Parkinson's disease. Ingesting even tiny amounts of paraquat can be lethal. Reports from America’s Poison Centers show hundreds of accidental and intentional poisonings - suicides - linked to paraquat ingestion in recent years, with at least one death a year.

Paraquat is banned in more than sixty countries, including those with large agricultural economies, like the United Kingdom, China, Brazil, and the members of the European Union. California should follow their lead.

There are reasonable, effective, and practicable alternatives to paraquat that are less destructive to the environment. First and foremost, is Integrated Pest Management, or IPM. California’s Department of Pesticide Regulation is emphasizing that we need to be using less pesticides and herbicides in their new planning effort, Sustainable Pest Management. They state, 'IPM is a strategy that focuses on long-term pest prevention through biological controls, habitat manipulation and other approaches'

California needs to be the leader in eliminating highly toxic pesticides like paraquat. Furthermore, the pesticide industry, always proud of their ability to innovate, should step forward and agree to stop producing this product and produce far less toxic weed killers."

Paraquat: The Centers for Disease Control and Prevention (CDC) describes paraquat as a "toxic chemical that is widely used as an herbicide (plant killer)." Paraquat is a contact herbicide that desiccates and destroys plant cell membranes within hours of application, and, according to US EPA, is one of the most widely used herbicides in the United States. Paraquat is used in many agricultural settings for the control of weeds and grasses, as a harvest aid desiccant (to remove green foliage before harvesting, such as for cotton or potatoes), and as a postharvest desiccant. Approved non-agricultural uses for paraquat include control of weeds and grasses around commercial buildings, electric transformer stations, fence lines, pipeline pumping stations, public airports, and storage yards. Paraquat can be applied to agricultural and non-agricultural areas (e.g., non-crop lands, and pasture lands) with aerial, ground, and handheld spray equipment.

Impacts of paraquat exposure: According to US EPA, humans may be exposed to paraquat in food and drinking water since paraquat may be applied directly to growing crops and application may result in it reaching surface and ground water sources of drinking water. Non-occupational exposures may occur as a result of spray drift from off-target applications of paraquat. US EPA states that occupational handler and post-application exposures are expected from paraquat usage. The CDC asserts that licensed applicators of paraquat are the people most at risk for exposure.

US EPA says that paraquat is highly toxic. According to the US EPA, one small sip of paraquat can be fatal and there is no antidote. Because of paraquat's acute toxicity, all paraquat products registered for use in the United States are federally designated as restricted-use pesticides (RUPs) that can only be sold to and used by trained, certified applicators. There are no paraquat products registered for homeowner use and no products registered for application to residential areas.

The 2023 *Environmental Science and Pollution Research* article, "Agriculture without paraquat is feasible without loss of productivity—lessons learned from phasing out a highly hazardous herbicide," notes that in response to known harms, particularly to human health, over 67 countries have banned the use of paraquat and many private voluntary standards in certified food and fiber supply chains and retailer companies have included paraquat in their prohibited chemical lists. The article also explains that paraquat is one of the most frequently used pesticides in suicide. Paraquat is also involved in fatal and non-fatal unintentional poisonings, including in countries with high use of protective equipment and mitigation measures. For example, US EPA says that out of 27 paraquat fatality reports during 2014, eight were due to the accidental ingestion of paraquat.

Paraquat is also implicated in chronic health effects, especially the progressive neurodegenerative disorder Parkinson's disease. Experimental research has shown that paraquat crosses the blood-brain barrier and can enter and accumulate in dopaminergic neurons, the cells lost in Parkinson's disease. Dopaminergic neurons play an important role in the control of multiple brain functions, including voluntary movement and the regulation of many processes, such as mood and stress. The February 2024, article, "Agricultural paraquat dichloride use and Parkinson's disease in California's Central Valley," published in the *International Journal of Epidemiology*, notes that at least 10 epidemiological studies have linked paraquat exposure to

Parkinson's disease, and a 2019 meta-analysis of 13 case-control studies with 3231 patients and 4901 controls showed paraquat exposure to be associated with a 1.64- fold increase in the risk of Parkinson's disease. The article observes, however, that epidemiological results have not been unequivocal, pointing to a recent report from the Agricultural Health Study suggesting no association, contradicting positive associations previously reported in a nested case-control study from the same cohort (it also notes questions about the accuracy of the self-reporting of pesticide use and selection bias in the Agricultural Health study). The 2024 epidemiological study published in the *International Journal of Epidemiology* article found that, in agricultural central California (Kern, Fresno, and Tulare counties), higher levels of ambient paraquat exposure at either residences or workplaces was associated with Parkinson's disease risk. The study concludes that its findings provide further evidence that paraquat exposure increases the risk of Parkinson's disease.

In addition to human health concerns, the *Environmental Science and Pollution Research* article notes that paraquat also poses a risk to the environment. It states that paraquat is moderately to highly toxic to mammals, birds, and aquatic invertebrates. US EPA's 2019 draft ecological risk assessment also identified potential risks to mammals, birds, terrestrial invertebrates, terrestrial plants, and algae due to paraquat exposure, and stated that paraquat is "very persistent in soil/sediment and accumulates in the environment in an adsorbed state."

Alternatives to paraquat: According to the 2023 *Environmental Science and Pollution Research* article, production data consistently failed to show any negative effects of banning paraquat on agricultural productivity. The article points to a wide range of alternative approaches to weed management and crop defoliation, many of which do not rely on herbicides, and says that over 1.25 million farmers in low- and middle-income countries successfully produce a range of crops for private voluntary standards in food and fiber supply chains that prohibit paraquat use.

The article highlights a wide range of non-herbicide and herbicide—both synthetic and plant-derived—tools and methods available to farmers that can be used as a direct alternative to paraquat or as part of an integrated weed management (IWM) system to replace its use. The aim of IWM is to diversify weed management strategies and reduce reliance on herbicides. Non-herbicide weed management approaches range from traditional techniques such as inter-row hoeing, to modern adaptions using computer vision systems, and novel "high-tech" approaches such as fully autonomous robotic weeders. The article points out that before herbicides were developed, mechanical weeding using harrows, inter-row cultivators, or mowers were widely used in farming and remain the most common alternative to herbicide use for direct weed control. The article contends that these methods are successfully used in organic and non-organic farming.

The article also argues that agroecological approaches can considerably reduce the need to kill plants with either herbicides or mechanical techniques, with improved environmental outcomes. It says that agroecological practices, such as mulches, cover crops, livestock grazing, crop rotation, and diversifying crops and weed communities, provide a holistic and more sustainable approach to managing weeds. The article maintains that these practices provide multiple ecosystem services, as well as improving profitability due to reduced costs and increased crop yield.

There are also numerous available herbicides that are used as a direct substitute for paraquat, such as diquat, glufosinate ammonium, and glyphosate (Roundup); however, synthetic chemical

herbicides can have a range of adverse health and environmental effects that need to be taken into consideration before being used.

Paraquat use in California: Pesticide products containing paraquat are registered in California for use as an herbicide and defoliant on a variety of agricultural plants. Paraquat is a California restricted material, and therefore not available for homeowner use or for application in residential areas. Restricted materials are pesticides deemed to have a higher potential to cause harm to public health, farm workers, domestic animals, honeybees, the environment, wildlife, or other crops compared to other pesticides. With certain exceptions, restricted materials may be purchased and used only by or under the supervision of a certified commercial or private applicator under a permit issued by the county agricultural commissioner.

The highest uses of paraquat reported in California in 2021 (the most recent year for which we have data) included use on alfalfa, almonds, cotton, grapes, pistachios, sunflowers, tomatoes, and walnut crops. In 2021, 426,103 pounds of paraquat products were applied on 399,445 acres in California; in 2020, 854,429 pounds were applied on 808,407 acres; in 2019, 1,340,825 pounds were applied on 1,237,110 acres; and, in 2018, 1,301,935 pounds were applied on 1,240,012 acres. According to these statistics, paraquat use has significantly declined in recent years.

It is difficult to track DPR's reviews and actions on paraquat over the years because much of its past work is no longer posted online; however, a few documents provide some evidence. DPR's March 21, 2008, document, "Prioritization and Status of Active Ingredients for Risk Characterization: Report 50," shows that as early as 2008, DPR ranked paraquat as "high priority" for undergoing a risk assessment due to multiple studies indicating possible adverse effects, including genotoxicity, oncogenicity, combined oncogenicity/chronic toxicity, and chronic toxicity. A March 27, 2023, letter from Californians for Pesticide Reform and California Rural Legal Assistance Foundation to DPR's Pesticide Registration and Evaluation Committee notes that DPR again identified paraquat as high priority for risk assessment/reevaluation in 2011, and in 2014, DPR ranked paraquat as the second highest priority chemical in the state for risk assessment initiation. Unfortunately, the links to those documents on DPR's website are no longer active, and it is unclear whether DPR initiated risk assessment following DPR's multi-year high priority listing of paraquat.

DPR's reevaluation process: FAC § 12824 requires DPR to "eliminate from use" any pesticide that "endangers the agricultural or nonagricultural environment, is not beneficial for the purposes for which it is sold, or is misrepresented." State statute also requires that, in order to do so, DPR must have "an orderly program for the continuous evaluation of all pesticides actually registered." To carry out this requirement, regulation requires DPR to continuously evaluate pesticides currently registered in California.

DPR, in its "Semiannual Report Summarizing the Reevaluation Status of Pesticide Products during the Period of July 1, 2023, through December 31, 2023," (2023 Semiannual Report) provided the following description of the reevaluation process.

California regulations require DPR to investigate all reports of adverse effects to public health or the environment that indicate a pesticide may have caused or is likely to cause a significant adverse impact. Reevaluation of a registered pesticide is required if, from the investigation, a significant adverse impact occurred, or is likely to occur, from its use.

Regulation specifies factors under which DPR may initiate a reevaluation, including public or worker health hazard; environmental contamination; residue overtolerance; fish or wildlife hazard; lack of efficacy; undesirable phytotoxicity; hazardous packaging; inadequate labeling; disruption of the implementation or conduct of pest management; availability of an effective and feasible alternative material or procedure that is demonstrably less destructive to the environment; discovery that data upon which a registration was issued is false, misleading, or incomplete; and, other information suggesting a significant adverse effect. An ongoing DPR pesticide review may also trigger a reevaluation, as can data or information received from registrants; state and county pesticide use surveillance and illness investigations; pesticide residue sample analyses; environmental monitoring activities; and, issues that may concern other state or federal agencies.

When a pesticide enters the reevaluation process, DPR reviews existing data and may require that registrants provide additional data to characterize the nature and extent of the potential hazard and identify appropriate mitigation measures, if needed.

DPR concludes reevaluations in several ways. If the data demonstrate use of the pesticide presents no significant adverse effects, DPR concludes the reevaluation without additional mitigation measures. If additional mitigation measures are necessary, DPR will place appropriate restrictions on the use of the pesticide to mitigate the potential significant adverse effect. If the adverse impact cannot be mitigated, DPR cancels or suspends the pesticide product registration.

DPR's review of paraquat for reevaluation: According to DPR's 2023 Semiannual Report, in DPR's notice to renew the registrations of pesticide products for 2023, DPR received comments requesting that DPR reevaluate, suspend, or cancel products containing paraquat. DPR received 4,683 identical or substantially similar comments submitted pursuant to an email campaign, as well as six unique comments containing references to public literature and studies. The unique comments included letters from environmental and Parkinson's disease research organizations, and from Parkinson's disease researchers and practitioners, and expressed concern regarding human health and environmental issues regarding the use of paraquat. Several of these letters urged DPR to place paraquat into reevaluation, or to suspend or cancel its registration. In response to DPR's notice to renew the registrations of pesticide products for 2023, DPR received one comment from an environmental group again requesting that DPR reevaluate, suspend, or cancel products containing paraquat. This comment included additional studies not referenced in the 2022 comment letters. DPR notes that it continues to evaluate the studies and comments submitted in 2022 and 2023 on paraquat, and anticipates completing its initial scientific review in the coming months. DPR will make a decision about its next steps following that review, including whether the review triggers a reevaluation of products containing paraquat.

US EPA's pesticide registration review process: US EPA is required to review each registered pesticide at least every 15 years to ensure that the pesticide can carry out its intended functions without creating unreasonable adverse effects to human health and the environment. US EPA notes that it strives to base its decisions on the best available and sound science, but science is constantly evolving, and new scientific information can come to light at any time and change the understanding of potential effects from pesticides. As part of registration review, US EPA may identify additional data that may be useful for assessing a pesticide and require that it be submitted through a data call-in.

While each pesticide review is unique, all pesticides go through the same basic registration review process at US EPA, which includes a preliminary work plan; a final work plan; data call in; draft risk assessments; a proposed interim decision or a proposed decision; and, an interim decision or final decision. US EPA says that whenever it determines there are urgent human or environmental risks from pesticide exposures that require prompt attention, it will take appropriate regulatory action, regardless of the registration review status of the pesticide.

US EPA's recent action on paraquat: US EPA first registered paraquat in 1964 and it completed re-registration of the chemical in 1997. US EPA initiated its latest reregistration review for paraquat in 2011, and in October 2019, it released the draft human health and ecological risk assessments for public comment. In October 2020, US EPA released the paraquat proposed interim decision and an addendum to the paraquat draft human health risk assessment. After reviewing public comments on the proposed interim decision, US EPA finalized the paraquat interim decision in July 2021. US EPA's interim decision for paraquat finalizes new, enforceable mitigation measures to reduce exposure, including: requiring a residential area drift buffer for all aerial applications; prohibiting the use of human flaggers; prohibiting pressurized handgun and backpack sprayer application methods; requiring a 7-day restricted entry interval for cotton desiccation; and, requiring mandatory spray drift management label language, among other measures. US EPA uses interim decisions to finalize the completed parts of the registration review process and to implement enforceable mitigation measures while conducting other longer-term assessments, such as an endangered species assessment.

Following the interim decision, California Rural Legal Assistance Foundation, Farmworker Association of Florida, Michael J. Fox Foundation for Parkinson's Research, Farmworker Justice, Alianza Nacional De Campesinas, Pesticide Action Network North America, the Center for Biological Diversity, Toxic Free North Carolina, and United Farm Workers filed suit to challenge the decision. The plaintiffs argue that the interim decision understates paraquat's hazards, ignores relevant exposure pathways, and authorizes unsafe paraquat uses based on a one-sided risk benefit balancing, and therefore ultimately violates FIFRA's requirements. FIFRA requires US EPA to evaluate the risks from pesticides and to take actions necessary to prevent unreasonable risk to human health or the environment. Following the suit, US EPA agreed to reconsider its paraquat analyses, and, in January 2024, submitted a Preliminary Supplemental Consideration of Certain Issues in Support of its Interim Registration Review Decision for Paraquat (supplemental analysis). The plaintiffs contend that the supplemental analysis neither evaluates the latest evidence of paraquat's health risks nor addresses the legal and factual errors underlying the interim decision. US EPA is expected to finalize the supplemental analysis in January 2025, and to decide whether to pursue changes to the interim decision at that point. In January 2025, the lawsuit against the interim decision is also scheduled to come out of abeyance, meaning the litigation could resume.

Paraquat litigation and settlements: People who have developed Parkinson's disease are filing lawsuits against the paraquat manufacturers Syngenta and Chevron, and the distributors of paraquat, including FMC Corporation. These lawsuits seek compensation for injuries to the victims, mainly agricultural workers and people living near agricultural activities, as a result of exposure to paraquat, or compensation for loss of consortium, meaning the loss a family or spouse experiences due to injuries to the victim. State court cases are pending in California, Delaware, Illinois, Florida, Pennsylvania, and Washington. The California cases of about 300 people were consolidated in the Superior Court of Contra Costa County, and the trial for one cases is commencing in October 2024 in King County, Washington. Additionally, the cases of

about 5,000 people were consolidated in a federal multidistrict litigation docket in the Southern District of Illinois. For the multidistrict litigation case, on April 17, 2024, U.S. District Judge Nancy Rosenstengel dismissed four bellwether lawsuits after excluding the testimony of the plaintiffs' key expert. Plaintiffs plan to appeal. While most paraquat Parkinson's lawsuits are still in the early stages, Syngenta reported in its 2022 Financial Report that it reached a $187.5 million settlement in 2021 to resolve claims related to people alleging their Parkinson's disease was caused by exposure to paraquat.

This bill: This bill prohibits, on and after January 1, 2026, a person from using, manufacturing, selling, delivering, holding, or offering for sale in commerce a pesticide product that contains the active ingredient paraquat.

Proposed amendments: The author's intent in carrying AB 1963 is to address the public health and environmental concerns associated with exposure to paraquat. Currently this bill prohibits, on and after January 1, 2026, a person from using, manufacturing, selling, delivering, holding, or offering for sale a pesticide product that contains paraquat. Existing law prohibits the use of certain other pesticides, specifically rodenticide products that contain the active ingredients diphacinone, brodifacoum, bromadiolone, difenacoum, and difethialone These statutes, however, institute the prohibition on the pesticide only until DPR completes a reevaluation of these pesticides and establishes control measures to reduce potential environmental harm by any approved uses. In order to make the provisions of this bill consistent with existing statute, and to enable a thorough review of paraquat by DPR, the author may wish to consider amending the bill to prohibit the use of paraquat until DPR completes a reevaluation of paraquat and establishes appropriate controls to mitigate any potential significant adverse effects of paraquat exposure.

Arguments in support: According to a coalition of supporters, including environmental, public health, and environmental justice organizations, "While much of the paraquat applied winds up in the soil for years, the chemical can also drift through the air or linger in dust. And, this pesticide drift creates health concerns. In California the available data shows that workers and residents in areas with the highest use of the chemical face a greater risk of Parkinson's disease. Chronic exposure to paraquat increases the risk of developing Parkinson's disease by reducing the number of neurons that produce dopamine in certain parts of the brain. A study using data from the National Institutes of Health found people who sprayed paraquat were more than twice as likely to develop Parkinson's disease as those who applied other pesticides. And a meta-analysis of 13 studies found a 64 percent increase in the likelihood of developing Parkinson's disease from paraquat exposure. Just this year, findings from researchers at UCLA show paraquat sprayed within 500 meters of where people lived and worked could more than double a person's odds of developing Parkinson's. Other health problems linked to paraquat include thyroid disease and cancer, impaired kidney function, childhood leukemia, and non-Hodgkin lymphoma."

The Consumer Attorneys of California also write in support,

> "…over 50 countries… have already banned the sale and use of paraquat, including other agricultural powerhouses such as the European Union, China, Brazil, and the United Kingdom.
>
> Paraquat is extremely toxic to humans.... Additionally, a significant body of scientific evidence has linked paraquat exposure to the development of Parkinson's Disease… Those at highest risk for paraquat exposure are farmworkers and agricultural laborers who mix,

load, and apply paraquat. This population makes up almost 5% of California's labor force and is the backbone of California's economy as the top food-producing state. The lives of many farmworkers have already been irrevocably harmed by paraquat, with more being jeopardized every day. Thousands of farmworkers in California alone have been diagnosed with Parkinson's disease following their exposure to paraquat and will live out their final decades suffering from a progressive loss of dignity, as they lose control over their bodies, their bowels, and eventually even their ability to communicate…

AB 1963 would not negatively affect crop production, as international assessments found that paraquat bans in other countries, including Brazil and China, largely did not impact crop yields. …Paraquat is one of the only toxins that replicate the neuropathological features of Parkinson's disease, as well as Parkinson's symptoms in animals. Hundreds of animal studies have shown that paraquat causes the death of dopamine-producing neurons, the production of Lewy bodies, motor deficits, and behavioral changes consistent with those seen in human Parkinson's disease. Human exposure studies have similarly confirmed this, finding more than a doubling of Parkinson's disease among those who work with paraquat…

Recent evidence shows that those who live and work in agricultural areas may be at risk whether or not they work directly with paraquat. A study published in 2024 by researchers at UCLA found that those who live and/or work near the locations where paraquat was sprayed in California's Central Valley were more than 2 times as likely to develop Parkinson's disease compared to others.…

Manufacturers have gone to great lengths to downplay or conceal the side effects of paraquat's dangers from regulators and consumers… they have also imposed significant restrictions on [their] internal scientists who study the herbicide. In 2003, Syngenta went so far as to ban its own scientists from measuring paraquat levels in the brains of its study animals for fear of public knowledge. Five years later, Syngenta banned its scientists from studying paraquat altogether without approval from its legal department. With the passage of AB 1963, Californians would be protected from a harmful, toxic herbicide."

Arguments in opposition: According to a coalition of opponents, including agricultural trade groups, chemical manufacturers, and pesticide manufacturers, who write in an oppose unless amended position,

"AB 1963 Circumvents the Federal and State Process for Ensuring Product Safety: Pesticide products are heavily regulated, evaluated, and restricted as appropriate at the federal, state, and local level… Before registering a new pesticide or new use for a registered pesticide, EPA must first ensure that the pesticide, when used according to label directions, does not pose unreasonable risks. After a product is approved for use by U.S. EPA, products must also be approved by [DPR], which considers the ingredients of the pesticides, sites of use, amount, frequency and timing of use, among other things. To ensure additional safety, DPR frequently imposes additional standards for required permits, use mitigations and other restrictions, or prohibits uses entirely… Paraquat is also designated as a California Restricted Material, and its use requires a permit and Notice of Intent to apply… AB 1963 fails to respect the pre-existing and obligatory standards in place by federal, state and local agencies to protect users, the public and environment from legitimate and verifiable risk.

AB 1963 Ignores Reviews Completed and Currently Underway:…After claims from non-governmental organizations of risk, DPR has undertaken a preliminary investigation 'to

evaluate the data associated with the public comments...' If warranted and the data substantiate the claim, DPR may initiate a formal reevaluation of the product. DPR can require mitigations and cancel product registrations if there are not feasible mitigations. To date, the State has not determined that reevaluation is warranted… U.S. EPA is also completing its extensive and thorough registration review of paraquat… U.S. EPA's review included but was not limited to 'health effects on the user through residential or occupational exposure; health effects on others such as farmworkers and bystanders or consumers of treated products; and effects on non-target organisms or the environment.' The Legislature ought not substitute its judgment for the comprehensive and scientific review of the safety of paraquat conducted by technical experts.

AB 1963 Claims of Harm are Unsubstantiated: …In January 2024, U.S. EPA released a detailed 63-page explanation of its human health evaluation, and a reaffirmation based on an extensive review of the evidence that paraquat is unlikely to cause Parkinson's: the agency concluded that 'the weight of evidence was insufficient to link paraquat exposure from pesticidal use of U.S. registered paraquat products to [Parkinson's disease] in humans.' In short, the hypothesis that paraquat causes Parkinson's is not accepted in the medical community or peer-reviewed science, nor has it been accepted at any time in the past… The allegations that paraquat can cause non-Hodgkin's lymphoma and childhood leukemia are also unwarranted… U.S. EPA has determined that paraquat is not expected to volatilize from treated fields. The potential for drift is mitigated by measures on the label designed to be protective to reduce risks of illness or injury to bystanders, workers, and handlers.

Paraquat Remains an Essential Tool for Food Production:…Keeping weed-strips mostly clear of weeds can save a grower 10,000 to 50,000 gallons of water per acre per year… Since paraquat is a restricted product with significant protective equipment, handling and training requirements, its use has significantly declined the last several years, dropping nearly 70% from 2019 to 2021. Nonetheless, it remains an essential tool in managing weeds.

Alternative Proposal:…to address concerns from stakeholders, this coalition recommends AB 1963 be amended to direct DPR to complete its current, additional review of paraquat safety. To address concerns of expediency, the bill can incorporate a date by which the review is completed."

Related legislation:

1) AB 2552 (Friedman). Prohibits, as specified, the use of the rodenticides chlorophacinone and warfarin until DPR has completed a reevaluation and developed and adopted further restrictions on their use. This bill is pending hearing in the Assembly Judiciary Committee.

2) AB 1322 (Friedman, Chapter 836, Statutes of 2023). Prohibits, as specified, the use of the rodenticide diphacinone until DPR has completed a reevaluation and developed and adopted further restrictions on its use.

3) AB 1788 (Bloom, Chapter 250, Statutes of 2020). Prohibits, as specified, the use of the rodenticides brodifacoum, bromadiolone, difenacoum, and difethialone until the director of DPR has completed a reevaluation of those pesticides and developed and adopted further restrictions on their use.

4) SB 86 (Durazo, Chapter 299, Statutes of 2020). Would have, commencing June 1, 2021, prohibited the use of a pesticide that contains the active ingredient chlorpyrifos. The contents of this bill were stricken and the bill was amended to instead require DPR to submit a quarterly report, as specified, on the use of chlorpyrifos in granular form.

5) SB 458 (Durazo, 2019). Would have prohibited the use of pesticides that contain chlorpyrifos in California until DPR adopts specified control measures for chlorpyrifos. This bill was held in the Senate Appropriations Committee.

REGISTERED SUPPORT / OPPOSITION:

Support

A Voice for Choice Advocacy
American Bird Conservancy
Beyond Pesticides
California Association of Professional Scientists
California Nurses for Environmental Health & Justice
California Rural Legal Assistance
California Rural Legal Assistance Foundation (CRLA Foundation)
Californians for Pesticide Reform
Center for Biological Diversity
Center for Environmental Health
Clean Water Action
Cleanearth4kids.org
Community Water Center
Consumer Attorneys of California
Educate. Advocate.
Environmental Working Group (Sponsor)
Facts Families Advocating for Chemical and Toxics Safety
Families Advocating for Chemical and Toxics Safety
Farmworker Justice
Food and Water Watch
Friends of The Earth
Fund Her
GMO Science
Green Latinos
Mamavation - Non-toxic Products for Healthy Families
Maternal and Child Health Access
Michael J. Fox Foundation for Parkinson's Research; the
Pesticide Action Network
Physicians for Social Responsibility - San Francisco Bay Area Chapter
Protect Wild Petaluma
Re:wild Your Campus
Recolte Energy
Resource Renewal Institute
Worksafe
YardSmartMarin

Opposition

Almond Alliance
CA Cotton Ginners & Growers Association
California Agricultural Aircraft Association
California Agricultural Commissioners & Sealers Association
California Apple Commission
California Association of Pest Control Advisers
California Association of Winegrape Growers
California Blueberry Commission
California Cattlemen's Association
California Chamber of Commerce
California Cherry Growers and Industry Association
California Farm Bureau Federation
California Food Producers
California Fresh Fruit Association
California Manufacturers & Technology Association
California Pear Growers Association
California Seed Association
California Walnuts
Chemical Industry Council of California
Croplife America
Olive Growers Council of California
Western Agricultural Processors Association
Western Growers Association
Western Plant Health Association

Analysis Prepared by: Shannon McKinney / E.S. & T.M. /

Date of Hearing: April 23, 2024

ASSEMBLY COMMITTEE ON ENVIRONMENTAL SAFETY AND TOXIC MATERIALS
Eduardo Garcia, Chair
AB 2113 (Garcia) – As Amended April 11, 2024

SUBJECT: Pesticides

SUMMARY: Increases, over a three period, the mill assessment (a fee on the sale of all pesticides sold into the state), in order to support the programs of the Department of Pesticide Regulation (DPR). Specifically, **this bill**:

1) Defines "high-risk pesticide" as an active ingredient that is highly hazardous and poses a likelihood of, or is known to cause, significant or widespread human or ecological impacts from its use.

2) Defines "integrated pest management" (IPM) as an ecosystem-based strategy that focuses on long-term prevention of pests or their damage through a combination of techniques such as biological control, habitat manipulation, modification of cultural practices, and use of resistant varieties. Pesticides are used only after monitoring indicates they are needed according to established guidelines and treatments are made with the goal of removing only the target organism. Pest control materials are selected and applied in a manner that minimizes risks to human health, beneficial and non-target organisms, and the environment.

3) Defines "priority pesticide" as a pesticide product, active ingredient, or group of related products within the context of specific product uses, or pest- or location-use combinations, that are of greatest concern and warrant heightened attention, planning, and support to expedite its replacement and eventual elimination.

4) Defines "sustainable pest management" (SPM) as a holistic, whole system approach applicable to agricultural and other managed ecosystems and urban and rural communities that builds on the concept of integrated pest management to include the wider context of the three sustainability pillars: human health and social equity; environmental protection; and, economic vitality.

5) Exempts, from the pesticide applicator requirements, sanitation services for the collection, disposal, and treatment of wastewater, refuse, or sewage; and pool cleaning services, unless the person is selling, applying, using, or distributing a restricted material.

6) Requires research funded by the DPR to consider how the research could help to implement SPM and implement and support IPM, andalternatives to priority pesticides and high-risk pesticides.

7) Requires DPR, on or before January 31 of each year, to post on its website the estimated timeframe for processing an application for registration of a pesticide.

8) Requires DPR, while processing an application for the registration of a pesticide, if it determines that the processing will be longer than the posted estimated timeframe to complete it, to contact the applicant and provide further details.

9) Requires DPR, on or before January 31 of each year, if it determines that it might increase registration fees during the calendar year, to post that determination on its internet website and send that determination through any of its relevant, registration-related email lists.

10) Provides that the continuous evaluation process of pesticides, may include, but is not limited to, re-evaluating the active ingredient, making a change to the label, requiring a risk assessment of the active ingredient, designating the active ingredient as a restricted material, and requiring the mitigation of risks associated with the active ingredient.

11) Requires DPR, on or before January 31 of each year, as part of the continuous evaluation of all pesticides registered, to post on its internet website a list of active ingredients that it might place under continuous evaluation in that calendar year.

12) Requires DPR, under its process for continuous evaluation of all pesticides registered, to post an estimated timeline for completing an evaluation for an active ingredient, if DPR listed the active ingredient as being under continuous evaluation.

13) Requires DPR, on or before January 31, 2025, to post on its internet website, an estimated timeline for completing the re-evaluation of any active ingredient that is undergoing re-evaluation.

14) Requires DPR, on or before January 31, 2026, to initiate the re-evaluation of a least two additional active ingredients and post the estimated timeline for completing the re-evaluations on its internet website.

15) Requires DPR, on or before January 31, 2027, and each year thereafter, to initiate the re-evaluation of at least five additional active ingredients and post the estimated timeline for completing the re-evaluations on its internet website.

16) Establishes the rate for the mill assessment on the sale of all pesticides, from July 1, 2024, to June 30, 2025, to be 24 mills ($0.024) per dollar sales of all sales of registered pesticides for use in this state.

17) Establishes the rate for the mill assessment on the sale of all pesticides, from July 1, 2025, to June 30, 2026, to be 27 mills ($0.027) per dollar sales of all sales of registered pesticides for use in this state.

18) Establishes the rate for the mill assessment on the sale of all pesticides, from July 1, 2026, to June 30, 2027, to be 29 mills ($0.029) per dollar sales of all sales of registered pesticides for use in this state.

19) Authorizes the director of DPR, beginning on July 1, 2028, to adopt regulations setting one fixed rate for the mills assessment adequate to support DPR's annual expenditures authorized in the annual Budget Act and to provide a prudent reserve; the rate shall not exceed 33.9 mills ($0.0339).

20) Provides that funding from the mill assessment shall support implementation of the following recently enacted laws: AB 363 (Bauer-Kahan, Chapter 520, Statutes of 2023), AB 652 (Lee, Chapter 662, Statutes of 2023), AB 1016 (Jones-Sawyer, Chapter 354, Statutes of 2023), and AB 1322 (Friedman, Chapter 836, Statutes of 2023).

21) Requires the mill assessment to be paid by the person or entity that first sold the pesticide for use in the state.

EXISTING LAW:

1) Provides, under the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA), for federal regulation of pesticide distribution, sale, and use. Requires that all pesticides distributed or sold in the United States be registered (licensed) by the United States Environmental Protection Agency (US EPA). Requires, before US EPA registers a pesticide under FIFRA, the applicant to show, among other things, that using the pesticide according to specifications will not generally cause unreasonable adverse effects on the environment. (7 United States Code (U.S.C.) § 136, et seq.)

2) Authorizes the state's pesticide regulatory program and mandates DPR to, among other things, provide for the proper, safe, and efficient use of pesticides essential for the production of food and fiber, for the protection of public health and safety, for the protection of the environment from environmentally harmful pesticides, and to assure agricultural and pest control workers safe working conditions where pesticides are present by prohibiting, regulating, or otherwise ensuring proper stewardship of those pesticides. (Food and Agriculture Code (FAC) § 11401, et seq.)

3) Regulates the use of pesticides and authorizes the director of DPR to adopt regulations to govern the registration, sale, transportation, or use of pesticides, as prescribed. (FAC §11501, et. seq.)

4) Requires the director of DPR to establish, by regulation, fees for DPR's pesticide registration program. (FAC § 12812)

5) Requires the director to endeavor to eliminate from use in the state any pesticide that endangers the agricultural or nonagricultural environment, is not beneficial for the purposes for which it is sold, or is misrepresented. Requires the DPR director, in carrying out this responsibility, to develop an orderly program for the continuous evaluation of all pesticides actually registered. (FAC § 12824)

6) Authorizes, the director, after a hearing, to cancel the registration of, or refuse to register, any pesticide, for a pesticide:
   a) That has demonstrated serious uncontrollable adverse effects either within or outside the agricultural environment;
   b) The use of which is of less public value or greater detriment to the environment than the benefit received by its use;
   c) For which there is a reasonable, effective, and practicable alternate material or procedure that is demonstrably less destructive to the environment; or,
   d) That, when properly used, is detrimental to vegetation, except weeds, to domestic animals, or to the public health and safety. (FAC § 12825)

7) Requires the director and the County Agricultural Commissioner (CAC) of each county, under the direction and supervision of the director, to enforce the pesticide program and the regulations that are issued pursuant to it. (FAC § 11501.5)

8) Requires the director to adopt regulations that govern the conduct of the business of pest control. (FAC § 11502)

9) Defines "pesticide" as including any substance, or mixture of substances, which is intended to be used for defoliating plants, regulating plant growth, or for preventing, destroying, repelling, or mitigating any pest, as defined, which may infest or be detrimental to vegetation, man, animals, or households, or be present in any agricultural or nonagricultural environment whatsoever. (FAC § 12753)

10) Requires the mill assessment to be paid by the pesticide registrant, broker, dealer or other person subject to the mill assessment. (FAC § 12847)

11) Sets the maximum rate for the mill assessment at 21 mills ($0.021). (FAC § 12841)

FISCAL EFFECT: Unknown.

COMMENTS:

Need for the bill: According to the author, "In January 2024, the Governor introduced, as part of his proposed budget, a proposal to increase the mill assessment that supports DPR. This budget proposal is designed to fill a structural deficit with DPR's funding and provide additional funding to support and enhance DPR's core functions. Additionally, the Governor included trailer bill language to implement his budget proposal. I introduced AB 2113 to give the Legislature an opportunity, through the policy committee process, to hear from stakeholders and make further enhancements and refinements to the Governor's proposal to address issues raised by stakeholders and the Legislature. I view this bill as an ongoing dialogue to ensure there is an effective and properly resourced DPR, in order to more effectively carry out its mission."

DPR's Mission: Since most pesticides are, by design, inherently toxic to their target pest – and excess amounts of any substance may be harmful – pesticide use must be strictly controlled. Amendments to FIFRA have delegated responsibility and authority to states for training, registration, and enforcement through cooperative agreements, with U.S. EPA maintaining oversight responsibility over state programs. In California, these duties lie with DPR, which is housed within the California Environmental Protection Agency (CalEPA) and has the express mission "to protect human health and the environment by regulating pesticide sales and use, and by fostering reduced-risk pest management."

California's first laws to regulate pesticides were in response to consumer fraud cases and counterfeit, adulterated, and mislabeled products in the early 1900s. For much of the 20th century, the California Department of Food and Agriculture (CDFA) was tasked with the regulation of pesticides and related law enforcement. In 1991, CalEPA was established to unify the state's environmental authority, bringing the Air Resources Board, the State Water Resources Control Board, the Integrated Waste Management Board, the Department of Toxic Substances Control, the Office of Environmental Health Hazard Assessment (OEHHA), and DPR under one agency. Pesticide-related statutory responsibilities and authorities were transferred to DPR. Today, CDFA maintains only the analytical pesticide residue laboratory. Structural pesticide control is housed at the Department of Consumer Affairs, and local enforcement lies with CACs, who receive guidance and support from DPR.

DPR's Structure: In addition to its Administrative Services Division and the Office of Technology Services, DPR maintains the following six programmatic branches that work to fulfill DPR's responsibilities and goals:

- Pesticide Registration Branch: responsible for the scientific evaluation and registration of pesticide products. Any pesticide product must be registered with the state before its sale, possession, or use. The branch coordinates the required scientific data evaluation process across DPR's branches and with other relevant state agencies. It also serves as the primary liaison to companies applying to register their products;

- Pest Management and Licensing Branch: evaluates pesticide and pest management problems and awards grants to develop and promote new strategies that reduce adverse environmental effects and hazards from pesticide use in agricultural and non-agricultural settings. This branch oversees, among others, the Pesticide Use Reporting Program, the Licensing and Certification Program, and the School and Child Care IPM Program;

- Human Health Assessment Branch: reviews toxicological studies, prepares risk assessments, and evaluates the adequacy of product labels;

- Worker Health and Safety Branch: evaluates exposure and performs risk assessments to develop and implement mitigation measures that reduce the risk of workers and public exposure to pesticides;

- Environmental Monitoring Branch: monitors the environment to determine the fate of pesticides and analyzes potential hazards in air, soil, and ground and surface water. The branch develops methods for the collection and analysis of environmental samples for pesticides. It also provides environmental monitoring data necessary for emergency eradication projects, environmental contamination assessments, pesticide registration and reevaluation, and human exposure evaluations; and,

- Pesticide Enforcement Branch: enforces federal and state laws and regulations pertaining to proper and safe use of pesticides. The branch has oversight responsibility for pesticide incident investigations, provides guidance to county regulators, trains inspectors, and evaluates the effectiveness of county pesticide use programs. Locally, pesticide use enforcement is largely carried out by CACs and their staff, to whom the Pesticide Enforcement Branch provides training, coordination, and technical support.

Sources of Funding: DPR's main revenue sources are:

- The "mill" assessment: the fee levied on pesticide sales at the point of first sale into the state. This is, by far, the greatest source of revenue for DPR;
- Product registration and renewal fees: annual fee imposed on manufacturers, importers, and dealers who wish to label and sell a pesticide product in the state;
- Licensing and certification fees: fees imposed on people and businesses that sell, apply, or recommend the use of pesticides. This includes examination and licensure of pesticide applicators, aircraft pilots, pest control dealer agents, pest control advisors, and businesses that sell or apply pesticides or use pest control methods or devices for hire. DPR also accredits more than 2,000 continuing education courses;

- Civil penalties;
- Other fees and reimbursements;and,
- Funds from US EPA and the U.S. Department of Agriculture.

The Mill Fee: All DPR-registered pesticides are subject to the "mill assessment" fee upon sale into the state. A "mill" is one-tenth of a cent ($0.001). The maximum assessment rate is set by statute in FAC sections 12841 and 12841.1, at 21 mills, or 2.1 cents, for every dollar in pesticide sales. An additional 0.75 mill is assessed on agricultural and dual-use products; these revenues support CDFA's Pesticide Consultation and Analysis Unit. Products registered for manufacturing use only (i.e., sold for repackaging or to manufacture other pesticide products) are exempt from the mill fee; instead, a fee is assessed at the point of sale of the repackaged or completed product.

The mill assessment is self-reported and reporting and payment responsibilities lie with the person or entity with first knowledge of a sale, at the time of sale. Those subject to the fee are required to maintain records and may be audited by DPR. If investigators find sales of unregistered products or unpaid mill assessments, sellers must pay the amount owed and a 10% late penalty. A civil penalty may also be levied. Civil penalties have been set at a maximum of $5,000 since 2000.

Revenues from mill assessment are placed in the DPR Fund, pursuant to FAC section 12841(g), and make up the majority of funding (approximately 80%) available to the DPR's programmatic branches. Importantly, an amount equal to 7.6 mills per dollar of pesticide sales per year is allocated to CACs for local enforcement action.

Through funding allocated to DPR in the 2021-2022 state budget, DPR recently announced a contract with Crowe, LLC to examine the department's current and future funding structure and make recommendations on how to maintain its pest management programs while also accelerating the transition to more sustainable pest management practices.

Local Enforcement: County Agricultural Commissioners: California's geographic and population size and the diversity of its agricultural commodities necessitate a more complex partnership between state and local authorities, when compared with any other state in the nation. While DPR is responsible for the delivery of an effective statewide pesticide regulatory program, the legislature has delegated local pesticide use enforcement to CACs.

County boards of supervisors appoint CACs who must be licensed by the state. Numbering approximately 400 in total, CACs and their staff of inspector-biologists receive funding for their enforcement activities from DPR, including the equivalent of 0.76% of all pesticide sales in the state; their respective county governments; grants; fees; fines; and CDFA. CACs are tasked with the enforcement of laws and regulations that cover environmental protection, pest prevention, worker and consumer protection, and other special services. Each year, CACs must negotiate with DPR on a pesticide enforcement work plan that prioritizes worker protection, illness investigations, application of high-toxicity pesticides, and agricultural pesticide applications near parks and schools.

Critically, CACs investigate reports of illnesses and injuries associated with pesticide use. They are also responsible for the inspection of operations and records of growers, non-agricultural pesticide applicators, pest control businesses (agricultural and structural), farm labor contractors,

and government agencies to ensure compliance with safety standards and requirements. They further certify private applicators, issue restricted materials permits, train field workers, and conduct public outreach efforts. CAC staff also conduct inspections to prevent pesticide misapplication and drift, ground and surface water contamination, and to protect endangered species and non-target wildlife. If violations are found, CACs can levy civil penalties.

DPR and CACs have broad authority to enter public and private property for enforcement activities such as audits, inspections, investigations, and sample collection for laboratory analysis. DPR and CACs have several enforcement tools at their disposal, including fines; refusal, revocation, or suspension of licenses and certificates; civil and criminal court actions filed through the state Attorney General; cease-and-desist orders and warning letters; crop quarantine, seizure, or abatement; orders to prohibit the harvest of commodities; and others. CACs may also ask local prosecutors to file enforcement actions. DPR attorneys monitor and may help develop case files; prosecute administrative cases; or serve on prosecution teams with country district attorneys or the Attorney General's office.

2021 Governor's proposed budget: The Governor's 2021-22 budget included a proposal to increase and tier the mill assessment. Under that proposal, more acutely toxic pesticides would have been charged a higher rate (or tier). The additional funding generated would have been used to address a structural deficit in the DPR Fund and support various programmatic expansions across DPR, CDFA, and CACs. The Legislature rejected the proposal and instead provided General Fund resources of $10.3 million in 2021-22 and $8.8 million in 2022-23 to DPR. The funding provided relief to the DPR Fund and supported alternative pest management grants and outreach, environmental monitoring, and pesticide takeback events hosted by CACs. Budget bill language also directed DPR to use a portion of the funding to hire a consultant to study potential tiering of the mill assessment.

Crowe report: In August 2023, Crowe, Inc. (the independent contractor that DPR hired to conduct the statutorily directed study) released its final findings and recommendations. Among other things, the report recommends:

- That the mill assessment initially be set at a flat rate—such that all pesticides are assessed the same tax rate—increasing from 21 mills to 33.9 mills over a three- to five-year period.
- Allowing the mill assessment to be adjusted up to a cap, to be set in statute.
- That the mill assessment be set at a level sufficient to generate revenues above what is needed to cover the structural deficit, to enable DPR and CACs to address identified programmatic needs at an expanded level, and to provide an additional amount to CDFA to support its pesticide consultation services.
- That DPR revisit the possibility of adopting a tiered mill assessment once it has made progress in identifying priority pesticides pursuant to its SPM Roadmap. Under a tiered model, the state would levy a higher mill assessment on products that the department categorizes as priority pesticides. The report notes that such an approach would likely not incentivize the purchase of safer alternatives, but rather would (1) signal a need for alternatives and (2) generate additional revenues that could be used to support the research of and outreach for alternatives.

Finally, the report also found that DPR's registration and licensing programs—which are not supported by the mill assessment—have unfunded programmatic needs.

Sustainable Pest Management (SPM): In January 2023, DPR released its SPM Roadmap, which includes strategies to transition the state to safer, more sustainable pest management. Actions in the plan include expediting the registration of new pesticide products, supporting research of and outreach for alternatives to high-risk pesticides, and expanding monitoring and data collection. A key goal of the roadmap is to eliminate the use of "priority pesticides" by 2050. The plan defines priority pesticides as those that warrant attention and planning to expedite their replacement and elimination, but does not list any specific pesticides as falling into this category. The criteria for priority pesticides include factors such as risk level and the availability of effective alternatives. The plan states that DPR will take future steps to identify which pesticides should receive this categorization under the advisement of a multi-stakeholder committee.

2024 Governor's proposed budget: The Governor proposes several changes to increase revenues deposited into the DPR Fund, to generate a total of $30.4 million of new revenues in 2024-25 (growing to $43.9 million in future years). Of this amount, $9.8 million would address the structural deficit and $17.8 million would be used to expand programs and activities (growing to $32.5 million). The increased revenues would be generated by: (1) increasing the mill assessment ($22.1 million in 2024-25, growing to $33.8 million), (2) increasing registration fees through regulations ($6.3 million in 2024-25, growing to $7.2 million), and (3) increasing licensing fees through regulations ($2 million in 2024-25, growing to $2.9 million). The proposal also would provide $717,000 from the Greenhouse Gas Reduction Fund on an ongoing basis to support additional programmatic expansions for the department.

Budget proposal includes several policy changes: The Governor proposes budget trailer legislation that would make several changes. Among other things, the trailer bill language:

- Changes mill assessment payer responsibility. The proposal would require the mill assessment to be paid by the entity that first sells a pesticide into the state. This contrasts with current law, under which it is paid by the entity who has registered the pesticide. DPR indicates that this change would address payment responsibility issues related to online retail and align the mill assessment with how the state collects other fees and taxes.

- Extends the statute of limitations for mill assessment payment violations found in audits. The proposal would extend the current statute of limitations for DPR to take enforcement actions when audits reveal mill assessment payment violations. Currently, DPR must bring enforcement actions within four years of the occurrence of the violation. The proposal would allow DPR to bring enforcement actions on violations that have occurred within four years of the audit's commencement, but no later than two years after the audit's completion. DPR indicates that this extended time line would better reflect the period it needs to complete audits and take corresponding enforcement actions.

- Extends the statute of limitations for pesticide use violations. Currently, enforcement actions on pesticide use violations must be brought by DPR or CACs within two years of the occurrence of the violation. The proposal would extend this time line to three years. DPR indicates that this change would better reflect the time needed to investigate and bring enforcement actions for pesticide use violations.

- Authorizes DPR to enforce California's laws on out-of-state pesticide dealers. The proposal would authorize DPR to levy administrative penalties of up to $15,000 on violations related to pesticide dealers, such as when entities act in this role without a license. Currently, the authority to levy administrative penalties related to pesticide dealers resides solely with CACs. DPR indicates taking enforcement actions on out-of-state pesticide dealers would be a more appropriate role to assign to the state, since the primary role of CACs is to be the main enforcement authorities within their jurisdictions.

- Exempts emergency pesticide use authorizations from California Environmental Quality Act (CEQA) review. CEQA requires state and local agencies to consider the potential environmental impacts associated with potential public or private projects or activities. Federal law authorizes the US EPA to allow federal and state agencies (such as DPR) to permit the unregistered use of a pesticide to address emergency conditions. For example, this might occur when no other registered pesticides are available to control a serious pest problem that would result in significant economic losses or cause adverse environmental impacts. These emergency authorizations are only permitted for a limited time within a defined geographical area and usually involve pesticides that have been registered for other uses (such as for different crops). The proposal would exempt such emergency pesticide use authorizations from requiring a CEQA review.

Legislative Analyst's Office (LAO) review of Governor's 2024 budget proposal: In its review of the Governor 2024 mill fee budget proposal, the LAO made the following determinations:

> "Increasing Mill Assessment Is Justified. Overall, we find two key justifications for the state to increase the mill assessment. First, it has not been increased since 2004. Given the considerable amount of time since its last adjustment, an increase is warranted to ensure that it both aligns with current department expenditures and is able to support new state priorities related to pesticides going forward. Second, increasing the mill assessment to support these activities aligns with the "polluter pays" principle, whereby those who produce or otherwise contribute to pollution (such as environmental impacts from pesticides) should bear the associated regulatory costs of managing and preventing damage to public health and the environment.
>
> However, Legislative Priorities Should Also Be Incorporated. While we find the administration's proposed programmatic augmentations to be reasonable, they do not represent the only options for expanding DPR's activities. The Legislature has an important opportunity now to determine (1) the scope of activities it wants DPR to conduct, (2) the associated level of resources required, and (3) the corresponding level at which the mill assessment should be set. This could involve removing or refining activities proposed by the Governor or adding activities that are legislative priorities. Ensuring that legislative priorities are reflected is particularly important given the opportunity that adjusting taxes and fees provides in setting the state's overall goals for pesticide regulation and ensuring they are well supported. Depending on the actions taken, modifying planned programmatic augmentations could result in higher or lower increases to the mill assessment and registration and licensing fees than proposed by the Governor. Potential categories of modifications the Legislature could consider include:
>
> Funding for SPM Roadmap Activities. The Governor's proposal would use funding to support activities outlined in the department's SPM Roadmap—such as identifying

priority pesticides and expediting the registration of reduced-risk pesticides. While these activities could provide some benefits, we note that the SPM Roadmap is an administration-led initiative. The Legislature may wish to consider whether it agrees that these are worthwhile activities for DPR to undertake and whether any statutory guidance might be needed to further align the proposed actions with its own priorities.

Funding for CACs. A central component of the proposal is to ensure that sufficient state resources are provided to uphold pesticide laws and regulations. While the Governor's proposal includes additional enforcement funding for DPR, it does not augment funding for CACs' enforcement activities. This diverges from the recommendation made in the independent contractor's report, which identified a $10.2 million funding need for CACs. We also note that the last time the state raised the mill assessment, the portion provided to CACs was also increased. While current allotments could be sufficient, this is an important opportunity for the Legislature to ensure that CACs are properly resourced to effectively complete their statutorily required enforcement activities.

Recently Chaptered Legislation. The proposal does not provide resources to implement recently chaptered legislation—such as for Chapter 662 of 2023 (AB 652, Lee), which requires DPR to convene an environmental justice committee. This omission is consistent with the administration's overall approach in the Governor's budget, which mostly excludes augmentations related to implementing recently chaptered legislation. (The administration indicates it will consider including such resources as part of the May Revision depending on the overall budget condition.) However, given the important opportunity the Legislature has right now to set DPR's scope of work and corresponding funding needs, it is a key juncture for considering whether all of its desired activities are included—particularly those already enacted into law by the Legislature and Governor."

Stakeholder input: Since the introduction of the Governor's DPR budget proposal and this bill, many stakeholders have reached out and provided input on potential changes to the Governor's proposal and this bill. Below is a summary of the input received regarding the Governor's proposal and AB 2113:

- Pesticide registration: entities that register pesticides believe the current registration process is too slow and unpredictable. They would like more predictability as to when the registration of a pesticide would be completed, including seeking statutory deadlines that DPR would need to meet, as part of the pesticide registration process. Additionally, various stakeholders would like DPR to not only streamline the registration process, but also provide for an expedited review for pesticides that pose a reduced risk, potentially including those pesticides that are organic.

- Pesticide registration fee: DPR's budget proposal includes positions for DPR that would be funded from an increase in the pesticide registration fee, which DPR can administratively increase through the regulatory process. Stakeholders that pay this fee would prefer the registration fee be moved into statute and only raised by future statutory changes.

- Re-evaluation of pesticides: Environmental justice and environmental stakeholders are concerned that DPR's re-evaluation process is slow and not publicly transparent. DPR has re-evaluated approximately five pesticides since 1991 and is currently re-evaluating

five pesticides (some of which have been under re-evaluation for 20 years). In comparison, DPR registers hundreds of pesticides a month. These stakeholders would like to see DPR move more efficiently with re-evaluations, to include initiating more re-evaluations and completing them in a timely manner. The stakeholders are also concerned that the current process is vague and not transparent. For example, stakeholders say that they are not sure if there is a particular reason or rationale that DPR uses to select a pesticide for re-evaluation, that they are unsure of DPR's process,; and that they must wait for years for updates or action on DPR's re-evaluations.

- Mill Fee: Some stakeholders believe the mill fee proposed by DPR is too low, they believe it should at least be set at the rate recommended in the Crowe study. Additionally these stakeholders do not think there should be a cap, and that DPR should be able to adjust the fee in the future to match resources that are approved in the annual budget. However, other stakeholders believe the fee is set too high, and that the increases proposed over the three year phase-in are too high in the first year. Additionally, these stakeholders think the fee increases should stop after the third year increase and that future increases in the mill fee should happen only through statute.

- Transparency: Virtually all stakeholders think DPR's program could benefit from added transparency, both through the pesticide registration process and the continuous evaluation process.

- SPM and IPM: Some stakeholders would like the mill fee proposal to have a greater emphasis on both SPM and IPM, including additional funding (beyond what is in the Governor's proposal) for SPM.

- Research grants: Many stakeholders signaled a concern with DPR's current process for funding research. This includes a concern that the research is not connected to publicly stated goals such as SPM, IPM, or seeking alternatives to pesticides that pose a higher risk.

- Funding for DPR: All stakeholders either support or acknowledge that DPR's funding has not increased significantly over a couple of decades and that if the funding improves DPR's programs, that some level of increase is needed.

This bill: AB 2113 increases, over a three period, the mill assessment (a fee on the sale of all pesticides sold into the state), in order to resolve a deficit in DPR's funding and support, in some cases, an expansion of DPR's programs. In addition, AB 2113 proposes policy changes that reflect input from multiple stakeholders. These proposals are intended to advance further conversations among stakeholders, the Legislature, and the Administration.

Issues under development: As noted, this bill is not a finished product, rather a vehicle for further input. Issues to be addressed in the near future include the amount of the mill fee, added transparency and accountability around both the pesticide registration process and the re-evaluation process, the role of SPM and IPM, and the focus of DPR funded research.

Arguments in support: According to a coalition of environmental, environmental health, and environmental justice organizations writing in support if amended:

"Implementing AB 2113 and increasing the pesticide mill fee would be an important step towards addressing these ongoing harms from chemical pesticides. However, the undersigned organizations recommend the following amendments in order to fully protect the public from the health impacts of pesticides:

- Maintain strong definitions while increasing the ambition of Sustainable Pest Management (SPM) adoption and add $20 million ongoing annual funding from the pesticide mill fee to establish an SPM Incentive Program;
- Include timelines for completing pesticide re-evaluations;
- Expedite only organic or biological pesticides for registration;
- Align mill fee increase with Crowe study's recommended fee increase; and,
- Propose actions for when monitoring detects unsafe pesticide exposure levels."

Arguments in opposition: According to a coalition comprised of organizations representing the agricultural and consumer products sectors writing oppose unless amended:

"…AB 2113 currently does not provide specific detail and accountability requirements to ensure these additional resources address well-defined needs and will result in meaningful, measurable improvements in core program implementation. Below are a series of responses to the amendments as provided on April 11th:

- Registration Transparency: Both DPR's [budget change proposal] and AB 2113 lack critical transparency requirements about how the proposals conform to core statutory functions. Unfortunately, lack of transparency in departmental activities for fee payers is not a new phenomenon. We ask AB 2113 be amended to require annual reporting by DPR of registration timelines with specific information;
- Fee Transparency: Likewise, we appreciate the requirement for DPR to provide public notice by January 31st each year if they are considering raising registration or licensing fees. This coalition remains strongly opposed to granting DPR the authority to raise the mill beyond the 2026-27 budget year;
- Re-evaluations: Related to the mandates on reevaluations, this coalition would like to express concern. While we understand the new amendment was included to direct the Department to work more concertedly on reevaluation, the mandate to initiate reevaluation on two pesticides per year is without context and will result in a significant new workload. This coalition requests this mandate be removed.
- Mill Assessment: While we appreciate AB 2113 proposes the smallest increase first to lessen the initial impact on the taxpayers, our coalition asks that you eliminate the delegation of tax authority to DPR by striking SEC. 6. Section 12841 (f)(1)(D). If the Department would like additional resources above and beyond a 28% increase by year three, as proposed, they should return to the Legislature, provide a budget proposal of what activities they seek to fund and daylight any policy debate; and,
- Registration and licensing fees: We are seeking a statutory cap on registration fees and elimination of the emergency regulatory authority, to ensure DPR completes a robust and thorough stakeholder process which provides registrants ample time to budget for registration increases.

While we maintain these concerns, we support a strong DPR. We believe it is possible to achieve a balance between reasonable tax and fee increases, with improved services and transparency by DPR."

Related legislation:

1) AB 363 (Bauer-Kahan, Chapter 520, Statutes of 2023). Prohibits, beginning January 1, 2025, the sale, possession, or use of a pesticide containing one or more neonicotinoid pesticides, as defined, for any nonagricultural use on nonproduction outdoor or ornamental plants, trees, or turf, except by state certified applicators and state licensed pest control dealers. Requires DPR to evaluate the potential impacts of neonicotinoid pesticide uses on pollinating insects, aquatic ecosystems, and human health, as specified.

2) AB 652 (Lee, Chapter 662, Statutes of 2023). Establishes a Department of Pesticide Regulation Environmental Justice Advisory Committee (EJ Advisory Committee) to integrate environmental justice considerations into DPR's programs, policies, decision making, and activities.

3) AB 1016 (Jones-Sawyer, Chapter 354, Statutes of 2023). Establishes a private applicator designation under the unmanned pest control aircraft pilot's certificate. Requires proof of the pilot's completion of a program accredited by DPR as well as a valid private applicator certificate in order to be eligible for the unmanned pest control aircraft pilot's certificate under the status of private applicator.

4) AB 1322 (Friedman, Chapter 836, Statutes of 2023). Prohibits the use of the rodenticide diphacinone in wildlife habitat areas, as defined, and prohibits the use of diphacinone in the state until DPR has completed a reevaluation and developed and adopted further restrictions on its use, as specified. Makes changes to existing restrictions on the use of second-generation anticoagulant rodenticides consistent with those placed on diphacinone.

REGISTERED SUPPORT / OPPOSITION:

Support if Amended & Support

Alchemist CDC
California Food and Farming Network
California Nurses for Environmental Health & Justice
Californians for Pesticide Reform
Center for Biological Diversity
Center for Food Safety; the
Central California Environmental Justice Network
Ceres Community Project
Clean Earth 4 Kids
Clean Water Action
Community Alliance With Family Farmers
Environmental Working Group
Facts: Families Advocating for Chemical & Toxics Safety
Jaide Conservation Collective, LLC
Pesticide Action Network North America

Physicians for Social Responsibility - Los Angeles
Roots of Change
Sacramento Food Policy Council
Second Harvest of Silicon Valley
Socioenvironmental and Education Network (SEEN)
The Praxis Project
Veggielution

California Pool & Spa Association (SUPPORT)

Opposition

Agricultural Council of California
Almond Alliance of California
American Chemistry Council
American Pistachio Growers
Association of California Egg Farmers
California Agricultural Aircraft Association
California Apple Commission
California Association of Pest Control Advisers
California Association of Wheat Growers
California Association of Winegrape Growers
California Bean Shippers Association
California Blueberry Association
California Blueberry Commission
California Chamber of Commerce
California Cotton Ginners & Growers Association
California Farm Bureau Federation
California Fresh Fruit Association
California Grain and Feed Association
California Manufacturers & Technology Association
California Pear Growers
California Seed Association
California Strawberry Commission
California Tomato Growers Association
California Walnuts
California Women for Agriculture
Grower-shipper Association of Central California
Household and Commercial Products Association
Nisei Farmers League
Olive Growers Council of California
Pest Control Operators of California
Tri Cal
Western Agricultural Processors Association
Western Growers Association
Western Plant Health Association

Analysis Prepared by: Josh Tooker / E.S. & T.M. /

Date of Hearing: April 23, 2024

ASSEMBLY COMMITTEE ON ENVIRONMENTAL SAFETY AND TOXIC MATERIALS
Eduardo Garcia, Chair
AB 2201 (Addis) – As Amended April 9, 2024

SUBJECT: Toxics: air care products

SUMMARY: Prohibits, on and after July 1, 2026, a person, including, but not limited to, a manufacturer, from selling or distributing in commerce in this state an air care product that contains any intentionally added ingredient from a specified list. Specifically, **this bill**:

1) Defines "air care product" as a chemically formulated consumer product labeled to indicate that the purpose of the product is to enhance or condition the indoor environment by eliminating unpleasant odors or freshening the air.

2) Defines "chemically formulated consumer product" to mean a product, excluding a home appliance, that is manufactured from chemicals to be used by household, institutional, or commercial consumers, without further processing, for specific purposes.

3) Defines "department" to mean the Department of Toxic Substances Control (DTSC).

4) Defines "ingredient" as a single chemical entity or mixture used as a component in the manufacturing of an air care product.

5) Defines "intentionally added ingredient" as a chemical that a manufacturer has intentionally added to an air care product and that has a functional or technical effect in the product, including, but not limited to, the components of intentionally added fragrance ingredients and colorants and intentional breakdown products of an added chemical that also have a functional or technical effect in the product.

6) Defines "nonfunctional constituent" as a substance that is an incidental component of an intentionally added ingredient, a breakdown product of an intentionally added ingredient, or a byproduct of the manufacturing process that has no functional or technical effect on the air care product.

7) Prohibits, on and after July 1, 2026, a person, including, but not limited to, a manufacturer, from selling or distributing in commerce in this state an air care product that contains any of the following intentionally added ingredients:

    a) Lilial (CAS no. 80-54-6);

    b) Lyral (CAS no. 31906-04-4);

    c) Methyl eugenol (CAS no. 93-15-2);

    d) Pulegone (CAS no. 89-82-7);

    e) The following xylene substances:

        i) Xylene (mixed isomers) (CAS no. 1330-20-7);

ii) O-xylene (CAS no. 95-47-6);

iii) P-xylene (CAS no. 106-42-3); and,

iv) M-xylene (CAS no. 108-38-3);

f) Styrene (CAS no. 100-42-5);

g) Acetaldehyde (CAS no. 75-07-0);

h) The following synthetic musk substances:

i) Phantolide (CAS no. 15323-35-0);

ii) Tonalide (CAS no. 1506-02-1);

iii) Galaxolide (CAS no. 1222-05-5);

iv) Celestolide (CAS no. 13171-00-1);

v) Cashmeran (CAS no. 33704-61-9);

vi) Musk ketone (CAS no. 81-14-1);

vii) Musk xylene (CAS no. 81-15-2);

viii) Versalide (CAS no. 88-29-9); and,

ix) Traseolide (CAS no. 68140-48-7);

i) The following formaldehyde releasers:

i) DMDM hydantoin (CAS no. 6440-58-0);

ii) Diazolidinyl urea (CAS no. 78491-02-8);

iii) Imidazolidinyl urea (CAS no. 39236-46-9);

iv) Sodium hydroxymethylglycinate (CAS no. 70161-44-3);

v) Quaternium-15 (CAS no. 4080-31-3);

vi) 2-bromo-2-nitropropane-1,3-diol (CAS no. 52-51-7);

vii) Glyoxal (CAS no. 107-22-2);

viii) Polyoxymethylene urea (CAS no. 68611-64-3);

ix) Methenamine (CAS no. 100-97-0);

x) 5-bromo-5-nitro-1,3-dioxane (CAS no. 30007-47-7); and,

xi) Benzylhemiformal (CAS no. 14548-60-8);

j) The following phthalates:

i) Diethyl phthalate (CAS no. 84-66-2);

ii) Dimethyl phthalate (CAS no. 131-11-3);

iii) Benzyl butyl phthalate (CAS no. 85-68-7);

iv) Dibutyl phthalate (CAS no. 84-74-2); and,

v) Diethylhexyl phthalate (CAS no. 117-81-7);

k) The following ethanolamine substances:

i) Ethanolamine (CAS no. 141-43-5);

ii) Diethanolamine (CAS no. 111-42-2); and,

iii) Triethanolamine (CAS no. 102-71-6);

l) The following glycol ether substances:

i) 2-Hexyloxyethanol (CAS no. 112-25-4);

ii) Butoxydiglycol (CAS no. 112-34-5);

iii) Diethylene glycol monomethyl ether (CAS no. 111-77-3);

iv) Ethylene glycol monobutyl ether (CAS no. 111-76-2);

v) Diethylene glycol (CAS no. 111-46-6); and,

vi) Ethylene glycol (CAS no. 107-21-1);

m) The following paraben substances:

i) Propylparaben (CAS no. 94-13-3); and,

ii) Butylparaben (CAS no. 94-26-8);

n) The following naphtha substances:

i) Naphtha (CAS no. 8030-30-6);

ii) Naphtha, petroleum, hydrotreated heavy (CAS no. 64742-48-9); and,

iii) Naphtha, petroleum, heavy alkylate (CAS no. 64741-65-7);

o) The following cresol substances:

i) Cresol unspecified (CAS no. 1319-77-3);

ii) m-Cresol (CAS no. 108-39-4);

iii) o-Cresol (CAS no. 95-48-7); and,

iv) p-Cresol (CAS no. 106-44-5);

p) Methyl isobutyl ketone (CAS no. 108-10-1);

q) Phenol (CAS no.108-95-2);

r) Pyridine (CAS no.110-86-1);

s) Myrcene (CAS no. 123-35-3); and,

t) Butylated hydroxytoluene (CAS no. 128-37-0).

8) Provides, if an air care product made through manufacturing processes intended to comply with this chapter contains a nonfunctional constituent that is a substance listed in this bill, then that nonfunctional constituent shall not cause the product to be in violation of this section.

9) Requires a manufacturer of an air care product to prepare technical documentation or other information showing that the manufacturer's air care product sold or distributed in commerce in this state complies with the requirements of this bill.

10) Authorizes DTSC to request a manufacturer of an air care product to submit to DTSC the technical documentation or other information described in the bill.

11) Requires a manufacturer of an air care product sold or distributed in commerce in this state to provide to a person who sells or offers for sale that manufacturer's air care product, upon request, a certification that the air care product does not contain any of the ingredients listed in the bill in a manner that would result in the prohibition of that air care product being sold or distributed in commerce in this state.

12) Authorizes a manufacturer, if an air care product contains an ingredient that the manufacturer wishes to claim as a trade secret, to submit information to DTSC in accordance with existing trade secret protections in the law.

13) Authorizes DTSC to adopt regulations to implement and administer this bill.

EXISTING LAW:

1) Creates the Cleaning Product Right To Know Act of 2017, which requires manufacturers of cleaning products to disclose specified chemical ingredients on a product label and on the manufacturers website. Prohibits a designated product from being sold in the state unless the designated product and the manufacturer of the designated product comply with this bill. (Health and Safety Code (HSC) § 108950)

Under the California Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65):

2) Prohibits a person, in the course of doing business, from knowingly discharging or releasing a chemical known to the state to cause cancer or reproductive toxicity into water or onto or into land where such chemical passes or probably will pass into any source of drinking water. (HSC § 25249.5)

3) Prohibits a person, in the course of doing business, from knowingly and intentionally exposing any individual to a chemical known to the state to cause cancer or reproductive toxicity without first giving clear and reasonable warning to such individual. (HSC § 25249.6)

4) Requires the Governor to publish a list of chemicals known to cause cancer or reproductive toxicity and to annually revise the list. (HSC § 25249.8)

Under the Safer Consumer Products (Green Chemistry) statutes:

5) Requires DTSC to adopt regulations to establish a process to identify and prioritize chemicals or chemical ingredients in consumer products that may be considered chemicals of concern, as specified. (HSC § 25252)

6) Requires DTSC to adopt regulations to establish a process to evaluate chemicals of concern in consumer products, and their potential alternatives, to determine how to best limit exposure or to reduce the level of hazard posed by a chemical of concern. (HSC § 25253 (a))

7) Specifies, but does not limit, regulatory responses that DTSC can take following the completion of an alternatives analysis, ranging from no action, to a prohibition of the chemical in the product. (HSC § 25253)

8) Authorizes a person providing information pursuant to the Green Chemistry statutes, at the time of submission, to identify a portion of the information submitted to DTSC as a trade secret and, upon the written request of DTSC, provide support for the claim that the information is a trade secret. (HSC § 25257)

FISCAL EFFECT: Unknown.

COMMENTS:

Need for the bill: According to the author: "Although air fresheners are advertised as improving indoor air quality, some chemicals used as ingredients in these products can pose significant health risks to consumers. Because we spend most of our time indoors, exposures to these products inside of homes, in our schools, and at our workplaces can add up quickly.

Consumers deserve to know that products being sold and used in the state are safe. With AB 2201, Californians will be able to breathe easier knowing that the air fresheners used in their homes and public spaces will no longer contain chemicals known to harm human health."

Chemicals in products: Industrial chemicals have become a part of everyday life, contributing to improvements in medicine, technology, and infrastructure and touching just about everything people come into contact with. More than 85,000 chemicals have been registered for use in the

United States, and more than 700 new chemicals enter the marketplace each year. As more and more chemicals enter our homes and workplaces, the need to better understand and prevent the potential adverse effects these chemicals may have on human health and on the environment becomes even more critical.

According to a 2014 review article in *The Journal of Environmental Studies and Sciences, ,* as a consequence of weaknesses in federal chemicals policy, chemicals suspected of being hazardous are found in numerous consumer and commercial products, including some to which children likely are exposed. The Centers for Disease Control and Prevention have detected hundreds of industrial chemicals in the bodies of American children and adults. Many of these chemicals have been linked to adverse health effects, but for the majority, there is too little information to understand their potential for long-term harm.

Decades of federal under-regulation of toxic chemicals have, according to a 2020 review article in *Ecology Law Quarterly,* have produced an environmental disease burden that includes asthma from exposure to air pollution, neurological harm from exposure to lead and pesticides, and other children's health effects that are cumulatively estimated to cost the United States over $76 billion annually. A subset of endocrine disrupting chemicals found in food, personal care products, and everyday household items is estimated to account for more than $340 billion overall in health costs and lost wages each year, with associated human suffering. The article posits that in the resulting chemicals policy emergency, states have become the first responders.

In California, as reported in a 2008 report released by the Regents of the University of California, chemical and pollution related diseases among children and workers cost the state's insurers, businesses, and families an estimated $2.6 billion in direct and indirect costs per year. In 2004, more than 200,000 California workers were diagnosed with deadly, chronic diseases - such as cancer or emphysema, attributable to chemical exposure in the workplace. Over that same year, 240,000 cases of preventable childhood diseases related to exposure to chemical substances were diagnosed.

A 2014 article in *The Journal of Environmental Studies and Sciences* notes that experts estimate that the environmental contribution to disease may explain a quarter to a third of the global disease burden. In addition to human health effects, environmental contamination continues to erode biodiversity and ecosystem health worldwide.

Green Chemistry: Green Chemistry, as defined in *Green Chemistry: Theory and Practice*, is "the utilization of a set of principles that reduces or eliminates the use or generation of hazardous substances in the design, manufacture and application of chemical products." For the last century, environmental and public health protection has concentrated on capturing and storing hazardous waste. Green Chemistry is a fundamentally different approach to environmental and public health protection, transitioning away from managing hazardous chemicals to reducing or eliminating their use in products or processes altogether. Green Chemistry encourages cleaner and less-polluting industrial processes, while creating new economic opportunities in the design and use of chemicals, materials, products, and processes.

Green Chemistry in California: In 2008, the California legislature recognized the principle of Green Chemistry by enacting two landmark pieces of legislation, AB 1879 (Feuer and Huffman, Chapter 559, Statutes of 2008) and SB 509 (Simitian, Chapter 560, Statutes of 2008). These bills

lay the statutory foundation for the state's Green Chemistry program and intend to establish a comprehensive approach to chemicals policy.

The structure for regulatory action required by the Green Chemistry legislation is broad and general. Rather than specifying particular chemicals or explicit regulatory action on those chemicals, the statutes authorize state agencies, primarily DTSC, to set up a process to identify and evaluate chemicals of concern and the products in which they are found, and to impose appropriate regulatory action for those chemicals and products in order to protect people and the environment. This unique statutory approach anticipated state agencies playing a greater role in developing strategies and policies designed to meet the general objectives of the statute.

Statutory requirements for the California Green Chemistry regulations: The bulk of the statutory requirements for establishing regulations governing the Green Chemistry program was included in AB 1879 (Feuer and Huffman, Chapter 559, Statutes of 2008). Its companion bill, SB 509 (Simitian, Chapter 560, Statutes of 2008), also includes provisions related to the regulations. AB 1879 requires DTSC to adopt regulations that fulfill two major requirements: 1) establish a process to *identify and prioritize* chemicals or chemical ingredients in consumer products that may be considered a chemical of concern; and, 2) establish a process for *evaluating* chemicals of concern in consumer products, and their potential alternatives, to determine how best to *limit exposure or to reduce the level of hazard posed* by the chemical.

The Safer Consumer Products regulatory process: To implement the Green Chemistry statutes, DTSC created what it called a "four-step continuous, science-based, iterative" regulatory process, which it deemed the "Safer Consumer Products" (SCP) regulations. The SCP regulations were adopted October 2013, and follow the process below:

1) Candidate Chemicals – The regulations establish a list of "candidate chemicals" based on the work already done by other authoritative organizations, and specify a process for DTSC to identify additional chemicals as candidate chemicals;

2) Priority Products – The regulations require DTSC to evaluate and prioritize product/candidate chemical combinations to develop a list of "priority products" for which alternatives analyses must be conducted. A candidate chemical that is the basis for a product being listed as a priority product is designated as a chemical of concern for that product and any alternative considered or selected to replace that product;

3) Alternatives Analysis – The regulations require responsible entities (manufacturers, importers, assemblers, and retailers) to notify DTSC when their product is listed as a priority product. DTSC will post this information on its website. Manufacturers (or other responsible entities) of a product listed as a priority product must perform an alternatives analysis for the product and the chemicals of concern in the product to determine how best to limit exposures to, or reduce the level of adverse public health and environmental impacts posed by, the chemicals of concern in the product; and,

4) Regulatory Responses – The regulations require DTSC to identify and implement regulatory responses designed to protect public health and/or the environment, and maximize the use of acceptable and feasible alternatives of least concern. DTSC may require regulatory responses for a priority product (if the manufacturer decides to retain the priority product), or for an alternative product selected to replace the priority product.

Challenges with implementation: In October 2018, the Public Health Institute, an independent non-profit organization, released a report, *California's Green Chemistry Initiative at Age 10: An Evaluation of its Progress and Promise*, evaluating the Green Chemistry program in California. The report noted that while the Green Chemistry program is an innovative program with the potential to drive the market for safer chemicals and products, and while it includes many of the attributes of a successful chemicals policy, it has failed to achieve its full potential in several ways. According to the report, "the pace of implementation of the SCP Program has been slow and DTSC has unclear authority to collect necessary information on chemicals in products. California's overall efforts and investment have not been sufficient to foster robust research and development of safer product chemistry. The SCP's Candidate Chemical List needs to be updated over time to capture chemicals with Hazard Traits consistent with breast cancer-causing chemicals and other potential health threats. And, the Toxics Information Clearinghouse currently provides no useful information but could be repurposed for more effective use."

In the almost 16 years since the passage of the original Green Chemistry legislation, DTSC has only adopted seven priority products and has three more priority products currently undergoing the regulatory process. Additionally, DTSC's SCP Program only allows it to list a priority product for one chemical-product combination. If DTSC were to move forward with a priority product designation for the chemicals in AB 2201 that would likely mean 58 separate regulations. Under recent staffing improvements DTSC has indicated a likely average of 5 priority product regulations per year going forward. The best case scenario would have DTSC adopting regulations for the chemicals in this bill within 12 years.

Chemical bans and the SCP Program: In 2008, California enacted AB 1879 (Feuer and Huffman, Chapter 559, Statutes of 2008) to establish a regulatory process for identifying and prioritizing chemicals of concern in consumer products, to create methods for analyzing alternatives to existing hazardous chemicals, and to ultimately take regulatory action to reduce the level of harm from the chemicals in those products. DTSC did this by promulgating the Safer Consumer Products regulations, which took effect in October 2013. DTSC's approach provides science-based criteria and procedures for identifying and evaluating alternatives with the objective of replacing chemicals of concern with safer chemicals and avoiding the use of substitute chemicals that pose equal or greater harm.

While the intent of AB 1879 is to establish a robust and thorough regulatory process rooted in science to consider exposure to chemicals in consumer products, it has long been recognized that DTSC does not have the resources to evaluate all, or even a significant percentage of, chemicals in every consumer product application. The permutations of product and chemical combinations are virtually limitless. To that end, the Safer Consumer Products statute does not preclude the Legislature from taking legislative action on the use of chemicals in consumer products. When there is credible scientific evidence to support a change in state policy to protect public health, the Legislature can respond to that science more expeditiously than can DTSC. Since AB 1879 was enacted, the Legislature has enacted policies on various chemical-product applications, which includep prohibitions on [spell out PFAS] (bill info); a ban on flame retardants in children's products, mattresses, and upholstered furniture (AB 2998, Bloom, Chapter 924, Statutes of 2018); a ban on bisphenol A in toddler sippy cups and bottles (AB 1319, Butler, Chapter 467, Statutes of 2011); a ban on the sale of jewelry with cadmium at certain levels (AB 929, Pavley, Chapter 313, Statutes of 2010); and, a ban on the sale of brake pads containing copper in exceedances of certain levels (SB 346, Kehoe, Chapter 307, Statutes of 2010).

DTSC, in fact, wrote in support of AB 1319 (Butler) stating: "DTSC does not believe that the [Safer Consumer Products] regulations should ever be viewed as excluding action that the Legislature might take to address specific product related concerns that are brought to its attention. Not only have the regulations taken longer to adopt than originally anticipated, DTSC also expects that the process to be represented in the regulations will be subject to time and resource constraints. There may be circumstances that warrant more timely action than DTSC can accommodate through its process."

Based upon the above legislative precedent, the Legislature may decide to move forward with chemical bans, regardless of the work by DTSC under the SCP Program.

Compliance and Enforcement under SCP: The mission of the SCP Program is to advance the design, development, and use of products that are chemically safer for people and the environment. DTSC provides compliance assistance to responsible entities and conducts compliance evaluation and enforcement activities to ensure that responsible entities comply with the SCP Regulations.

DTSC may initiate formal enforcement actions against recalcitrant responsible entities who fail to comply with regulatory requirements. DTSC's compliance and enforcement activities under the SCP include:

- Hosting workshops and conducting other outreach to inform and engage stakeholders regarding program activities, including new legislation and regulatory requirements, proposed Priority Product listings, and important regulatory deadlines;
- Offering compliance assistance, guidance, and training to help responsible entities successfully navigate the Alternatives Analysis process;
- Conducting market surveillance and product testing to identify product ingredients and assess the presence of Priority Products on the California market; and,
- Undertaking enforcement actions as warranted.

If the manufacturer of a Priority Product fails to comply with SCP regulations, DTSC places that manufacturer on DTSC's publicly available Failure to Comply List. Manufacturers of Priority Products have the principal duty to comply with SCP regulations. When a manufacturer does not comply, the duty to comply falls to the importer (if any), and then after continued non-compliance, this duty falls to the retailer or assembler. The SCP Regulations prohibit retailers and assemblers from purchasing or selling non-compliant Priority Products. Once a manufacturer is placed on the Failure to Comply List, retailers and assemblers of the non-compliant Priority Products must submit a Cease Ordering Notification to DTSC informing the Department that the retailer or assembler has ceased ordering the product.

This bill deals with some chemicals that have been identified as candidate chemicals under DTSC's SCP Program. It is possible that DTSC would enforce this bill in a manner that is similar to how they enforce the SCP Program.

Cleaning Product Right to Know Act of 2017: SB 258 (Lara, Chapter 830, Statutes of 2017) creates the Cleaning Product Right To Know Act of 2017, which requires manufacturers of cleaning products to disclose specified chemical ingredients on a product label and on the manufacturers website. Prohibits a designated product from being sold in the state unless the designated product and the manufacturer of the designated product complies with SB 258. SB

258 also includes a definition of "air care product" that is identical to the definition of "air care product" in AB 2201.

Author's rationale for including the chemicals in the bill: The author's office has provided a wide variety of background on the 58 chemicals identified in the bill – too much information to list. However, the list of potential harmful health effects identified by the author's office regarding the chemicals listed in the bill include: cancer (on the state's Proposition 65 list); nervous system toxicity; toxicity to aquatic life; endrocrrine disruption (as identified by the European Union (E.U.)); reproductive toxicity; and, asthma. Some of the chemicals listed in the bill are also prohibited in cosmetics in the E.U.

Disagreement on science: According to a variety of information provided by the opposition to this bill (also too much information to list), they contend that the chemicals listed in the bill are safe, especially if dosage is taken into consideration. One key element the opposition makes is that the bill bans the chemical completely, however in the studies they have cited, they believe there are safe levels of the these chemicals. The bulk of scientific studies submitted by the opposition includes information from the Research Institute for Fragrance Materials (RIFM; a member-supported nonprofit organization, with membership comprised of product manufacturers and other companies). After reviewing literature for over 18 chemicals list in the bill, on average the RIFM studies show that these chemicals do not present a concern for genetic toxicity, genotoxicity, phototoxicity, or photoallergicity.

This bill: Prohibits, on and after July 1, 2026, a person, including, but not limited to, a manufacturer, from selling or distributing in commerce in this state an air care product that contains any of the specified list of intentionally added ingredients. Other legislation banning chemicals from cosmetics has been modeled after chemicals prohibitions in the E.U., however, this bill would be the first of its kind – banning chemicals from air care products.

Focus on subset of chemicals: The scope of this bill is incredibly large, approximately 58 chemicals, spanning a large volume of air care products. The author may wish to consider focusing the bill on a subset of chemicals with a particular focus. One option is to limit the bill to chemicals on DTSC's candidate chemical list. These chemicals have been identified as having at least one hazard trait. Additionally, the candidate chemical list is used by manufacturers, retailers, and suppliers to identify chemicals in their products and re-formulate to remove these chemicals – thereby getting ahead of potential future regulation.

Arguments in support: According to the Environmental Working Group:

> "This bill will ban a number of chemicals that are in air fresheners. Simply put, when using some of these products, consumers think that they are "improving" their indoor air quality but have no idea that they are exposing themselves and their families, as well as visitors to their homes or businesses, to chemicals that may harm their health.
>
> Air fresheners currently sold in the state of California can contain toxic ingredients that can expose the users to harmful chemicals. These chemicals are linked to asthma attacks, migraine headaches, hormone disruption, developmental or reproductive harm, and even cancer. Even air fresheners that are marketed as "green" or "organic" can contain potentially hazardous chemicals. And, these are not chemicals regulated by the CA Air Resources Board as [volatile organic compounds] or greenhouse gases.

These chemicals pose a greater risk to children, who are more vulnerable to their effects than adults. Studies have shown that higher exposure to certain household cleaners, including air fresheners, in utero and in infancy is associated with greater risk of asthma and wheezing in childhood. Infants who were exposed to cleaning products used by their mothers while they were in the womb may suffer respiratory symptoms that persist throughout childhood.

AB 2201 will lead to safer air fresheners and to greater consumer confidence that they are not exposing themselves to any toxic chemicals that might affect them short or long term."

Arguments in opposition: According to a coalition opposing the bill:

"…given existing safety programs and regulations, both in California and elsewhere, we do not believe this legislation is warranted.

We care deeply about the safety of our ingredients, including those that go into air care products. The fragrance and consumer product industry are regulated from the raw material level to the final finished product. In addition, air fresheners go through rigorous safety testing and must comply with federal and state regulations, including air quality regulations and safety regulations.

Fragranced air fresheners are essential to combating malodors in both public and private settings. Air freshening products contain scent-based technologies that can capture or alter underlying malodors. In turn, this has direct positive benefits, reducing the negative impact on wellbeing that malodors can produce, increasing productivity and performance, improving use of public facilities and therefore hygiene, and more. We caution against legislation such as this, that bans ingredients without considering exposure, could result in increased costs or decreased access to these vital products.

It must be emphasized that there are existing Californian regulatory systems in place to protect consumers. The Green Chemistry Initiative and its Safer Consumer Products (SCP) Program uses a science-based process to identify specific products that contain potentially harmful chemicals and to evaluate potential safer alternatives. The SCP Program provides an opportunity for industry, NGOs, and the public alike to weigh in on a particular ingredient or proposal. The proposed bans in this legislation would eliminate that constructive process and be duplicative of the work the Department of Toxic Substances Control (DTSC) is already undertaking.

Many of the ingredients on the proposed ban list in AB 2201 have already been assessed by RIFM, and our industry takes steps to ensure they are used in a safe manner based on exposure."

Related legislation:

1) AB 496 (Friedman, Chapter 441, Statutes of 2023). Prohibits, beginning January 1, 2027, the manufacture, sale, delivery, holding, or offering for sale in commerce of any cosmetic product containing specified intentionally added ingredients.

2) AB 2771 (Friedman, Chapter 804, Statutes of 2022). Prohibits any person or entity from manufacturing, selling, delivering, holding, or offering for sale in commerce any cosmetic product that contains any PFAS.

3) SB 502 (Allen, Chapter 701, Statutes of 2022). Updates and reforms California's SCP Program, including, among other things, creating a streamlined alternatives analysis process; requiring manufacturers to provide information to DTSC on a consumer product's ingredients, use and sales upon request; and authorizing DTSC to enforce product chemical information request violations.

4) AB 2762 (Muratsuchi, Chapter 314, Statutes of 2020). Prohibits, beginning January 1, 2025, the manufacture, sale, delivery, holding, or offering for sale in commerce of any cosmetic product containing specified intentionally added ingredients.

5) SB 258 (Lara, Chapter 830, Statutes of 2017). Creates the Cleaning Product Right To Know Act of 2017, which requires manufacturers of cleaning products to disclose specified chemical ingredients on a product label and on the manufacturers website. Prohibits a designated product from being sold in the state unless the designated product and the manufacturer of the designated product comply with this bill.

REGISTERED SUPPORT / OPPOSITION:

Support

Environmental Working Group (Sponsor)
Alliance of Nurses for Healthy Environments
Breast Cancer Prevention Partners
California Brain Tumor Association
California Coastal Protection Network
Center for Environmental Health
Clean Water Action
Cleanearth4kids.org
Community Water Center
Families Advocating for Chemical and Toxics Safety
Mamavation - Non-toxic Products for Healthy Families
Moms Advocating Sustainability
Physicians for Social Responsibility - San Francisco Bay Area Chapter
Progressives for Democracy in America
Responsible Purchasing Network

Opposition

American Chemistry Council
American Cleaning Institute
California Manufacturers & Technology Association
Chemical Industry Council of California
Fragrance Creators Association
Household and Commercial Products Association

Analysis Prepared by: Josh Tooker / E.S. & T.M. /

Date of Hearing: April 23, 2024

ASSEMBLY COMMITTEE ON ENVIRONMENTAL SAFETY AND TOXIC MATERIALS
Eduardo Garcia, Chair
AB 2214 (Bauer-Kahan) – As Amended April 17, 2024

SUBJECT: Ocean Protection Council: microplastics

SUMMARY: Requires the Ocean Protection Council (OPC) to establish and lead an interagency coordination group to recommend statutory changes and adopt a workplan to implement recommendations from the 2022 Statewide Microplastics Strategy (Strategy). Specifically, **this bill**:

1) Makes findings and declarations relating to the health and environmental impacts of microplastics; the importance of interagency coordination for effective policy implementation; and, achieving a goal of zero plastic pollution entering state waters by 2030, through complementary efforts among state agencies.

2) Requires, on or before March 1, 2025, the OPC to establish and lead an interagency coordination group that includes, but is not limited to, representatives from the California Coastal Commission, California Water Quality Monitoring Council, Department of Resources Recycling and Recovery (CalRecycle), Department of Toxic Substances Control (DTSC), Office of Environmental Health Hazard Assessment (OEHHA), State Energy Resources Conservation and Development Commission, and the State Water Resources Control Board (State Water Board).

3) Requires the OPC—on or before December 31, 2025 and in coordination with the interagency coordination group—to identify and recommend to the Legislature statutory changes that are needed to implement the recommendations described in the Strategy, including, but not limited to recommendations to:

    a) Expand the statewide microbead ban to include microplastics that are intentionally added to specific consumer products; and,

    b) Promote, or otherwise require, the sale and use of ENERGY STAR condenser dryers and washing machines with a microfiber filtration system with a mesh size of not greater than 100 micrometers, and develop a program to incentivize postmarket retrofits or purchases through rebates and other mechanisms.

4) Requires the OPC—on or before December 31, 2025, and in coordination with the interagency coordination group—to adopt a workplan outlining which participating agencies within the interagency coordination group will implement the recommendations; and, requires that the workplan be provided to the Legislature on or before December 31, 2025.

5) Authorizes the OPC to satisfy its reporting duties by including the recommended statutory changes and workplan in the report on Strategy implementation that the OPC is required to submit to the Legislature pursuant to Public Resources Code (PRC) § 35635(g)(2).

6) Authorizes the OPC to augment a task force or workgroup that has already been formed to accomplish the requirements established by AB 2214.

7) Requires implementation by agency personnel to be within the scope of their duties.

8) Repeals the requirements established by AB 2214 on January 1, 2029.

EXISTING LAW:

1) Establishes the OPC in state government and requires the OPC to, among other things, coordinate activities of state agencies that are related to the protection and conservation of coastal waters and ocean ecosystems to improve the effectiveness of state efforts to protect ocean resources, establish a science advisory team, and identify and recommend to the Legislature changes in law needed to achieve these goals. (PRC § 35600, et seq.)

2) Requires, on or before December 31, 2024, OPC to adopt and implement a Strategy related to microplastic materials that pose an emerging concern for ocean health; requires the OPC to work with the State Water Board, OEHHA, and other interested entities in the development of the Strategy; specifies that the goal of the Strategy is to increase understanding of the scale and risks of microplastics on the marine environment and to identify proposed solutions to address the impacts of microplastics. (PRC § 35635(b))

3) Requires, on or before December 31, 2025, the OPC to report to the Legislature on the implementation of the Strategy and the OPC's findings pursuant to required components in the Strategy, including recommendations for policy changes or additional research that may be needed. (PRC § 35635(g)(2))

4) Requires, under the Porter-Cologne Water Quality Control Act (Porter-Cologne Act), the State Water Board and Regional Water Quality Control Boards (Regional Water Boards) to implement a program to control discharges of preproduction plastic (including plastic resin pellets and powdered coloring for plastics) from point and nonpoint sources; requires the State Water Board to determine the appropriate regulatory methods to address the discharges from these point and nonpoint sources. (Water Code § 13367)

5) Enacts the Plastic Microbeads Nuisance Prevention Law, prohibiting the sale of personal care products that contain plastic microbeads on and after January 1, 2020, and makes several related findings and declarations, including that:

    a) Plastic does not biodegrade into elements or compounds commonly found in nature, but instead, upon exposure to the elements, photodegrades into smaller pieces of plastic, causing land and water pollution that is virtually impossible to remediate;

    b) Plastic pollution is the dominant type of anthropogenic debris found throughout the marine environment;

    c) Plastic pollution is an environmental and human health hazard and a public nuisance; and,

    d) Microplastics are persistent organic compounds that attract other pollutants commonly present in the environment, many of which are recognized to have serious deleterious impacts on human health or the environment. (PRC § 42360, et seq.)

6) Requires the State Water Board to adopt a definition of microplastics in drinking water by July 1, 2020; adopt a standard methodology to test drinking water for microplastics; and, adopt testing and reporting requirements. (Health & Safety Code § 116376)

FISCAL EFFECT: Unknown.

COMMENTS:

Need for the bill: According to the author:

> "AB 2214 addresses the urgent need to mitigate the pervasive presence of microplastics, which pose significant threats to both human health and the environment. Microplastics, including synthetic microfibers, are ubiquitous pollutants found across various ecosystems, and their prevalence has led to heightened human exposure. A global study conducted by WWF International revealed alarming statistics, suggesting that individuals may ingest an average of 5 grams of plastic per week, equivalent to the weight of a credit card. Synthetic microfibers, originating primarily from polyester, nylon, or rayon textiles, constitute a significant portion of microplastic pollution. It is estimated that in California alone, 4,900,000 pounds of microfibers are generated from apparel washing each year. Consequently, microfibers persistently infiltrate the environment, necessitating proactive measures to curb their detrimental effects. AB 2214 leverages our state agency expertise and authority to engage in complementary efforts to reduce microplastics pollution and achieve a goal of zero plastic pollution entering state waters by 2030."

Microplastic pollution and the Statewide Microplastics Strategy: In 2018, the Legislature recognized the need for a comprehensive plan to address microplastics pollution and passed SB 1263 (Portantino, Chapter 609, Statutes of 2018), which requires the OPC to adopt and implement a Statewide Microplastics Strategy that increases understanding of the scale and risks of microplastics pollution in the marine environment and identifies proposed solutions. Released in February 2022, the Strategy provides a multi-year roadmap designed to help California take on a national and global leadership role in managing microplastics pollution.

According to research reviewed in the Strategy, plastics are ubiquitous in both Californians' daily lives and in the environment. Worldwide, an estimated 11 million metric tons of plastic enter the ocean each year, and without any intervention, this amount is anticipated to triple by 2040. Plastics are recognized globally as the most harmful and persistent fraction of marine litter, accounting for at least 85% of total marine waste. Over time, plastics break down in aquatic environments into pieces of ever-decreasing size, with those less than 5 millimeters in size known as microplastics.

Microplastics fall into two general categories: primary microplastics manufactured at a small size (e.g., preproduction plastic pellets used in manufacturing or microbeads in personal care products) or secondary microplastics that result from the breakdown of larger plastics. Microplastics have a range of polymer types, sizes, shapes, and associated chemicals, with irregular shapes and fibers found increasingly in marine organisms, including mammals, fish, mollusks, and crustaceans. In toxicity studies, microplastic exposures have been shown to cause adverse effects, including tissue inflammation, impaired growth, developmental anomalies, and reproductive difficulties.

In California, microplastics have been observed in Monterey Bay, San Francisco Bay, the Greater Farallones National Marine Sanctuary, Lake Tahoe, and in Southern California waterways. Microplastics are present nearly everywhere scientists have looked, from pristine mountain streams to agricultural soil, and within human placenta, stool samples, and lung tissue. Microplastics can enter the food web, where plastic particles can transfer into tissue, and expose humans to plastic-associated and endocrine-disrupting chemicals from seafood consumption.

OPC collaborated with partner agencies and research institutions to develop the Strategy's scientific foundation. This collaboration included efforts to characterize the predominant sources and pathways of microplastics in the San Francisco Bay; initiate standardized sampling, detection, characterization, and microplastic monitoring methods; and, create a preliminary risk assessment framework for sampling, monitoring, and evaluating microplastics statewide. The recommended actions outlined in the Strategy are organized into two basic categories, or "tracks": 1) management actions that California can begin implementing immediately; and, 2) research priorities to inform future actions. The OPC maintains that, over the next several years, California can achieve reductions in microplastic pollution and catalyze increased scientific understanding by implementing the 22 recommended early actions and 13 research priorities outlined in the Strategy.

Specifically, the Strategy recommends the following framework for the first track, comprised of immediate, "no regrets" actions:

- Pollution Prevention: Eliminate plastic waste at the source (e.g., products or materials from which microplastics originate such as vehicle tires, textiles, single use foodware and packaging, agriculture, and fisheries and aquaculture), including through the expansion of the state's existing microbead ban, and by promoting or requiring the sale and use of ENERGY STAR dryers and washing machines with microfiber filters;

- Pathway Interventions: Intervene within specific pathways (e.g., stormwater runoff, wastewater, and aerial deposition) that mobilize microplastics into California waters; and,

- Outreach and Education: Engage and inform the public and industries of microplastic sources, impacts, and solutions.

For the second track, which outlines research strategies to inform future action and enhance the scientific understanding of microplastics, the Strategy recommends:

- Monitoring: standardize a statewide monitoring approach and understand and identify trends in statewide microplastic pollution;

- Risk Thresholds and Assessment: improve understanding of impacts to aquatic life and human health, including developing a water quality objective;

- Sources and Pathways Prioritization: identify and prioritize future management solutions based on local data; and,

- Evaluating New Solutions: develop and implement future pollution prevention and pathway intervention solutions.

For most, but not all, of the recommendations, the Strategy identifies one or more potential agency partners. Potential agency partners are not identified for the recommendation on promoting or requiring the sale and use of ENERGY STAR dryers and washing machines with microfiber filters. In addition, the Strategy does not specify state agency plans for implementing the recommendations, nor does it specify formalized plans for interagency collaboration to support implementation.

Tackling complex, multifaceted policy issues through interagency collaboration: As noted in the Strategy, the issue of microplastics is complex, and reducing their prevalence and impacts on human health will require decisionmakers and state agencies to consider the sources of microplastics, as well as their management once they enter the environment. These questions span multiple agency jurisdictions and bodies of law, including the regulation of land and water use (multiple agencies, including the California Coastal Commission); recycling and solid waste management (CalRecycle); consumer products (multiple agencies, including DTSC through its Safer Consumer Products Program); drinking water (the State Water Board, under the Safe Drinking Water Act); and, water quality (the State Water Board and Regional Water Boards, under the Porter-Cologne Act), to name a few.

In its 2013 report, "Sustainability for the nation: Resource connections and governance linkages," the National Academies of Sciences, Engineering, and Medicine emphasizes the importance of interagency coordination for addressing complex, cross-cutting issues, particularly with respect to environmental problems that have wide-ranging impacts on human health, ecosystems, community resilience, and access to affordable supplies of food, water, and energy. According to the report:

> "…many authorizing or enabling acts focus on a single mission, or a single domain—water or energy, for example—even if the domain is part of an interconnected resource system…[The] description for this fragmentation of authority is the stovepipe or silo effect: Each agency focuses on implementing its own statutory mandate…There is a rational justification for this phenomenon—namely, the agencies were created as repositories for expertise and experience in a particular area…so they appropriately concentrate on that area and not on matters outside their jurisdiction. But there are consequences for concentrating in this way: It often leads to silo-based approaches to interconnected systems."

To reduce siloing and tackle cross-cutting issues, the report highlights the importance of interagency collaboration, to allow for shared decisionmaking that "engages agencies and stakeholders in goal-setting, planning, knowledge building, implementation, assessment, and decision adjustments." A 2023 report from the United States Government Accountability Office (GAO), "Leading practices to enhance interagency collaboration and address crosscutting challenges," similarly points to agency siloing as a major impediment to implementing policy solutions for complex issues. The GAO report highlights several mechanisms and leading practices for collaboration, including the establishment of interagency groups and the clarification of agency roles and responsibilities.

Current state law does not require the multiple agencies identified as potential partners in the Strategy to collaborate, nor does it require any one entity to facilitate interagency coordination. Requiring interagency coordination and designating a convener—as AB 2214 does—could help ensure that participating state agencies delegate responsibilities for particular portions of the Strategy, and determine how to best leverage limited resources, by identifying areas of synergy

and reducing fragmentation and duplication. The requirement for a workplan in AB 2214 could also provide the Legislature with clarification on how state agencies plan to assume leadership for and implement specific recommendations in the Strategy; these details are not specified in the Strategy, nor are they required to be reported to the Legislature, under current state law.

This bill: AB 2214 requires the OPC to establish and lead an interagency coordination group, and to recommend statutory changes and adopt a workplan for the implementation of the Strategy's recommendations. By requiring interagency coordination, this bill could help facilitate strong implementation of the Strategy and build upon the Legislature's prior efforts to tackle the cross-cutting, complex issue of microplastics pollution. This bill could also help ensure that the Legislature receives recommendations for statutory changes that are specific to implementing the Strategy and informed by the state's regulatory and scientific expertise on microplastics.

Arguments in support: According to a coalition of supporting organizations:

> "Absent urgent interventions, microplastics will continue to pose a threat to our environment, wildlife, and public health…AB 2214 aims to address the cross-sectoral issue of microplastic pollution comprehensively. The bill requires the [OPC] to establish and lead an interagency coordination group to identify and recommend statutory changes needed to implement the recommendations described in the Statewide Microplastics Strategy. This strategy, developed in response to the growing concerns regarding microplastics pollution, includes 22 recommendations to reduce and manage microplastics. Among these actions, the bill notably mandates the OPC review expanding the statewide microbead ban to include microplastics intentionally added to specific consumer products and determine the best way to promote the sale and use of ENERGY STAR condenser dryers and washing machines equipped with microfiber filters.
>
> Microplastic pollution poses a multifaceted challenge that demands coordinated action across various sectors and jurisdictions. By bringing the state government’s experts together to identify explicit ways to address the proliferation of microplastics in our environment, AB 2214 ensures California's leadership at a global level in effectively managing and mitigating the adverse impacts of microplastic pollution."

Arguments in opposition: None on file.

Related legislation:

1) AB 234 (Bauer-Kahan, 2023). Would have prohibited a synthetic polymer microparticle, as defined, from being placed on the market; specified multiple effective dates for restrictions, depending upon product type; and established exemptions on the basis of biodegradability, determined using specified tests and pass criteria. This bill was held in the Assembly Natural Resources Committee.

2) AB 1628 (McKinnor, 2023). Would have required that all new washing machines sold or offered for sale in the state for residential or state use contain a microfiber filtration system by January 1, 2029. This bill was vetoed by Governor Gavin Newsom.

3) AB 1724 (Stone, 2022). Would have required all state-owned washing machines to contain a microfiber filtration system with a mesh size of 100 microns or smaller. This bill was held on the suspense file in the Assembly Appropriations Committee.

4) AB 622 (Friedman, 2021). Would have required, on or before January 1, 2024, that all washing machines sold as new in California contain a microfiber filtration system with a mesh size of 100 microns or smaller. This bill was held in the Assembly Environmental Safety and Toxic Materials Committee.

5) AB 802 (Bloom, 2021). Would have required the State Water Board to identify the best available control technology for filtering microfibers from an industrial, institutional, or commercial laundry facility. This bill was held in the Assembly Environmental Safety and Toxic Materials Committee.

6) AB 1952 (Stone, 2020). Would have required the Department of General Services, in coordination with the California Environmental Protection Agency, to implement a one-year pilot program to assess the efficacy of microfiber filtration systems for 10 state-owned laundry facilities and report the results to the Legislature on or before January 1, 2023. This bill was held in the Assembly Accountability and Administrative Review Committee.

7) AB 2297 (Bloom, 2020). Would have required the State Water Board to identify the best available control technology for filtering microfibers from an industrial, institutional, or commercial laundry facility. This bill was held in the Assembly Environmental Safety and Toxic Materials Committee.

8) AB 3232 (Friedman, 2020). Would have required, on or before January 1, 2023, that all washing machines sold commercially in California contain a microfiber filtration system with a 90% or greater filtration rate. This bill was held in the Assembly Environmental Safety and Toxic Materials Committee.

9) AB 129 (Bloom, 2019). Would have required the State Water Board to take specified actions relating to microfiber pollution on or before July 1, 2020, and would have required the State Water Board to identify best practices for clothing manufacturers to reduce the amount of microfibers released into the environment. This bill was held in the Assembly Environmental Safety and Toxic Materials Committee.

10) SB 1263 (Portantino, Chapter 609, Statutes of 2018). Requires the OPC to adopt and implement a Statewide Microplastics Strategy that increases understanding of the scale and risks of microplastics pollution in the marine environment and identifies proposed solutions.

REGISTERED SUPPORT / OPPOSITION:

Support

7th Generation Advisors
Active San Gabriel Valley
Azul
Blue Ocean Warriors
California Environmental Voters (formerly CLCV)
Californians Against Waste

Cleanearth4kids.org
Climate Action California
Community Environmental Council
Friends of Ballona Wetlands
League to Save Lake Tahoe
Monterey Bay Aquarium Foundation
Ocean Conservancy
Ocean Conservation Society
Plastic Pollution Coalition
Resource Renewal Institute
Save Our Shores
Sierra Institute for Community and Environment
Social Compassion in Legislation
The 5 Gyres Institute
The Last Plastic Straw
The Nature Conservancy

Opposition

None on file.

Analysis Prepared by: Naomi Ondrasek / E.S. & T.M. /

Date of Hearing: April 23, 2024

ASSEMBLY COMMITTEE ON ENVIRONMENTAL SAFETY AND TOXIC MATERIALS
Eduardo Garcia, Chair
AB 2300 (Wilson) – As Amended April 1, 2024

SUBJECT: Medical devices: Di-(2-ethylhexyl) phthalate (DEHP)

SUMMARY: Prohibits, beginning January 1, 2026, a person or entity from manufacturing, selling, or distributing into commerce in the State of California intravenous solution containers made with intentionally added DEHP; prohibits, beginning January 1, 2031, a person or entity from manufacturing, selling or distributing into commerce in the State of California intravenous tubing made with intentionally added DEHP for use in neonatal intensive care units, nutrition infusions, or oncology treatment infusions; prohibits a person or entity from replacing DEHP for revised or new products with other specified ortho-phthalates; and, exempts, from the prohibition of using DEHP, human blood collection and storage bags and apheresis and cell therapy blood kits and bags, including integral tubing. Specifically, **this bill**:

1) Defines "DEHP" as Di(2-ethylhexyl) phthalate.

2) Defines "intentionally added DEHP" as DEHP that a manufacturer has intentionally added to a product and that has functional or technical effect on the product.

3) Defines "intravenous solution containers" as a container used to house medicine, fluid, or nutrition therapy that is intravenously administered to patients in a hospital, outpatient, or other health care facility.

4) Defines "intravenous tubing" as any tubing used to administer fluids, medication, or nutrient directly to an adult, child, or infant.

5) Defines "ortho-phthalates" as a class of chemicals that are esters of ortho-phthalic acid, including all of the following:
   a. Benzyl-butyl phthalate (BBP) 85-68-7.
   b. Dibutyl phthalate (DBP) 84-74-2.
   c. Dicyclohexyl phthalate (DCHP) 84-61-7.
   d. Di-(2-ethylhexyl) phthalate (DEHP) 117-81-7.
   e. Diethyl phthalate (DEP) 84-66-2.
   f. Di-isobutyl phthalate (DIBP) 84-69-5.
   g. Di-isodecyl phthalate (DIDP) 26761-40-0.
   h. Di-isononyl phthalate (DINP) 28553-12-0.
   i. Di-n-hexyl phthalate (DnHP) 84-75-3.
   j. Di-n-octyl phthalate (DNOP) 117-84-0.
   k. Di-n-pentyl (DnPP) phthalate 131-18-0.
   l. Diisoheptyl phthalate (DIHP) 71888-89-6.

6) Prohibits commencing January 1, 2026, a person or entity from manufacturing, selling, or distributing into commerce in the State of California intravenous solution containers made with intentionally added DEHP.

7) Prohibits, commencing January 1, 2031, a person or entity from manufacturing, selling, or distributing into commerce in the State of California intravenous tubing made with intentionally added DEHP for use in neonatal intensive care units, nutrition infusions, or oncology treatment infusions.

8) Prohibits a person or entity from replacing DEHP, pursuant to the provisions of this bill, for revised or new products with other ortho-phthalates.

9) Exempts from the provisions of the bill human blood collection and storage bags and apheresis and cell therapy blood kits and bags, including integral tubing.

10) Makes several legislative findings stating: that DEHP and other ortho-phthalates are toxic chemicals; ortho-phthalates produce flexibility in plastics; DEHP is the most commonly used 'plasticizer' in medical devices, including intravenous (IV) solution containers and intravenous tubing; DEHP leaches out of the plastic into the solution being held in the container; DEHP is classified as an endocrine (hormone)-disrupting compound affecting reproductive health, development, and metabolism; studies have suggested a potential link between DEHP exposure and certain types of cancer (e.g. breast, liver, lung, and testicular cancer); the United States Environmental Protection Agency (US EPA) has determined that DEHP is a probable human carcinogen, and it is listed on the Proposition 65 list; DEHP is metabolized in the liver and can accumulate in the body over time; prolonged exposure to high levels of DEHP has been shown to cause liver and kidney damage in animal studies; inhalation or ingestion of DEHP can cause respiratory irritation and allergic reaction particularly those with preexisting respiratory conditions or sensitivities; approximately 70 percent of California hospitals are buying and using toxic IV bags exposing patients directly to DEHP; exposure to DEHP has been linked to multidrug resistance in triple-negative breast cancer cells, inhibiting the apoptosis mechanism induced by breast cancer drugs such as tamoxifen and increasing cell proliferation; and, DEHP has been suggested to serve as a mitogenic factor for estrogen receptor-positive breast cancer cells, potentially making them multidrug resistant.

EXISTING LAW:

1) Defines "person" as any person, firm, association, organization, partnership, business trust, corporation, limited liability company, or company. (Health and Safety Code (HSC) § 19)

2) Establishes the Sherman Food, Drug, and Cosmetic Law (Sherman Law), administered by the California Department of Public Health (CDPH), which regulates the manufacture, packaging, labeling, and advertising of food, drugs, medical devices, and cosmetics. (HSC § 111929.4)

3) Prohibits, commencing January 1, 2025, a person or entity from manufacturing, selling, delivering, holding, or offering for sale, in commerce any cosmetic product that contains, among other intentionally added ingredients, dibutyl phthalate (DBP) (CAS no. 84-74-2) and diethylhexyl phthalate (DEHP). (CAS no. 117-81-7) (HSC § 108980)

4) Prohibits, commencing January 1, 2009, a person or entity from manufacturing, selling, or distributing in commerce any toy or child care article that contains di-(2-ethylhexyl) phthalate (DEHP), dibutyl phthalate (DBP), or benzyl butyl phthalate (BBP), in concentrations exceeding 0.1%. (HSC § 108937 (a))

5) Prohibits, commencing January 1, 2009, a person or entity from manufacturing, selling, or distributing in commerce any toy or child care article intended for use by a child under three years of age if that product can be placed in the child's mouth and contains diisononyl phthalate (DINP), diisodecyl phthalate (DIDP), or di-n-octyl phthalate (DnOP), in concentrations exceeding 0.1 percent. (HSC § 108937 (b))

Under the California Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65):

6) Prohibits, a person, in the course of doing business, from knowingly and intentionally exposing any individual to a chemical known to the state to cause cancer or reproductive toxicity without first giving clear and reasonable warning to such individual. (HSC § 25249.6)

7) Requires the Governor, on or before March 1, 1987, to publish a list of chemicals known to the state to cause cancer or reproductive toxicity and to revise and republish in light of additional knowledge at least once per year thereafter. The Office of Environmental Health Hazard Assessment (OEHHA) listed DEHP as a chemical known to the state to cause cancer on January, 1, 1988 and as a chemical known to the state to cause reproductive toxicity (male reproductive toxicity and developmental toxicity). (HSC § 25249.8)

Under the Safer Consumer Products (Green Chemistry) statutes:

8) Requires DTSC to adopt regulations to establish a process to identify and prioritize chemicals or chemical ingredients in consumer products that may be considered chemicals of concern, as specified. (HSC § 25252)

9) Requires DTSC to adopt regulations to establish a process to evaluate chemicals of concern in consumer products, and their potential alternatives, to determine how to best limit exposure or to reduce the level of hazard posed by a chemical of concern. (HSC § 25253 (a))

10) Specifies, but does not limit, regulatory responses that DTSC can take following the completion of an alternatives analysis, ranging from no action, to a prohibition of the chemical in the product. (HSC § 25253)

FISCAL EFFECT: Unknown

COMMENTS:

Need for the bill: According to the author:

"As a recent patient of the medical care system, I have first-hand knowledge related to the need for multiple infusions, with long durations, through medicines administered from IV bags. Each time you are potentially being exposed to a toxic material simply because we haven't passed a law to ban this toxic material. There are alternatives, they are currently being used, and they aren't more expensive. The State decided to ban the use of DEHP in kid's toys, I think it is time to ban this from medical containers that allow leaching directly into our bodies- when we are most vulnerable. People should be focused on their healthcare, not whether the very life-saving procedure is exposing them to cancer and other terrible health impacts."

Proposition 65: Proposition 65, officially known as the Safe and Drinking Water and Toxic Enforcement Act of 1986, was enacted as a ballot initiative in November 1986. The proposition requires the state to maintain and update a list of chemicals known to the state to cause cancer or reproductive toxicity, protects the state's drinking water sources from being contaminated with chemicals known to cause cancer, birth defects and other reproductive harm and requires businesses to inform Californians about exposure to such chemicals. OEHHA is the lead agency for implementation of Proposition 65 and has the authority to adopt and modify regulations as necessary. According to OEEHA, the proposition 65 list contains a wide range of naturally occurring and synthetic chemicals including additives or ingredients in pesticides, common household products, food, drugs, dyes, or solvents. The list was last updated on December 29, 2023 and contains DEHP, and other ortho-phthalates (BBP, DIDP, DBP, DnHP, and DINP).

Sherman Food, Drug, and Cosmetic Law (Sherman Law): The Sherman law, administered by CDPH, ensures that food, drugs, and medical devices are safe and not adulterated, misbranded or falsely advertised, and that drugs and medical devices are effective. CDPH analyzes food, drugs, cosmetics, and other consumer products for chemical adulterations. Common analytes include toxic metals, seafood toxins, carcinogens, prescription drug ingredients, food additives and preservatives.

Phthalate use and exposure: The Centers for Disease Control and Prevention (CDC) describe phthalates as a group of chemicals used in hundreds of products ranging from personal care products to vinyl flooring. These synthetics chemicals have a wide range of uses and are a component of many products humans use on a day to day basis. Phthalates are often called plasticizers because they are used to make plastics more flexible and resistant to breaking. In industry, phthalates are commonly added to polyvinyl chloride (PVC) plastics. Phthalates are used in perfumes, nail polish, lubricants, medical tubing, blood bags, food and drink containers, and insect repellants: human exposure to phthalates is virtually unavoidable.

Di-(2-ethylhexyl) phthalate (*DEHP):* DEHP was the first phthalate introduced as a plasticizer of PVC over nine decades ago. An article, published in Additives for Polymers in 2017, estimated the global consumption of DEHP at 3.07 million tons the previous year. DEHP has been listed in OEHHA's Proposition 65 list as causing cancer since 1988 and a developmental and male reproductive toxicant since 2003. In 1988, the US EPA listed DEHP as a probable carcinogen. The listing was based on studies in mice and rats of both sexes that showed increased incidence of liver tumors.

Prior to listing a chemical under Prop 65, OEHHA scientists review peer-reviewed research articles. The evidence reviewed by OEHHA included research studies in small mammals (mice,

rats, and hamsters). The findings were a decrease in testicular weight and testicular atrophy (decreased size) and reduced fertility. Additionally, studies that reported developmental toxicities, like skeletal abnormalities and exencephaly (brain outside the skull), after giving mice DEHP were also reported when mono-(2-ethylhexyl) (MEHP) a metabolite of DEHP (a product of the breakdown of DEHP) was given. The literature reviewed and appropriate conclusions can be found on OEHHA's website.

Decades after the listing of DEHP, we continue using DEHP in products found in our homes, work and healthcare facilities. The research on DEHP continue to advance increasing our understanding of health risks with DEHP exposure. In a review article published in Biomed Research International titled, "*Toxic Effects of Di-2-Ethylhexyl Phthalate: An Overview,"* different research studies are summarized indicating DEHP is an endocrine disruptor interfering with hormone signaling in various organs. Small mammals that were exposed to DEHP before birth, had lower concentrations of reproductive hormone, like testosterone. Reduced steroidogenesis, the process by which cholesterol is converted to steroid hormones (e.g. testosterone, estrogen, cortisol) is also observed. DEHP created histopathological changes (changes in the tissue, cells or structure indicating signs of a disease) in the thyroid. Toxicity to the brain, liver and kidneys has also been observed.

Proponents of AB 2300 highlighted published research articles that focus on DEHP and cancer. These studies among other things, describe; cell mechanisms (molecular pathways) linking DEHP to drug resistance in colorectal cancer and cell mechanisms by which DEHP is linked to drug resistance in triple negative breast cancer (a cancer type that tends to grow and spread faster and has less treatment options). These findings have been published within the last four years and warrant additional studies to fully capture the impact of DEHP on cancer patients.

Phthalates and healthcare: Phthalates are present in several types of medical devices including blood bags, tubing, catheters, and disposable gloves. The level of care and length of care patients receive determines how much exposure they will have to phthalates in this setting. DEHP is present in blood bags and other intravenous solution containers and intravenous tubing.

DEHP-free products have been readily available for some time now. In 2012, an article published in The Washington Post titled "*Kaiser Permanente to use safer IV equipment*," reports that Kaiser Permanente (Kaiser) had made a decision to buy IV solution bags that are 100% free of PVC and DEHP. The article further reports that in 2010, Kaiser was "the first of the industry to announce that it would require suppliers to provide environmental data for $1 billion worth of medical equipment and products used in Kaiser's hospitals, medical offices and other facilities." Access to their website confirms they were able to successfully phase out DEHP containing IV solution bags. It is unclear how many other healthcare systems in California have implemented or started to implement similar changes.

Actions by other countries: In 2018, the European Union (EU) amended their phthalates list to include DEHP. This meant that DEHP was added to their REACH (Registration, Evaluation, Authorization and Restriction of Chemical) Authorization list. As a result of the listing on REACH list DEHP would be phased out of medical devices. On November 2023, an extension was granted to phase out DEHP. The new regulation states DEHP cannot be used in medical devices starting July 1, 2030, unless they apply for authorization before January 1, 2029. Authorization applications will be evaluated before approval.

Alternatives in the market: According to information provided from the author's office, there are four major manufactures of IV bags in the US that already supply DEHP-free intravenous solution containers or IV sets: B. Braun Medical, Fresenius Kabi, Baxter, and ICU Medical. Three of these companies have announced in recent years expansion of their DEHP-free products, FDA approval on their DEHP-free products or a new manufacturing center in the United States.

Protecting Californians: The State Legislature has addressed the use of phthalates in several products. Assembly Bill (AB) 1108 (Ma, Chapter 11, Statutes of 2007) was signed into law to protect children from phthalate exposure. The list of phthalates included DEHP. AB 2762 (Muratsuchi, Chapter 314, Statutes of 2020) was signed into law to prevent DEHP and DBP, among other specified chemicals, from being intentionally added to cosmetic products. Policies prohibiting intentional use of other chemicals or disclosure of chemicals used have also been implemented demonstrating increased awareness on the chemicals used in many of the products Californians use or consume. The provisions of this bill regarding intravenous tubing protect vulnerable groups: those in neonatal intensive care units, those receiving nutrition infusions, or those receiving oncology treatment infusions. People receiving care in these areas are already in a vulnerable state (e.g. immunocompromised, nutrient deficient) and because of this they disproportionally bear the burden of higher exposure compared to other patients.

The importance of supply: The provisions of this bill provide two timelines for removing DEHP from intravenous solution containers and intravenous tubing. Furthermore, they focus on reducing exposure of DEHP, through intravenous tubing, in neonatal intensive care units, nutrition infusions, or oncology treatment infusions. The implementation of DEHP-free intravenous tubing in these areas first can inform the timeline of future additional protections (if desired). Some proponents of the bill would like to expand coverage and concerns arise over the ability to cover that demand. As this bill moves through the legislative process, the author may wish to continue conversations with the industry to ensure supply shortages don't affect healthcare services and result in unintended consequences.

Blood Bags: While AB 2300 was in Assembly Health Committee it was amended to exempt blood bags and materials associated with blood collection. This amendment was critical for two reasons; research studies have demonstrated that DEHP bags are critical in preventing haemolysis- that is, preventing the destruction of red blood cells- and because despite several studies trying to identify an effective alternative to DEHP for blood storage, more research is needed. In a news article, published August 2023 titled, "*Paving the Way for the Future of Blood Transfusions*," the medical device manufacturer Fresenius Kabi presents their promising DEHP-free blood bag system and discusses the challenges and considerations in finding proper replacements. This news and numerous peer-reviewed research articles that have reported findings on possible alternatives demonstrate that scientists are committed to finding solutions, but they need more time. This amendment prevented a possible unintended consequence from happening: a blood supply shortage in California.

Enforcement: Existing law, the Sherman Food, Drug, and Cosmetic Law, enforced by CDPH covers medical devices. The provisions of this bill do not delegate authority for enforcement to any department. California has passed legislation, which ultimately became law, prohibiting the use of certain chemicals without delegating authority to any department. In other instances, legislation without an enforcing department has been sent to the Governor, but was vetoed. The European Union's regulation to remove DEHP from medical devices includes an option for

applying for authorized use. The intent behind this provision is likely to allow, in unique circumstances, the use of DEHP if safe alternatives are not available. As this bill moves through the legislative process, the author is encouraged to continue conversations with stakeholders and CDPH to determine a framework for enforcement. Additionally, consideration may be given to an authorized use process similar to the European Union to address unforeseeable problems. This may also ease concerns about the current timeline in AB 2300.

Regrettable substitutes: Chemical bans require manufacturers to switch to alternatives. We have previously had situations where replacements for one chemical result in another with similar toxicity profiles. The perfect example of regrettable substitutions is BPA to BPS. The provisions of this bill include a list of phthalates that are not permitted as substitutes. As this bill moves through the legislative process, the author may wish to consider including language to prohibit manufactures from using other harmful (reproductive toxicants or carcinogenic) chemicals.

Intentionally added DEHP vs trace amount: Many pieces of legislations over the years have focused on prohibiting toxic chemicals in cosmetics, food ware and other items. This bill clearly defines "intentionally added DEHP." However, it does not provided language to account for trace amounts that may be found in products. Due to the widespread and long term use of DEHP, the author may wish to consider adding language to include a threshold amount or account for trace amounts. This would address the concerns raised by the opposition.

Legislative findings: As this bills moves through the process, the author is encouraged to review the legislative findings, possibly consult OEHHA scientists, to ensure findings are accurate based on the literature since they are set to be in statute.

This bill: AB 2300 would prohibit beginning January 1, 2026, a person or entity from manufacturing, selling, or distributing into commerce in the State of California intravenous solution containers made with intentionally added DEHP. It would also prohibit, beginning January 1, 2031, a person or entity from manufacturing, selling or distributing into commerce in the State of California intravenous tubing made with intentionally added DEHP for use in neonatal intensive care units, nutrition infusions, or oncology treatment infusions. Additionally, it would also prohibits a person or entity from replacing DEHP for revised or new products with other specified ortho-phthalates. Lastly, it would exempts human blood collection and storage bags and apheresis and cell therapy blood kits and bags, including integral tubing, from the provisions of the bill.

Arguments in support: According to California Black Health Network and Breast Cancer Prevention Partners:

"DEHP has been classified by the US Environmental Protection Agency as a Group B2, probable human carcinogen. The U.S. Food and Drug Administration has suggested manufactures consider eliminating the use of DEHP in certain devices that can result in high aggregate exposures in sensitive patient populations, and The American Medical Association, among other professional organizations, encourages hospitals and physicians to reduce and phase out the use of PVC medical device products, especially those containing DEHP.

Research indicates that DEHP promotes drug resistance and inhibits the effectiveness of breast cancer drugs; interferes with the ability of chemotherapies to fight breast cancer, and that patients with higher levels of DEHP in their system had higher rates of relapse and mortality.

DEHP also has impacts beyond human health. It leaches into the environment through the disposal of plastic waste in landfills. It sticks strongly to soil and breaks down slowly when it is near the surface. Indoors, DEHP can also stick to dust particles. DEHP stuck to particles in the air can return to the ground or bodies of water via rain or snow. DEHP does not usually evaporate into the air or easily dissolve in water. It can build up in fish and other water-dwelling species.

Our standards for medical devices, especially devices used by immunocompromised patients, need to be higher. DEHP is harmful throughout its entire life cycle, from manufacturing to disposal, and it has impacts beyond human health. We know that safer products exist, so why aren't we using them? Non-DEHP containers and tubing have been available for decades. Just as DEHP is no longer allowed in toys and other children's products, it is time for DEHP to be eliminated from these medical products."

Arguments in opposition: According to a coalition of industry stakeholders:

"Given the robust pre-market medical device and new drug application review process at the United States Food and Drug Administration (FDA), we are concerned with the precedent AB 2300 would set. Medical devices and drugs are distributed nationally, and the FDA regulatory process provides manufacturers, healthcare providers, and patients with a consistent set of rules governing product safety. It would be extremely difficult for the industry to navigate a patchwork of inconsistent state regulations governing medical devices and drugs.
Changing or substituting product materials is a highly complex process and subject to strict regulatory requirements and lengthy approval times. We respectfully request your consideration of two amendments that, despite concerns articulated above, would help alleviate concerns around patient safety and access.

1) Delayed implementation: Given the robust manufacturing and FDA approval processes described above, we propose an effective date of 2035 for both Intravenous tubing and solution containers.
2) Amending the definition of "Intentionally added DEHP" to include a 0.1% w/w threshold – this will allow manufacturers to test products to ensure compliance and is important to distinguish between intentional vs unintentional uses."

Related Legislation:

1) AB 2244 (Ting, 2024). Prohibits, beginning on January 1, 2025 a paper proof of purchase (receipt), provided to a consumer by a business or created by a manufacturer, from containing bisphenol A (BPA) and would prohibit, beginning January 1, 2026, a paper proof of purchase, provided to a consumer by a business or created by a manufacturer, from containing any bisphenols. This bill is pending action in the Assembly Appropriations Committee.

2) AB 418 (Gabriel, Chapter 17, Statutes of 2023). Prohibits, beginning January 1, 2027, a person or entity from manufacturing, selling, delivering, distributing, holding, or offering for sale, in commerce a food product for human consumption that contains any of the following: brominated vegetable oil, potassium bromate, propylparaben, and red dye 3.

3) AB 2762 (Muratsuchi, Chapter 314, Statutes of 2020). Prohibits, beginning January 1, 2025, prohibit a person or entity from manufacturing, selling, delivering, holding, or offering for sale, in commerce any cosmetic product that contains specified intentionally added ingredients. The list includes two phthalates: dibutyl phthalate (DBP, CAS no. 84-74-2) and diethylhexyl phthalate (DEHP, CAS no. 117-81-7).

4) AB 1319 (Butler, Chapter 467, Statutes of 2011). Prohibits the sale, manufacture, or distribution of any bottle or cup that contains BPA, at a detectable level above 0.1 parts per billion (ppb), if the bottle or cup is designed or intended to be filled with any liquid, food or beverage intended primarily for consumption from that bottle or cup by children three years of age or younger.

5) AB 1108 (Ma, Chapter 11, Statutes of 2007). Prohibits the manufacture, sale, or distribution in commerce of any toy or child care article that contains di-(2-ethylhexyl) phthalate (DEHP), dibutyl phthalate (DBP), or benzyl butyl phthalate (BBP), in concentrations exceeding 0.1 percent. Prohibits the manufacture, sale, or distribution in commerce of any toy or child care article intended for use by a child under three years of age if that product can be placed in the child's mouth and contains diisononyl phthalate (DINP), diisodecyl phthalate (DIDP), or di-n-octyl phthalate (DnOP), in concentrations exceeding 0.1 percent. Requires manufactures to use the least toxic alternative.

REGISTERED SUPPORT / OPPOSITION:

Support

A Voice for Choice Advocacy
Access Reproductive Justice
Alliance of Nurses for Healthy Environments
Asian Americans Advancing Justice Southern California
Association of Regional Center Agencies
B. Braun Medical, INC.
Breast Cancer Prevention Partners
Buen Vecino
California Black Health Network
California Health Coalition Advocacy
California Nurses for Environmental Health and Justice
California Pan-ethnic Health Network
CALPIRG, California Public Interest Research Group
Center for Community Action and Environmental Justice
Center for Environmental Health
Clean Production Action
Clean Water Action
Cleanearth4kids.org
Courage California
Defend Our Health
Educate. Advocate.
Health Care Without Harm
Health Equity for African American's League (HEAAL)
Healthy Contra Costa

Keep a Breast
Latino Coalition for A Healthy California
Made Safe
Mixteco Indigena Community Organizing Project
National Association of Environmental Medicine (NAEM)
National Stewardship Action Council
National Union of Healthcare Workers
Northern California Center for Well-being
Plastic Pollution Coalition
PRC/Black Leadership Council
Public Health Advocates
San Francisco Bay Physicians for Social Responsibility
Science and Environmental Health Network
Sharp Healthcare
The Last Beach Cleanup
Urban Strategies Council
Western Center on Law & Poverty, INC.
Women's Voices for The Earth
Young Invincibles

Opposition

Advanced Medical Technology Association (ADVAMED)
Cerus Corporation

Analysis Prepared by: Brenda Cisneros-Larios / E.S. & T.M. /

Date of Hearing: April 23, 2024

ASSEMBLY COMMITTEE ON ENVIRONMENTAL SAFETY AND TOXIC MATERIALS
Eduardo Garcia, Chair
AB 2316 (Gabriel) – As Amended April 8, 2024

SUBJECT: Pupil nutrition: substances: prohibition

SUMMARY: Prohibits, beginning on July 1, 2025, a public school from offering, selling, or otherwise provide any food containing specified synthetic food dyes or titanium dioxide. Specifically, **this bill**:

1) Prohibits, beginning on July 1, 2025, a public school from offering, selling, or otherwise providing any food containing any of the following substances:

    a) Blue 1 (CAS 3844-45-9);

    b) Blue 2 (CAS 860-22-0);

    c) Green 3 (CAS 2353-45-9);

    d) Red 40 (CAS 25965-17-6);

    e) Titanium dioxide (CAS 13463-67-7);

    f) Yellow 5 (CAS 1934-21-0); and,

    g) Yellow 6 (CAS 2783-94-0).

2) Authorizes a public school to permit the sale of food items that have any of the substances listed above as part of a school fundraising event in either of the following circumstances:

    a) The sale of those items takes place off of and away from school premises, and

    b) The sale of those items takes place on school premises at least one-half hour after the end of the school-day.

3) Defines "food" as any article, including a component of any article, used or intended for use for food, drink, confection, condiment, or chewing gum by man or other animal.

4) Defines "public school" as a school operated by a school district or county office of education, a charter school, and the state special schools.

EXISTING LAW:

1) Prohibits, pursuant to the federal Food, Drug & Cosmetic Act (FD&C Act), the movement in interstate commerce of adulterated and misbranded food, drugs, devices, and cosmetics. (21 Code of Federal Regulations § 701.3)

2) Establishes the Sherman Food, Drug, and Cosmetic Law (Sherman Law). (Health and Safety Code (HSC) § 109875)

3) Defines "food" as any article, including a component of any article, used or intended for use for food, drink, confection, condiment, or chewing gum by man or other animal. (HSC § 109935)

4) Defines "person" as any individual, firm, partnership, trust, corporation, limited liability company, company, estate, public or private institution, association, organization, group, city, county, city and county, political subdivision of this state, other governmental agency within the state, and any representative, agent, or agency of any of the foregoing. (HSC § 109995)

5) Defines "food additive" as any substance, the intended use of which results or may reasonably be expected to result, directly or indirectly, in the substance becoming a component of the food or otherwise affecting characteristics of the food. This includes any substance or radiation source intended for use in producing, manufacturing, packing, treating, packaging, transporting, or holding any food. (HSC § 109940)

6) Defines "manufacture" as the preparation, compounding, propagation, processing, or fabrication of any food, drug, device, or cosmetic. The term "manufacture" includes repackaging or otherwise changing the container, wrapper, or labeling of any food, drug, device, or cosmetic in furtherance of the distribution of the food, drug, device, or cosmetic. The term "manufacture" does not include repackaging from a bulk container by a retailer at the time of sale to its ultimate consumer. (HSC § 109970)

7) Provides that it is unlawful for any person to manufacture, sell, deliver, hold, or offer for sale any food that is adulterated. (HSC § 110620)

8) Provides that any food is adulterated if it bears or contains any poisonous or deleterious substance that may render it injurious to health of man or any other animal that may consume it. The food is not considered adulterated if the substance is a naturally occurring substance and if the quantity of the substance in the food does not render it injurious to health. (HSC § 110545)

9) Establishes the Unfair Competition Law (UCL). (Business and Professions Code § 17200 *et seq*.)

10) Establishes the following provisions under the California Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65):

    a) Prohibits a person, in the course of doing business, from knowingly discharging or releasing a chemical known to the state to cause cancer or reproductive toxicity into water or onto or into land where such chemical passes or probably will pass into any source of drinking water. (HSC § 25249.5)

    b) Prohibits a person, in the course of doing business, from knowingly and intentionally exposing any individual to a chemical known to the state to cause cancer or reproductive toxicity without first giving clear and reasonable warning to such individual. (HSC § 25249.6)

c) Requires the Governor to publish a list of chemicals known to cause cancer or reproductive toxicity and to annually revise the list. (HSC § 25249.8)

FISCAL EFFECT: Unknown.

COMMENTS:

Need for the bill: According to the author, "California has a responsibility to protect our students from chemicals that harm children and that can interfere with their ability to learn. It is unacceptable that federal regulators have not stepped up to prevent the serving of school foods with additives that are linked to cancer, hyperactivity, and neurobehavioral harms. This bill will empower schools to better protect the health and wellbeing of our kids and encourage manufacturers to stop using these dangerous additives."

Federal Food and Drug Administration (FDA): Under the FD&C Act, the FDA is responsible for regulating all color additives used in foods, drugs, and certain medical devices to ensure that they meet FDA's safety standard and are accurately labeled. A color additive is any dye, pigment, or other substance which when added or applied to a food, drug, cosmetic, or to the human body, is capable (alone or through reactions with other substances) of imparting color.

According to the FDA: "Color additives serve a useful purpose in many products, making them attractive, appealing, appetizing, and informative. Added color can serve as a kind of code that allows us to identify products on sight, like candy flavors, medicine dosages, and left or right contact lenses. One of the FDA's roles is to assure that color additives are safely and appropriately used."

All color additives and new uses for listed color additives must be approved by the FDA before they may be used in foods, drugs, cosmetics, or certain medical devices, or on the human body. There is no Generally Recognized As Safe (GRAS) provision within the federal statutory definition of a color additive. Under the FD&C Act, any substance that is intentionally added to food, is a food additive, subject to premarket review and approval by FDA, unless the substance is designated as GRAS.

The FDA has reviewed and continues to examine the effects of color additives on children's behavior. According to the FDA: "the totality of scientific evidence shows that most children have no adverse effects when consuming foods containing color additives, but some evidence suggests that certain children may be sensitive to them."

Sherman Food, Drug, and Cosmetic Law (Sherman Law): The Sherman law, administered by the California Department of Public Health (CDPH), ensures that food, drugs, and medical devices are safe and not adulterated, misbranded or falsely advertised, and that drugs and medical devices are effective. CDPH analyzes food, drugs, cosmetics, and other consumer products for chemical adulterations. Common analytes include toxic metals, seafood toxins, carcinogens, prescription drug ingredients, food additives, and preservatives.

OEHHA report on effects of synthetic food dyes: In April 2021, OEHHA released the report, "Health Effects Assessment: Potential Neurobehavioral Effects of Synthetic Food Dyes in Children." Excerpts from the report include the following:

"CalEPA's Office of Environmental Health Hazard Assessment (OEHHA) evaluated the scientific literature and conducted a risk assessment of the impact of synthetic food dyes on children, particularly on whether the dyes are associated with hyperactivity and other behavioral changes in children….

OEHHA conducted a multifaceted evaluation of the FD&C 'batch-certified' synthetic food dyes, focusing on seven of the nine food dyes that have been approved by the US FD&C: FD&C Blue No. 1; FD&C Blue No. 2; FD&C Green No. 3; FD&C Red No. 3; FD&C Red No. 40; FD&C Yellow No. 5; and FD&C Yellow No. 6. These seven dyes contribute the greatest exposure to synthetic food dyes for the general US public….

The body of evidence from human studies indicates that synthetic food dyes are associated with adverse neurobehavioral outcomes in children, and that children vary in their sensitivity to synthetic food dyes….

Metaanalyses (combining results of multiple studies) indicate effects on children's behavior from exposure to synthetic food dyes. Overall, our review of human studies suggests that synthetic food dyes are associated with adverse neurobehavioral effects, such as inattentiveness, hyperactivity and restlessness in sensitive children. The evidence supports a relationship between food dye exposure and adverse behavioral outcomes in children, both with and without pre-existing behavioral disorders. Animal studies indicate effects of exposure to synthetic food dyes on activity, memory and learning, changes in neurotransmitter systems in the brain, and microscopic changes in brain structure. Developmental toxicology studies demonstrated effects on the activity of offspring when either Red No. 3, Red No. 40, Yellow No. 5, or Blue No. 1 was administered in utero, through lactation and into adulthood."

This bill: AB 2316 would prohibit public schools from offering foods that contain the synthetic dyes covered in this study by OEHHA.

Comments to OEHHA's draft synthetic food dye report: A coalition letter, from multiple groups, including the California Chamber of Commerce, American Beverage Association and the American Chemistry Council, dated November 6, 2020, was submitted to OEHHA in response to OEHHA's "Public Review Draft of Health Effects Assessment: Potential Neurological Effects of Synthetic Food Dyes in Children." The letter states:

"As a prefatory matter, we remind OEHHA that the U.S. Food and Drug Administration (FDA) has an extensive premarket approval and market surveillance program for the use of synthetic food colors. Any additional regulatory action by OEHHA or the California Legislature will create confusion in an area where the FDA has sole and preeminent responsibility. The potential patchwork of laws at the state level will generate confusion among consumers. Clear, simple, and consistent national regulation informed by risk-based science will enhance consumer trust in these products. FDA currently provides this leadership.

In addition, robust reviews of the health impacts of synthetic food colors conducted by scientific bodies including the FDA and the European Food Safety Authority (EFSA) have generally found these ingredients to be safe for use as food additives. As such, the claims suggesting synthetic food colors cause possible attention deficit disorder / hyperactivity in children is not scientifically substantiated. Existing risk assessments by international bodies have dismissed and discounted much of the available neurobehavioral evidence in this respect. Rather, the basis and

nature of the OEHHA risk assessment was precipitated by legislative interest and policy driven conclusions predicated on casual correlation.

Color additives play an important role in food and they do so without posing a health risk to consumers. The most important benefit is the organoleptic property that indicates the palatability, or tastiness, of a product. Research has consistently shown that if foods don't have the right color, people won't eat them. Colors are added to ensure an even, consistent appearance that meet consumer expectations and preferences. During processing, the naturally occurring color in foods is often lost, which can make otherwise nutritious foods unappealing to humans.

In conclusion, it has been our repeated position that to single out synthetic colors as a focus of investigation is not a productive strategy for addressing an important disorder such as ADHD. The legislative interest and inquiry does not in and of itself establish significant questions of fact or dispute to suggest a hazard exists. The evidence, when appropriately contextualized, does not support discriminating against food colors within our national food safety program. We support federal regulations that result in uniform structures, empower consumers to make informed decisions, and are grounded in risk-based science. When a patchwork of regulatory policies exists, it contributes to consumer confusion and adds unnecessary stress to the supply chain resulting in higher prices."

Additional research on synthetic food dyes: According to the 2012 article. "Toxicology of food dyes" (Kobylewski and Jacobson) in the *International Journal of Occupational and Environmental Health:*

"Food dyes, synthesized originally from coal tar and now petroleum, have long been controversial because of safety concerns. Many dyes have been banned because of their adverse effects on laboratory animals or inadequate testing. This review finds that all of the nine currently US-approved dyes raise health concerns of varying degrees. Red 3 causes cancer in animals, and there is evidence that several other dyes also are carcinogenic. Three dyes (Red 40, Yellow 5, and Yellow 6) have been found to be contaminated with benzidine or other carcinogens. At least four dyes (Blue 1, Red 40, Yellow 5, and Yellow 6) cause hypersensitivity reactions. Numerous microbiological and rodent studies of Yellow 5 were positive for genotoxicity. Toxicity tests on two dyes (Citrus Red 2 and Orange B) also suggest safety concerns, but Citrus Red 2 is used at low levels and only on some Florida oranges and Orange B has not been used for several years. The inadequacy of much of the testing and the evidence for carcinogenicity, genotoxicity, and hypersensitivity, coupled with the fact that dyes do not improve the safety or nutritional quality of foods, indicates that all of the currently used dyes should be removed from the food supply and replaced, if at all, by safer colorings. It is recommended that regulatory authorities require better and independent toxicity testing, exercise greater caution regarding continued approval of these dyes, and in the future approve only well-tested, safe dyes."

Additionally, according to the 2022 article, "Potential impacts of synthetic food dyes on activity and attention in children: a review of human and animal science," (Miller, et. al), in *Environmental Health*:

"Concern that synthetic food dyes may impact behavior in children prompted a review by the California Office of Environmental Health Hazard Assessment (OEHHA). OEHHA conducted a

systematic review of the epidemiologic research on synthetic food dyes and neurobehavioral outcomes in children with or without identified behavioral disorders (particularly attention and activity). We also conducted a search of the animal toxicology literature to identify studies of neurobehavioral effects in laboratory animals exposed to synthetic food dyes. Finally, we conducted a hazard characterization of the potential neurobehavioral impacts of food dye consumption. We identified 27 clinical trials of children exposed to synthetic food dyes in this review, of which 25 were challenge studies. All studies used a cross-over design and most were double blinded and the cross-over design was randomized. Sixteen (64%) out of 25 challenge studies identified some evidence of a positive association, and in 13 (52%) the association was statistically significant. These studies support a relationship between food dye exposure and adverse behavioral outcomes in children. Animal toxicology literature provides additional support for effects on behavior. Together, the human clinical trials and animal toxicology literature support an association between synthetic food dyes and behavioral impacts in children. The current Food and Drug Administration (FDA) acceptable daily intakes are based on older studies that were not designed to assess the types of behavioral effects observed in children. For four dyes where adequate dose-response data from animal and human studies were available, comparisons of the effective doses in studies that measured behavioral or brain effects following exposure to synthetic food dyes indicate that the basis of the ADIs [acceptable daily intake] may not be adequate to protect neurobehavior in susceptible children. There is a need to re-evaluate exposure in children and for additional research to provide a more complete database for establishing ADIs protective of neurobehavioral effects."

Disagreement on the science regarding synthetic food dyes: As noted in the comment letter submitted to OEHHA, the industry opposing this bill strongly disagrees with the science that shows any harm from synthetic food dyes. The opposition to this bill contends that extensive scientific research shows that synthetic food dyes are safe. This topic will the subject of ongoing conversations on this bill.

Proposition 65: In 1986, California voters approved a ballot initiative, the Safe Drinking Water and Toxic Enforcement Act of 1986, commonly referred to as Proposition 65, to address their concern that "hazardous chemicals pose a serious potential threat to their health and well-being, [and] that state government agencies have failed to provide them with adequate protection…" Proposition 65 requires the state to publish a list of chemicals known to cause cancer or birth defects or other reproductive harm. This list, which must be updated at least once a year, currently includes approximately 900 chemicals. OEHHA administers the Proposition 65 program, including an evaluation of all currently available scientific information on substances considered for placement on the Proposition 65 list. The list contains a wide range of naturally occurring and synthetic chemicals that are known to cause cancer or birth defects or other reproductive harm. These chemicals include additives or ingredients in pesticides, common household products, food, drugs, dyes, or solvents. Listed chemicals may also be used in manufacturing and construction, or they may be byproducts of chemical processes, such as motor vehicle exhaust.

Purpose of synthetic food dyes and titanium dioxide in food: Synthetic food dyes and titanium dioxide have one main purpose in food: to change or alter the color. These chemicals have no positive health or nutritional benefits.

Titanium dioxide: Pure titanium dioxide is a fine, white powder that provides a bright, white pigment. Titanium dioxide has been used for a century in a range of industrial and consumer

products, including paints, coatings, adhesives, paper, plastics and rubber, printing inks, coated fabrics and textiles, as well as ceramics, floor coverings, roofing materials, cosmetics, toothpaste, soap, water treatment agents, pharmaceuticals, food colorants, automotive products, sunscreen, catalysts, and menstrual products.

Titanium dioxide is produced in two main forms. The primary form, comprising over 98% of total production, is pigment grade titanium dioxide. The pigmentary form makes use of titanium dioxide's excellent light-scattering properties in applications that require white opacity and brightness. The other form in which titanium dioxide is produced is as an ultrafine (nanomaterial) product. This form is selected when different properties, such as transparency and maximum ultraviolet light absorption, are required, such as in cosmetic sunscreens.

Titanium dioxide has been included on the Proposition 65 list since 2011 as causing cancer (airborne, unbound particles of respirable size). Exposure can irritate the eyes, nose and throat, and titanium dioxide can irritate the lungs following inhalation. Repeated exposure may cause bronchitis to develop with coughing, phlegm, and/or shortness of breath. Titanium dioxide has been banned in the European Union since 2022 and alternatives include products made from rice and corn starches and flours.

According to the article, "Safety assessment of titanium dioxide (E171) as a food additive," published by the European Food Safety Authority in May 2021:

"The present opinion deals with an updated safety assessment of the food additive titanium dioxide…. based on new relevant scientific evidence considered to be reliable to the Panel. Based on all the evidence available, a concern for genotoxicity could not be ruled out, and given the many uncertainties, the Panel concluded that titanium dioxide can no longer be considered as safe when used as a food additive."

Disagreement on the science regarding titanium dioxide: In addition to disagreeing with the science on synthetic food dyes, the industry opposing this bill strongly disagrees with the science that shows any harm from titanium dioxide. The opposition to this bill contends that extensive scientific research shows that titanium dioxide is safe in food. This topic will be the subject of ongoing conversations on this bill.

Recent legislation banning food dyes also impacts food in schools: In 2023, AB 418 (Gabriel, Chapter 328), was passed by the Legislature and signed by the Governor. Beginning January 1, 2027, AB 418 prohibits a person or entity from manufacturing, selling, delivering, distributing, holding, or offering for sale, in commerce a food product that contains any of the following substances: brominated vegetable oil, potassium bromate, propylparaben, and red dye 3. Red dye 3 is also a synthetic dye that was the subject of OEHHA's study. It is important to note that by 2027, all food in the state, including food served in schools, must comply with the requirements of AB 418.

Additional health effects and alternatives listed in AB 2316: According to information provided by the author of the bill, below are potential health risks of the chemicals in the bill, types of products those chemicals are used in, and potential alternatives to those chemicals:

Chemical	Health risks	Type of product	Most recent FDA review	Alternatives
Red 40	Behavioral difficulties in children	Cereal, ice cream, drinks, candy, popsicles, cheese-flavored chips, toaster pastries, yogurt, jellies, sprinkles, fruit cups	1971	Anthocyanins, black/purple carrot, elderberry, purple sweet potato, beet
Yellow 5	Behavioral difficulties in children	Cereal, ice cream, drinks, candy, popsicles, cheese-flavored chips, toaster pastries, sprinkles, fruit cups	1969	Annatto, saffron, turmeric, beta-carotene, paprika
Yellow 6	Behavioral difficulties in children	Cereal, ice cream, drinks, candy, popsicles, cheese-flavored chips, toaster pastries, sprinkles, fruit cups	1986	Annatto, saffron, turmeric, beta-carotene, paprika
Blue 1	Behavioral difficulties in children	Cereal, ice cream, drinks, popsicles, candy, sprinkles, yogurt	1969	Spirulina, butterfly pea flower extract, anthocyanin, red cabbage
Blue 2	Behavioral difficulties in children	Cereal, ice cream, drinks, popsicles, candy, sprinkles, yogurt	1983	Spirulina, butterfly pea flower extract, anthocyanin, red cabbage
Green 3	Behavioral difficulties in children	Cereal, ice cream, drinks, popsicles, candy, sprinkles	1982	Spirulina, chlorophyll, matcha
Titanium dioxide (white pigment)	Genotoxicity, immunotoxicity, inflammation	Candy, salad dressing, processed desserts, frosting, cheese, canned soup	1973	Calcium carbonate, rice and corn starches and flours

Potential benefit to California agriculture: California agriculture is a major part of California's economy. According to the California Department of Food and Agriculture: "In 2022, the market value of agricultural products sold in California totaled $59 billion." As the food industry complies with AB 418 and this bill, and moves away from synthetic dyes and titanium dioxide, the replacements for those chemicals are various foods grown in California, including carrots, blueberries, beets, and rice. California agriculture is in a great position to step in and provide food alternatives to these dyes and chemicals being served to children in public schools.

This bill: AB 2316 prohibits, beginning July 1, 2025, a public school from offering, selling, or otherwise provide any food containing, specified synthetic food dyes or titanium dioxide. Synthetic food dyes and titanium dioxide do not have health or nutritional benefits, and while those selling food with them believe they are important, they are not necessary to making food.

Ongoing conversations: Given the breadth of what this bill covers, food served to children in public schools in a state with 40 million people, there will be issues to be ironed out. As the bill moves through the legislative process the author and stakeholders will discuss issues including the scope of the bill (which foods served at public schools to be included), the implementation date of the bill (how much time is needed re-formulate and bring into the market alternatives), what, if any, cost implications there could be for public schools, further conversations regarding the science supporting the prohibition of synthetic food dyes and titanium dioxide, and likely other technical issues regarding implementation and compliance (ensuring that those providing food to schools know the rules).

Arguments in support: According to a coalition writing in support:

"We are writing to urge your committee to support AB 2316, a bill that prohibits California public schools from serving food containing any one of seven harmful food colors that are linked to behavioral difficulties, like inattentiveness and impaired memory, and to chromosomal damage.

Moreover, many students from low-income and under-resourced backgrounds often rely on free meals provided at school, so AB 2316 would help ensure that, at least when it comes to school food, a student's socioeconomic status doesn't affect their ability to eat food free of these toxic chemicals.

In particular, this bill prohibits schools from serving food containing Red 40, Yellow 5, Yellow 6, Blue 1, Blue 2, Green 3, all of which California state scientists at the California Environmental Protection Agency (CalEPA) say are linked to behavioral problems in some children. The bill also prohibits schools from serving food containing Titanium Dioxide, which the European Union no longer allows in food due to its links to genotoxicity, immunotoxicity, and inflammation.

Animal studies also show that synthetic food dyes affect activity, memory and learning, change the way the chemicals carry signals from one nerve to the next in the brain, and cause microscopic changes in brain structure.

Given the compelling evidence regarding the AB 2316 listed food chemicals' health effects, especially on children, we would ask that the Legislature support this bill and prevent schools from serving the AB 2316 dyes and colors to children."

Arguments in opposition: According to a coalition writing in opposition:

"The undersigned organizations have taken an OPPOSE position on AB 2316, legislation that would prohibit public schools from offering for sale food products that contain various ingredients, including titanium dioxide (TiO2) and other color additives. Providing safe and affordable food, especially for school children, is of the utmost importance to our members. As outlined below, the overwhelming scientific assessments conducted by several international governmental agencies, as well as the US FDA, have concluded the safety of titanium dioxide and other additives as food ingredients. AB 2316 effectively circumvents the comprehensive food safety programs in place in favor of a legislative ban. The elimination of these products, with no reasonable time provided to even reformulate, would substantially impact school revenue, decrease access to nutritious food products and negatively impact public school budgets

at a time when the state is facing record deficits. This letter focuses on why the bill is not scientifically sound by focusing on the ban of Titanium Dioxide, throwing into question the scientific rigor of the whole bill, including the use of causal evidence for hyperactivity not proven nor accepted by health authorities globally.

The conclusion of international scientific authorities, affirming the safety of this additive, stands in stark contrast to the bill's extensive prohibitions in the bill and raises questions about the Legislature's role in conducting and interpreting complex toxicological studies on food safety over scientific bodies that have concluded their safe use. The existence of these agencies, tasked explicitly with evaluating the safety of foods for market, underscores the importance of deferring to expert bodies who boast full-time, dedicated scientific staff whose primary mission is to thoroughly analyze and determine the safety of food products, leveraging their expertise and specialized knowledge for public benefit.

Finally, even if the Legislature were to disagree with these international scientific authorities and ban these ingredients, the proposed legislation provides no sell through provisions nor reformulation timeframe to realistically comply. As a result, food products already manufactured would need to be destroyed and food products that school programs rely upon would lose access to these foods with substantial impacts."

Related legislation:

1) AB 418 (Gabriel, Chapter 328, Statutes of 2023). Prohibits a person or entity, commencing January 1, 2027, from manufacturing, selling, delivering, distributing, holding, or offering for sale in commerce a food product for human consumption that contains any of the following substances: brominated vegetable oil (BVO); potassium bromate; propylparaben; or, red dye 3.

2) SB 651 (Wieckowski, 2021). Would have required food that contains synthetic dyes to have the following label: SAFETY WARNING: Synthetic dyes may cause or worsen behavioral problems in children. This bill was set for hearing in the Senate Health Committee, then the hearing was cancelled at the request of the author, and the bill subsequently died on file.

REGISTERED SUPPORT / OPPOSITION:

Support

26 Individual Scientists
A Voice for Choice Advocacy
Active San Gabriel Valley
Alliance of Nurses for Healthy Environments
American Nurses Association/California
As You Sow
Braid Mission
Breast Cancer Prevention Partners
Brighter Beginnings
California Environmental Voters (formerly CLCV)
California Nurses for Environmental Health and Justice
California State Council of Service Employees International Union (SEIU California)

Capistrano Unified School District
Center for Community Action and Environmental Justice
Center for Ecoliteracy
Center for Environmental Health
Center for Science in The Public Interest
Childrens Environmental Health Network
Cleanearth4kids.org
Clearya
Consumer Reports
Development of Court Skills
Eat Real
Ecology Center
Educate. Advocate.
Environmental Health Trust
Environmental Working Group
Facts: Families Advocating for Chemical & Toxics Safety
Friends Committee on Legislation of California
GMO Science
Grassroots Environmental Education
Green Science Policy Institute
Group of Expert Independent Scientists
Healthy Babies Bright Futures
Indivisible Marin
Life Time Foundation
Long Beach Gray Panthers
Los Angeles County Office of Education
Lunchassist
Mamavation - Non-toxic Products for Healthy Families
Maternal and Child Health Access
Moms Across America
Moms Advocating Sustainability
Mysafetynest.org
Non-toxic Neighborhoods
Nontoxic Schools
Old World Winery
Pesticide Action Network
Physicians for Social Responsibility - San Francisco Bay Area Chapter
Real Food for Kids
Recolte Energy
Resource Renewal Institute
Russian Riverkeeper
Scratchworks
See (Social Eco Education)
Sonoma Safe Agriculture Safe Schools (Sonoma Sass)
Tahoe Truckee Unified School District
The Feingold Association of The United States
United Nurses Associations of California/Union of Health Care Professionals
Uve
Wellness in The Schools, Inc.

Opposition

American Bakers Association
American Beverage Association
American Chemistry Council
California Agricultural Teachers Association
California Agricultural Teachers' Association
California Chamber of Commerce
California Food Producers
California League of Food Producers
California Manufacturers & Technology Association
Consumer Brands Association
Dairy Institute of California
International Association of Color Manufacturers
International Dairy Foods Association
National Automatic Merchandising Association
National Confectioners Association

Analysis Prepared by: Josh Tooker / E.S. & T.M. /

Date of Hearing: April 23, 2024

ASSEMBLY COMMITTEE ON ENVIRONMENTAL SAFETY AND TOXIC MATERIALS
Eduardo Garcia, Chair
AB 2365 (Haney) – As Amended April 18, 2024

SUBJECT: Public health: kratom

SUMMARY: Adds kratom products to the Sherman, Food, Drug and Cosmetic Law; requires processors, as defined, to annually register their kratom products with the California Department of Public Health (CDPH); requires a certificate of analysis from an accredited independent laboratory as part of the registration confirming kratom products meets the specified requirements; establishes labeling and packaging requirements for kratom products; and, prohibits the sale of kratom products to individuals under 21 years of age. Specifically, **this bill**:

1) Defines "kratom leaf" as the leaf of the kratom plant (*mitragyna speciosa*) in fresh or dehydrated form, and subjected to no postharvest processing except for drying or size reduction, by cutting, milling, or similar procedure, and to cleaning or sterilization through application of heat, steam, pressurization, irradiation, or other standard treatments applied to food ingredients. The total alkaloid content of kratom leaf material used in a kratom product shall not exceed 3.5 percent on a dried weight basis.

2) Defines "kratom leaf extract" as the material obtained by extraction of kratom leaves with a solvent consisting of water, ethanol, or food grade carbon dioxide, or any other solvent authorized by regulation to be used in manufacturing a food ingredient and that meets all of the following requirements:

    a. Contains an amount of residual solvent not to exceed the amount specified by the United States Food and Drug Administration (US FDA) guidance;
    b. Contains mitragynine as the most abundant alkaloid at a level that is equal to or more than twofold that of any other alkaloid present; and,
    c. Provides that the ratio of mitragynine to other alkaloids is the same or greater than that of the starting materials.

3) Defines "kratom product" as a food or dietary supplement meeting the following requirements:

    a. Contains kratom leaf, or kratom leaf extract;
    b. Does not contain any synthesized kratom alkaloids or other kratom component or synthesized metabolites of any kratom component; and,
    c. Limits the level of 7-hydroxymitragynine on a percent weight basis to be less than 1 percent of the amount of total kratom alkaloids;

4) For the purpose of kratom product, defines "synthesized" as produced using directed synthetic or biosynthetic chemistry rather than traditional food preparation techniques, such as heating or extracting.

5) Defines "processor" as the party responsible for manufacturing, packaging, labeling, or distributing kratom products, or the party that advertises, represents, or holds itself as manufacturing, preparing, packaging, or labeling kratom products.

6) Defines "total kratom alkaloids" as the sum of mitragynine, speciogynine, paynantheine, and 7-hydroxymitragynine in a kratom product.

7) States that amounts of residual solvents used in the manufacturing process in kratom products must comply with US FDA.

8) Requires the following information on a label:

   a. Recommendation against the use by individuals under 21 years of age, individuals who are breastfeeding or pregnant;
   b. Recommendation to talk to a health care professional;
   c. Advisement that kratom may be habit forming;
   d. The statement: *This product has not been evaluated by the United States Food and Drug Administration and is not intended to diagnose, treat, cure, or prevent any disease;*
   e. Name and place of business of the manufacturer, packer, or distributor; and,
   f. Directions for use that include, recommended amount per serving, number of servings per 24-hour period, amounts of total kratom alkaloids, mitragynine and 7-hydroxymitragynine.

9) Requires the following for a retail package container:

   a. Clearly marks the number of servings;
   b. Contains no more than three servings if the product is in liquid form, or the kratom product is sold in a container that is less than eight fluid ounces, or the kratom product does not include a calibrated measuring device.
   c. Has clear serving size markings if kratom product in liquid; and,
   d. Requires the package to come with a calibrated measuring device if kratom product is in powder form.

10) Requires the processor to register each kratom product they manufacture, pack, distribute, or label.

11) Requires the annual registration of kratom products to include a certificate of analysis from an independent laboratory. Requires the lab to be accredited under the standards of the International Organization of Standardization 17025:2017 accreditation from an accreditation body that is a signatory to the International Laboratory Accreditation Cooperation Mutual Recognition Arrangement.

12) Requires the certificate of analysis to confirm that the product complies with the provisions of this bill.

13) Requires a processor, upon request by CDPH, to provide the results of a valid test that quantifies the amount of any or all alkaloids and any other component or substance that affects the quality or strength of the kratom product.

14) Authorizes CDPH, upon a reasonable basis, to require an independent third party test of a registered kratom product by a laboratory of their choice. The processor must submit payment for the test and equitable administrative fees in a reasonable timeframe.

15) Requires CDPH to revoke the registration of a kratom product if the processor does not submit payment to the department within 30 days of receipt of the invoice for the testing and administrative fee.

16) Prohibits an individual from selling kratom leaf or a kratom product to a person under 21 years of age.

EXISTING LAW:

1) Prohibits, pursuant to the federal Food, Drug & Cosmetic Act (FD&C Act), the movement in interstate commerce of adulterated and misbranded food, drugs, devices, and cosmetics. (21 Code of Federal Regulations § 701.3)

2) Establishes the Sherman Food, Drug, and Cosmetic Law (Sherman Law), administered by CDPH, which regulates the manufacture, packaging, labeling, and advertising of food, drugs, and cosmetics. (Health and Safety Code (HSC) § 111929.4)

Under the Sherman Food, Drug and Cosmetic Law:

3) Defines "label" as a display of written, printed, or graphic matter upon a food, drug, device, or cosmetic or upon its immediate container. (HSC § 109955)

4) Defines "manufacture" as the preparation, compounding, propagation, processing, or fabrication of any food, drug, device, or cosmetic. "Manufacture" includes repackaging or otherwise changing the container, wrapper, or labeling of any food, drug, device, or cosmetic in furtherance of the distribution of the food, drug, device, or cosmetic, but does not include repackaging from a bulk container by a retailer at the time of sale to its ultimate consumer. (HSC § 109970)

5) Defines "package" as any container or wrapper that may be used by a manufacturer, producer, jobber, packer, or dealer for enclosing or containing any food, drug, device, or cosmetic. (HSC § 109990)

6) Defines "person" as any individual, firm, partnership, trust, corporation, limited liability company, company, estate, public or private institution, association, organization, group, city, county, city and county, political subdivision of this state, other governmental agency within the state, and any representative, agent, or agency of any of the foregoing. (HSC § 109995)

7) Requires all labels of foods, drugs, devices, or cosmetics to conform to federal requirements, as specified. (HSC § 110340)

8) Requires the label of any package of a food, drug, device, or cosmetic that bears a representation as to the number of servings of the commodity contained in the package to bear a statement of the net quantity, in terms of weight, measure, or numerical count, of each serving. (HSC § 110345)

9) Makes it unlawful for any person to advertise any food, drug, device, or cosmetic that is adulterated or misbranded. (HSC § 110398)

FISCAL EFFECT: Unknown

COMMENTS:

Need for the bill: According to the author:

"Kratom is widely available throughout California. Some estimates show that nearly 25% of all kratom sales in the US are in California alone. With the increase in demand for kratom, some manufacturers have irresponsibly created more potent and dangerous products. Without any kratom regulations, consumers can easily access products that can cause serious illness or harm. AB 2365 will follow the lead of other states and ban high potency kratom, while making sure that safe kratom is accessible for consumers."

Kratom: Kratom (*Mitragyna speciosa*) is a tropical tree native to Southeast Asia, the Philippines, and New Guinea. The leaves of this tree contain two major psychoactive ingredients (mitragynine and 7-hydroxymytragynine). Below are key definitions and drug information:

- Psychoactive: a drug or other substance that affects how the brain works and causes changes in mood, awareness, thoughts, feelings, or behavior. For example, alcohol, caffeine, certain pain medicines, heroin, cocaine, and amphetamines.
- Alkaloids: a class of nitrogen containing organic compounds found in bacteria, fungi, animals, and plants.
- Mitragynine: a major active alkaloid found in kratom making up two/thirds of the total alkaloid content in kratom. Mitragynine is considered a partial agonist of the opioid receptor.
- 7-hydroxymytragynine: an active metabolite of mitragynine (product of the breakdown of mitragynine). It is present in low quantities in kratom and it is a partial agonist of the opioid receptor.

Kratom Use: Kratom has been used for centuries during socioreligious ceremonies. In Thailand, it has been used to treat medical conditions like morphine dependence. In Malaysia, it is used as an opium substitute. Kratom leaves are crushed and then, smoked, brewed with tea or consumed in capsule form. Kratom leaves can also be chewed. Kratom is used to self-treat conditions such as pain, coughing, diarrhea, anxiety and depression, opioid use disorder, and opioid withdrawal.

Every year, within the United States Department of Health and Human Services, the Substance Abuse and Mental Health Services Administration (SAMHSA) sponsors and publishes the survey *National Survey on Drug Use and Health*. On November 2023, SAMHSA published *Key substance use and mental health indicators in the United States: Results from the 2022 National Survey on Drug Use and Health.* This report marked the third year in which respondents were asked about kratom use in the 12 months before the interview. Below is a table for the past three reports (most current first). The percentage was highest among young adults aged 18-25 every single year.

Age Group	Publication Year: 2023 Survey Year: 2022	Publication Year: 2022 Survey Year: 2021	Publication Year: 2021 Survey Year: 2020
12-17 years	0.1% (26,000 people)	0.2% (45,000 people)	0.2% (48,000 people)
18-25 years	1.1% (371,000 people)	0.8% (284,000 people)	0.9% (286,000 people)

26 or older	0.7% (1.5 million people)	0.6% (1.4 million people)	0.8% (1.8 million people)
% of respondents	0.7% (1.9 million people)	0.6 % (1.7 million people)	0.8% (2.1 million people)

The drug fact sheet for kratom, publicly available on the United States Drug Enforcement Administration (US DEA), states that at low doses, kratom can cause increased alertness, physical energy, and talkativeness. At high doses users experience sedative effects. The fact sheet also states that several cases of psychosis have been reported: individuals addicted to kratom exhibited psychotic symptoms, including hallucinations, delusion, and confusion. Kratom's effects on the body include nausea, itching, sweating, dry mouth, constipation, increased urination, tachycardia, vomiting, drowsiness, and loss of appetite. Users of kratom have also experienced anorexia, weight loss, insomnia, hepatotoxicity, seizure, and hallucinations.

According to *Notes from the Field: Unintentional Drug Overdose Deaths with Kratom Detected — 27 States, July 2016–December 2017* (CDC report), published on April 2019 by the Centers for Disease Control and Prevention, 152 out of 27,338 (or 0.56%) of overdose deaths, tested positive for kratom on postmortem toxicology. Kratom was determined to be the cause of death for 91 of the 152 kratom positive deaths (59.9%), including seven that were only positive for kratom (additional substances cannot be ruled out). Almost all deaths had toxicology testing results that were positive for other substances including, but not limited to, fentanyl and heroine. Because kratom products are not properly regulated, information on the product safety, quality and use is not known in the context of these findings.

United States Food and Drug Administration (US FDA): The US FDA has not approved any prescription or over-the-counter drug products containing kratom or its two chemicals (mitragynine and 7-hydroxymitragynine). In other words, the US FDA has not evaluated the safety and effectiveness of kratom and its components in the treatment of any medical conditions. The US FDA has also concluded that there is not enough information to conclude that dietary supplements or food additive that contain kratom do not present a significant or unreasonable risk of illness or injury.

Consistent with statements on the US FDA website, on May 2023, *Clinical Implications of Kratom (Mitragyna speciosa) Use: a Literature Review* was published in the journal of Current Addiction Reports. The authors state that "Very few clinical reports of toxicity have been recorded among individuals using kratom alone and/or for the first time... more rigorous research on the clinical, pharmacodynamics [biochemical and physiological effects of drugs], and pharmacokinetic [movement and interaction of drugs in the body] aspects of kratom and MG [mitragynine] is needed to clarify the therapeutically useful or risky doses of kratom in humans." Executing rigorous research studies and collecting this data will likely take several years.

Proponents of the bill have highlighted a FDA dose-finding and safety pilot study that concludes servings sizes provided in the study were well tolerated by individuals. They also acknowledge that more research is needed for a comprehensive profile on safety and tolerability. On January 16, 2024, the FDA announced an open period of applications for a human abuse potential (HAP) study on the use of botanical kratom and " the pilot study is expected to provide critical information for conducting the HAP study, including information on the kratom dose, the

botanical supply provider, and content for the Investigational New Drug application (e.g., safety information and chemistry manufacturing and controls data)."

National Institute on Drug Abuse (NIDA): NIDA currently supports and conducts research to evaluate the medicinal uses (effects, mechanisms and therapeutic potential) of kratom and related alkaloids. They state on their website that "compared to deaths from other drugs, a very small number of deaths have been linked to kratom products and nearly all cases involved other drugs or contaminants." There is concern about kratom's addictive potential due to mitragynine and 7-hydroxymitragynine's ability to activate subtypes of the opioid receptors. NIDA cites some research studies that includes in vivo studies (rodent studies) noting that the way kratom compounds bind to these receptors may reduce the potential for addiction relative to opioids. Robust clinical trials are needed to further advance understanding.

NIDA's website also points to primary literature that reports on people using kratom to ease cravings and withdrawal symptoms associated with other substances. On the subject of kratom withdrawal, they state that some studies suggest people may experience mild to moderate withdrawal symptoms when they stop kratom use, but more studies are warranted. On the subject of safety, they highlight that: kratom products may contain harmful contaminants; adverse effects range from mild to severe; a very small number of deaths have been linked to kratom products; drug interactions may influence effects; long-term health and safety effects are not well understood; effects on pregnancy are not well understood; and, safety effects of intoxication are not well understood.

Actions by the Federal Drug Enforcement Agency: In August 2016, the DEA announced that it would temporarily classify kratom's alkaloids, mitragynine and 7-hydroxymitragynine, as a Schedule I drug. According to the DEA's website, Schedule I drugs, substances, or chemicals are defined as drugs with no currently accepted medical use and a high potential for abuse. The actions by the DEA were possible through the Controlled Substances Act, an act that gives the DEA authority to temporarily reclassify a substance to avoid an imminent hazard to public safety. After receiving backlash from advocates stating kratom was safer than prescription opioids, testimonials on its usefulness for managing pain and beneficial uses, and a bipartisan letter by U.S. Representatives calling for a delay on the ban, the DEA announced it would withdraw its intent to temporarily schedule kratom's alkaloids as a Schedule I drug. Thousands of comments were submitted in favor of kratom use and continued access. Currently, the DEA has listed kratom as a Drug and Chemical of Concern.

Actions within California: The city of San Diego banned the manufacturing, sale, distribution and possession of kratom since 2016. The city of Oceanside also prohibited the sale, distribution, possession and use of kratom in 2016. Newport Beach City Council approved an ordinance that would prohibit the sale and distribution of kratom. This ordinance took effect on April 2024.

Action by other states: Over the past decade there has been numerous actions put forth by different states. The Congressional Research Service Report titled, "Kratom Regulation: Federal Status and State Approaches," states that as of November 2023, Alabama (since May 2016), Arkansas (since October 2015), Indiana (since 2014), Rhode Island (since 2017), Vermont (since 2016) and Wisconsin (since 2014) currently ban mitragynine and 7-hydroxymitragynine. The states of Indiana, Rhode Island, Vermont, and Wisconsin have introduced legislation to replace the bans with regulations to allow for the sale of kratom products.

Actions by the Federal Government: On October 2023, The United States Senate and the United States House of Representatives introduced similar bills to protect access to kratom. The bills would require the Secretary of Health and Human Services to hold at least one hearing that allows for the discussion of the scientific data and information to date about the safety and use of kratom containing products or products derived from kratom marketed as a food, dietary ingredient, or dietary supplement. The scope of the hearing would include, among other things, input from scientific researchers, the degree of dependence or addiction associated with kratom, and potential benefits of kratom use. A task force to report on federally funded kratom-related research would also be formed allowing for ongoing evaluation of scientific findings.

Categories of regulation: For states that allow the sale of Kratom, the regulations cover different categories:

- Age restriction- Eight states ban the sale of kratom products for persons under 18 years of age. Eight other states ban the sale of kratom products to persons under 21 years of age. There is also legislation banning the possession by underage persons in some of these states.
- Marketing to children- Utah currently prohibits packaging or flavoring that appeals to children and requires safe packaging. West Virginia has recently passed legislation to address marketing to children.
- Adulteration and Contamination- Ten states have passed legislation that prohibit the sale of adulterated kratom products (contain non-kratom substances) or prohibit kratom products that are contaminated with harmful non-kratom substances.
- Strength- Four states have prohibited the sale of products if 7-hydroxymitragynine is greater than 2% of the alkaloid content.
- Labeling- Of the sixteen states that regulate Kratom sales, nine have regulations requiring labels to include one or a combination of the following: directions for safe use; warnings (e.g. This product has not been evaluated by the FDA and is not intended to diagnose, treat, cure or prevent any disease); information of the manufacturer or distributor; ingredients; alkaloid content; and/or factual basis that a product is a kratom product because it is derived from the kratom leaf.
- Testing and sampling- Four states have testing requirements to verify levels of alkaloid content, label information, heavy metal concentrations, contaminants (i.e. purity levels), and/or contamination with other drugs.
- Registration and permitting- Three states require registration with state agencies or obtaining state permits.
- Synthetic alkaloids-Four states define Kratom as not including synthetic kratom alkaloids. These states prohibit kratom products from being adulterated with synthetic compounds.
- Local authority- Colorado and Louisiana allow local authorities to adopt regulations on kratom or to ban kratom, but do not allow the sale of kratom to persons under 21 years of age.
- Private right of action- Oklahoma and Utah allow individuals to bring private civil actions for damages if they were harmed by violations of their kratom laws.
- Tax- West Virginia taxes kratom products.

The provisions of AB 2365 are very similar to existing regulations throughout the country and they cover several categories of regulation mentioned above. That is, they set an age restriction, require labeling to include directions of use, warnings, manufacture, packer or distributor information, alkaloid content, list of ingredients, and define kratom product to exclude synthetic

alkaloids or synthetic components. The provisions of AB 2365 also requires testing of kratom products for compliance, registration of products, and gives authority to CDPH.

Regulation for safety: Previously cited data shows that more than 1.5 million Americans use kratom in some form. The events that unfolded when DEA announced intent to classify kratom's alkaloids as a Schedule I drug were actions by citizens that firmly believed in protecting the individual right to access a potentially therapeutic product, long used in other cultures. Proponents of the bill are in favor of regulating kratom to keep kratom users safe. Additionally, they state regulations are intended to also prevent "bad actors" in the industry and prevent a black market for kratom.

Heavy metals and other drugs: In 2018, the US FDA released a statement titled, "Statement by FDA Commissioner Scott Gottlieb, M.D., on risk of heavy metals, including nickel and lead, found in some kratom products" that reported the presence of heavy metals and warned consumers after testing some kratom products. About six months later, the US FDA released a second set of findings after testing more products and stated that "the analysis found significant levels of lead and nickel at concentrations that exceed safe exposure for oral daily drug intake." Without ensuring that kratom products are being tested for the presence of heavy metals, heavy kratom users may be exposed to heavy metal concentrations harmful to their health.

Postmortem toxicology data points from the CDC report cites fentanyl as the most frequently co-occurring substance. The data cannot confirm nor deny that kratom products were not adulterated with other dangerous drugs or that the kratom consumer was knowingly or unknowingly exposed to fentanyl. The state of Colorado has drafted legislation to prohibit kratom products that are adulterated with fentanyl or any other controlled substance.

Age: An age requirement in the bill of 21 years of age is consistent with current purchasing requirements for other habit forming products like tobacco and alcohol.

Testing requirements: The current language in the bill requires a certificate of analysis that confirms the product complies with (i) residual solvent amount guidelines established by the US FDA and (ii) the requirements listed to meet the definition of a kratom product.

The author may wish to consider including language that outlines testing requirements to test for the presence and amounts of heavy metals. For example, testing to verify the product does not contain harmful levels of lead or nickel. Consideration may also be given to other tests to ensure kratom products are not adulterated with illicit drugs.

Concentration of alkaloids: Average values of alkaloid concentrations in kratom are known. Ratios and concentration limits in AB 2365 are intended to limit "enhanced" products (addition of alkaloids to the product) in the market and align with native kratom leaf material and legislation in other states. A statement shared by a group of scientists explains the importance of these values:

"Mitragynine is metabolized in the human body to some degree into the active metabolite, 7-hydroxymitragynine. This 7-hydroxymitragynine metabolite has been shown to be associated with relatively greater abuse liability than its parent mitragynine, as it is more potent than mitragynine and 3- 22 times more potent than morphine at opioid receptors. The pharmacology of 7- hydroxymitragynine appears to differ from mitragynine in that is only acts on opioid receptors, rather than multiple systems in the human body…From a safety perspective, limiting

the amount of both mitragynine, 7-hydroxymitragynine, and other alkaloids as has been done in most kratom-related state legislation, ensures that consumers are unlikely to experience adverse effects at commonly reported amounts of kratom ingestion."

As AB 2365 moves through the legislative process, the author's office may consider working with CDPH and health professionals to review the ratios and concentration limits.

This bill: AB 2365 would define kratom products and establish a set of requirements for kratom products under the Sherman, Food, Drug and Cosmetic Law. It would define processors and require them to register their kratom products with CDPH. As part of the registration process, a certificate of analysis from an accredited independent laboratory confirming kratom products meets the specified requirements would be required. Lastly, it would establish labeling and packaging requirements and would prohibit the sale of kratom products to individuals under 21 years of age.

Arguments in support: According to a coalition of law enforcement:

"While kratom use or sale has been banned or restricted in several countries, kratom products are currently legal and accessible online and in stores without restriction. AB 2365 takes a first step in regulating this mind-altering substance and we look forward to working with the author in ensuring that kratom products available to the public are safe and not accessible to our youth."

Additionally, the Global Kratom Coalition states:

"The CA KCPA [AB 2365, the California Kratom Consumer Protection Act] addresses the lack of regulation and universal standards in the kratom industry, providing peace of mind to kratom users by assuring them that the products they buy meet stringent safety standards. We believe that AB 2365's framework, among other things, will improve the market for our industry by setting widely accepted and well tread manufacturing standards as the floor for kratom processing practices in California. AB 2365 does this in 5 ways:

1. Manufacturing and Formulation Standards: AB 2365 would require vendors to adhere to specific safety guidelines and manufacturing practices. Consumers should expect with certainty that kratom products in California are uncontaminated, unadulterated, and contain a dosage level that is recognized as safe.
2. Age Limits: The act would prohibit the sale of kratom to minors, emphasizing that individuals aged 18 and above are the intended consumers.
3. Labeling and Disclosure: Under AB 2365, kratom processors must disclose allergens, ingredients, age requirements, physician and other safety warnings, directions for safe use, as well as the origin and content of mitragynine and 7-hydroxymitragynine in their products. Consumers will be able to make informed choices with these rules in place.
4. Banning Harmful Substances: The measure would prohibit kratom products containing synthetic alkaloids that could compromise user safety.
5. Testing and Registration Requirements: AB 2365 would require kratom processors to test and label their products accurately. Kratom processors would also be required to register with the Department of Public Health."

Arguments in opposition: None on file.

Related Legislation:

1) AB 2217 (Weber). Prohibits, beginning January 1, 2027, a person or entity from manufacturing, selling, delivering, distributing, holding, or offering for sale, in commerce a food product for human consumption that contains tianeptine. AB 2217 makes it a violation of these provisions punishable by a civil penalty not to exceed $5,000 for a first violation and not to exceed $10,000 for each subsequent violation, upon an action brought by the Attorney General, a city attorney, a county counsel, or a district attorney. AB 2217 is pending a hearing in the Assembly Committee on Health.

2) AB 82 (Weber). Prohibits a retail establishment from selling, transferring, or otherwise furnishing dietary supplements for weight loss or over-the-counter diet pills, as defined, to any person under 18 years of age without a prescription. AB 82 has been referred to the Senate Committee on Rules.

3) AB 418 (Gabriel, Chapter 17, Statutes of 2023). Prohibits, beginning January 1, 2027, a person or entity from manufacturing, selling, delivering, distributing, holding, or offering for sale, in commerce a food product for human consumption that contains any of the following: brominated vegetable oil, potassium bromate, propylparaben, and red dye 3.

4) AB 1341 (Garcia 2022). Would have prohibited a retail establishment from selling, transferring, or otherwise furnishing dietary supplements for weight loss or over-the-counter diet pills, as defined, to any person under 18 years of age without a prescription, by requiring the retail establishment to follow a specified identification check. This bill was vetoed by Governor Gavin Newsom.

REGISTERED SUPPORT / OPPOSITION:

Support

Arcadia Police Officers' Association
Burbank Police Officers' Association
California Coalition of School Safety Professionals
California District Attorneys Association
California Narcotic Officers' Association
California Reserve Peace Officers Association
Claremont Police Officers Association
Corona Police Officers Association
Culver City Police Officers' Association
Deputy Sheriffs' Association of Monterey County
Fullerton Police Officers' Association
Global Kratom Coalition
Los Angeles School Police Management Association
Los Angeles School Police Officers Association
Murrieta Police Officers' Association
Newport Beach Police Association
Novato Police Officers Association
Palos Verdes Police Officers Association
Placer County Deputy Sheriffs' Assocation
Planted in Science Consulting, LLC
Pomona Police Officers' Association
Riverside Police Officers Association

Riverside Sheriffs' Association
Santa Ana Police Officers Association
Upland Police Officers Association

Opposition

None on file.

Analysis Prepared by: Brenda Cisneros-Larios / E.S. & T.M. /

Date of Hearing: April 23, 2024

ASSEMBLY COMMITTEE ON ENVIRONMENTAL SAFETY AND TOXIC MATERIALS
Eduardo Garcia, Chair
AB 2454 (Lee) – As Amended April 15, 2024

SUBJECT: Drinking water: rental property: domestic well testing

SUMMARY: Requires an owner of a domestic well that serves a rental property, who is provided written notice of a free domestic well testing program, as defined, to participate in the program and perform specified actions, including providing test results to tenants and, if the test results demonstrate a violation of any primary drinking water standard, ensuring tenants have access to an adequate supply of safe drinking water. Specifically, **this bill**:

1) Defines "free domestic well testing program" to mean a program that provides domestic well testing for one or more contaminants by a laboratory certified by the state to conduct drinking water sampling and analysis, that is offered free of charge to the owner of a domestic well, and that is funded by any of the following:

    a) Any fund or program to test domestic wells established by any Regional Water Quality Control Board (Regional Water Board) pursuant to the Porter-Cologne Water Quality Control Act (Porter-Cologne);

    b) Any fund or program to test domestic wells established by the State Water Resources Control Board (State Water Board) pursuant to provisions governing the Cleanup and Abatement Account (CAA);

    c) Any well mitigation funds or programs established by a groundwater sustainability agency pursuant to the Sustainable Groundwater Management Act (SGMA);

    d) Any funds or programs established by the fund expenditure plan (Expenditure Plan), developed by the State Water Board for the Safe and Affordable Drinking Water Fund (SADW Fund); and,

    e) Any other fund or program created to provide domestic well testing at no cost to the owner of the domestic well, including, but not limited to, state funds, federal funds, bond funds, voluntary agreements, settlement agreements, and judgements.

2) Requires an owner of a domestic well that serves a rental property, who is provided written notice of a free domestic well testing program, to participate in the program and its related requirements, and to do all of the following:

    a) Request testing for all primary and secondary drinking water contaminants, or contaminants of emerging concern, for which testing is provided by the program;

    b) Request follow-up testing annually, or if the program does not offer annual testing, request follow-up testing as frequently as the program permits; and,

    c) Provide all necessary consent for the testing, and for the submission of test results by the certified laboratory to the Division of Drinking Water and any public database maintained by the State Water Board.

3) Requires written notice to be provided by mailing a description of the relevant domestic well testing program to the owner of the domestic well at their last known address and to the current resident of the rental property.

4) Requires the owner of the rental property to provide test results to all current residents of the rental property within 10 days of receiving the results; requires the test results to describe any exceedance of primary or secondary drinking water standards, and to be provided in English and the primary language spoken by the resident.

5) Requires, if the test results demonstrate a violation of any primary drinking water standard, the domestic well owner to ensure that, within 14 days of receiving the test results, tenants of rental properties served solely by the domestic well have access to an adequate supply of safe drinking water.

6) Prohibits the owner of a domestic well from imposing any charge, or increasing any fee, rent, or other charge on any tenant solely as a result of the requirements of this section.

7) Provides that the provisions under AB 2454 are exempt from the remedies set forth in the California Safe Drinking Water Act (SDWA).

EXISTING LAW:

1) Declares that it is the established policy of the state that every human being has the right to safe, clean, affordable, and accessible water adequate for human consumption, cooking, and sanitary purposes. (Water Code (WC) § 106.3)

2) Pursuant to the federal SDWA, authorizes the United States Environmental Protection Agency (US EPA) to set standards for drinking water quality and to oversee the states, localities, and water suppliers who implement those standards. (42 United States Code § 300(f), et seq.)

3) Requires, pursuant to the California SDWA, the State Water Board to regulate drinking water and to enforce the federal SDWA and other regulations. (Health and Safety Code (HSC) § 116275, et seq.)

4) Defines "domestic well" as a groundwater well used to supply water for the domestic needs of an individual residence or a water system that is not a public water system and that has no more than four service connections. (HSC § 116681(g))

5) Prohibits an order from the State Water Board from requiring consolidation or extension of service to a residence served solely by a domestic well, until an owner of the affected residence provides written consent to the consolidation or extension of service. (HSC § 116682(j)(1))

6) Specifies that any owner of a domestic well, located within a consolidation or extended service area, who does not provide written consent is ineligible, until consent is provided, for any future water-related grant funding from the state, other than funding to mitigate a well failure, disaster, or other emergency. (HSC § 116682(j)(2))

7) Requires any owner of a domestic well, that serves a rental property and is located within a consolidation or extended service area, who does not provide written consent to ensure that tenants of rental properties served solely by that domestic well have access to an adequate supply of safe drinking water; requires, until consent is provided, the domestic well owner to do all of the following:

    a) Once per year, test the drinking water from domestic wells; testing shall be conducted for all contaminants for which the State Water Board has adopted primary and secondary drinking water standards and conducted pursuant to specified state regulations;

    b) Provide the test results to all tenants within 10 days of receiving them; the notice shall comply with specified state regulations and shall be provided in English and the primary language spoken by the tenant; and,

    c) Provide the test results to the local health officer or other relevant health agency. (HSC § 116682(j)(3)(A))

8) Requires, if the test results show a violation of any primary or secondary drinking water standard adopted by the State Water Board, the domestic well owner to provide or pay for uninterrupted replacement water service, which may include wellhead treatment. (HSC § 116682(j)(3)(B))

9) Requires, if wellhead treatment is used to address contamination, the domestic well owner to do both of the following:

    a) Conduct well testing pursuant to specified state regulations, to determine if, subsequent to wellhead treatment, water from the domestic well meets primary and secondary drinking water standards adopted by the State Water Board; and,

    b) Provide the test results to all tenants within 10 days of receiving them, in English and the primary language spoken by the tenant, and to the local health officer or other relevant health agency. (HSC § 116682(j)(3)(C))

10) Prohibits an owner of a domestic well from imposing any charge, or increasing any fee, rent, or other charge on any tenant solely as a result of the requirements specified above (in HSC § 116682(j)(3)(A-C)). (HSC § 116682(j)(3)(D))

11) Requires the State Water Board to enforce the above requirements (in HSC § 116682(j)(3)) if the Legislature has appropriated sufficient funds in the annual Budget Act or otherwise for that purpose. (HSC § 116682(j)(3)(F))

12) Requires, by January 1, 2021, the State Water Board, in consultation with local health officers and other relevant stakeholders, to use available data to make a map of aquifers that are at high risk of containing contaminants that exceed safe drinking water standards, and that are used or likely to be used as a source of drinking water by a state small water system or a domestic well. (HSC § 116772(a)(1))

13) Requires that a finding that a disadvantaged community, in whole or in part, is substantially reliant on at-risk domestic wells be based on maps, created pursuant to HSC § 116772(a)(1),

and inspection or testing of the wells showing an imminent risk of failing to provide an adequate supply of safe drinking water. (HSC § 116682(k))

14) Establishes the SADW Fund to help water systems provide an adequate and affordable supply of safe drinking water in both the near and long terms. (HSC § 116766)

15) Requires the State Water Board, in consultation with the Department of Finance, to annually adopt an Expenditure Plan for the SADW Fund; requires the Expenditure Plan to include, among other things, a list of programs to be funded that assist or will assist households supplied by a domestic well that consistently fails to provide an adequate supply of safe drinking water. (HSC § 116769(a)(6))

16) Authorizes the Expenditure Plan to include, among other things, expenditures for testing the drinking water quality of domestic wells serving low-income households, prioritizing those in high-risk areas, as defined. (HSC § 116770(d))

17) Provides, under SGMA, that local agencies must sustainably manage groundwater in high- or medium-priority basins by 2040; defines "sustainable management of groundwater" as the avoidance of specified "undesirable results," including degraded water quality. (WC § 10720, et seq.).

18) Establishes Porter-Cologne, which prohibits the discharge of pollutants to surface waters unless the discharger obtains a permit from the State Water Board. (WC § 13000, et seq.)

19) Establishes the Abatement Account within the State Water Quality Control Fund, administered by the State Water Board. (WC § 13440)

20) Provides to the Abatement Account half of all funds collected due to criminal penalties and all funds from civil penalties received under Porter-Cologne. (WC § 13441)

21) Authorizes the State Water Board to approve grants from the Abatement Account, to any eligible entity to assist in cleaning up a waste, abating the effects of a waste on waters of the state, or addressing an urgent drinking water need. Eligible entities include a public agency, tribal government, not-for-profit organization serving a disadvantaged community, or a community water system that serves a disadvantaged community. (WC § 13442)

FISCAL EFFECT: Unknown.

COMMENTS:

Need for the bill: According to the author: "Tenants should have the same human right to access safe drinking water as homeowners. Unfortunately, despite the existence of free domestic well testing programs in many regions of the state, domestic well participation remains far too low, putting tenants at risk of exposure to dangerous contaminants. This bill would require domestic well owners to participate in these free programs, and where contamination exists, to ensure that tenants have an adequate supply of safe drinking water, thereby helping to prevent tenants from drinking toxic tap water."

Human right to water: Through enactment of AB 685 (Eng, Chapter 524, Statutes of 2012), California became the first state with a Human Right to Water law. AB 685 establishes a state policy that every human being has the right to safe, clean, affordable, and accessible water adequate for human consumption, cooking, and sanitation. Water supply issues; contaminants; costs of treatment and distribution systems; climate change; the number and nature of small public water systems, especially in disadvantaged communities; and many other factors continue to challenge progress in implementing the Human Right to Water.

Drinking water contamination: While most drinking water in California meets requirements for health and safety, surface waters and aquifers used for drinking water can be contaminated by various chemicals, microbes, and radionuclides. According to the US EPA, common sources of drinking water contaminants include:

- *Industry and agriculture*. Organic solvents, petroleum products, and heavy metals from disposal sites or storage facilities can migrate into aquifers. Pesticides and fertilizers can be carried into lakes and streams by stormwater runoff or snowmelt, or can percolate into aquifers;

- *Human and animal waste*. Human wastes from sewage and septic systems can carry harmful microbes into drinking water sources, as can wastes from animal feedlots and wildlife. Major contaminants resulting from human and animal waste include Giardia, Cryptosporidium, and *E. coli*;

- *Treatment and distribution*. While treatment can remove many contaminants, it can also leave behind byproducts (such as trihalomethanes) that may themselves be harmful. Water can also become contaminated after it enters the distribution system, from a breach in the piping system or from corrosion of plumbing materials made from lead or copper; and,

- *Natural sources*. Some ground water is unsuitable or challenging to use for drinking because the local underground conditions include high levels of certain contaminants. For example, as ground water travels through rock and soil, it can pick up naturally occurring arsenic, other heavy metals, or radionuclides.

Health effects of drinking water contaminants: The US EPA reports that there is a broad range of health effects associated with exposure to drinking water contaminants. Ingestion or exposure to pathogens at sufficient doses can result in gastrointestinal illness with symptoms such as diarrhea, nausea, stomach cramps, and vomiting. Exposure to higher doses of chemicals, metals, or radionuclides through drinking water can produce biological responses, toxicological effects, and more severe health impacts including cancer, developmental or reproductive effects, neurological changes, and organ damage.

Contamination in domestic wells: State law defines a "domestic well" as a groundwater well used to supply water for the domestic needs of an individual residence, or a water system that is not a public water system and has no more than four service connections. According to the State Water Board, domestic well water is for private use and consumption, typically by single family homeowners.

In prior years, under the Groundwater Ambient Monitoring and Assessment Program, the State Water Board implemented the Domestic Well Project (Project), which sampled the private wells

of volunteer well owners on a county-by-county basis. From 2002 to 2011, over 1,100 wells were sampled in Yuba, El Dorado, Tehama, Tulare, San Diego, and Monterey counties. The Project sampled domestic wells for commonly detected chemicals—including nitrate, trace metals, volatile organic compounds, pesticides, and radionuclides—at no cost to well owners. Well owners received the test results and fact sheets.

As of 2011, the Project was on hiatus pending funding. However, the results show that domestic well contamination is a statewide problem, and provide a picture of the degree and types of contamination present in domestic wells. Below is a sampling of the results, by county (project years and the number of wells tested are also indicated):

- In Yuba County (2002, 128 wells), 22% of tested wells exceeded state drinking water standards for total coliform (i.e., bacteria);

- In El Dorado County (2003-04, 398 wells), 28% of tested wells exceeded state drinking water standards for total coliform;

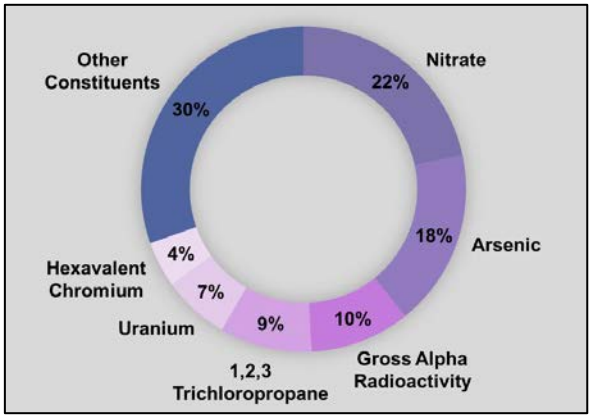
- In Tehama County (2005, 223 wells), 25% of tested wells exceeded state drinking water standards for total coliform;

- In Tulare County (2006, 181 wells), 33% of tested wells exceeded state drinking water standards for total coliform, 8% exceeded standards for fecal coliform, and 41% exceeded standards for nitrate;

- In San Diego County (2008-09, 137 wells), 25% of tested wells exceeded state drinking water standards for total coliform, and 18% exceeded standards for nitrate; and,

- In Monterey County (2011, 79 wells), 14% of tested wells exceeded state drinking water standards for total coliform, 11% exceeded standards for nitrate, and 11% exceeded standards for perchlorate.

Domestic wells and inequitable access to safe drinking water: In its 2022 Drinking Water Needs Assessment, the State Water Board reports that across the state, an estimated 33% of domestic wells are located in disadvantaged or severely disadvantaged communities, and 43% of wells in these communities are identified as at-risk, or located in areas where groundwater is at high risk of containing contaminants that exceed safe drinking water standards. When compared to non-at-risk domestic well areas, at-risk domestic well areas have higher overall pollution burdens, a higher percentage of household poverty, a higher percentage of limited English-speaking households, and larger household size. They are also more likely to be in majority non-white census areas.



The adjacent figure shows the proportion of at-risk domestic wells that may exceed drinking water standards for specific contaminants. In addition, a study published in the *American*

Journal of Public Health (Pace et al., 2022) noted critical environmental justice concerns relating to domestic well use. After examining statewide well and sociodemographic data, the authors concluded that "poor water quality disproportionately impacts communities of color in California, with the highest estimated arsenic, nitrate, and [hexavalent chromium] concentrations in areas of domestic well use."

Domestic well regulation: Neither the US EPA nor the State Water Board regulate domestic wells, although both recommend annual testing of wells used for drinking water. According to the State Water Board's 2015 guide on domestic wells, well owners must obtain permits from local environmental health agencies or local water districts before well construction, modification, or destruction. The Department of Water Resources and the State Water Board have established well construction standards; however, the state does not maintain water quality standards, or testing or remediation requirements, for domestic wells.

California—similar to most other states—does not maintain statewide laws or regulations that provide explicit protections for people renting homes that are on domestic wells, at least with respect to drinking water quality. Because neither state nor federal law requires domestic wells to be tested for drinking water contaminants, renters may not know whether contaminants are present in their drinking water. Without explicit protections, they may not be willing to test the water for a domestic well that they do not own.

A few states have taken steps to tackle these issues. For example, in 2001, the state of New Jersey enacted the Private Well Testing Act, which requires landlords to test the private well water supplied to their tenants, and to provide their tenants with a written copy of the results. In Maryland, the Private Well Safety Act requires an owner of residential rental property that is served by a private well to:

- Provide for water quality testing every three years;
- Disclose the test results to a tenant;
- Notify a tenant under specified circumstances, to include sharing the most recent water quality test when a tenant signs a lease;
- Provide, when testing reveals contamination, an approved potable water supply until the contamination is permanently remediated; and,
- Resolve the issue of contamination within 60 days of learning contamination is present, including by providing an approved potable water supply on an ongoing basis, permanently remediating the contamination, or providing the tenant with the option to terminate the lease.

In 2023, California took steps to provide protections for a limited population of tenants using domestic wells through enactment of AB 664 (Lee, Chapter 810, Statutes of 2023). Under the California SDWA, domestic well owners cannot be compelled to participate in extension of service or consolidation projects, which involve the physical or managerial joining of two or more water systems. The State Water Board uses these projects to improve access to safe drinking water for disadvantaged communities. AB 664 preserves the ability of domestic well

owners to decline participation in these projects, but requires well owners who decline to ensure that tenants who rely on their wells have access to an adequate supply of safe drinking water.

Domestic well testing programs: Although California does not maintain statewide requirements or programs explicitly focused on water quality testing for domestic wells, funds issued by the State Water Board have been used to support regional domestic well testing programs. Below are two examples:

- *Self Help Enterprises Household Solutions Program* (Self Help Enterprises is a community development organization that serves multiple counties in the San Joaquin Valley). As of 2023, this program had an approved funding level of $14.6 million through the SADW Fund, to conduct outreach to potential households served by private wells; conduct well testing; and provide interim solutions, including through the use of point-of-entry and/or point-of-use filtration devices for households with water quality issues; and,

- *Central Valley Salinity Alternatives for Long-Term Sustainability (CV-SALTS).* In 2006, the Central Valley Regional Water Quality Control Board initiated CV-SALTS as a cooperative effort among regulators, permittees, environmental interests, and other parties interested in Central Valley water quality. Through its Nitrate Control Program, CV-SALTS is working with management zones (formally defined areas with specific boundaries, where a contractual arrangement among permittees is required to provide safe drinking water and to manage nitrate) to identify residential areas with high nitrate concentrations in groundwater, reach out to residents in these areas to offer well testing services, offer free bottled water delivery services to residents with wells exceeding safe nitrate levels, and identify long-term safe drinking water solutions. Some management zones test wells for other contaminants in addition to nitrate; for example, the Valley Water Collaborative and Tule Management Zones have added non-nitrate contaminants to their well tests, using a grant issued through the State Water Board's Safe and Affordable Funding for Equity and Resilience (SAFER) Program.

According to supporters of AB 2454—including community-based organizations that are engaged in on-the-ground efforts to help households access well testing through initiatives such as CV-SALTS—tenants are sometimes unable to benefit from free well testing programs, in instances where domestic well owners decline to participate, or are unresponsive to a written invitation to participate. The sponsors of AB 2454 maintain that this barrier to participation for tenants is one reason that free domestic well testing programs only reach a fraction of households at risk for exposure to dangerous contaminants.

Policy considerations: AB 2454 highlights an important issue: the lack of state-level protections that ensure renters who rely on domestic wells have access to an adequate supply of safe drinking water. AB 2454 proposes to address this issue by requiring domestic well owners—if their well serves a rental property—to participate in a free domestic well testing program if they receive written notice of the program. AB 2454 defines "free domestic well testing program" to include programs offered under any one of several acts or funds, including Porter-Cologne, SGMA, the CAA, the SADW Fund, or any other fund or program created to provide free domestic well testing.

As AB 2454 moves forward, the author may wish to consider the following questions regarding implementation and enforcement of the bill's provisions:

- As defined in AB 2454, "free domestic well testing program" references acts and funds that are governed by separate statutes in the Water Code and Health and Safety Code, and administered by multiple state and regional agencies, including the State Water Board, Regional Water Boards, and the California Department of Water Resources. Which state agencies will be responsible for ensuring that domestic well owners comply with the bill's requirements, and are additional statutory changes, in the laws governing each of these acts and funds, needed to explicitly authorize and/or require enforcement by these agencies?

- The underlying statutes for the various acts and funds referenced in AB 2454's definition of "free domestic well testing program" specify different remedies for noncompliance. How would these remedies apply to noncompliance by a domestic well owner under AB 2454? The author may wish to consider whether remedies specific to AB 2454 are needed, to ensure that they are consistent across free domestic well programs offered under different state acts and funds.

- AB 2454's definition of "free domestic well testing program" includes programs categorized as "any other fund or program created to provide free domestic well testing." Could this include programs offered and funded by non-governmental entities, and, if so, how would the state exercise oversight over these programs, at least with respect to the requirements established by AB 2454?

This bill: AB 2454 requires a domestic well owner, if their well serves a rental property, to participate in a free domestic well testing program if they receive written notice for the program. This bill would also require domestic well owners participating in these programs to share test results with tenants and ensure that tenants have access to an adequate supply of safe drinking water, if testing shows contamination. California currently lacks explicit statewide protections for tenants who rely on domestic wells as their sole source of drinking water; AB 2454 draws attention to this issue and takes steps to ensure tenants can benefit from free domestic well testing programs.

Arguments in support: According to a coalition of supporting organizations:

> "Under current law, (AB 664, Lee) domestic well owners serving tenants in disadvantaged communities where consolidations are occurring must consent to ongoing, state funded consolidation projects, or provide annual well testing and replacement drinking water for their tenants. While well testing and mitigation can be costly, several local and state funded programs exist to provide essential resources such as bottled water deliveries, hauled water, or water quality testing at no cost to the well owner. One such program is the CV-SALTS program in the San Joaquin Valley, which provides complementary nitrate contamination testing, as well as assistance with short-term and long-term replacement water solutions. However, current law does not require the owner of a domestic well owner serving a rental property to participate in these free domestic well testing programs, or to ensure that tenants have an adequate supply of safe drinking water when a contamination problem is found. The result is that many tenants cannot access these programs, and that they are not nearly as effective or equitable as they should be when a domestic well owner does not reside on-site, is unresponsive, or if they decline to receive these essential services.
>
> This bill would help ensure that a tenant living in areas where federal, state, or locally funded domestic well testing programs can access these programs, minimizing their potential

exposure to toxic chemicals, and improving the ability of state and regional partners to effectively address groundwater contamination and provide access to safe drinking water.

To fully realize the promise of the Human Right to Water, California must ensure that its most vulnerable—including renters who live in disadvantaged communities and have limited control over their water quality—have access to safe drinking water."

Arguments in opposition: None on file.

Related legislation:

1) AB 664 (Lee, Chapter 810, Statutes of 2023). Requires the owner of a domestic well that serves a rental property and is located within a drinking water system consolidation or extended service area, who does not provide written consent to the consolidation or extension of service, to ensure that tenants of rental properties served solely by their well have access to an adequate supply of safe drinking water.

2) SB 403 (Gonzalez, Chapter 242, Statutes of 2021). Authorizes the State Water Board to order the consolidation of at-risk domestic wells and at-risk water systems.

3) AB 508 (Chu, Chapter 352, Statutes of 2019). Makes changes to statute related to the State Water Board's authority to order the consolidation of drinking water systems, including setting a deadline of July 1, 2020 as the date by which the State Water Board must develop a policy that provides a process for members of a disadvantaged community to petition for consolidation, and deleting statute that required the State Water Board, before ordering consolidation or extension of service, to obtain written consent to the project from a domestic well owner.

4) SB 200 (Monning, Chapter 120, Statutes of 2019). Established the SADW Fund to help water systems provide an adequate and affordable supply of safe drinking water in both the near and the long terms.

5) SB 623 (Monning, 2017). Would have created the Safe and Affordable Drinking Water Fund, administered by the State Water Board, to assist communities and individual domestic well users to address contaminants in drinking water that exceed safe drinking water standards. This bill was held in the Assembly Rules Committee.

6) AB 685 (Eng, Chapter 524, Statutes of 2012). Declares that it is the established policy of the state that every human being has the right to clean, affordable, and accessible water adequate for human consumption, cooking, and sanitary purposes and requires that relevant state agencies, including the Department of Water Resources, the State Water Board, and the State Department of Public Health consider this policy when revising, adopting, or establishing policies, regulations, and grant criteria pertinent to the human uses of water.

REGISTERED SUPPORT / OPPOSITION:

Support

Clean Water Action (Co-Sponsor)
Community Water Center (Co-Sponsor)
Leadership Counsel for Justice and Accountability (Co-Sponsor)
Carbon Cycle Institute
Environmental Working Group
Human Impact Partners

Opposition

None on file.

Analysis Prepared by: Naomi Ondrasek / E.S. & T.M. /

Date of Hearing: April 23, 2024

ASSEMBLY COMMITTEE ON ENVIRONMENTAL SAFETY AND TOXIC MATERIALS
Eduardo Garcia, Chair
AB 2491 (Lee) – As Amended April 18, 2024

SUBJECT: Cosmetic products: safety

SUMMARY: Prohibits, beginning January 1, 2025, a person or entity from selling to a person under 13 years of age an over-the-counter skin care product or cosmetic product advertised to address skin aging that contains specified intentionally added ingredients. Specifically, **this bill**:

1) Prohibits, beginning January 1, 2025, a person or entity from selling to a person under 13 years of age an over-the-counter skin care product or cosmetic product advertised to address skin aging that contains either of the following intentionally added ingredients:

    a) Vitamin A and its derivatives, including, but not limited to, retinoids and retinol, and

    b) An alpha hydroxy acid, including, but not limited to, glycolic acid, ascorbic acid (vitamin C), or citric acid.

2) Requires a person or business that conducts business in California to take reasonable steps to ensure that the purchaser of a product described in this bill is not under the age of 13. Reasonable steps include, but are not limited to, all of the following:

    a) Placing a prominent notice next to the physical product or in the product's online description that states that the product is not meant for anyone under 13 years of age;

    b) Requires the purchaser to provide a date of birth or otherwise confirm their age before purchasing;

    c) Requiring the purchaser to use a non-prepaid credit card for an online purchase; and,

    d) Requiring the purchaser to verify their age by means of a valid form of identification that includes a photograph of the purchaser and their date of birth.

3) Provides that a person or entity who violates the provisions of the bill is liable for a civil penalty, not to exceed ten thousand dollars per day for each violation; provides that the civil penalty may be assessed and recovered in a civil action brought in any court of competent jurisdiction.

4) Requires the court, in assessing the amount of a civil penalty for a violation of the bill, to consider all of the following:

    a) The nature and extent of the violation;

    b) The number of, and severity of, the violations;

    c) The economic effect of the penalty on the violator;

d) Whether the violator took good faith measures to comply with this section and when these measures were taken;

e) The deterrent effect that the imposition of the penalty would have on both the violator and the regulated community as a whole; and,

f) Whether there were contributing environmental factors that a reasonable person knew or should have known about.

EXISTING LAW:

1) Prohibits, commencing January 1, 2009, a person or entity from manufacturing, selling, or distributing in commerce any toy or child care article that contains di-(2-ethylhexyl) phthalate, dibutyl phthalate, or benzyl butyl phthalate. (Health and Safety Code (HSC) § 108937 (a))

2) Prohibits, commencing January 1, 2009, a person or entity from manufacturing, selling, or distributing in commerce any toy or child care article intended for use by a child under three years of age if that product can be placed in the child's mouth and contains diisononyl phthalate, diisodecyl phthalate, or di-n-octyl phthalate. (HSC § 108937(b))

3) Prohibits, on and after July 1, 2013, a person from manufacturing, selling, or distributing in commerce any bottle or cup that contains bisphenol A (BPA) if the bottle or cup is designed or intended to be filled with any liquid, food, or beverage intended primarily for consumption from that bottle or cup by children three years of age or younger. (HSC § 108940)

4) Prohibits, on and after July 1, 2023, a person, including, but not limited to, a manufacturer, from selling or distributing in commerce in this state any new, not previously owned, juvenile product that contains regulated perfluoroalkyl and polyfluoroalkyl substances (PFAS). (HSC § 108946)

5) Requires, pursuant to the federal Food, Drug & Cosmetic Act (FD&C Act), cosmetics produced or distributed for retail sale to consumers for their personal care to bear an ingredient declaration. (21 Code of Federal Regulations § 701.3)

6) Defines, pursuant to the Sherman Food, Drug, Cosmetic Law (Sherman Act), "cosmetic" as any article, or its components, intended to be rubbed, poured, sprinkled, or sprayed on, introduced into, or otherwise applied to, the human body, or any part of the human body, for cleansing, beautifying, promoting attractiveness, or altering the appearance. Provides that the term "cosmetic" does not include soap. Makes it unlawful for any person to manufacture, sell, deliver, hold, or offer for sale any cosmetic that is adulterated. Makes it unlawful for any person to adulterate any cosmetic. Makes it unlawful for any person to receive in commerce any cosmetic that is adulterated or to deliver or proffer for delivery any such cosmetic. (HSC § 109900)

7) Requires, pursuant to the Safe Consumer Cosmetic Act (Cosmetics Act), a manufacturer of a cosmetic that is subject to regulation by the federal Food and Drug Administration (FDA) to submit to the California Department of Public Health (CDPH) a list of its cosmetic products sold in California that contain any ingredient that is a chemical identified as causing cancer or reproductive toxicity. (HSC § 111792)

FISCAL EFFECT: Unknown.

COMMENTS:

Need for the bill: According to the author, "Platforms such as TikTok and Instagram are filled with beauty influencers promoting makeup routines and skincare products, resulting in a phenomenon dubbed "Sephora Kids." Young children exposed to this content are driven to buy trendy products, including anti-aging skincare, that are targeted to adult skin concerns, without receiving proper information about the effects or science behind the skincare.

Social media has kicked off a trend of children using anti-aging products with powerful active ingredients that may be harmful to them. We're seeing this on both the national and international level. AB 2491 protects our youth from the unnecessary risks of using products that are not suitable for their skincare needs. These anti-aging products offer no benefits to children and preteens."

Federal cosmetics regulatory requirements: Neither the FDA nor CDPH require premarket safety testing, review, or approval of cosmetic products. Under the FD&C Act, cosmetics and their ingredients are not required to be approved before they are sold to the public, and the FDA does not have the authority to require manufacturers to file health and safety data on cosmetic ingredients or to order a recall of a dangerous cosmetic product.

Public health concerns with cosmetics: Cosmetic products are sold to consumers across California, including to children who are still in the formative years of development. These products are used as part of daily beauty and cleansing routines, often times on the skin's most sensitive areas, like the face, eyelids, and lips. Cosmetic products are most heavily used by women, including those of childbearing age, increasing the likelihood of exposing mothers, fetuses, and nursing children to substances that can cause cancer and reproductive toxicity. That is why it is so important that cosmetic products are safe, properly labeled, and free of contamination.

Recent social media trend dealing with cosmetics: Recently there has been a lot of media attention regarding young children purchasing and using anti-aging products and the main culprit is social media. To highlight this media coverage, below are two articles published in *USA Today*:

According to the article, "Young girls are flooding Sephora in what some call an 'epidemic.' So we talked to their moms," published January 20, 2024:

"People say that there's an 'epidemic' in the works, but not the infectious disease kind. Instead, it's swarms of preteens flooding Sephora stores across the country, ravaging makeup and skincare displays for Drunk Elephant and Rare Beauty products that some experts argue are not suitable for children.

Videos of young girls crowding Sephora aisles with baskets carrying hundreds of dollars worth of products have dominated TikTok for several weeks. People say the store looks like an elementary school for the beauty-obsessed 10-year-olds, some of whom have been caught treating employees poorly and destroying displays.

Nannies have chimed in with stories of parents giving them unlimited budgets to take their kids makeup shopping, a 'humbling and embarrassing' experience, one noted on TikTok, wondering 'when do we say enough is enough when it’s not our problem to say enough is enough?'"

According to the article, "Sephora kids are mobbing retinol, anti-aging products. Dermatologists say it's a problem," published on January 26, 2024:

"Kids are swarming Sephora and have never been more obsessed with skincare − and it might be a problem. Dermatologists say they're seeing more and more children as patients with several-step skincare routines, more-often filled with products they either don't need or that are harming their skin.

Dermatologist Dr. Brooke Jeffy recalls one patient, around age 11, who developed a severe rash around her eyes from retinol, an ingredient known for anti-aging, which she says the child insisted on using. 'This rash had been going on for so long and was so intense, it's probably going to take at least a month, if not more, to totally resolve,' Jeffy says. 'All for trying to use an anti-aging product that she doesn't need.'

Now, Jeffy and other dermatologists are sounding the alarm against a beauty industry and culture that are pushing unnecessary products and fears of aging onto children too young to even drive. 'They don't understand the function of skin and that it's not just this wall you can throw anything at,' Jeffy says. 'It's kind of word of reason − word of their parents, sometimes, word of me or other physicians − against this huge industry of beauty and social media.'

Jeffy says she's seen children who use up to eight products every morning. On TikTok, where she makes videos about the dangers of adult skincare for kids, she's seen some routines as long as 12 steps.

The ingredients that are the main culprits for harming kids' skin, she says, are retinol, exfoliating acids and fragrance, which can cause irritation and the development of contact allergies. 'When the skin barrier is damaged by constant irritation like this, it gets dry,' Jeffy says. 'It's more prone to infection, more prone to getting rashes and more prone to breakouts.' She adds irritation also makes the skin barrier less efficient at protecting the skin from environmental damage, like ultraviolet radiation or pollution.

Dermatologists will sometimes recommend retinoid products to teens and tweens to treat a specific condition, such as acne; however, these decisions, Jeffy says, are weighed by medical professionals against potential downsides. For anti-aging purposes, retinol is unnecessary for those who haven't reached their twenties, which is when collagen begins to decrease, Dr. Danilo Del Campo, a dermatologist in Chicago, says. Jeffy largely blames social media for kids' preoccupation with skincare and anti-aging products. She also says the pandemic, which put many work and school activities on Zoom, also likely played a role, since people are now frequently confronted with how their face looks on screen."

According to the article, *Kids exploring skincare may be a risk from influencers hyping incorrect products: UCLA experts advise a minimalist approach and an emphatic discussion with parents,* published January 25, 2024 on UCLA Health.org:

"TikTok, Instragram—the entirety of cyberspace—are awash with Generation Alpha (under age 13) 'influencers' advising tweens and teens to start a skincare routine post haste. Young consumers are taking it to heart. What's a parent to do when faced with their kids' request for expensive skincare serums and night creams?

UCLA Health's Carl Cheng, MD, assistant clinical professor of dermatology and board-certified dermatologist and pediatric dermatologist, and Jayden Galamgam, MD, board-certified dermatologist and pediatric dermatology fellow, offer important insights:

Q: What trends are you seeing in your practice among tweens and teens:

Dr. Cheng: Parents are bringing their pre-teens and teens in for skincare routines, even though they have no skin pathology of concern – no acne or eczema, etc. These visits are requested by children themselves who want a skincare routine, largely driven by what they have seen and heard from friends and on social media. Information is widely accessible, and so is misinformation.

Dr. Galamgam: I have noticed pre-teens and teens coming in with allergic contact dermatitis of the face. Contact dermatitis is a hypersensitivity reaction that can occur due to direct contact with an allergen. It manifests as red, scaly, itchy rashes in areas of exposure. This may suggest that patients are being exposed to facial ingredients that are causing these reactions.

Q: What is not appropriate for children's skin?

Dr. Cheng: Many products have what we call 'active' ingredients—like salicylic acid, retinols, peptides. They are more suitable for mature skin to target wrinkles or skin with specific concerns like acne. But for tweens and teens, these ingredients can do damage, irritate the skin and cause the reverse effects they are hoping to achieve.

Dr. Galamgam: Retinols and retinoids can sometimes be a problem for young children, especially if there is not a clinical indication such as acne. Retinols can sometimes cause retinoid dermatitis, a type of scaly rash. Additionally, retinols can make you susceptible to sunburn and sun damage."

Laws dealing with chemicals and children: Over the years, the Legislature has passed laws that are specific to young children. Particularly these laws have focused on prohibited certain chemicals to be in products that are used by young children. Following are a few bills that prohibit the sale of products to young children if they contain certain chemicals:

- *Phthalates in products for young children*: AB 1108 (Ma, Chapter 672, Statutes of 2007). Prohibits the use of phthalates in toys and childcare products designed for babies and children under three years of age. Requires manufacturers to use the least toxic alternative when replacing phthalates.

- *Product safety: BPA*: AB 1319 (Butler, Chapter 467, Statutes of 2011) Prohibits the sale, manufacture, or distribution of a bottle or cup or a liquid, food or beverage in a can, jar or plastic bottle that contains BPA if the item is primarily intended for children three years of age or younger. Requires manufacturers to use the least toxic alternative when replacing BPA in containers. The bill provides that if the Department of Toxic Substances Control adopts a regulatory response regarding the use of BPA in a product that is prohibited by this bill, then this law shall not apply to that product.

- *Product safety: juvenile products: chemicals: PFAS*: AB 652 (Friedman, Chapter 500, Statutes of 2021) prohibits, on or after July 1, 2023, a person from selling or distributing in commerce any new juvenile products that contain regulated PFAS. Defines PFAS as intentionally added PFAS or the presence of PFAS in a product or product component at or above 100 parts per million, as measured in total organic fluorine.

This bill: Prohibits, beginning January 1, 2025, a person or entity from selling to a person under 13 years of age, an over-the-counter skin care product or cosmetic product advertised to address skin aging that contains either of the specified intentionally added ingredients. The goal of the bill is to protect children from certain chemicals that may, especially due to their age and developmental state, be harmful to them. Even though these social media trends can be short-lived, anything on the internet could live forever. AB 2491 ensures that consumers are better informed and children are protected from potentially harmful chemicals.

Additional discussion: As the bill moves through the legislative process, the author may wish to continue a dialogue with stakeholders to provide more clarity on how a seller of cosmetics covered under the bill can comply with the bills requirements. Additionally, the bill is placed in a code section that does not have any state entity overseeing or enforcing it. The author may wish to consider state enforcement options, perhaps including placement under the Sherman Act.

Technical issue: The bill was recently amended to provide a list of options to sellers of cosmetics covered under the bill. However, the language requires a seller of these cosmetics to use all of the reasonable options provided. The intent was a menu of options that a seller could pick from in order to be in compliance with the bill. The rationale for this menu of compliance options is to provide the seller of cosmetics with flexibility and still inform the consumer. Going forward the author may wish to clarify that this is a menu of options by changing "all" to "any".

Arguments in support: According to the California Association of Professional Scientists:

"Common ingredients in anti-aging skin products are retinols, glycolic acid and ascorbic acid. These ingredients are used to improve the appearance of fine lines and wrinkles by boosting collagen production and increasing cell turnover. However, they can also cause skin irritations such as redness, itching, swelling, dryness, peeling, and potentially lead to topical dermatitis and eczema. Children do not benefit from these products so there is only potential for harm. There is also the concern that the irritation and damage to the skin barrier these products create damages the skin's ability to protect itself from sun exposure and the chronic irritation may accelerate changes in the skin associated with aging. Thus, a product that may have benefit in an adult offers only risk in a child because they do not have the damage these products address to begin with."

Arguments in opposition: According to a coalition in opposition to the bill:

"We commend Assemblymember Lee for raising this important issue and highlighting a concerning social media trend among preteens. Our organizations do not support children using anti-aging products.

While we recognize and share Assemblymember Lee's concerns about this trend, this bill presents significant practical issues with compliance and enforcement. AB 2491 bans a wide range of OTC [over-the-counter] cosmetic products without consideration of the concentrations of the targeted ingredients. Products including moisturizers, sunscreens and cleansers contain these ingredients at varying levels. As written, the onus is on a retail establishment or cashier to determine two things at point of sale—whether someone is under the age of 13, and whether the product they are purchasing is covered by this bill. The latter criteria requires knowledge of how the product is advertised. Ecommerce sales channels would further complicate enforcement of the proposed product sales restrictions.

We believe that manufacturers, retailers, and even parents have a role to play in ensuring children are using products that are appropriate for their skin. Cosmetic and personal care product manufacturers remain committed to consumer education and appropriate skin care regimens for all ages.

Again, we appreciate the intent of this bill. However, AB 2491 is seemingly impossible to comply with and unlikely to alleviate the impact of this social media trend."

Related legislation:

1) AB 2316 (Gabriel). Prohibits, beginning on July 1, 2025, a public school from offering, selling, or otherwise provide any food containing specified synthetic food dyes or titanium dioxide. This bill is pending action in the Assembly Environmental Safety and Toxic Materials Committee.

2) AB 2365 (Haney). Adds kratom products to the Sherman Act requires processors, as defined, to annually register their kratom products with the CDPH; requires a certificate of analysis from an accredited independent laboratory as part of the registration confirming kratom products meet the specified requirements; establishes labeling and packaging requirements for kratom products; and prohibits the sale of kratom products to individuals under 21 years of age. This bill is pending action in the Assembly Environmental Safety and Toxic Materials Committee.

3) AB 652 (Freidman, Chapter 500, Statutes of 2021). Prohibits, on or after July 1, 2023, a person from selling or distributing in commerce any new juvenile product that contains PFAS.

4) AB 1319 (Butler, Chapter 467, Statutes of 2011). Prohibits the sale, manufacture, or distribution of a bottle or cup or a liquid, food or beverage in a can, jar or plastic bottle that contains BPA if the item is primarily intended for children three years of age or younger.

5) AB 1108 (Ma, Chapter 672, Statutes of 2007). Prohibits the use of phthalates in toys and childcare products designed for babies and children under three years of age. Requires

manufacturers to use the least toxic alternative when replacing phthalates in accordance with this law.

REGISTERED SUPPORT / OPPOSITION:

Support

California Association of Professional Scientists
California Nurses for Environmental Health and Justice
Center for Environmental Health
Childrens Advocacy Institute
Cleanearth4kids.org
Consumer Attorneys of California
Consumer Federation of California
Environmental Working Group
FACTS: Families Advocating for Chemical & Toxics Safety
GMO Science
Just the Goods
Moms Advocating Sustainability
Non-toxic Neighborhoods
Pink Panthers
Recolte Energy
Social Eco Education
The Keep a Breast Foundation

Opposition

Cal Chamber
California Manufacturers & Technology Association
California Retailers Association
California Trucking Association
Civil Justice Association of California
Personal Care Products Council

Analysis Prepared by: Josh Tooker / E.S. & T.M. /

Date of Hearing: April 23, 2024

ASSEMBLY COMMITTEE ON ENVIRONMENTAL SAFETY AND TOXIC MATERIALS
Eduardo Garcia, Chair
AB 2513 (Pellerin) – As Amended April 17, 2024

SUBJECT: Gas stoves and ranges: warning label

SUMMARY: Prohibits a person from selling or offering for sale a gas stove that is manufactured or sold online on or after January 1, 2025, or sold in a store on or after January 1, 2026, unless that gas stove contains a specified warning label. Specifically, **this bill**:

1) Defines "gas stove" as a household natural gas stove or range that is used for food preparation and provides at least one of the following functions:

   a) Surface cooking;

   b) Oven cooking; or,

   c) Broiling.

2) Defines "QR code" as a machine-readable code consisting of an array of squares used for storing an internet website address.

3) Prohibits a person from selling, attempting to sell, or offering to sell to a consumer in this state a gas stove that is manufactured or sold online on or after January 1, 2025, or sold in a store on or after January 1, 2026, unless a label on the gas stove bears the following statement:

   "WARNING: A gas stove or oven range in use can release nitrogen dioxide, carbon monoxide, and benzene inside homes at rates that lead to concentrations exceeding the standards of the Office of Environmental Health Hazard Assessment and the United States Environmental Protection Agency for outdoor air quality. Breathing these pollutants can exacerbate preexisting respiratory illnesses and increase the risk of developing leukemia and asthma, especially in children. To help reduce the risk of breathing harmful gases, allow ventilation in the area and turn on a vent hood when gas-powered stoves and ranges are in use."

4) Requires the warning label above to be attached to the gas stove in a conspicuous location and be in a type size and font no smaller than the largest type size and font used for other consumer information on the product.

5) Requires the warning label required by this bill to include a QR code with a link to the website of the California Air Resources Board (ARB), specifically to their webpage dealing with indoor air pollution and cooking.

6) Requires an internet website, before transacting an online sale of a gas stove to an address in California, to prominently post for the prospective purchaser the content of the warning label required by this bill.

EXISTING LAW:

1) Defines "person" as any person, firm, association, organization, partnership, business trust, corporation, limited liability company, or company. (Health and Safety Code (HSC) § 19)

2) Requires a warning label to be affixed near the thermostat of all new water heaters to be sold in the state for residential use. This warning shall read as follows:

   "Warning: Setting of the water heater thermostat in excess of 130 degrees Fahrenheit or 54 degrees centigrade may cause accidental scalding or other injury, particularly to children or elderly persons." (HSC § 108525)

Under the California Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65):

3) Prohibits, a person, in the course of doing business, from knowingly and intentionally exposing any individual to a chemical known to the state to cause cancer or reproductive toxicity without first giving clear and reasonable warning to such individual. (HSC § 25249.6)

4) Requires the Governor, on or before March 1, 1987, to publish a list of chemicals known to the state to cause cancer or reproductive toxicity and to revise and republish it in light of additional knowledge, at least once per year thereafter. (HSC § 25249.8)

5) Requires manufacturers of upholstered furniture to indicate, on a label currently required by law, whether or not the product contains added flame retardant chemicals. (Business & Professions Code § 19094)

FISCAL EFFECT: Unknown.

COMMENTS:

Need for the bill: According to the author, "The emissions from the use of gas stoves inside without the proper ventilation can lead to multiple health problems for Californians. The EPA states exposure to nitrogen dioxide can result in decreased lung function in those with chronic pulmonary diseases, development of acute/chronic bronchitis, and increased probability of developing asthma in children by 24%. In order to prevent excessive exposure to nitrogen dioxide, carbon monoxide and other carcinogenic byproducts that cause harmful health effects, AB 2513 will require consumer warning labels for all new gas stoves sold in California.

The labels will inform consumers of the hazards associated with gas stoves and oven appliances. This will allow for an increased vigilance in installing and proper use of gas stoves in order to prevent undue exposure. Similarly by making this information available to consumers at the point of sale, it will help the purchaser make more informed decisions."

Proposition 65: Proposition 65, officially known as the Safe and Drinking Water and Toxic Enforcement Act of 1986, was enacted as a ballot initiative in November 1986. Proposition 65 requires the state to maintain and update a list of chemicals known to the state to cause cancer or reproductive toxicity; protects the state's drinking water sources from being contaminated with chemicals known to cause cancer, birth defects, and other reproductive harm, and, requires businesses to inform Californians about exposure to such chemicals. The Office of Health Hazard Assessment (OEHHA) is the lead agency for implementation of Proposition 65 and has the authority to adopt and modify regulations as necessary. According to OEHHA, the

Proposition 65 list contains a wide range of naturally occurring and synthetic chemicals including additives or ingredients in pesticides, common household products, food, drugs, dyes, or solvents.

Proposition 65 from household appliances: According to OEHHA's website, exposure to Proposition 65-listed chemicals from household appliances can occur in the following ways:

- Appliances that use natural gas, such as some ranges, dryers, and hot water heaters, may emit benzene, carbon monoxide, or formaldehyde when in use. Benzene is present in natural gas, and carbon monoxide and formaldehyde are created when natural gas is burned. Consumers may be exposed to significant amounts of these chemicals, especially if the appliances are not properly vented.
- Some flame retardants and phthalates may be present in plastic components of appliances.
- Proposition 65 chemicals may also be present in enclosed components of the appliance (such as printed circuit boards). During normal use, consumer exposure to these chemicals is expected to be negligible.

The main ways a person can be exposed to Proposition 65-listed chemicals from household appliances are:

- Breathing in air or dust that contain chemicals;
- Transferring chemicals from the hands to the mouth, and swallowing;
- Touching surfaces or dust that contain chemicals and absorbing them through the skin; and,
- During pregnancy, some of these chemicals can pass from mother to baby.

Indoor air contamination from cooking: According to the California Air Resources Board (ARB),

> "People use a variety of heat sources to cook food, including gas, wood, and electricity. Each of these heat sources can create indoor air pollution during cooking. Natural gas stoves can release carbon monoxide, formaldehyde and other harmful pollutants into the air, which can be toxic to people and pets. Using a wood stove or fireplace to cook can result in high levels of indoor air pollution from wood smoke.
>
> Cooking can also generate unhealthy air pollutants from heating oil, fat and other food ingredients, especially at high temperatures. Self-cleaning ovens, whether gas or electric, can create high levels of pollutants as food waste is burned away. Exposure to these can cause or worsen a wide range of health problems such as nose and throat irritation, headaches, fatigue and nausea. Young children, people with asthma and people with heart or lung disease are especially vulnerable to the harmful effects of indoor air pollution.
>
> Studies show that air can be unhealthy to breathe when people cook in kitchens with poor ventilation. The best way to ventilate your kitchen is to use a properly-installed, high efficiency range hood over your stove. A high efficiency range hood has a high cubic feet per minute (cfm) rating and a low sones (noise) rating. If you have a gas stove, a qualified technician should inspect it every year for gas leaks and carbon monoxide.

Ways to improve ventilation in your kitchen:

- If you have a range hood: check to make sure it vents to the outdoors; use it while cooking or using your stove; and, cook on the back burners, if possible, because the range hood exhausts this area more effectively.
- If you don't have a range hood: use a wall or ceiling exhaust fan while cooking, open windows and/or exterior doors to improve air flow through the kitchen."

Health concerns from gas stoves: According to the article, "Gas Stove Emissions Are a Public Health Concern: Exposure to Indoor Nitrogen Dioxide Increases Risk of Illness in Children, Older Adults, and People with Underlying Health Conditions" published November 8, 2022, by the American Public Health Association:

> "Natural gas stoves generate a number of harmful air pollutants, with nitrogen dioxide (NO_2) most consistently identified in the scientific literature. Multiple high-quality scientific studies have shown that NO_2 concentrations are higher in homes that use gas stoves and that cooking with gas stoves without ventilation can result in home NO_2 concentrations that are above the ambient air quality standards of the [US] Environmental Protection Agency (EPA). The [US] EPA has determined that NO_2 is "causal" of more severe respiratory symptoms in people with asthma and that long-term exposure to NO_2 is "likely causal" of respiratory illnesses such as asthma. Furthermore, epidemiological studies have shown that gas stoves are associated with an increased risk of asthma in children as well as more severe asthma symptoms. Despite this evidence, few safeguards are in place to protect the health of the public from gas stove emissions, particularly in overburdened and underserved communities. While comprehensive federal law regulates outdoor air quality in the United States, there are no federal indoor air quality guidelines, and few state or local policies address indoor air pollution. Those living in smaller, older, less ventilated homes are at higher risk of the effects of indoor air pollutants from a variety of sources, introducing a disproportionate risk of illness among lower-income populations and people of color. Along with other healthy home improvements, health experts should advocate for an equitable, multipronged approach to combat indoor air pollution from gas stoves, including policy change, program development, education about emission mitigation, and investment.
>
> An effective way to inform the public of the risk of gas stove emissions and effective remediation strategies is to require disclosures at the point of sale or when rental and lease agreements are signed. Thirty-seven states require the presence of radon to be disclosed during real estate transactions, and four states require tenant disclosures. HUD [US Department of Housing and Urban Development] requires information about radon be provided for all Federal Housing Administration insured forward mortgages. This requirement is estimated to reach millions of people buying homes.
>
> Another policy lever is to better regulate gas stoves and ventilation. The Institute for Policy Integrity at the New York University School of Law, citing health-harming emissions of gas stoves, recently called upon the Consumer Product Safety Commission (CPSC) to develop mandatory performance standards for gas stoves and range hoods, require warning labels for gas stoves, and educate the public about the harms of gas stove emissions."

Other statutory labeling requirements: Senate Bill (SB) 1019 (Leno, Chapter 862, Statutes of 2014) requires manufacturers of upholstered furniture to indicate, on a label currently required

by law, whether or not the product contains added flame retardant chemicals. SB 1019 requires all upholstered and reupholstered furniture to contain the following label:
"The upholstery materials in this product:
_____contain added flame retardant chemicals
_____contain NO added flame retardant chemicals

The State of California has updated the flammability standard and determined that the fire safety requirements for this product can be met without adding flame retardant chemicals. The state has identified many flame retardant chemicals as being known to, or strongly suspected of, adversely impacting human health or development."

Additionally, SB 1019 requires Bureau of Electronic and Appliance Repair, Home Furnishings, and Thermal Insulation (BEARHFTI) to ensure compliance with the labeling and documentation requirements in this bill. Since passage of SB 1019, BEARHFTI has been re-named the Bureau of Household Goods and Services (BHGS).

This bill is placed in a code section that does not have a state entity ensuring compliance or enforcement. As the bill moves through the process, the author may wish to consider placing the labeling requirements under a state entity such as BHGS.

This bill: AB 2513 does not ban gas stoves. The bill provides consumers with information relating to pollutants associated with using a gas stove and how to mitigate potential harm from those pollutants. Currently there are no federal or state indoor air quality standards for stoves or ranges (either gas or electric). Until there are such standards, providing consumers with a warning and a way to mitigate that potential for harm is a good first step.

Arguments in support: According to the California Public Interest Research Group (CALPIRG),

> "AB 2513 would require all gas stoves manufactured on or after January 2025 and sold in California to have a warning label detailing the health risks associated with pollutants emitted from gas stoves.
>
> More than four decades of research shows that gas stoves are producing dangerous air pollution indoors – increasing the risk of childhood asthma and other respiratory problems, but this risk has largely been hidden from the public. Consumers deserve the truth when it comes to the danger of cooking with gas stoves. The kitchen should be a place of bonding – not a place where our families are exposed to toxic pollution that can make us sick.
>
> A growing body of evidence on the respiratory and other health risks associated with gas stove pollution has led the American Medical Association, the American Public Health Association, and Physicians for Social Responsibility to raise the alarm, and the Consumer Product Safety Commission has recently opened an investigation into the health risks and potential opportunities to mitigate harm.
>
> Gas stoves emit harmful levels of nitrogen dioxide, carbon monoxide, methane, and benzene. Recent Stanford studies found that gas stoves can emit carcinogenic benzene levels above those found in secondhand smoke and nationally, gas stoves have the same climate impact equivalent to 500,000 gasoline-powered cars.

A study from the nonprofit group RMI found that 20% of childhood asthma cases in California are attributable to gas stove use. Despite all these studies, lack of education and federal regulations leave consumers largely unaware of the risks associated with gas stove cooking."

Arguments in opposition: According to the Association of Home Appliance Manufacturers and the California Building Industry Association,

"The undersigned organizations are writing to inform you of our opposition to AB 2513 (Pellerin), legislation that would require a warning label on gas cooking appliances. This legislation is unnecessary as existing standards provide consumers with robust protection from gas cooking emissions.

Gas cooking is an affordable and preferred technology used in 40 percent of U.S. homes. All cooking products, including gas ranges and cooktops, meet or exceed current safety standards and building code requirements. Effective ventilation is key to enhancing indoor air quality. Recent building code updates have focused on improving ventilation in newer homes, which are constructed to be more airtight than older homes.

Indisputably and by far the most important improvement in indoor air quality related to cooking of any type is improved ventilation, primarily, but not exclusively, to deal with particulate matter, especially PM2.5, emitted during both gas and electric cooking and originating in the foodstuffs cooked.

We support further public educational campaigns aimed at building owners, consumers, public housing authorities, and other entities to install and use improved ventilation in residences, including, but not limited to, the proper use and installation of ventilation devices such as exhaust hoods and fans.

Though we are opposed to AB 2513, we remain committed to the development of standards. Regardless of the fuel type used for cooking, the appropriate installation and use of improved ventilation in residences, such as exhaust hoods and fans, is key to the enhancement of indoor air quality."

Related legislation:

AB 1019 (Leno, Chapter 862, Statutes of 2014). Requires manufacturers of upholstered furniture to indicate, on a label currently required by law, whether or not the product contains added flame retardant chemicals.

REGISTERED SUPPORT / OPPOSITION:

Support

CALPIRG, California Public Interest Research Group (Sponsor)
A Cecilia Mogal, Medical Doctor
Active San Gabriel Valley
Adriana Gardner, Pharmacist
Alexander Chang, Pre-health Student

Amanda Millstein, Medical Doctor
American Lung Association in California
Angelina Crans Yoo, Medical Doctor
Ann Harvey, Medical Doctor
Ashley Mcclure, Medical Doctor
Breast Cancer Prevention Partners
Brenda Nuyen, Medical Doctor
Bret Andrews, Doctor of Osteopathy
Brianna Egan, Medical Student and Nutritionist
Bruce Bekkar, Medical Doctor
C Freeman, Medical Doctor
California Environmental Voters (formerly CLCV)
Carmen Morales Board, Nurse Practitioner
Center for Climate Change & Health
Chelsea Young, Medical Doctor
Cindy Russell, Medical Doctor
Clean Water Action
Cleanearth4kids.org
Climate Health Now
Climate Reality Project - Silicon Valley Chapter
Coalition for Clean Air
Condessa Curley, Medical Doctor
Cynthia Mahoney, Medical Doctor
Daniel Nguyen, Medical Doctor
David Bezanson, Phd
Day One
Deirdre Bernard-Pearl, Medical Doctor
Diane Chau, Medical Doctor
Dougal Mackinnon, Medical Doctor
Ellen Leng, Medical Doctor
Environmental Working Group
Eve Yalom, Medical Doctor
Evelie Posch, Religious Leader/healer
Facts: Families Advocating for Chemical & Toxics Safety
Forward Dining Solutions LLC
Hina Fullar, Medical Doctor
Ilana Murphy, Acupuncturist
Jeffrey Mann, Medical Doctor
Jennifer Graber, Medical Doctor
Jonathan Lu, Medical Doctor
Joseph Eichenseher, Medical Doctor
Julio Lopez, Medical Student
Katrina Saba, Medical Doctor
Knox Kelly, Medical Doctor
Lara Wright, Medical Doctor
Latino Coalition for A Healthy California
Lawrence Nathan, Medical Doctor
Leslie Klein, Medical Doctor
Marc Futernick, Medical Doctor

Margie Chen, Medical Doctor
Marty Lynch, Healthcare Administrator
Melanie Schimpf, Public Health
Michael Harris, Medical Doctor
Morgan Theis, Medical Doctor
Nan Yarbrough, Mental Health Professional
Nneoma Ojiaku, Medical Doctor
Physicians for Social Responsibility - San Francisco Bay Area Chapter
Protect Playa Now!
Rachel Abbott, Medical Doctor
Regional Asthma Management & Prevention
Rosalind Harder, Social Worker
Rupa Basu, Public Health
Samir Thadani, Medical Doctor
Sandiego350
Sandra Rubin, Medical Doctor
Sheila Tarbet, Public Health
Shuinn Chang, Nurse Practitioner
So Cal 350 Climate Action
Susan Steinbrecher, Licensed Vocational Nurse
Sustainable Claremont
Tara Dade, Physician Assistant
Terri Olson, Public Health
Thea Spitzer, Healthcare Administrator
Vanessa Forsythe, Registered Nurse
Venise Curry, Medical Doctor
Vista Shakiba, Medical Doctor
Vote Solar
William Pevec, Medical Doctor
Zerocarbonma
Zoe Novic, Public Health

Opposition

Association of Home Appliance Manufacturers

Analysis Prepared by: Josh Tooker / E.S. & T.M. /

Date of Hearing: April 23, 2024

ASSEMBLY COMMITTEE ON ENVIRONMENTAL SAFETY AND TOXIC MATERIALS
Eduardo Garcia, Chair
AB 2671 (Weber) – As Amended April 18, 2024

SUBJECT: Family daycare homes: filtered water

SUMMARY: Requires licensed family daycare homes (also known as family child care homes, or FCCHs) to only serve children with water, or food prepared with water, that has been filtered using a point-of-use (POU) water filtration device certified to meet National Sanitation Foundation/American National Standards Institute (NSF/ANSI) standards for lead reduction; and requires the California Department of Social Services (CDSS) to adopt regulations, as specified, to implement the requirements of AB 2671. Specifically, **this bill**:

1) Requires, commencing January 1, 2027, a licensed FCCH that operates in a building constructed before January 1, 2010 to only serve water to children or use water in food preparation for children in the care of the FCCH that has been filtered with a POU water filtration device certified to meet NSF/ANSI standards for lead and particulate reduction, as required by CDSS.

2) Requires, on or before January 1, 2026, CDSS to develop, in consultation with the State Water Resources Control Board (State Water Board), and adopt regulations to implement the requirements of AB 2671; requires the regulations to do all of the following:

    a) Specify required NSF/ANSI standards for lead and particulate reduction for POU water filtration devices to be used by FCCHs, and provide information on how to verify a POU water filtration device was tested and certified to meet those standards;

    b) Update the regulations to ensure they reflect the most up-to-date NSF/ANSI standards, if the standards are replaced with newer standards, or if they undergo updates that have implications, as determined by CDSS, for the installation, use, or maintenance of POU water filtration devices by an FCCH;

    c) Establish parameters for the proper installation, use, and maintenance of POU water filtration devices, including the proper use of flushing after installation of a new filter, replacement of a filter cartridge, or periods of stagnation, in order to reduce human exposure to bacteria and lead;

    d) Include a statement in communications to FCCHs that POU water filtration devices may be a short-term control measure for lead in drinking water, and encourage FCCHs to consider other options for long-term or permanent control measures, including, but not limited to, fixture or pipe replacement;

    e) Require FCCHs to maintain records and receipts, to be provided to CDSS during scheduled inspections, demonstrating that all POU water filtration devices have been installed, used, and maintained, including that filter cartridges have been replaced, pursuant to CDSS' regulations;

f) Require maintenance records to include a document, posted and clearly visible near the front door of the facility, that displays the dates that filter cartridges were replaced;

g) Require CDSS to develop form templates to facilitate the compliance of FCCHs with the above record-keeping requirements;

h) Specify that an FCCH is exempt from the regulatory requirements established pursuant to AB 2671, if the FCCH can provide two rounds of test results from a laboratory accredited under the state's Environmental Laboratory Accreditation Program (ELAP) showing that, within the one year prior to submission of the results to CDSS, the lead level in drinking water in the FCCH did not exceed 1 ppb; and,

i) Require CDSS to take one or more of the following actions if an FCCH does not comply with the regulations established pursuant to AB 2671:

   A) Issue a letter of violation to an FCCH if, during any inspection, CDSS determines that the FCCH's records and receipts do not show installation, use, or maintenance in accordance with the regulations established pursuant to AB 2671;

   B) Require, if the letter of violation indicates that an FCCH has not installed POU water filtration devices, the FCCH to submit to CDSS, within five business days of receiving a letter of violation, documentation demonstrating that POU filters have been installed;

   C) Require, if the letter of violation indicates that an FCCH has failed to use or maintain POU water filtration devices, the FCCH to submit to CDSS, within 210 days, documentation demonstrating six months of use and maintenance of the POU water filtration devices;

   D) Require, if CDSS determines that an FCCH has not complied with the above requirement to submit documentation within 210 days, an FCCH to test, as soon as possible, for lead in drinking water at all POU water filtration devices to determine if the POU filters are reducing lead to below 5 ppb; require CDSS to develop requirements for the collection and submission of water samples by an external water sampler, certified according to procedures determined by CDSS, to an ELAP-accredited laboratory; and, require a laboratory receiving a drinking water sample to electronically submit its test results to the State Water Board using data submission methods that are acceptable to the State Water Board;

   E) Require CDSS to require an FCCH to notify the parents or legal guardians of children in the care of the FCCH of a requirement to conduct lead testing, within five business days of being issued the requirement by CDSS, and to notify parents or legal guardians of the test results within five business days after receiving the results from the laboratory;

   F) Require CDSS to require an FCCH with lead levels above 5 ppb to immediately ensure that the children in the care of the FCCH are only being served an alternative source of potable water and that an alternative source of potable water is used to prepare all food served to children, until the FCCH can provide records and receipts showing that filter cartridges have been replaced for all POU water filtration devices;

requires an alternative source of potable water, which may include bottled water, to contain a lead level below 5 ppb; and,

G) Require CDSS to temporarily suspend the license for an FCCH that does not comply with one or more of the above corrective actions specified in AB 2671.

3) Requires CDSS to provide, to FCCHs, a list of POU water filtration devices that meet the requirements established under regulations adopted pursuant to AB 2671.

4) Requires the State Water Board to report to CDSS the lead test results for an FCCH with lead levels above 5 ppb, in a timely manner.

5) Requires CDSS to include a public stakeholder process in developing the regulations required under AB 2671.

6) Authorizes CDSS to implement and administer changes made by AB 2671 through all-county letters or similar written instructions, until regulations are adopted.

7) Requires, on or before July 1, 2029, CDSS to submit a report to the Legislature that includes all of the following:

   a) The annual percentage and total number of FCCHs that were exempt from the requirements established by AB 2671;

   b) The annual percentage and total number of FCCHs that were issued only a letter of violation;

   c) The annual percentage and total number of FCCHs that were issued a letter of violation followed by a temporary license suspension, disaggregated by the reason for the temporary license suspension; and,

   d) The annual percentage and total number of FCCHs with test results showing lead levels in drinking water above 5 ppb.

8) Provide that the requirement for submitting the above report is inoperative on July 1, 2033.

9) Authorizes funds from the United States Environmental Protection Agency's (US EPA) Voluntary School and Child Care Lead Testing and Reduction Grant Program in 2024-25, 2025-26, and 2026-27 fiscal years to be used to provide POU water filtration devices to FCCHs; requires funding priority to be given to FCCHs that primarily care for low-income children; and, requires that filters meet the requirements established by regulations, adopted pursuant to AB 2671.

EXISTING LAW:

1) Establishes as policy of the state that every human being has the right to safe, clean, affordable, and accessible water adequate for human consumption, cooking, and sanitary purposes. (Water Code § 106.3)

2) Defines "point-of-use treatment device" or "POU" to mean a treatment device applied to a single tap for the purpose of reducing contaminant levels in drinking water at that tap. (22 California Code of Regulations (CCR) § 64417)

3) Requires a public water system, prior to installing POUs, and as part of a permit application to use POU in lieu of centralized treatment, to submit to the State Water Board a POU Monitoring Program sufficient to ensure that water treated by the proposed POU consistently meets drinking water standards. (22 CCR § 64418.5)

4) Establishes the "California Child Day Care Facilities Act," creating a separate licensing category for child daycare centers and FCCHs within CDSS' existing licensing structure. (Health and Safety Code (HSC) § 1596.70, et seq.)

5) Defines "child daycare facility" to mean a facility that provides nonmedical care to children under 18 years of age in need of personal services, supervision, or assistance for sustaining the activities of daily living or for the protection of the individual on less than a 24-hour basis, and includes daycare centers, employer-sponsored child care centers, and FCCHs. (HSC § 1596.750)

6) Defines "family daycare home" to mean a facility that regularly provides care, protection, and supervision for 14 or fewer children, including children under 10 years of age who reside at the home, in the provider's own home, for periods of less than 24 hours per day, while the parents or guardians are away. (HSC § 1596.78(a))

7) Requires the installation of point-of-entry or POU treatment devices for drinking fountains, and up to three years of post-installation replacement filters, and operations, maintenance, and monitoring of the devices, including training on how to operate and maintain the treatment devices in local educational agencies serving kindergarten or any of grades 1-12, inclusive, and preschools and child daycare facilities located on public school property. (HSC § 116276(a)(3))

8) Requires licensed child daycare facilities to comply with certain requirements for beverages served by the daycare provider to the children in care, including ensuring the availability and accessibility of readily available clean and safe drinking water throughout the day. (HSC § 1596.808(a)(4))

9) Requires drinking water from a non-contaminating fixture or container in child care centers to be readily available both indoors and in an outdoor activity area; requires all drinking water to be potable, as specified. (22 CCR § 101239.2)

10) Requires at least one director or teacher at each daycare center, and each FCCH licensee who provides care to have at least 15 hours of health and safety training, including a preventative health practices course regarding the prevention of lead exposure that is consistent with the most recent California Department of Public Health's (CDPH) training curriculum on child care lead poisoning prevention. (HSC § 1596.866)

11) Requires a licensed child daycare center that is located in a building constructed before January 1, 2010 to have its drinking water tested for lead contamination levels on or after January 1, 2020, but no later than January 1, 2023, and every five years after the date of the initial test. (HSC § 1597.16(a)(1))

12) Requires a licensed child daycare center subject to HSC § 1597.16(a)(1) to collect and submit drinking water samples to an accredited laboratory; requires the laboratory to, in a timely manner, electronically submit its test results to the State Water Board; and if the test results show elevated levels, requires the State Water Board to report, in a timely manner, the test results to CDSS. (HSC § 1597.16(a)(2)(A))

13) Requires, upon notification of elevated lead levels, a licensed child daycare center to immediately make inoperable and cease using the fountains and faucets where elevated lead levels may exist, and to obtain a potable source of water for children and staff. (HSC § 1597.16(a)(3))

14) Requires a licensed child daycare center to notify parents or guardians of children enrolled in the center of the requirement to test a facility's drinking water and of the test results. (HSC § 1597.16(a)(4))

15) Requires the State Water Board to provide grants for testing drinking water lead levels in licensed child daycare centers, remediating lead in child daycare centers' drinking water systems, and providing technical assistance to child daycare centers requiring help applying for the grants, from any funds appropriated for these purposes in the 2018-19 Budget Act. (HSC § 1596.8661)

16) Prohibits the use of any pipe, pipe or plumbing fitting or fixture, solder, or flux that is not "lead free" in the installation or repair of any public water system or any plumbing in a facility providing water for human consumption. (HSC § 116875(a))

17) Defines "lead free" as not containing more than 0.2% lead when used with respect to solder and flux and not more than a weighted average of 0.25% lead when used with respect to the wetted surfaces of pipes and pipe fittings, plumbing fittings, and fixtures. (HSC § 116875(e))

18) Defines, for the purposes of the federal Lead and Copper Rule (LCR), "child care facility" to mean a location that houses a licensed provider of child care, daycare, or early learning services to children, as determined by the state, local, or tribal licensing agency. (40 Code of Federal Regulations (CFR) § 141.2)

19) Requires all community water systems to conduct lead monitoring at the schools and child care facilities they serve if those schools or child care facilities were constructed prior to January 1, 2014, or the date the state adopted standards that meet the definition of "lead free" under the federal Safe Drinking Water Act, whichever is earlier. (40 CFR § 141.92)

20) Requires a community water system to collect five samples per school and two samples per child care facility at outlets typically used for consumption; prohibits, except under specified conditions, outlets from having POU devices. (40 CFR § 141.92(b)(1))

21) Requires community water systems to collect samples from at least 20% of elementary schools and 20% of child care facilities served by the system per year, or according to a schedule approved by the state, until all schools and child care facilities identified on a list required under the LCR have been sampled or declined to participate. (40 CFR § 141.92(c)(1))

22) Requires community water systems to sample all elementary schools and child care facilities at least once in the five years following October 16, 2024. (40 CFR § 141.92(c)(2))

23) Requires community water systems, after they have completed one cycle of sampling in all elementary schools and child care facilities, to sample at the request of an elementary school or child care facility. (40 CFR § 141.92(c)(3))

FISCAL EFFECT: Unknown.

COMMENTS:

Need for the bill: According to the author:

> "We know that no level of lead exposure is safe and that it is linked to slowed growth and development of children, and that it damages the brain and nervous system. Children are some of the most vulnerable residents in our state, and we cannot continue to allow them to be unintentionally poisoned in the same facilities where they are cared for.
>
> For these reasons, AB 2671 requires a licensed family daycare home to only serve water to children, or use water in food preparation for the family daycare home that has been filtered with a point-of-use water filtration device certified to meet National Sanitation Foundation of the American National Standards Institute (NSF/ANSI) standards for water safety, and that explicitly claims to remove lead.
>
> The bill also requires the family daycare home to maintain records and receipts demonstrating that the water filtration device has been maintained, and its filters replaced."

Human right to water: With the enactment of AB 685 (Eng, Chapter 524, Statutes of 2012), California became the first state in the nation with a Human Right to Water law. AB 685 established a state policy that every human being has the right to safe, clean, affordable, and accessible water adequate for human consumption, cooking, and sanitation. However, water supply issues, climate change, contaminants, aging infrastructure, and failing and at-risk systems, especially in disadvantaged communities, are among the multiple factors that continue to challenge progress in implementing the Human Right to Water.

Short- and long-term consequences of childhood lead exposure: According to the Centers for Disease Control and Prevention (CDC), there is no safe level of lead in drinking water and even very low levels can have negative and irreversible health effects, especially for children and pregnant persons. Because of lead's health impacts, the US EPA maintains a maximum contaminant level goal of zero, and some organizations, such as the American Association of Pediatrics, have called for national and state efforts to bring lead levels in drinking water closer to zero ppb. The CDC states that childhood lead exposure can seriously harm a child's health and cause well-documented adverse effects, including brain and nervous system damage, slowed growth and development, learning and behavior problems, and hearing and speech problems.

While children, pregnant persons, and developing fetuses are particularly susceptible to the harmful effects of lead, lead in blood can also result in an increased risk of cardiovascular disease, high blood pressure, and kidney and nervous system problems for adults. Because the human body can store lead in bone, even temporary environmental exposures in childhood can

result in many years to decades of recurring or ongoing elevations in blood lead levels (BLLs). One study by Nie et al. (2009), published in the *Journal of Occupational and Environmental Medicine*, reported that lead stored in bone can release back into the blood, resulting in elevated BLLs during periods of illness (e.g., with skeletal or dental disease) and during multiple life stages, including childhood, pregnancy, lactation, and menopause.

Inequities in childhood lead exposure: According to the CDC, people with low incomes and people of color are more likely to live in neighborhoods with outdated infrastructure, and are thus more likely to be exposed to lead-based paint and pipes, faucets, and plumbing fixtures containing lead. Evens et al. (2015) found that among nearly 58,000 children attending Chicago public schools, BLLs were highest in black children (relative to Hispanic and white children) and higher in low-income children.

Children from low-income families and communities of color can also be further disadvantaged through the cumulative impacts of lead and other challenges they may face, including higher rates of poverty, malnutrition, exposure to multiple pollutants, and enrollment in under-resourced schools. A 2020 study published in *Nature Medicine* (Marshall et al.) reported that the combination of lead exposure and being from a low-income family can result in worse impacts for children, when compared to children who have only one of these risk factors. Specifically, children from low-income families and with the highest risk levels for lead exposure showed reduced cognitive performance and changes in parts of the brain that regulate the capacity for problem solving, planning, critical thinking, and memory.

In California, the Childhood Lead Poisoning Prevention (CLPP) Program, administered by CDPH, carries out prevention activities including outreach, education, and surveillance; promotes lead screening for children at risk for lead exposure; and provides case management and follow-up for children with elevated BLLs (i.e., BLLs greater than or equal to 4.5 micrograms per deciliter (μg/dL)). In its 2022 Biennial Report, "California's progress in preventing and managing childhood lead exposure," CDPH states:

> "…lead poisoning does not impact all children equally. Children living in poverty, children enrolled in Medicaid, children living in older housing, and African American children, are found to have higher levels of lead exposure. Geographic disparities are also present…Thus, while considerable progress has been made in reducing lead exposure and decreasing the prevalence of children with elevated BLLs in the United States, elevated childhood BLLs remain a major preventable environmental health problem. Preventing all childhood lead exposure in California would contribute an estimated additional $8-11 billion in lifetime earnings for all children born in a single year."

For 2020, CDPH found geographic disparities in the BLLs of young children under six years old. Specifically, CDPH reports that the percentage of children under the age of six with elevated BLLs (greater than or equal to 4.5 μg/dL) varied by county, from 4.35% in Humboldt County to 0.47% in Riverside County. The percentage of children with even higher BLLs (greater than or equal to 9.5 μg/dL) varied from 0.66% in Sacramento County to 0% in Shasta County. When disaggregated by zip code, CDPH reports that in one Sacramento zip code, 13.87% of tested children under the age of six had elevated BLLs.

Sources of childhood exposure to lead: The US EPA states that children can be exposed to lead in paint, dust, soil, air, and food, as well as drinking water, and that drinking water can make up

20% or more of a person's total lead exposure. According to a 2012 article published in the CDC's *Morbidity and Mortality Weekly Report* (Brown and Margolis), lead is unlikely to be present in source water, unless a specific source of contamination exists. More commonly, lead enters drinking water through the corrosion of plumbing materials and solder that contain lead. Lead can enter a building's drinking water by leaching from lead service lines, lead solder used in copper piping, and from brass fixtures. The amount of lead in tap water can depend on several factors, including the age and material of the pipes and fixtures, concentration of lead in water delivered by the public utility, and corrosiveness of the water. More corrosive water can cause greater leaching from pipes.

Compared to other states, California has a relatively small share of the nation's lead service lines (defined under the LCR, described further below, as a "portion of pipe that is made of lead, which connects the water main to the building inlet" (40 CFR § 141.2)). In 2016, the American Water Works Association released a national survey of lead service line occurrence, finding that California had, at that time, about 1 percent of the nation's lead service lines. Under state law—added by SB 1398 (Leyva, Chapter 731, Statutes of 2016) and amended by SB 427 (Leyva, Chapter 238, Statutes of 2017)—all community water systems were required to compile an inventory of known lead user service lines in their distribution systems by July 1, 2018. Community water systems were further required to propose a schedule by July 1, 2020 to replace all known lead user service lines and user service lines constructed of unknown material.

State and federal laws also regulate the lead content of fixtures. Beginning January 1, 2010, California law (AB 1953, Chan, Chapter 853, Statutes of 2006) banned for sale and use any pipe, pipe or plumbing fitting, or fixture intended to convey or dispense water for human consumption through drinking or cooking that is not "lead free." That law defines "lead free" as not more than 0.2% lead when used with respect to solder and flux; not more than a weighted average of 0.25% when used with respect to the wetted surfaces of pipes and pipe fittings, plumbing fittings, and fixtures; and not more than 8% when used with respect to pipes and pipe fittings. This definition applies to kitchen faucets, bathroom faucets, and any other endpoint device intended to convey or dispense water for human consumption through drinking or cooking. AB 2671 requires an FCCH to serve water and food prepared with water that has been filtered using a POU water filtration device, if the FCCH operates in a building that was constructed before January 1, 2010, the date that AB 1953 went into effect.

Licensed child care: The California Child Day Care Facilities Act governs the licensure, maintenance, and operation of child daycare centers and FCCHs in the state. This law and the associated regulations found in Title 22 of the CCR establish, among other things, general health and safety requirements, staff-to-child ratios, and provider training requirements. CDSS' Community Care Licensing Division has the responsibility of licensing and monitoring the state's child care facilities, including child daycare centers and FCCHs.

In fiscal year 2022-23, most children enrolled in subsidized child care and development programs received care through licensed FCCHs (158,959), child daycare centers (124,708), and license-exempt settings (82,704).

Family child care homes: FCCHs are operated in the licensee's own home, which may be rented, leased, or owned, and are permitted to be in a mobile home park or an apartment. FCCHs provide nonmedical care and supervision in a family-like setting, providing a nurturing environment for children while supporting their cognitive, social, and emotional development.

Families with lower incomes may have a greater need for home-based child care, whether licensed or unlicensed, compared to higher-income families. This can be due, in part, to the availability of care options during nontraditional work hours commonly associated with certain lower-paying occupations. For instance, data from a 2022 report by the U.S. Department of Labor reveals that in 2020, 2 million individuals who were categorized as "working poor"—those who spent at least 27 weeks in the labor force, but still earned incomes below the federal poverty level—were employed in service occupations. Jobs within the service sector often entail nontraditional and unpredictable work schedules. As such, FCCH programs play a critical role in increasing accessibility to early childhood education and care, particularly for families in underserved or rural areas where traditional child care facilities may be limited.

The January 2024 CDSS Child Care Transition Quarterly Report found that 158,959 Californian children were enrolled in FCCHs in fiscal year 2022-23. Additionally, data from the Children's Equity Project in 2019 indicated that 75% of children enrolled in an FCCH were Latinx. A study published by the University of California, Berkeley's Center for the Study of Child Care Employment in 2022 surveyed 3,000 FCCH providers and found that 98% were women; 82% were above 40 years of age; and, 37% were Latina, followed by 29% who identified as White.

The efficacy of POU filters at reducing lead levels in drinking water: According to the State Water Board, a POU filter is a treatment device applied to a single tap, to reduce contaminant levels in drinking water (as opposed to point-of-entry devices, which are installed where water enters a building). In the "3Ts for reducing lead in drinking water in schools and child care facilities" manual (3Ts Manual), the US EPA identifies POU filters as effective at removing lead and recommends that schools and child care providers verify that filters are tested and certified against NSF/ANSI standards for lead and particulate reduction. This recommendation aligns with requirements in AB 2671.

In 2014, a switch in Flint, Michigan's water sources caused lead to leach from service lines into drinking water at dangerously high levels. In the wake of the crisis, the US EPA initiated an assessment program (summarized in the 2016 document "Flint, MI Filter Challenge Assessment") to evaluate the efficacy of POU filters that are NSF-certified to remove lead. The filters were distributed to residents who use the Flint Drinking Water system for consumption. During its initial assessment, the US EPA collected samples of both filtered and unfiltered water from over 200 taps, and found that the filters, when installed and operating properly, effectively reduced lead levels. Specifically, the US EPA found that the maximum and average concentrations of lead were "exceptionally low," with most data showing that lead levels in filtered water were too low to be detected. According to the US EPA, the data support "the conclusion that the use of filtered water would protect all populations, including pregnant women and children, from exposure to lead-contaminated water."

To ensure proper use of filters in the Flint community, the Flint Action Coordinating Team and Genesee Health System reached out to researchers at the University of Michigan and Wayne State University, to develop a program that would empower community members to support the safe and effective use of POU filters in homes. In 2019, the collaboration led to the release of a three modules, designed for use by community organizations to train community members on how to install, use, maintain, and clean their POU filters correctly and safely. The training offers a blend of manufacturer information and knowledge, developed from research and experience with the devices. The University of Michigan's webpage, "Point of use water filters: A

grassroots train-the-trainer program," states that over 150 Flint residents have been trained through this program.

The emergence of "filter-first" as a strategy for reducing childhood lead exposure: AB 2671 would implement a "filter-first" strategy to reduce lead levels in the drinking water of FCCHs. As of April 2024, only a few jurisdictions in the United States, including Washington D.C. and the state of Michigan, had adopted a filter-first policy for schools and child care facilities. The specific design of filter-first strategies varies, although a common feature is the requirement that schools and child care facilities install POU filters on outlets providing water for human consumption as a preventative measure, even if testing has not yet demonstrated the presence of lead contamination.

Proponents of the filter-first strategy highlight challenges with traditional approaches, which generally focus on testing first, followed by remediation where elevated lead levels occur. Challenges with traditional approaches include the potentially high costs of remediation (e.g., replacing lead-leaching fixtures and plumbing), and possible variations in lead levels over time (for example, changes in water chemistry can cause lead to leach from plumbing, even in places where prior testing did not show lead contamination).

One filter-first approach developed by the Natural Resources Defense Council (NRDC)—which created model state legislation that was informed by laws in Washington D.C. and the state of New York—would require, among other things, that schools and child care facilities:

- Install filters on drinking water taps;
- Test the taps, after filters have been installed, and provide parents and staff with the test results;
- Remediate the problem when lead concentrations exceed 1 ppb;
- Provide free and safe potable water if lead contamination is found; and,
- Develop and implement remediation plans, and post the test results and remediation plans.

In addition, NRDC's model legislation would require states to promulgate regulations, issue guidance on remediation plans and maintenance of filters, and provide training to school personnel. According to the NRDC, this model legislation informed the development of filter-first legislation in Michigan, described further below.

Key considerations for safely implementing "filter-first" solutions: The US EPA's 3Ts Manual describes the use of POU filters as a short-term control measure for reducing lead exposure until permanent measures can be implemented. The 3Ts Manual also states that POU filters can be used as a permanent control measure; however, the US EPA qualifies this recommendation by stating that "facilities should be sure to create maintenance schedules and identify a point of contact to be in charge of making sure they are properly maintained."

The proper use and routine maintenance—including the replacement of filter cartridges, inspection of filter housing for damage or vandalism, and flushing after periods of stagnation—is critical for ensuring that POU filters function as intended. Evaluations of filter performance are often conducted under controlled laboratory conditions, rather than in the field (i.e., in actual use

in schools and child care facilities), where improper installation, use, and maintenance may play a potentially larger role in filter function. In a 2022 study published in the journal *Water Research*, entitled "Influence of point-of-use filters and stagnation on water quality at a preschool and under laboratory conditions," Clark et al. state: "Few studies have examined POU filters under conditions of actual use, particularly in schools where children are especially vulnerable to [lead] in drinking water." To clarify how filters are impacted by stagnation (i.e., periods of time when filters are not in use and water sits in pipes, fixtures, and filters), the authors sampled filtered water in an Illinois preschool for a year, before and after typical school stagnation periods, and tested the samples for lead levels and the presence of bacteria. The authors found that installing "the filters had the unintended consequence of significantly increasing the bacterial concentrations…in the preschool's drinking water and in laboratory filter effluent." While none of the bacteria were disease-causing, Clark et al. note that "the increase of total bacteria in the filter effluent following filtration and stagnation periods as short as overnight may have concerning public health implications if pathogenic bacteria were to be present in the influent." The authors recommend five minute flushing of filters after periods of stagnation, which they found significantly decreased bacteria levels in filtered water.

In 2023, Michigan enacted a body of state laws, collectively known as "Filter First," that includes requirements pertaining both to the installation and proper maintenance of POU filters in schools and child care centers. These laws require schools and child care centers to develop a Drinking Water Management Plan and install lead reducing filters on all consumptive fixtures. Until exhausted, funding will be available for one-time costs, including the purchase of POU filters and certain maintenance and sampling costs. Michigan's laws also require the state's environmental and education departments to provide schools and child care centers with a Drinking Water Management Plan template, guidance for using filters, and training. In addition, the laws require that if lead levels exceed 5 ppb, POU filters be made inoperable and undergo filter replacement and retesting. Although not identical, these provisions are similar to AB 2671's requirements that FCCHs serve filtered water to children in their care, and replace filter cartridges where lead levels exceed 5 ppb. Also similar to Michigan, AB 2671 requires CDSS to develop regulations and templates to support implementation and help ensure proper installation, use, and maintenance of filters by FCCHs.

Notably, Michigan's Filter First laws require child care centers to establish a schedule showing when annual lead testing of filtered water will occur, to ensure that filters are properly installed and providing water that does not contain lead exceeding 5 ppb. In contrast, AB 2671's lead testing requirements are triggered only when CDSS inspections identify serious concerns with an FCCH's filter maintenance; this approach could help balance the need to ensure POU filters are functioning properly, while reducing the burden placed on FCCHs. As noted above, FCCHs play a critical role in increasing accessibility to early childhood education and care, particularly for children from low-income families, children from families in underserved or rural areas, and children whose parents work in the service sector with nontraditional or unpredictable work schedules.

Federal action on lead in child care facilities: In 1991, the US EPA promulgated the LCR to minimize lead and copper in drinking water. On January 15, 2021, the US EPA issued substantial changes, called the Lead and Copper Rule Revisions (LCRR), to the LCR, to provide greater and more effective protection of public health. The LCRR contain federal regulations that would, for the first time, require community water systems to test for lead in drinking water in schools and child care facilities. The LCRR define "child care facility" to mean a location that

houses a licensed provider of child care, daycare, or early learning services to children, as determined by the state, local, or tribal licensing agency (40 CFR § 141.2); this definition includes licensed FCCHs.

If unchanged by the Lead and Copper Rule Improvements (LCRI; described below), rules established under the LCRR will require community water systems, beginning on October 16, 2024, to conduct lead sampling at a certain number of faucets at each elementary school and child care facility they serve within five years, and provide testing to elementary schools and child care facilities upon request after the first round of mandatory testing.

The Lead and Copper Rule Improvements: On January 20, 2021, federal Executive Order 13990 directed all federal agencies to undertake review and action to address the promulgation of federal regulations during the prior four years. The LCRR were specifically identified as requiring review. As a result, the US EPA delayed the effective and compliance dates established in the LCRR to December 16, 2021 and October 16, 2024, respectively. The US EPA committed to propose and revise the LCRR by October 2024 with the LCRI.

On November 30, 2023, the US EPA announced the proposed LCRI, which maintain most of the LCRR requirements for community water systems to conduct public education and offer sampling to schools and child care facilities. The LCRI clarify that community water systems do not have to sample in schools and child care facilities that underwent full plumbing replacement after January 1, 2014, or the date that a state adopted standards meeting the federal definition of "lead free" (January 1, 2010, in California). The US EPA states that the LCRI are intended to provide a "baseline level of sampling information," and that "States are likely better positioned than EPA to administer lead testing and remediation programs because States can establish regulations for schools and child care facilities that would provide for greater consistency of education, testing, remediation activities, and public communication across all schools and child care facilities throughout a State."

Regarding filter-first approaches, the LCRI propose to allow states to waive the requirements for community water systems to sample in schools and child care facilities, if a school or child care facility installs and maintains POU devices certified to reduce lead in drinking water on all outlets used to provide water for human consumption. However, the US EPA notes a need for continued discussion to determine how to structure the proposed waivers. Specifically, the US EPA states:

> "EPA is aware that some State and local governments require schools to 'filter-first,' meaning that filters certified to reduce lead are required to be installed and maintained on outlets in schools and child care facilities used for drinking and cooking…EPA considered feedback on filter-first approaches and is proposing to add a waiver eligibility for [community water systems] to sample in schools and child care facilities that install and maintain POU devices on all outlets used for cooking and drinking. EPA is seeking comment on whether or not to allow States to waive the requirements [for community water systems to sample] in schools and child care facilities that use and maintain filters certified to reduce lead, and if so, whether the waiver should only be allowed where schools and child care facilities are required by State or local law to install POU devices and maintain them. EPA is seeking comment on the minimum requirements for States to provide a waiver (e.g., should the waiver be limited to locations where the filter use is required by State or local law; should the

waiver be limited to locations where State or local law requires periodic sampling or testing to ensure proper filter use).

Some stakeholders advocated for the LCRI to include a filter-first requirement while others disagree with such approaches for reasons including because filters may not be properly maintained over the long-term resulting in reduced efficacy, and the cost and burdens on water systems..."

State action on lead in drinking water in child daycare centers: In 2018, the Legislature enacted AB 2370 (Holden, Chapter 676, Statutes of 2018), which requires licensed child daycare centers operating in buildings constructed before January 1, 2010 to have their drinking water tested for lead by January 1, 2023, and every five years after the initial test. AB 2370 also mandated collaboration between CDSS and the State Water Board in the implementation of the bill's requirements. The requirements established by AB 2370 do not apply to FCCHs.

Similar to AB 2671, AB 2370 requires child daycare centers to:

- Test outlets for lead levels (although testing under AB 2671 would be limited to instances in which CDSS identifies serious concerns regarding an FCCH's maintenance of POU filters);
- Obtain a potable source of water for children; and,
- Notify parents or guardians of the test results.

Subsequent written directives from CDSS specified an action level of 5 ppb, with a minimum reporting threshold of 1 ppb, for lead in water in child daycare centers. Through SB 862 (Budget Committee, Chapter 449, Statutes of 2018), the Legislature appropriated $5 million, which the State Water Board is using to assist child daycare centers with the costs of testing and fixture replacement.

In May 2023, the Environmental Working Group (one of the co-sponsors of AB 2671) reported the results of an analysis of lead level data, collected under AB 2370. The Environmental Working Group reports that out of 6,866 child daycare centers with test results, nearly 1,700 had lead levels above 5 ppb. More than 250 of these sites had lead levels equal to or greater than 50 ppb; one site had lead levels above 11,000 ppb, more than 2,000 times the action level established by CDSS through its written directives.

This bill: AB 2671 requires FCCHs to only serve water, or food prepared with water, to children that has been filtered using a POU water filtration device certified to reduce lead levels. This bill also requires CDSS to adopt implementing regulations. AB 2671 stands to strengthen health protections for children in the care of FCCHs, not only because the bill requires FCCHs to serve filtered water, but also because the bill establishes "guardrails" to help ensure that the filters will be properly installed, used, and maintained, with regulatory oversight from CDSS.

Arguments in support: A coalition of supporting environmental organizations states:

"California has already taken action to address lead contamination in schools and child care centers…The result is that schools in 53% of school districts and 25% of 6,500 child care centers found elevated levels of lead in their drinking water. Lead levels in many child care centers were many times, even hundreds of times, higher than the state's allowed threshold of 5 [ppb]. 259 centers up and down the state found lead levels between 50 and 1000 ppb, and one child care center found lead levels at 11,300 parts per billion—2,200 times the state

limit…A glaring gap in our state's effort to address lead contamination in drinking water is in family daycare home facilities, which were exempt from AB 2370's lead-testing requirement…AB 2671 will close the gap in lead remediation for children in family daycare facilities…Lead concentrations in water are highly variable, and so even proper sampling can miss lead contamination or fail to capture its full extent…Rather than 'test and fix,' AB 2671 requires family daycare homes to 'filter first,' meaning filter all drinking water provided to children in their care now, and use filters certified to remove lead when doing so. Plumbing system remediation can happen at a later time when significantly more funds are available."

Writing in a support-if-amended position, Child Care Providers United states:

"Family childcare providers care for some of the most vulnerable and indigent children in California; they provide them with a safe and stable learning environment, transportation, and warm meals. Despite significant recent investments in childcare, including raising wages for some providers by 20%, a recent P5 study shows that most licensed providers do not pay themselves a salary, and those who do earn hourly pay of less than $10. Increasing mandatory operating costs related to water filtration systems and regular filter replacement, with no support from the state on the mandates they are imposing, could be a deciding factor in whether a provider can accept more children or keep their doors open.

In addition to the cost burdens, the issue of education, enforcement, and record maintenance falls entirely on the providers. Communication between the state and family childcare providers has always been underwhelming, especially with limited language options. We are concerned with the ability of providers to be properly informed on how to best comply with the regulation in the time and manner provided in AB 2671.

For the reasons stated we urge the following amendments be made:

- Implementation contingent upon reimbursement of Filter System and Filters
- Extend windows to ensure that providers have time to appropriately comply
- Authorized State Agency shall meet and confer with CCPU to determine the most appropriate means to provide outreach and education, compliance, enforcement, and reimbursement.
- Recommend offering [Family, Friend, and Neighbor caregivers] the option to participate."

Arguments in opposition: None on file.

Related legislation:

1) AB 1851 (Holden). Requires the State Superintendent of Public Instruction of the California Department of Education to establish a pilot program to test for and remediate lead in drinking water in the schools of 6-10 local educational agencies; requires a technical assistance provider to advise participating LEAs on meeting the requirements of the pilot program, analyze the pilot program's outcomes, and provide recommendations to the state on reducing lead in drinking water in schools across California. This bill is pending before the Assembly Appropriations Committee.

2) AB 249 (Holden, 2023). Would have required, on or before January 1, 2027, a community water system that serves a schoolsite receiving federal Title I funds to test for lead in each of the schoolsite's potable water system outlets and to perform specified actions, if lead levels exceeded 5 ppb. This bill was vetoed by Governor Gavin Newsom.

3) AB 100 (Holden, Chapter 692, Statutes of 2021). Requires, commencing January 1, 2023, manufacturer compliance with a specified lower lead leaching standard for faucets and other end point devices used for providing drinking water; prohibits sales of products that do not meet the new standard beginning July 1, 2023; and, requires labeling of products that comply with the definition of "lead free" to indicate compliance in an easily identifiable manner.

4) AB 2370 (Holden, Chapter 676, Statutes of 2018). Requires licensed child daycare facilities to, upon enrolling any child, provide parents or guardians with certain written information related to the risks and effects of lead exposure and blood lead testing recommendations and requirements, and subjects certain child daycare centers to requirements related to testing drinking water for lead contamination levels.

5) SB 862 (Budget Committee, Chapter 449, Statutes of 2018). Appropriated $5 million to the State Water Board to provide grants or contracts for drinking water testing for lead at licensed child daycare centers, remediation of lead in plumbing and drinking water fixtures, and technical assistance for licensed child daycare providers to apply for testing and remediation.

6) AB 746 (Gonzalez Fletcher, Chapter 746, Statutes of 2017). Requires a community water system that serves a schoolsite built before January 1, 2010 to test for lead in the potable water system of the schoolsite on or before July 1, 2019.

7) SB 427 (Leyva, Chapter 238, Statutes of 2017). Requires, by July 1, 2020, a community water system that has identified lead user service lines in use in its distribution system to provide a timeline for replacement of those service lines to the State Water Board.

8) SB 1398 (Leyva, Chapter 731, Statutes of 2016). Requires a public water system to identify and replace known leaded plumbing.

9) AB 2124 (E. Garcia, Lackey, 2016). Would have required a public water system to include in its water analysis samples from schools, daycare facilities, and health care facilities, to the extent those locations are within the public water system. This bill was held in the Senate Environmental Quality Committee.

10) AB 434 (E. Garcia, Chapter 663, Statutes of 2015). Requires the State Water Board to adopt regulations governing the use of point-of-entry and POU treatment by a public water system in lieu of centralized treatment, where it can be demonstrated that centralized treatment is not immediately economically feasible.

11) AB 2084 (Brownley, Chapter 593, Statutes of 2010). Establishes a minimum standard for beverages that are served in licensed child daycare facilities and requires facilities to make clean and safe drinking water readily available and accessible for consumption throughout the day.

12) AB 1953 (Chan, Chapter 853, Statutes of 2006). Banned for sale and use any pipe, pipe or plumbing fitting, or fixture intended to convey or dispense water for human consumption through drinking or cooking that is not "lead free."

REGISTERED SUPPORT / OPPOSITION:

Support

CALPIRG, California Public Interest Research Group (Co-Sponsor)
Environmental Working Group (Co-Sponsor)
A Voice for Choice Advocacy
Active San Gabriel Valley
Alliance of Nurses for Healthy Environments
As You Sow
Brighter Beginnings
California Environmental Voters (formerly CLCV)
California Nurses for Environmental Health & Justice
Center for Community Action & Environmental Justice
Center for Environmental Health
Childhood Lead Poisoning Prevention Program
Clean Water Action
Cleanearth4kids.org
Development of Court Skills
Environment California
Facts: Families Advocating for Chemical & Toxics Safety
Friends Committee on Legislation of California
Healing and Justice Center
Little Things Matter
Lutheran Office of Public Policy - California
Mamavation - Non-toxic Products for Healthy Families
Moms Advocating Sustainability
Mysafetynest.org
Non-toxic Neighborhoods
Nontoxic Schools
Recolte Energy
Russian Riverkeeper
Sustainable Claremont
www.gmoscience.org

Opposition

None on file.

Analysis Prepared by: Naomi Ondrasek / E.S. & T.M. /

Date of Hearing: April 23, 2024

ASSEMBLY COMMITTEE ON ENVIRONMENTAL SAFETY AND TOXIC MATERIALS
Eduardo Garcia, Chair
AB 2827 (Reyes) – As Introduced February 15, 2024

SUBJECT: Invasive species: prevention

SUMMARY: Requires state agencies to develop and implement strategies to detect, control, monitor, and eradicate invasive species, as specified. Specifically, **this bill**:

1) Makes legislative findings about the potential damage invasive species can cause to California's natural and working landscapes, native species, agriculture, public, economy, ecosystems, infrastructure, and biodiversity.

2) Makes legislative findings that the impacts of increased goods movement, international travel, and climate change on invasive species are pervasive and may enhance the survival, reproduction, and spread of invasive species, posing additional threats to the state.

3) Declares that it is in the best interest of the state to adopt a proactive and coordinated approach to prevent the introduction and spread of invasive species.

4) Declares that it is a primary goal of the state to prevent the introduction, and suppress the spread, of invasive species within its borders.

5) Requires, in carrying out the goal declared by this bill, state agencies, in collaboration with relevant stakeholders, to develop and implement strategies to detect, control, monitor, and eradicate invasive species to protect the state's agriculture, environment, and natural resources.

6) Requires the state to invest in research, outreach, and education programs to raise awareness about the risks and impacts of invasive species and promote responsible practices among residents, industries, and visitors.

7) Requires the California Department of Food and Agriculture (CDFA), in consultation with other relevant state agencies, to allocate funds, if available, to implement and enforce the provisions of this bill.

8) Requires state agencies to coordinate efforts, share information, and collaborate with federal, local, and tribal authorities to achieve the goal declared by this bill.

EXISTING LAW:

1) Requires CDFA to prevent the introduction and spread of injurious insect or animal pests, plant diseases, and noxious weeds. (Food and Agricultural Code (FAC) § 403)

2) Makes legislative findings that global travel, global trade, and climate change are introducing invasive animals, plants, insects, and plant and animal diseases to California. (FAC § 5260 (c))

3) Makes legislative findings that the State of California should undertake advanced planning on whether and how to address those invasive animals, plants, insects, and plant and animal diseases that are a threat to the state's agriculture, environment, or economy. (FAC § 5260 (e))

4) Defines "invasive pests" as animals, plants, insects, and plant and animal diseases or groups of those animals, plants, insects, and plant and animal diseases, including seeds, eggs, spores, or other matter capable of propagation, where introduction into California would, or would likely, cause economic or environmental harm. Specifies that "invasive pests" do not include agricultural crops, livestock, or poultry generally recognized by CDFA or the United States Department of Agriculture as suitable to be grown or raised in the state. (FAC § 5260.5)

5) Requires CDFA to develop and maintain a list of invasive pests that have a reasonable likelihood of entering California for which a detection, exclusion, eradication, control, or management action by the state might be appropriate. (FAC § 5261)

6) Requires CDFA to, based on available funding, develop and maintain a written plan, as specified, on the most appropriate options for detection, exclusion, eradication, control, or management of the higher priority invasive pests. Requires CDFA to consult with the United States Department of Agriculture, the University of California, other state agencies and departments, and others in the scientific and research community when developing the plan. Requires the State Department of Public Health, the Department of Fish and Wildlife (CDFW), the Office of Environmental Health Hazard Assessment, the Department of Boating and Waterways, the Department of Forestry and Fire Protection, the State Water Resources Control Board, and the Department of Pesticide Regulation to participate in the preparation of the plan. (FAC § 5262)

7) Makes legislative findings that the destructive impact of invasive and noxious weeds is profound, affecting California's cropland, rangeland, forests, parks, waterways, and wildlands. (FAC § 7270 (a))

8) Designates CDFA as the lead department in noxious weed management in cooperation with the Secretary of the Natural Resources Agency. (FAC § 7271 (a))

9) Establishes in state government the Invasive Species Council of California (Council), the purpose of which is to help coordinate a comprehensive effort to prevent the introduction of invasive species in the state and to advise state agencies, including, but not limited to, CDFA and the Natural Resources Agency, on how to facilitate coordinated, complementary, and cost-effective control or eradication of invasive species that have entered or are already established in the state. (FAC § 7700 (a)(1))

10) Authorizes the Council to address nonnative organisms that cause economic or environmental harm. Specifies that invasive species within the scope of the Council's advisory duties do not include humans, domestic livestock, specified domestic or domesticated species, or nonharmful exotic organisms. (FAC § 7700 (a)(1))

11) Requires the Council to consist of the following six members or his or her designated representative: the Secretary of CDFA; the Secretary of the Natural Resources Agency; the Secretary for Environmental Protection; the Secretary of Transportation; the Secretary of

California Health and Human Services; and, the Director of Emergency Services. (FAC § 7700 (b))

12) Requires the Secretary of the Natural Resources Agency or his or her designated representative and the Secretary of CDFA or his or her designee to serve as cochairs of the Council. (FAC § 7700(c))

13) Requires the Council to meet annually and as needed as determined by the cochairs. (FAC § 7700 (d))

14) Authorizes the Council to establish advisory committees and ad hoc working groups to advise on preventing the introduction of invasive species and providing for their control or eradication, as well as minimizing the economic, ecological, and human health impacts that invasive species cause. (FAC § 7700 (f)(1))

15) Authorizes the advisory committees and working groups to consist of representatives from state agencies, federal agencies, county agricultural commissioners, academia, nonprofit organizations, tribal nations, industry representatives, and members of the public. (FAC § 7700 (f)(2))

16) Authorizes, upon the appropriation or transfer of adequate moneys to the Invasive Species Account, the Council to make recommendations on invasive species projects and activities, including, but not limited to:
    a) To assist state, federal, and local agencies to prevent the introduction of invasive species;
    b) To develop statewide education, outreach, and branding of invasive species;
    c) To increase coordination and collaboration among invasive species partners; and,
    d) To develop statewide invasive species action plans. (FAC § 7702)

17) Authorizes the Council to establish the California Invasive Species Advisory Committee (Advisory Committee), and requires that 19 members be designated by specified state agencies and the Council. (FAC § 7704)

18) Establishes the Invasive Species Account in the Department of Food and Agriculture Fund and makes the moneys in the account available, upon appropriation by the Legislature, to the Secretary of CDFA for the purposes of funding invasive species projects and activities recommended by the Council. (FAC § 7706)

19) Requires the Council to coordinate with state and local public agencies, publicly funded educational institutions, and stakeholder groups to develop a plan for the cure or suppression of diseases associated with the spread of invasive shot hole borers. (FAC § 7708)

FISCAL EFFECT: Unknown.

COMMENTS:

According to the author, "AB 2827 will require the state to detect and eradicate invasive species that negatively impact agriculture here in California. In the Inland Empire alone over 550 square miles have been quarantined due to the impacts of the Oriental Fruit Fly, causing trees to be stripped of their fruit and an estimated economic impact of up to $176 million in crop losses,

additional pesticide use, and quarantine requirements. AB 2827 is critical legislation that will coordinate efforts in order to protect the state's agriculture, environment and natural resources."

Invasive species: Invasive species are non-native plants, animals and other living organisms that thrive in areas where they do not naturally live and cause, or are likely to cause, economic or environmental harm, or harm to human, animal, or plant health. Invasive species adapt easily, reproduce and spread quickly, and ultimately become established in the new area.

Invasive species are spread primarily by human activities, often unintended. People and goods travel quickly around the world and often carry uninvited species with them. Invasive species can be introduced to an area by ship ballast water (e.g. red tide organisms), firewood, agricultural products (e.g. fire ants), the movement of watercraft (e.g. zebra mussels), and by people (e.g. pathogens). Insects can be transported easily in wood, shipping palettes, and crates shipped across the globe. Imported plants can transport pests and diseases, and also become invasive when they escape into the wild. Released unwanted pets are another way invasive species are spread. At other times, non-native species are intentionally introduced to control pests, but then become invasive themselves.

Invasive species in California: According to CDFW, there are many different ways in which non-native invasive species have been and are introduced to California. Commercial shipping is a major source of unintentional introductions, along with smaller commercial fishing boats and recreational watercraft. Additionally, people traveling between natural areas, farms, or waterways for work or recreation unintentionally spread invasive species on their vehicles, boats, equipment and even clothing.

CDFW notes that both historically and today, non-native invasive species have also been introduced purposely in California, without an understanding of the potential consequences of those introductions. This occurs most commonly with plants used for erosion control, livestock forage, and aquarium or garden ornamentals. Some of the animals that are currently, or were in the past, brought into California as sources of food, fur, or pets have turned into major pests.

There are an estimated 50,000 non-native species of plants and animals living in the United States today. The Advisory Committee identified over 1,700 invasive species that threaten the state. According to the University of California, Riverside (UCR) Center for Invasive Species Research, on average, California acquires around nine new species of macroinvertebrates per year, of which around three will become pests. This is a rate of one new species every 40 days. These new species don't all become serious pest problems, but many evade eradication efforts, hijack sensitive ecosystems, and damage valued recreational and economic resources.

Examples of invasive species in California include the pathogen phytophthora ramorum (causes sudden oak death), which was inadvertently introduced to California forests on nursery stock and has killed up to 50 million trees in California; the Asian citrus psyllid (spreads huanglongbing disease) which kills citrus trees and threatens California's commercial citrus production; the American bullfrog, which was intentionally introduced as a food source and for biological control of insects and which now threatens native California frog and fish species; and, nutria, which were released to control aquatic vegetation and that cause damage through burrowing (such as in flood control levees), intense herbivory, and carrying pathogens and parasites.

Harm of invasive species: According to CDFW, invasive species threaten the diversity or abundance of native species through competition for resources, predation, parasitism, interbreeding with native populations, transmitting diseases, or causing physical or chemical changes to the invaded habitat. Through their impacts on natural ecosystems; agricultural and other developed lands; and, water delivery and flood protection systems, invasive species may also negatively affect human health and/or the economy. Examples of direct impacts to human activities include clogging navigable waterways and water delivery systems, weakening flood control structures, damaging crops, introducing diseases to animals that are raised or harvested commercially, and diminishing sportfish populations.

A 2023 report by the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services found that more than 3,500 harmful invasive species cost society more than $423 billion a year, numbers that are expected to grow as global trade and travel continue to accelerate the spread of plants and animals across continents at an unprecedented pace. Experts note that this estimate is likely extremely conservative.

According to the UCR Center for Invasive Species Research, "It has been estimated that in California alone, invasive pests cost this state at least $3 billion a year! A recent analysis by the California Invasive Plant Council (Spring 2009) indicates that weeds alone cost California at least $82 million per year. Some estimates suggest that invasive species cost the USA $138 billion per year, and that 42% of endangered US species have reached this status because of invasive species. Globally, 80% of endangered species are threatened primarily by invasive species, only habitat destruction causes greater endangerment of native species."

Invasive species mitigation: A large population of an invasive species can start from a few individuals, which can be difficult to detect and may go unnoticed. The tiny young of invasive shellfish or insects, a fragment of an aquatic weed, or a single plant ready to release its seeds can be enough to establish a population that could ultimately cost the state millions of dollars to address. According to CDFA, preventing the introduction and establishment of invasive species is always the best -- and least costly -- method of invasive species control. CDFW notes that the longer infestations are allowed to progress, the more extensive the damage and control costs, and the less efficient the control efforts. If populations are detected early enough, however, eradication may still be possible. CDFW explains that although prevention is the best strategy for managing invasive species, "early detection and rapid response" efforts are the most effective and cost-efficient responses to invasive species that become introduced and established.

In California, CDFA is required to "prevent the introduction and spread of injurious insect or animal pests, plant diseases, and noxious weeds" (FAC § 403). As a result, one of the primary goals of CDFA, as described in its mission statement, is to, "Protect against invasion of exotic pests and diseases."

Invasive Species Council of California (Council): According to its website, the Council, "represents the highest level of leadership and authority in state government regarding invasive species. The [Council] is an inter-agency council that helps to coordinate and ensure complementary, cost-efficient, environmentally sound and effective state activities regarding invasive species." The Council was established February 10, 2009, and, in 2018, AB 2470 (Grayson, Chapter 870, Statutes of 2018) established the Council in state government and its makeup, duties, and requirements were codified in statute. Statute establishes the purpose of the Council as helping coordinate a comprehensive effort to prevent the introduction of invasive

species in the state and to advise state agencies, within their respective authorities, on facilitating coordinated, complementary, and cost-effective control or eradication of invasive species that have entered or are established in the state

The Council is co–chaired by the Secretary of CDFA and the Secretary of the California Natural Resources Agency, and includes as members secretaries, or their designated representative, of the following agencies: the California Environmental Protection Agency; the California State Transportation Agency; the California Health and Human Services Agency; and, the Office of Emergency Services. Statute requires the Council to meet annually, which, according to its website, it did in 2020, 2022, and 2023.

California Invasive Species Advisory Committee (Advisory Committee): The Advisory Committee was created by the Council on April 8, 2009, to advise the Council. Primarily tasked with making recommendations to develop and prioritize an Invasive Species Action Plan, among other tasks, the Advisory Committee is made up of and receives input from local governments, tribal governments, federal agencies, environmental organizations, academic and science institutions, affected industry sectors, and impacted landowners. Several working groups may be convened under the auspices of the Advisory Committee to help write and implement an Invasive Species Action Plan, a Rapid Response Plan, and other related documents, such as: Communication and Outreach; International Agreements; Control, Management and Coordination; Prevention; and Research. AB 2470 (Grayson, Chapter 870, Statutes of 2018) established the Advisory Committee and its makeup, duties, and requirements in statute. According to the Advisory Committee's website, it meets several times a year.

This bill: AB 2827 declares that it is a primary goal of the state to prevent the introduction, and suppress the spread, of invasive species within the state's borders. It also requires, in carrying out the goal declared by the bill, state agencies, in collaboration with relevant stakeholders, to develop and implement strategies to detect, control, monitor, and eradicate invasive species in order to protect the state's agriculture, environment, and natural resources. To do so, AB 2827 requires state agencies to coordinate efforts, share information, and collaborate with federal, local, and tribal authorities.

AB 2827 also requires the state to invest in research, outreach, and education programs to raise awareness about the risks and impacts of invasive species and promote responsible practices among residents, industries, and visitors. To support this requirement, AB 2827 requires CDFA, in consultation with other relevant state agencies, to allocate funds, if available, to implement and enforce the provisions of the bill.

AB 2827 and existing structures for invasive species management: According to California Citrus Mutual, the "Council and the Advisory Committee were created almost two decades ago when greater resources were dedicated to invasive species management. Our goal is not to supplant the work of these bodies, but rather to bolster their efforts at a statewide level and not have disparate agency-specific goals. We were attempting not to be prescriptive of which state entity leads this process, but allow the agencies to determine that. Anecdotally, we think the Council would be an appropriate entity to convene all parties and develop the strategies specified in the bill. Our hope, as well, is that we can use these bodies' experience and breadth of exposure to enhance focus on prevention. We don't want to minimize control or eradication, but rather it is of the sponsors' perspective (and consistent with integrated pest management) that prevention is top of mind. The hardships we identify with the Council and the Advisory

Committee are the frequency of their meetings and the noted lack of resources. The Council meets once a year only and the Advisory Committee tries to meet quarterly and, based on the minutes available, most meetings are updates only. Both the Council's and Advisory Committee's last large report was in 2013. In 2021-22, by member request, the Council received a one-time $10 million allocation, but $5 million was clawed back by the Administration. That is the only appropriation, to our understanding, that has been dedicated to the Council. Also, in 2013, the Council developed an implementation update on some general activities related to invasive pests. The Council's website shows that in 2013, several actions had no progress or had not been initiated. Would this webpage be updated today, many of these actions would show no initiation."

Arguments in support: A coalition of supporters writes,

> "California is particularly susceptible to invasive species for a variety of reasons. The state's varied landscapes… provide habitats conducive to the establishment and spread of invasive species. Increasing goods and people movement… also serve as gateways for the inadvertent introduction. Climate change impacts extends lifecycles of invasives and make native plants and landscapes more susceptible. Collectively, these factors threaten biodiversity, ecosystem functions, and regional economies dependent upon agriculture, forestry, and natural resource management.
>
> While invasive species management has been traditionally interpreted as a major concern for working landscapes, they can be incredibly damaging to natural areas and our built environment. Invasive aquatic species can rapidly colonize freshwater bodies, clogging water intake pipes and damaging infrastructure; noxious weeds can carry plant diseases and outcompete native plants for essential resources. Terrestrial invasive species such as nutria can consume important native grasses and destabilize soil, accelerating erosion of levee systems. And more recently, the current infestation of exotic fruit flies across 15 California counties has infected residential and urban tree canopies compromising the beauty and value of urban landscapes.
>
> AB 2827 acknowledges these threats and declares that through coordinated and proactive action focused on prevention, California can further environmental stewardship. While invasive species have traditionally been managed in silos, AB 2827 charges various state agencies to work together to study, plan and manage invasive species issues. By developing and implementing strategies focused on prevention, the state can reduce the need for costly eradication and control measures, while maintaining the integrity of its agricultural and natural ecosystems."

Arguments is opposition: None on file.

Related legislation:

1) AB 2509 (Kalra). Defines "invasive species" and requires the Council to prioritize the principles of integrated pest management in all of its statutorily required activities. AB 2509 is pending hearing in the Assembly Agriculture Committee.

2) AB 2414 (Mathis, 2022). Would have required CDFA to post on its internet website a list of invasive pests that have a reasonable likelihood of entering California for which a detection,

exclusion, eradication, control, or management action by the state might be appropriate. AB 2414 died on file in the Assembly Agricultural Committee.

3) AB 2470 (Grayson, Chapter 870, Statutes of 2018). Establishes the Council, with a prescribed membership, to advise state agencies on how to facilitate coordinated control or eradication of invasive species; authorizes the Council to establish the Advisory Committee, with a prescribed membership, to advise the Council; requires the Council to coordinate with state and local public agencies to develop a plan to address invasive shot hole borers; and, establishes the Invasive Species Account to fund invasive species projects and activities recommended by the Council.

Double referral: This bill was double referred to the Assembly Committee on Agriculture and the Assembly Committee Environmental Safety and Toxic Materials. It was approved by the Assembly Committee on Agriculture on April 10, 2024, on a 10 – 0 vote.

REGISTERED SUPPORT / OPPOSITION:

Support

Agricultural Council of California
Almond Alliance of California
California Agricultural Commissioners & Sealers Association
California Apple Commission
California Association of Pest Control Advisers
California Association of Winegrape Growers
California Avocado Commission
California Blueberry Association
California Blueberry Commission
California Cattlemen's Association
California Chamber of Commerce
California Citrus Mutual
California Cotton Ginners and Growers Association
California Farm Bureau Federation
California Farmland Trust
California Fresh Fruit Association
California Walnut Commission
City of Rancho Cucamonga
Grower-shipper Association of Central California
Midpeninsula Regional Open Space District
Olive Growers Council of California
Redlands Chamber of Commerce
Western Agricultural Processors Association
Western Growers Association
Wine Institute

Opposition

None on file.

Analysis Prepared by: Shannon McKinney / E.S. & T.M. /

Date of Hearing: April 23, 2024

ASSEMBLY COMMITTEE ON ENVIRONMENTAL SAFETY AND TOXIC MATERIALS
Eduardo Garcia, Chair
AB 2916 (Friedman) – As Amended April 15, 2024

SUBJECT: Environmental health: floating devices: expanded polystyrene

SUMMARY: Prohibits, on and after January 1, 2026, the sale, distribution, installation, or arrangement of the installation of an overwater structure, block or float, excluding a floating home, that contains expanded polystyrene (EPS) or other plastic foam that is not fully enclosed and contained in a shell made of aluminum, concrete, steel, or plastic with a minimum thickness of 0.15 inches; Authorizes the State Water Resources Control Board (State Water Board) to adopt rules to implement, administer, and enforce the provisions of this bill. Specifically, **this bill**:

1) Prohibits, beginning, January 1, 2026, the sale, distribution, installation, or arrangement of the installation of the following items:

    a. An overwater structure that contains expanded polystyrene or other plastic foam that is not fully enclosed and contained in a shell made of aluminum, concrete, steel, or plastic with a minimum thickness of 0.15 inches.

    b. A block or float that contains, or is comprised of, expanded polystyrene or other plastic foam that is not fully enclosed and contained in a shell made of aluminum, concrete, steel, or plastic with a minimum thickness of 0.15 inches.

2) Authorizes the State Water Board to:

    a. Adopt rules to implement, administer, and enforce this bill.
    b. Maintain and revise a list of materials that are approved to fully enclose and contain EPS or other plastic foam used in an overwater structure, block, or float.

3) Authorizes the State Water Board to:

    a. Revise or disqualify a material used to fully enclose EPS or other plastic foam from use if the State Water Board determine the material is not adequate.

    b. Approve materials for use if they are sufficient to prevent the release of EPS or other plastic foam into the environment and are safe for use in the aquatic environment.

4) Provides that a violations of the provisions in this bill, are subject to a civil penalty for each violation in an amount not to exceed $10,000.

5) Requires, beginning January 1, 2026, an existing overwater structure that contains, or a block or float that contains or is comprised of, EPS or other plastic foam to be in compliance with the provisions of this bill at the time they are repaired or maintained.

6) Provides that a floating home, as defined in law, is not considered an overwater structure, and thus not covered under the bill; however, provides that a dock, float, walkway, or other

accessory overwater structure associated with a floating home is covered by provisions of the bill.

7) Defines "EPS" as blown polystyrene and expanded or extruded foams that are thermoplastic petrochemical materials utilizing a styrene monomer and processed by any technique or techniques, including, but not limited to, fusion of polymer spheres (expandable bead polystyrene), injection molding, foam molding, and extrusion blow molding (extruded foam polystyrene).

EXISTING LAW:

1) Establishes the Federal Water Pollution Control Act (Clean Water Act, or CWA) as the basic structure for regulating discharges of pollutants into the waters of the United States and for regulating quality standards for surface waters. (33 United States Code §1251 et seq.)

2) Establishes the Porter-Cologne Water Quality Control Act (Porter-Cologne Act) as the principal law governing water quality regulation in California. (Water Code (WC) § 13000 et seq.)

3) Prohibits, pursuant to the Porter-Cologne Water Quality Control Act, the discharge of pollutants to surface waters unless the discharger obtains a permit from the State Water Board. (Water Code (WC) § 13000, et seq.)

4) Regulates, under the Porter-Cologne Water Quality Control Act, discharges of pollutants in storm water and urban runoff by regulating, through the National Pollution Discharge Elimination System (NPDES), industrial discharges and discharges through the municipal storm drain systems. (Water Code § 13000 et seq.)

5) Makes legislative findings and declarations that the people of the state have the primary interest in the conservation, control, and utilization of the water resources of the state, and that the quality of all the waters of the state shall be protected for use and enjoyment by the people of the state; and that activities and factors which may affect the quality of the waters of the state shall be regulated to attain the highest water quality which is reasonable, considering all demands being made and to be made on those waters and the total values involved, beneficial and detrimental economic and social, tangible and intangible. (WC § 13000)

6) Makes legislative findings and declarations that the health, safety, and welfare of people require that there to be a statewide program for the control of the quality of all the waters of the states; that the state must be prepared to exercise its full power and jurisdiction to protect the quality of waters in the state from degradation originating inside or outside boundaries of the state; and that the statewide program for water quality control can be most effectively administered regionally, within a framework of statewide coordination and policy. (WC) § 13000)

7) Establishes the State Water Board and Regional Water Quality Control Boards (Regional Water Boards). (WC § 13100)

8) Requires the State Water Board to develop and adopt a state policy for water quality control. (WC § 13140)

9) Delegates to the Regional Water Boards the ability to adopt water quality standards within their region of jurisdiction. (WC § 13240)

10) Designates the State Water Board as the state water pollution control agency for all purposes stated in the federal Clean Water Act. (WC § 13160)

11) Authorizes a Regional Water Board, in establishing or reviewing any water quality control plan or waste discharge requirements, or in connection with any action relating to any plan or requirement, to investigate the quality of any waters of the state within its region. (WC § 13267)

12) Defines "floating home" as a floating structure which is all of the following:
    a. Designed and built to be used, or is modified to be used, as a stationary waterborne residential dwelling.
    b. Has no mode of power of its own.
    c. Requires a continuous utility linkage to a source originating on shore for utilities.
    d. Requires a permanent continuous hookup to a shoreside sewage system. (HSC § 18075.55(d))

FISCAL EFFECT: Unknown.

COMMENTS:

Need for bill: According to the author:

"California has experienced first-hand the negative impacts associated with foam-filled docks when they become damaged or water-logged. The result is not only harm to wildlife but also pollution of our waterways and nearly impossible cleanup efforts. This bill reduces further pollution of California's waters and beaches at the source."

State Water Board: The State Water Board was created by the State Legislature in 1967. As stated on their website, the five-member Board allocates water rights, adjudicates water right disputes, develops statewide water protection plans, establishes water quality standards, and guides the nine Regional Water Boards located in the major watersheds of the state.

Regional Water Boards: There are nine regional water quality control boards in the state. Regional boundaries are based on watersheds and water quality requirements are based on the unique differences in climate, topography, geology, and hydrology for each watershed. Each Regional Water Board makes critical water quality decisions for its region, including setting standards, issuing waste discharge requirements, determining compliance with those requirements, and taking appropriate enforcement actions.

Polystyrene: Polystyrene is a rigid, amorphous thermoplastic produced by the polymerization (small molecules connected in chain like manner) of styrene. Expanded polystyrene (EPS) is produced when pellets are expanded by heating with steam to form cellular beads. Dried particles then get molded into different shapes. The beads are approximately 2-5mm in diameter.

EPS has a wide range of uses and is an attractive product because it is lightweight and can withstand degradation for the most part.

The Problem with Plastics: Marine pollution from plastics has been a topic of conversation for decades. The plastic we produce and use eventually goes into our waters and endangers marine life. Often times, plastic pieces breakdown and end up being eaten by marine life, confused as food, and can cause problems resulting in death of these organisms. Hydrophobic chemicals present in the ocean in trace amounts (e.g., from contaminated runoff and oil and chemical spills) bind to plastic particles where they enter and accumulate in the food chain. Heavy metal accumulation in EPS fragments has also been researched suggesting a source of exposure to marine life that ingest it.

According to a review article published in the Journal Environmental Science and Technology, titled, "*Foamed Polystyrene in the Marine Environment: Sources, Additives, Transport, Behavior, and Impacts,* EPS is "a significant contributor to marine litter worldwide, its lightness and low density, ready transportation by the wind, and propensity to readily fragment ensure that it disperses more widely and rapidly than other forms of (unfoamed) plastic, both at sea and when beached. With small fragments readily blown around by the wind when dry and adhering to surfaces when wet, foamed PS [polystyrene] is also particularly difficult to retrieve during beach cleans." Furthermore, the exposure of EPS to ultraviolet light, due to its greater exposure to sunlight since it floats, results in further degradation of the plastic and smaller pieces contaminating the water.

Legislation across the country, including California, have implemented policies to reduce the use of plastic, promote use of biodegradable alternatives, and/or encourage recycling. A significant piece of legislation, Senate Bill (SB) 54 (Allen, Chapter 75, Statutes of 2022), or The Plastic Pollution Prevention and Packaging Producer Responsibility Act, was signed in 2022. It mandates that all single-use packaging and plastic food service ware like cutlery, takeout containers, plates, and cups in California be recyclable or compostable by 2032, with a 25% reduction in single-use plastic packaging and food service ware and a 65% recycling rate for EPS. One of the challenges EPS faces is recyclability. For that reason, supporters of plastic reduction believe EPS in these products will be phased out.

EPS makes things float: EPS is commonly used in flotation devices like docks, platforms, or other things meant to float or be above water. It is a relatively cheap material to use for these purposes. On January 7, 2024 a major storm event occurred around the Lake Tahoe region in northern California. The storm resulted in hundreds of thousands of EPS particles, remnants of a floating dock, washing up on the shoreline of Incline Village beaches. The small size and lightness of the polystyrene particles makes it incredibly hard to clean up and in the presence of snow, difficult to identify. While many volunteers helped with the clean-up process, it is expected that more cleanup efforts will be organized once the snow begins to melt in order to collect what was missed.

Legislation in other states: Pollution events like the one that happened in Lake Tahoe coupled with the increased awareness of plastic pollution in general, have resulted in legislation across the country to decrease the likelihood that EPS gets discharged into the waters. The State of New York has introduced legislation this year, 2023-2024 legislative session, under SB S4974A and Assembly Bill (AB) A8142. They intended, among other things, to ban the use of EPS in docks, buoys, or floating structures. In 2023, the state of Washington passed House Bill 1085, a

reducing plastic pollution law that among other things, bans overwater structures containing expanded or extruded plastic foam that is not fully enclosed and contained in a shell made of specified materials. The state of Oregon has had a law in place for decades that also protects the waters of their state from EPS release. All these established laws and proposed legislation mentioned vary on different things including, but not limited to, the allowed materials to fully enclose EPS, whether they have a grandfather clause for existing structures and if EPS is completely banned for use on structures on water or not.

Porter-Cologne Water Quality Control Act (Porter-Cologne Act): In 1969, the State Legislature enacted the Porter-Cologne Water Quality Control Act, the cornerstone of today's water protection efforts in California. Through it, the State Water Board has been entrusted with broad duties and powers to preserve and enhance the state's complex waterscape.

Consistent with the duties and powers under the Porter-Cologne Act, in 2007, AB 258 (Krekorian, Chapter 735, Statutes of 2007), was signed to require the State Water Board and the Regional Water Boards to implement a program to control discharges of preproduction plastic. For the purposes of this program, "preproduction plastic" was defined to include plastic resin pellets and powder coloring for plastics.

Enforcement through Porter-Cologne Act: Because the intent of AB 2916 is to prevent the release or discharge of EPS or other plastic foam into the waters of the state, it is possible that the provisions of this bill may qualify for enforcement under the Porter-Cologne Act. The author's office is engaged in conversations with the State Water Board, to determine if EPS or other plastic foam discharges to the waters is appropriate under the duties of the Porter-Cologne Act. As the bill moves through the legislative process, the author may wish to consult with the State Water Board on enforcement of this bill.

Clarity on language and word definitions: According to the author's office, the intent of AB 2916 is to prevent the release of EPS or other plastic foam into the waters of the state. The syntax in the bill that describes what is prohibited by a specified date, "an overwater structure that contains expanded polystyrene or other plastic foam that is not fully enclosed and contained in a shell made of aluminum, concrete, steel or plastic with a minimum thickness of 0.15 inches" can be interpreted to mean that any overwater structure that does not fit that specific description is allowed. For example, over water structures with partially enclosed (not fully enclosed) EPS or other plastic foam would be permitted as long as the material they use for partially enclosing the EPS or other plastic foam is not any of the above mentioned. Furthermore, the current word choice "fully enclosed" may be replaced with the word encapsulated and can mean a protective cover or physical barrier between the EPS or other plastic foam material and the water. In this way, it is clear that there is a barrier preventing the discharge of EPS or other plastic foam to the water. Similarly, the word block is intended to mean a three dimensional square, rectangle, or other shape composed of EPS or other plastic foam that is intended to be attached or included in an overwater structure to make said structure float. The provisions of this bill may be enforced by the State Water Board. The author's office may wish to consult the State Water Board for clarity and to help provide some definitions to terms for added clarity.

Existing overwater structures, blocks or float: Since the intent of AB 2916 is to prevent the release of EPS or other plastic foam to the waters, the current language is requiring existing overwater structures, block or float to be in compliance at the time that existing structures are "repaired or maintained." Other legislation outside the state, for example the State of

Washington, provides the following statement: "Nothing in this section applies to any dock sold, distributed or installed prior to January 1, 2024" (date when the law went in effect). The language of the State of Washington is referred to as a 'grandfather clause.' This clause addresses the concerns of stakeholders with regards to costly labor that would be required in order to make changes to existing overwater structure, blocks or floats. Furthermore, the current language uses the word "maintenance" which has broad implications. As this bill moves through the legislative process, the author may wish to consider conversations with stakeholders to further clarify if or when the bill applies to existing structures.

Approved materials: The author's amendments to AB 2916 provided some flexibility on the list of materials that can be used to fully enclose EPS or other plastic foam. The current version of AB 2916 gives the State Water Board authority to maintain and revise a list of materials that are approved to fully enclose and contain EPS or other plastic foam. The State Water Board would use their expertise to revise the material list and approve other materials. Under the current version of the bill, wood, treated or untreated, is not prohibited. These changes address the concerns some stakeholders had about the list of materials in a previous version of the bill.

This bill: AB 2916 would prohibit, beginning January 1, 2026, the sale, distribution, installation, or arrangement of the installation of two items: an overwater structure, excluding a floating home, that contains EPS or other plastic foam that is not fully enclosed and contained in a shell made of aluminum, concrete, steel or plastic with a minimum thickness of 0.15 inches and a block or float that contains, or is comprised of, EPS or other plastic foam that is not fully enclosed and contained in a shell made of aluminum, concrete, steel or plastic with a minimum thickness of 0.15 inches. This bill gives authority to the State Water Board to adopt rules to implement, administer, and enforce the provisions of the bill and to maintain and revise a list of materials that are approved for use, as specified. It would requires existing structures to be in compliance at the time they are repaired or maintained. The author's intent is clear, prevent the release of EPS or other plastic foam from overwater structures, blocks or floats. As the bill moves through the legislative process, further details will likely be worked out to refine and clarify the provisions of the bill.

Arguments in Support: According to a coalition of environmental organizations and advocacy groups:

"Since 2013, International Coastal Cleanup® volunteers in California have removed over 700,000 tiny expanded polystyrene pieces (<2.5 cm in size) in addition to over 700,000 other foam foodware and packaging items. Since volunteers started tracking foam dock pieces three years ago, Californians have logged over 4,000 pieces of foam docks. Prohibiting unencapsulated floating foam structures in California’s waterways will help reduce this harmful source of plastic pollution and prevent future foam microplastics.

Plastic pollution, including microplastics, is pervasive in the marine environment and has negative impacts on the environment, economy, and human health. The estimated annual cost of plastic cleanup and control in California was more than $428 million as of 2015. Foam docks can break during storms or from accidents, polluting our beloved waterways and coast with foam pieces. Microplastics, like the small foam pieces created by unencapsulated floating foam structures, are particularly harmful as they are the most mobile in aquatic ecosystems as well as through the food web and are all but impossible to clean up once they enter the environment.

Proactive measures like AB 2916 that prevent microplastics from entering the environment are the most cost-effective approaches to addressing microplastic pollution. Further, by focusing on new structures and future repair and maintenance of existing structures, this bill minimizes costs to the state by phasing out existing devices while reducing cleanup costs associated with plastic foam pollution."

Arguments in Opposition: According to the California Marine Recreation Association (MRA):

"MRA represents over 200 coastal and inland marinas in California. Our members embrace best practices in dock and marina operations. We must keep up with elements and advances in technology to keep our customers happy and the water free of unwanted contaminants, so we share in the objective of the bill to eliminate polystyrene from leaching into our waterways.

Our marinas are on the water and by their very nature subject to the elements. Maintaining our facilities, docks and floats is critical to managing our properties and the safety and well-being of our customers. As we read your bill it would require the replacement of floats when 'maintained'. This could dramatically impact marina operations with untold costs for daily upkeep and routine care. We believe simply removing the word 'maintain' from the bill would be sufficient to expedite the deployment of fully encapsulated floats.

If the purpose of the bill is to require fully encapsulated floats by 2026 we can support that for new installations or if a float requires 'repair' as described in the bill, but replacing a float for maintenance is unreasonable and best practices for keeping our docks safe for our customers requires constant maintenance just as any other hard asset does."

Related Legislation:

1) SB 54 (Allen, Chapter 75, Statutes of 2022). Establishes an Extended Producer Responsibility program to achieve recycling rates, composting and recyclability goals, and source reduction goals for single-use, disposable packaging or single-use, disposal food service ware.

2) AB 258 (Krekorian, Chapter 735, Statutes of 2007). Requires the State Water Board and the Regional Water Boards, by January 1, 2009, to implement a program for the control of discharges of preproduction plastics from point and nonpoint sources, including waste discharge, monitoring, and reporting requirements that, at a minimum, target plastic manufacturing, handling, and transportation facilities, and the implementation of specified minimum best management practices for the control of discharges of preproduction plastic.

REGISTERED SUPPORT / OPPOSITION:

Support

7th Generation Advisors
California Association of Professional Scientists
Cleanearth4kids.org
Families Advocating for Chemical and Toxics Safety
National Stewardship Action Council
Ocean Conservancy

Plastic Free Future
Plastic Pollution Coalition
San Francisco Bay Physicians for Social Responsibility
Surfrider Foundation
The 5 Gyres Institute
The Last Plastic Straw
The Story of Stuff Project

Opposition

California Marine Recreation Association (MRA)
Marine Recreation Association
Western Wood Preservers Institute

Analysis Prepared by: Brenda Cisneros-Larios / E.S. & T.M. /

Date of Hearing: April 23, 2024

ASSEMBLY COMMITTEE ON ENVIRONMENTAL SAFETY AND TOXIC MATERIALS
Eduardo Garcia, Chair
AB 2933 (Low) – As Amended April 18, 2024

SUBJECT: Multiunit residential structures and mixed-use residential and commercial structures: water conservation

SUMMARY: Requires the Department of Housing and Community Development (HCD) to investigate whether additional water conservation and efficiency measures, including but not limited to, "point-of-use" leak detection technology, are warranted for existing and new multifamily residential construction and mixed-use residential and commercial structures. Specifically, **this bill**:

1) Defines "point-of-use system" as a smart technology that uses remote data gathering and real-time analytics to detect water waste and to identify the point of failure.

2) Defines "multiunit residential structure" and "mixed-use residential and commercial structure" as real property containing three or more dwelling units.

3) Requires HCD, commencing with the next triennial edition of the California Building Standards Code (Title 24 of the California Code of Regulations (CCR)), to investigate whether additional water conservation and efficiency measures are warranted for existing and new multifamily residential construction and mixed-use residential and commercial structures, including but not limited to, "point-of-use" leak detection technology.

4) Authorizes HCD, if it determines that changes to the California Green Building Standards Code (Part 11 of Title 24 of the CCR) are warranted, to develop appropriate voluntary or mandatory proposals to be submitted to the California Building Standards Commission for consideration.

EXISTING LAW:

1) States the intent of the Legislature to do both of the following:
   (a) Encourage the conservation of water in multifamily residential rental buildings through means either within the landlord’s or the tenant’s control, and
   (b) Establish that the practices involving the sub-metering of dwelling units for water service are just and reasonable, and include appropriate safeguards for both tenants and landlords. (Civil Code (CC) § 1954.201)

2) Requires a landlord, if notified by a tenant or if the landlord becomes aware of a leak, a drip, a water fixture that does not shut off property, including, but not limited to, a toilet, a problem with a water-saving device, or other problem with the water system that causes constant or abnormally high water usage, to investigate, and, if warranted, rectify the condition. (CC § 1954.210)

3) Requires the State Water Resources Control Board (State Water Board) to adopt regulations governing the use of point-of-entry and point-of-use treatment by public water systems in

lieu of centralized treatment where it can be demonstrated that centralized treatment is not immediately economically feasible. (Health and Safety Code 116380)

4) Sets the following standards for indoor residential water use:
   (a) Until January 1, 2025, the standard for indoor residential water use shall be 55 gallons per capita daily.
   (b) Beginning January 1, 2025, and until January 1, 2030, the standard for indoor residential water use shall be the greater of 52.5 gallons per capita daily or a standard recommended by the Department of Water Resources in coordination with the State Water Resources Control Board (State Water Board).
   (c) Beginning January 1, 2030, the standard for indoor residential water use shall be the greater of 50 gallons per capita daily or a standard recommended by the Department of Water Resources in coordination with the State Water Board. (Water Code § 10609.4)

FISCAL EFFECT: Unknown.

COMMENTS:

Need for the bill: According to the author, "As climate change progresses, droughts are expected to become more frequent. Therefore, strengthening water conservation efforts is critical. AB 2933 aims to reduce water wastage caused by leaky toilets by requiring the installation of devices with real-time communication technology to alert and pinpoint location data so property owners can respond rapidly. AB 2933 is crucial to ensuring a more sustainable and less wasteful California."

Making conservation a California way of life: On May 31, 2018, Governor Brown signed two bills which build on the ongoing efforts to "make water conservation a California way of life." SB 606 (Hertzberg, Chapter 14, Statues of 2018) and AB 1668 (Friedman, Chapter 15, Statutes of 2018) emphasize efficiency and better use of existing water supplies in our cities and on farms. Specifically, the bills call for creation of new urban efficiency standards for indoor use, outdoor use, and water lost to leaks, as well as any appropriate variances for unique local conditions. The bills require the State Water Board to adopt standards establishing unique efficiency goals for each urban water supplier in California and provide those suppliers with flexibility to implement locally appropriate solutions. As part of the standards, urban retail water suppliers, not individual households or businesses, will be held to urban water use objectives.

Beginning January 1, 2024, each urban retail water agency will annually calculate its own objective, based on the water needed in its service area for efficient indoor residential water use, outdoor residential water use, commercial, industrial and institutional irrigation with dedicated meters, and reasonable amounts of system water loss, along with consideration of other unique local uses (i.e., variances) and a "bonus incentive," or credit, for potable water reuse. Urban water agencies are required to meet their water use objective. Those urban water agencies that don’t meet their objective may be subject to enforcement by the State Water Board. The law sets the indoor water use standard at 55 gallons per person per day (gallons per capita daily, or GPCD) until January 2025. The standard will become more stringent over time, decreasing to 50 GPCD in January 2030. In calculating the objective, urban water agencies will aggregate indoor water use across their service area. ·

Point-of-use treatment systems: AB 434 (Garcia, Chapter 663, Statutes of 2015) requires the State Water Board to adopt regulations governing the use of point-of-entry and point-of-use treatment by public water systems in lieu of centralized treatment where it can be demonstrated that centralized treatment is not immediately economically feasible. AB 2933 also uses the term "point-of-use". In order to reduce confusion, as the bill moves through the legislative process the author may wish to change the term in the bill to something else, perhaps point-of-use water leak detection system.

This bill: AB 2933 requires HCD to investigate whether additional water conservation and efficiency measures are warranted for existing and new multifamily residential construction and mixed-use residential and commercial structures, including but not limited to, "point-of-use" leak detection technology. According to the author and proponents of the bill, there is significant water saving potential from addressing leaks from toilets in multi-family housing. AB 2933 provides another tool in the tool box for owners and renters of multi-family residential units to reduce their water use and assists urban water retailers with meeting their indoor water use objectives.

Arguments in support: According to a coalition writing in support,

> "Over 1.2 trillion gallons of water are distributed annually by utilities in California. Shockingly, 7% of residential water, equivalent to 84 billion gallons, is lost due to known leaks in multi-unit residential and mixed-use structures. That amounts to 2,140 gallons per person. These losses are caused by water inefficiencies from improperly calibrated irrigation systems, malfunctioning appliances and plumbing leaks, for example.
>
> Toilets are one of the biggest culprits of water waste. Toilets account for 24% of indoor water usage. Leaks represent 13% of indoor water usage. Toilets are the most significant generator of wasted water because they malfunction on a frequent basis and result in 300 gallons (for slow leaks) to 2,016 gallons (for stuck valves) per toilet. Data confirms that every day 3.8% of toilets experience a stuck valve condition and 0.8% of toilets experience a slow toilet leak.
>
> Given these compelling reasons, we humbly request your support of AB 2933 legislation that requires the California Building Standards Commission to research, develop, and propose building standards, including voluntary standards of the California Green Building Standards Code, to reduce water waste in existing and new multiunit residential structures and mixed-use residential and commercial structures, including requiring installation of point-of-use systems."

Arguments in opposition: A group of organizations had written in opposition to the bill when it was before the Assembly Housing and Community Development Committee, however, the bill has been substantially amended and it is unclear if those groups remain in opposition.

Related legislation:

1) AB 1668 (Friedman, Chapter 15, Statutes of 2018). Jointly with SB 606, requires the State Water Board in coordination with the Department of Water Resources, to establish long-term urban water use efficiency standards by June 30, 2022.

2) SB 606 (Hertzberg, Chapter 14, Statutes of 2018). Jointly with AB 1668, requires the State Water Board in coordination with the Department of Water Resources, to establish long-term urban water use efficiency standards by June 30, 2022.

3) AB 434 (Garcia, Chapter 663, Statutes of 2015). Requires the State Water Board to adopt regulations governing the use of point-of-entry and point-of-use treatment by public water systems in lieu of centralized treatment where it can be demonstrated that centralized treatment is not immediately economically feasible.

REGISTERED SUPPORT / OPPOSITION:

Support

Alarm.com
Alert Labs
California State Pipe Trades Council
International Association of Plumbing & Mechanical Officials
Sensor Industries
Wint

Opposition

California Apartment Association
California Association of Realtors
California Building Industry Association (CBIA)
California Business Properties Association
Institute of Real Estate Management (IREM)

Analysis Prepared by: Josh Tooker / E.S. & T.M. /

Date of Hearing: April 23, 2024

ASSEMBLY COMMITTEE ON ENVIRONMENTAL SAFETY AND TOXIC MATERIALS
Eduardo Garcia, Chair
AB 3090 (Maienschein) – As Amended April 18, 2024

SUBJECT: Drinking water standards: emergency notification plan

SUMMARY: Updates the emergency notification plan, required in order for a person to operate a public water system, to encourage a public water system to provide notification to water users by means of various technology. Specifically, **this bill**:

1) Encourages a public water system, when updating an emergency notification plan, to provide notification to water users, by means of other communications technology, including but not limited to, text messages, email, or social media.

EXISTING LAW:

1) Defines a "person" as an individual, corporation, company, association, partnership, limited liability company, municipality, public utility, or other public body or institution, including the United States to the extent authorized by federal law. (Health and Safety Code (HSC) § 116275 (g))

2) Establishes the California Safe Drinking Water Act (SDWA) and requires the State Water Board to maintain a drinking water program. (HSC § 116270, et seq.)

3) Declares the established policy of the state to be that every human being has the right to safe, clean, affordable, and accessible water adequate for human consumption, cooking, and sanitary purposes. (Water Code § 106.3)

4) Requires, pursuant to the federal Safe Drinking Water Act (SDWA) and California SDWA, drinking water to meet specified standards for contamination (maximum contaminant levels, or MCLs) as set by the United States Environmental Protection Agency (US EPA) or the State Water Resources Control Board (State Water Board). (HSC § 116270 *et seq.*)

5) Defines "maximun contaminat level" as the maximal permissible level of contaminat in water. (HSC § 116275 (f))

6) Requires the State Water Board to adopt primary drinking water standards for contaminants in drinking water that are not less stringent than the national primary drinking water standards and are based on all of the following:

    a. The public health goal (PHG) for the contaminant published by the Office of Environmental Health Hazard Assessment (OEHHA);
    b. The national primary drinking water standard for the contaminant, if any, adopted by the US EPA; and,
    c. The technological and economic feasibility of compliance with the proposed primary drinking water standard. (HSC § 116365)

7) Defines "primary drinking water standards" as

a. Maximum levels of contaminants, that in the judgement of the State Water Board, may have an adverse effect on the health of persons;
b. Specific treatment techniques adopted by the State Water Board to establish maximum contaminant levels; and,
c. The monitoring and reporting requirements as specified in regulations adopted by the State Water Board that pertain to maximum contaminant levels. (HSC § 116275)

8) Defines a "public water system" as a system for the provision of water for human consumption through pipes or other constructed conveyances that has 15 or more service connections or regularly serves at least 25 individuals daily at least 60 days out of the year. (HSC § 116275 (h))

9) Requires every public water system to annually prepare a consumer confidence report and mail or deliver a copy of that report to each customer, other than an occupant, as defined in Section 799.28 of the Civil Code, of a recreational vehicle park. A public water system in a recreational vehicle park with occupants as defined in Section 799.28 of the Civil Code shall prominently display on a bulletin board at the entrance to or in the office of the park, and make available upon request, a copy of the report (HSC § 116470 (a)).

10) Requires any person who owns a public water system to ensure that the system does all of the following:
a. Complies with primary and secondary drinking water standards;
b. Will not be subject to backflow under normal operating conditions;
c. Provides a reliable and adequate supply of pure, wholesome, healthful, and potable water;
d. Employs or utilizes only water treatment operators or water treatment operators-in-training that have been certified by the State Water Board at the appropriate grade; and,
e. Complies with the operator certification program. (HSC § 116555 (a))

11) Requires the US EPA to establish criteria for a program to monitor unregulated contaminants and publish a list of up to 30 contaminants to be monitored every five years, known as the federal Unregulated Contaminant Monitoring Rule. (42 United States Code § 300(f))

12) Requires on or before July 1, 1998, and every three years thereafter, public water systems serving more than 10,000 service connections that detect one or more contaminants in drinking water that exceed the applicable public health goal, to prepare a brief written report in plain language that does all of the following:
a. Identifies each contaminant detected in drinking water that exceeds the applicable health goal;
b. Discloses the numerical public health risk, determined by OEHHA, associated with the maximum contaminant level for each contaminant and the numerical public health risk determined by OEHHA associated with the public health goal for that contaminant;
c. Identifies the category of risk to public health (i.e. carcinogenic);
d. Describes the best technology, if available on a commercial basis, to remove the contaminant or reduce the concentration of the contaminant;
e. Estimates the costs and the cost per customer of utilizing said technology to remove the contaminant or reduce the concentration of the contaminant; and,

f. Describes what action, if any, the local water purveyor intends to take to reduce the concentration of the contaminant in public drinking water supplies and the basis for that decision. (HSC § 116470 (b))

13) Requires a person to have an emergency notification plan in order to operate a public water system. The emergency notification plan must be submitted to and approved by State Water Board. The emergency notification plan shall provide for immediate notice to the customers of the public water system of any significant rise in the bacterial count of water or other failure to comply with any primary drinking water standard that represents an imminent danger to the health of the water users. (HSC § 116460)

14) Requires a water system to give a Tier 1 Public Notice if any of the following occur:
   a. A violation of *E. coli* MCL;
   b. A violation for the MCL for nitrate, nitrite, or total nitrate and nitrite, or when the water system fails to take a confirmation sample within 24 hours of the system's receipt of the first sample showing an exceedance of the nitrate or nitrite MCL;
   c. An occurrence of a waterborne microbial disease outbreak, or other waterborne emergency, a failure or significant interruption in water treatment process, a natural disaster that disrupts the water supply or distribution system, or a chemical spill or unexpected loading of possible pathogens into the source water that has the potential adverse effects on human health as a result of short-term exposure;
   d. Another violation or occurrence that has the potential for adverse effects on human health as a result of short-term exposure, as determined by the State Water Board based on a review of all available toxicological and analytical data;
   e. A violation of the MCL for chlorite;
   f. A violation of the MCL for perchlorate;
   g. A turbidity exceedance; and,
   h. A violation of the MRDL for chlorine dioxide; or when a system fails to take the required sample(s) within the distribution system, on the day following an exceedance of the MRDL at the entrance to the distribution system.

   Requires a public water system to deliver the public notice in a manner designed to reach residential, transient, and nontransient users of the water system and shall use, as a minimum, one of the following forms: radio or television; posting in conspicuous locations throughout the area served by the water system; hand delivery to persons served by the water system; or other method approved by the State Water Board, based on the method's ability to inform water system users. Notifications must happen within 24-hours of occurrence of the event. (22 California Code of Regulations (CCR) § 64463.1)

FISCAL EFFECT: Unknown

COMMENTS:

Need for the bill: According to the author, "As our California landscape continues to change and unravel in the face of destructive weather events it is crucial that we remain vigilant to the potential threats to life and property. Our water systems are especially at risk and despite the best efforts to prepare for all eventualities communities remain vulnerable. Making sure those affected by these natural disasters have the best information possible regarding the safety of their

drinking water allows us to be that much more prepared and proactive in our efforts to navigate an uncertain future."

California's drinking water program: Senate Bill 861 (Committee on Budget and Fiscal Review, Chapter 35, Statutes of 2014) transferred the state's drinking water program from the California Department of Public Health (CDPH) to the State Water Board effective July 1, 2014, creating the new Division of Drinking Water (DDW) within the State Water Board and made other statutory changes to create efficiencies and adoption and administration of the drinking water program.

The State Water Board has regulatory oversight of approximately 7,500 public drinking water systems in California. The State Water Board directly enforces the federal SDWA for all large water systems (those with 200 or more service connections), including those water systems regulated under the California Public Utilities Commission, the Department of Financial Protection and Innovation, or the Department of Housing and Community Development.

For small water systems (those with less than 200 connections), local health departments can be delegated, by the State Water Board, to have regulatory authority as the local primacy agency (LPA). 30 of California's 58 counties have LPA delegation agreements with the State Water Board, and therefore have primary responsibility of regulatory oversight of the public drinking water systems in their counties, which consist of community water systems with more than 14 and less than 200 connections, non-community non-transient systems, and non-community transient systems. In the remaining 28 counties, all public water systems, regardless of size, are directly overseen by the State Water Board.

The State Water Board has adopted regulations for drinking water standards, monitoring requirements, cross-connections, design and operational standards, and operator certification. The implementation of the drinking water program involves: (1) establishment of drinking water standards, (2) certification of operators and point-of-use treatment devices, and (3) direct regulation of public water systems with the authority to delegate oversight responsibility of small water systems to local county health departments. The regulation of public water systems includes: (1) issuance of permits covering the approval of water system design and operation procedures, (2) inspection of water systems, (3) the enforcement of laws and regulations to assure that all public water systems routinely monitor water quality and meet current standards, and (4) assuring notification is provided to consumers when standards are not being met.

What is a public water system? A public water system is defined as a system that provides water for human consumption to 15 or more connections or regularly serves 25 or more people daily for at least 60 days out of the year. Many people think of public water systems as large city or regional water suppliers, but they also include small housing communities, businesses, and even schools and restaurants that provide water. A public water system is not necessarily a public entity, and most public water systems are privately owned. Drinking water regulations impose the most stringent monitoring requirements on community and non-transient non-community water systems because the people they serve obtain all or much of their water from that system each day. Community water systems are city, county, regulated utilities, regional water systems, and even small water companies and districts where people live. Non-community non-transient water systems are places like schools and businesses that provide their own water. Being a public water system means providing affordable, safe drinking water to customers 24 hours a

day, 7 days a week, 365 days a year. This includes the associated legal, fiscal, and operational responsibilities, and future planning.

Human right to water: In 2012, California became the first state to enact a Human Right to Water law, AB 685 (Eng, Chapter 524, Statutes of 2012). Public policy continues to be focused on the right of every human being to have safe, clean, affordable, and accessible water adequate for human consumption, cooking, and sanitation. Water supply, contaminants, costs of treatment and distribution systems, the number and nature of small public water systems, especially in disadvantaged communities, and many other factors will continue to challenge progress in addressing the Human Right to Water.

Notification level (NL): Notification levels are established health-based advisory levels used by public water systems to provide information to its customers about certain non-regulated chemicals in drinking water that lack MCLs. When chemicals are found at concentrations greater than these levels, certain requirement and recommendations apply. Generally, NLs have been established in response to actual contamination of drinking water supplies, e.g., perchlorate, which now has an MCL. However, NLs for a number of chemicals were established in anticipation of possible contamination, such as from a hazardous waste site containing many pesticides (in the 1980s), or from a federal Superfund site (in the 2000s).

Once established, a NL generally stays in place, unless it is replaced by an MCL. On occasion, though, the DDW has revised the numeric value of an individual NL to reflect new risk assessment information on the particular chemical. For some of the chemicals that had advisory levels established early on, if no MCL was adopted and the need for the NL had passed, the advisory level was archived. Archived advisory levels may nevertheless be updated to reflect any new risk information that may become available, and may be used as NLs if needed.

According to information listed in the State Water Boards website, since the early 1980s, notification levels for 93 contaminants have been established. Of those, 40 have gone through the formal regulatory process and now have MCLs. Currently there are 32 chemicals with notification levels. In addition, another 24 chemicals have archived advisory levels.

Response level (RL): If a chemical is present in drinking water that is provided to consumers at concentrations considerably greater than the NL, the DDW recommends that the drinking water system take the source out of service. The level prompting a recommendation for source removal is the RL, and depends upon the toxicological endpoint that is the basis for the NL. For chemicals with a non-cancer toxicological endpoint, this recommendation occurs at 10 times the NL.

When a drinking water system does not take a source out of service despite the presence of a contaminant in drinking water at a level confirmed to be greater than the RL, the State Water Board recommends the following:

- Notification of the local governing body (*i.e.* city council or board of supervisors, or both) that indicates water is being provided that exceeds the chemical's RL, and the reason for the continued use of the source.
- Notification of the water system's customers and other water consumers that the contaminant is present in their drinking water at a concentration greater than its response level, the level at which source removal is recommended, and the reason for the continued use of the source.

- Whenever such a public "right-to-know" notice occurs, it should be provided to customers and to the water-consuming population in the affected area that would not directly receive such information, including renters, workers, and students.
- Notification should be provided directly to consumers, for example, by posted notices, hand-delivered notices, and water bill inserts.
- A press release from the water system should also be issued to the local media.
- After notification is provided, the DDW recommends the following: (1) Monthly sampling and analysis of the drinking water supply for as long as the contaminant exceeds its RL, and quarterly sampling for 12 months, should the concentration drop below the RL and (2) quarterly notification of the water system's customers and other water consumers for as long as the contaminant is present at a concentration greater than its RL, using the methods described above.

While NLs and RLs are not regulatory standards they provide important information about contaminants to public water systems and their customers, at the same time there are signification actions imposed upon public water systems with the issuance of a NL or RL.

Emergency Notification Plan: A person cannot operate a public water system unless they have an approved emergency notification plan. In a document titled "Water Quality Emergency Notification Plan," the State Water Board requires public water systems to submit the following information, as part of their emergency notification plan: administrative information of the public water system; names of designated people that will implement the plan once an imminent danger to the health of the water users has been identified; contact information for the State Water Board's DDW's District Engineer; an alternative contact within DDW; and the contact information for someone from the County Environmental Health Department Local Primacy Agency. Water systems operators are also provided contact information for Office of Emergency Services Warning Center, available 24/7. Lastly, water system operators are required to submit a description of the method or combination of methods that they use to communicate to their water users (e.g. radio, television, door-to-door, sound truck). The form states, consideration must be given to special organizations such as schools, non-English speaking groups, and outlying water users.

Wildfires and public water systems: The author's office has stressed the importance of having communication protocols that can organize and disseminate information quickly when water is not safe for consumption. These last several years California has experienced extreme weather events that have affected water quality (e.g. wildfires, drought or flooding) and have left communities struggling and, in some cases, without access to safe drinking water. A news article published in 2018 in Chemical & Engineering News titled, *"California wildfires caused unexpected benzene contamination of drinking water,"* describes the water contamination that occurred in the city of Santa Rosa, California following wildfires. Benzene levels persisted for months in the water systems because it was leaching from plastic pipes that had absorbed the chemical. A statement from an engineer in the article states "this event underscores the need for more research on plastic water pipes. The relative flexibility of plastic pipes is crucial in earthquake-prone areas like California. But their propensity for soaking up organics like a sponge can cause lingering contamination." Furthermore, an article available in the US EPA websites, addresses contamination of drinking water systems from volatile organic compounds (VOCs) after wildfires recognizes that VOC contamination can potentially be a long-term problem.

Communications during an emergency: While policies and frameworks for improving communication are improving over time, California has experienced problems in notifying or warning citizens in times of disaster or emergency. Proponents of the bill are in favor of maximizing the use of available notification technology systems. The aftermath after flooding events in Planada and Pajaro, California were examples they shared highlighting the need to improve communication. Residents did not receive timely information on a "Do Not Drink/Do Not Boil" advisory. These events demonstrated a need to improve how public water system users are notified in certain emergencies.

The federal Wireless Emergency Alert System (WEA) was established through The Warning, Alert, and Response Network (WARN) Act in 2008 and became operational in 2012. WEA is a public safety system that allows customers who own compatible mobile devices to receive geographically targeted, text-like messages alerting them of imminent threats to safety in their area. WEA is an opt-out system. Mobile device users will receive the WEA notification unless they choose to deactivate the service on their mobile device. Alerts sent using WEA are sent through the Integrated Public Alert and Warning System (IPAWS*)*. As stated in FEMA's website, federal agencies and state, local, tribal, and territorial governments are eligible to send alerts using IPAWS. Other public or private sector organization may also be eligible depending on their public safety mission. Information provided to the author's office said all California counties were registered to use WEA. It is unclear if it's the same agency or department across counties.

According to the Federal Communications Commission's website, "Public Safety Messages are a new class of WEA's that you can use only in connection with Imminent Threat or AMBER Alerts to recommend steps that the public should take to save lives or property... The availability of Public Safety Messages gives alert originators the ability to provide additional information to their communities during emergencies when that information is essential to saving lives or property but does not meet the criteria for issuing an Imminent Threat or AMBER Alert." While there are many technical challenges and barriers for public water systems to use this technology, it may be possible, under unique circumstances for public safety messages to be used in water contamination emergencies.

Considerations: Public water systems are diverse in size, ownership, structure, areas they serve, users they serve, and even number of counties they serve: what works for one, may not work for another. In dire situations water can be shut off or one water source can be disconnected to protect the health of public water system users. Water system operators or owners can both focus on making their systems more resilient to climate change to avoid having to send emergency notifications, and be encouraged to improve or update their communication methods.

As this bill moves through the legislative process, the author is encouraged to continue discussions with the State Water Board and California Governor's Office of Emergency Services to determine if public safety messages can be an option for contaminated water notifications, under specific circumstances, and identify a framework for implementation.

This bill: AB 3090 encourages public water systems to provide notification to water users, by means of other communications technology, including but not limited to, text messages, email, or social media. As technology advances and options for more immediate notification become available, public water systems are encouraged to make use of them to improve the speed in which people receive information.

Arguments in support: According to a coalition of environmental groups on a previous version of AB 3090:

"In 2023, the farmworker community of Pajaro in Monterey County was flooded after the adjacent levee was breached by historic, climate change induced rainfall. Following this disaster, State and Local authorities were able to utilize the federal Wireless Emergency Alert System (WEA) to successfully evacuate more than 3,000 community residents from their homes. These timely alerts were dispersed to all participating wireless carriers in the affected area, and provided immediate and potentially lifesaving safety measures. However, returning residents faced ongoing drinking water contamination issues stemming from the flood, with both the Pajaro-Sunny Mesa Community Services District and local authorities struggling to provide notification of the "Do Not Drink/Do Not Boil" advisory in place for residents of Monterey County, prolonging the community's exposure to contaminated tap water.

According to CalOES, each county has a certified operator for the WEA system; but no formal legislation outlines procedures detailing the usage of the WEA to alert the public to possible drinking water contamination following a natural disaster. AB 3090 would authorize public water systems authority to work with counties to use the Wireless Emergency Alert system (WEA) to send out alerts to water users for emergency Tier 1 notices, which notify users if their water is unsafe for human health and safety. This bill would also direct the public water systems to include important information for the water users, in both English and Spanish, and direct the water users to a website or others reliable sources where they can find more information and check to stay up to date on the status of their water safety and what is safe to do or not do with the water. As the world adapts to the new "normal" of increasing natural disasters, California must ensure that its most vulnerable—including rural communities, non-english speakers, and hard to reach populations —have access to all available tools to ensure human health and safety in the event of a natural disaster that impacts water contamination."

Arguments in opposition: None.

Related Legislation:

1) AB 2560 (Quirk, Chapter 350, Statues of 2020). Requires the State Water Board to post on its internet website and distribute through e-mail that it has initiated the development of a NL or RL for a contaminant and information for a proposed NL or RL along with supporting documentation. Authorize the State Water Board's DDW to exempt a contaminant from the public process created for NLs and RLs if DDW finds that a contaminant presents the potential for imminent harm to public health and safety.

2) SB 3 (Dodd, Chapter 855, Statutes of 2023). Requires, on and after August 1, 2024, covered water systems that supply water to 200 service connections or less to have a written policy on the discontinuation of residential water service. Requires that policy to be provided in writing in multiple languages. Prohibits covered water systems from shutting off water service for certain customers that meet specified criteria and prohibits the shutoff of water service until the water bill has been delinquent for 60 days. Enacts a cap on reconnection fees a covered water system can charge for restoring water service.

3) SB 998 (Dodd, Chapter 891, Statutes of 2018). Requires all public water systems (with more than 200 connections) to have a written policy on discontinuation of residential water service

and to provide that policy in multiple languages. Prohibits a public water system from shutting off water service for certain customers that meet specified criteria and prohibits the shutoff of water service until the bill has been delinquent for 60 days. Caps the reconnection fees a public water system can charge for restoring water service.

REGISTERED SUPPORT / OPPOSITION:

Support

Carbon Cycle Institute
Clean Water Action
Cleanearth4kids.org
Community Water Center
Environmental Working Group
Human Impact Partners
Leadership Counsel for Justice and Accountability

Opposition

None on file.

Analysis Prepared by: Brenda Cisneros-Larios / E.S. & T.M. /

Date of Hearing: April 23, 2024

ASSEMBLY COMMITTEE ON ENVIRONMENTAL SAFETY AND TOXIC MATERIALS
Eduardo Garcia, Chair
AB 3136 (Reyes) – As Introduced February 16, 2024

SUBJECT: Attorney General: Bureau of Environmental Justice

SUMMARY: Requires, within the Department of Justice (DOJ), the continued existence of a Bureau of Environmental Justice (Bureau of EJ). Specifically, **this bill**:

1) Requires, within the DOJ, the continued existence of a Bureau of EJ.

2) Provides that the purpose of the Bureau of EJ is to protect people and communities that endure a disproportionate share of environmental pollution and public health hazards.

3) Requires the Bureau of EJ to ensure the fair treatment of people of all races, cultures, and incomes with respect to the development, adoption, implementation, and enforcement of environmental laws, regulations, and policies, pursuant to the existing authority of the Attorney General (AG), including, but not limited to, all of the following:

    a) Ensuring compliance with the California Environmental Quality Act (CEQA) and land use planning laws;

    b) Penalizing and preventing illegal discharge to air and water from facilities located in communities already burdened disproportionately with pollution;

    c) Eliminating or reducing exposure to lead and other toxins in the environment and consumer products;

    d) Remediating contaminated drinking water; and,

    e) Challenging policies that inadequately protect public health and environmental protections.

4) Requires the AG to ensure the Bureau of EJ is staffed with a minimum of 12 attorneys and an appropriate number of support staff.

EXISTING LAW:

1) Defines "environmental justice" as the fair treatment and meaningful involvement of people of all races, cultures, incomes, and national origins, with respect to the development, adoption, implementation, and enforcement of environmental laws, regulations, and policies. (Government Code (GC) § 65040.12 (e)(1) and Public Resources Code (PRC) § 30107.3 (a))

2) Specifies that "environmental justice" includes, but is not limited to, all of the following:
    a) The availability of a healthy environment for all people;
    b) The deterrence, reduction, and elimination of pollution burdens for populations and communities experiencing the adverse effects of that pollution, so that the effects of the pollution are not disproportionately borne by those populations and communities;

   c) Governmental entities engaging and providing technical assistance to populations and communities most impacted by pollution to promote their meaningful participation in all phases of the environmental and land use decision-making process; and,
   d) At a minimum, the meaningful consideration of recommendations from populations and communities most impacted by pollution into environmental and land use decisions. (GC § 65040.12 (e)(2) and PRC § 30107.3 (b).

3) Establishes as policy of the state that every human being has the right to safe, clean, affordable, and accessible water adequate for human consumption, cooking, and sanitary purposes. (Water Code § 106.3)

4) Requires the California Environmental Protection Agency (CalEPA), in designing its mission for programs, policies, and standards, to do all of the following:
   a) Conduct its programs, policies, and activities that substantially affect human health or the environment in a manner that ensures the fair treatment of people of all races, cultures, and income levels, including minority populations and low-income populations of the state;
   b) Promote enforcement of all health and environmental statutes within its jurisdiction in a manner that ensures the fair treatment of people of all races, cultures, and income levels, including minority populations and low-income populations in the state;
   c) Ensure greater public participation in the agency's development, adoption, and implementation of environmental regulations and policies; and,
   d) Improve research and data collection for programs within the agency relating to the health of, and environment of, people of all races, cultures, and income levels, including minority populations and low-income populations of the state. (PRC § 71110)

5) Requires, on or before January 1, 2002, the Secretary for Environmental Protection to convene a Working Group on Environmental Justice to assist CalEPA in developing, on or before July 1, 2002, an agency-wide strategy for identifying and addressing any gaps in existing programs, policies, or activities that may impede the achievement of environmental justice. (PRC § 71113)

6) Requires the Secretary for Environmental Protection to, on or before January 1, 2002, convene an advisory group to assist the Working Group on Environmental Justice by providing recommendations and information to, and serving as a resource for, the working group. (PRC § 71114)

7) Requires the Secretary for Environmental Protection to, not later than January 1, 2004, and every three years thereafter, prepare and submit to the Governor and the Legislature a report on the implementation of the CalEPA environmental justice strategy. (PRC § 71115)

8) Requires the California Air Resources Board (CARB), by July 1, 2007, to convene an environmental justice advisory committee, of at least three members, to advise it in developing the carbon neutrality scoping plan pursuant to Assembly Bill (AB) 32, the California Global Warming Solutions Act of 2006 (Núñez, Chapter 488, Statues of 2006), and any other matters pertinent in implementing AB 32.
   a) Requires that the advisory committee be comprised of representatives from communities in the state with the most significant exposure to air pollution, including, but not limited to, communities with minority populations or low-income populations, or both;

b) Requires CARB to appoint the advisory committee members from nominations received from environmental justice organizations and community groups; and,
c) Requires CARB to provide reasonable per diem for attendance at advisory committee meetings by advisory committee members from nonprofit organizations. (Health and Safety Code § 38591)

9) Establishes an Environmental Justice Advisory Committee (EJ Advisory Committee) to make recommendations for integrating environmental justice considerations into the Department of Pesticide Regulation's (DPR's) programs, policies, decision making, and activities. (Food and Agriculture Code § 11519)

10) Enacts the California Environmental Quality Act (CEQA) which requires state and local government agencies to inform decision makers and the public about the potential environmental impacts of proposed projects, and to reduce those environmental impacts to the extent feasible. (PRC § 21000)

FISCAL EFFECT: Unknown.

COMMENTS:

Need for the bill: According to the author, "AB 3136 will promote environmental justice by codifying the Bureau of Environmental Justice in the Department of Justice. The Bureau was created administratively by Attorney General Becerra in 2018 and has since been expanded by Attorney General Bonta in 2021 to its current staff of 12 attorneys. The past and ongoing work of the Bureau is extremely important to California residents, but there is no guarantee that future Attorney Generals will continue to have the Bureau of Environmental Justice. Climate Change is the defining issue of the 21st century. How we adapt, plan, and mitigate it will have serious consequences. Low-income communities of color are usually impacted first, the hardest, and are most likely to be under-resourced. Codifying the Bureau of Environmental Justice will give these communities a guaranteed ally in the fight against environmental injustice and ensure that there will always be a dedicated entity in the state to take up these issues."

Environmental justice: According to the United States Environmental Protection Agency, "Environmental justice is the fair treatment and meaningful involvement of all people regardless of race, color, national origin, or income, with respect to the development, implementation, and enforcement of environmental laws, regulations, and policies. This goal will be achieved when everyone enjoys… the same degree of protection from environmental and health hazards, and equal access to the decision-making process to have a healthy environment in which to live, learn, and work."

Meaningful involvement, as related to environmental justice, means that, "People have an opportunity to participate in decisions about activities that may affect their environment and/or health; the public's contribution can influence the regulatory agency's decision; community concerns will be considered in the decision making process; and, decision makers will seek out and facilitate the involvement of those potentially affected."

Human right to water: In 2012, by enacting AB 685 (Eng, Chapter 524, Statutes of 2012), California became the first state with a Human Right to Water law. AB 685 established a state policy that every human being has the right to safe, clean, affordable, and accessible water

adequate for human consumption, cooking, and sanitation. Water supply issues, contaminants, costs of treatment and distribution systems, climate change, the number and nature of small public water systems, especially in disadvantaged communities, and many other factors continue to challenge progress in implementing the Human Right to Water.

CalEnviroScreen: Many communities continue to bear a disproportionate burden of pollution not only from multiple nearby sources, but also from pollution in multiple media (e.g., air or water). Some of these communities experience the additional burden of socioeconomic stressors and health conditions that render them more vulnerable to the impacts of pollution. In order to address the cumulative effects of both pollution burden and these additional factors, and to identify which communities might be in need of particular policy, investment, or programmatic interventions, the Office of Environmental Health Hazard Assessment (OEHHA) developed, maintains and updates the CalEnviroScreen tool on behalf of CalEPA. This tool applies a framework for assessing cumulative impacts that OEHHA developed in 2010, based in large part on input from a statewide working group on environmental justice that pointed out the unmet need to assess cumulative burdens and vulnerabilities affecting California communities (OEHHA 2010). CalEnviroScreen has been updated several times with the current version, 4.0, being released in 2021.

Disproportionate burden of pesticide exposure: According to the 2022 *BMC Public Health* article, "Pesticides and environmental injustice in the USA: root causes, current regulatory reinforcement and a path forward," "Many environmental pollutants are known to have disproportionate effects on Black, Indigenous, and People of Color (BIPOC), as well as on communities of low-income and wealth. The reasons for these disproportionate effects are complex and involve hundreds of years of systematic oppression kept in place through structural racism and classism in the United States… Disparities in exposures and harms from pesticides are widespread, impacting BIPOC and low-income communities in both rural and urban settings and occurring throughout the entire lifecycle of the pesticide from production to end-use… This is not simply a pesticides issue, but a broader public health and civil rights issue."

Children and disproportional exposure to pesticides: BIPOC children in California are especially at risk of being disproportionally impacted by pesticide exposure. The *BMC Public Health* article describes that in California, almost three out of every four children with the highest potential for exposure to pesticides at school were non-Anglo. An analysis of 15 agricultural counties in California found that children identifying as Hispanic were 46% more likely than white children to go to school within a quarter mile of locations where pesticides of human health concern were used. Hispanic children were also 91% more likely than white children to attend school where the highest amount of pesticides of human health concern were used nearby. Pesticide exposure in children is particularly concerning because children are more susceptible to the effects of pesticides because they are still developing. With children of color more likely to be exposed to pesticides, they are not only more susceptible, but more vulnerable to pesticidal harm. Children of color are therefore the most vulnerable of any vulnerable population subgroup and will often be the most at-risk population.

The *BMC Public Health* article concludes that altogether, the available literature and data suggest that BIPOC and people living in poverty are generally exposed to higher levels of pesticides than the total population at large. This presents a serious environmental justice issue that must be addressed.

Inequities in childhood lead exposure: According to the Center for Disease Control, people with low incomes and people of color are more likely to live in neighborhoods with outdated infrastructure, and are thus more likely to be exposed to lead-based paint and pipes, faucets, and plumbing fixtures containing lead. Evens et al. (2015), in a study published in *Environmental Health,* found that among nearly 58,000 children attending Chicago public schools, blood lead levels were highest in black children (relative to Hispanic and white children) and higher in low-income children. Children from low-income families and communities of color can also be further disadvantaged through the cumulative impacts of lead and other challenges they may face, including higher rates of poverty, malnutrition, exposure to multiple pollutants, and enrollment in under-resourced schools. A 2020 study published in *Nature Medicine* (Marshall et al.) reported that the combination of lead exposure and being from a low-income family can result in worse impacts, compared to when children have only one of these risk factors. Specifically, children from low-income families and with the highest risk levels for lead exposure showed reduced cognitive performance and brain changes (including reduced volume of the cortex, a part of the brain that plays a role in higher level processes, including problem solving, planning, critical thinking, and memory).

Establishment of an environmental justice framework in California: According to the California Department of Resources Recycling and Recovery (CalRecycle), California became the first state in the nation to put environmental justice considerations into law when Governor Gray Davis signed Senate Bill (SB) 115 (Solis, Chapter 690, Statutes of 1999). The bill provided the procedural framework for environmental justice in California and directed CalEPA to conduct its programs, policies, and activities with consideration to environmental justice principles. It also defined environmental justice in the state to mean, "the fair treatment and meaningful involvement of people of all races, cultures, incomes and national origins with respect to the development, adoption, implementation and enforcement of environmental laws, regulations, and policies." SB 89 (Escutia, Chapter 728, Statutes of 2000) was enacted shortly after SB 115, and called for a strategic path to advance environmental justice. It required CalEPA to establish an interagency Working Group on Environmental Justice to assist in developing a strategy for identifying and addressing gaps in existing programs, policies, or activities that may hinder the achievement of environmental justice in the state. While some of the statutory requirements of these early bills have expired, they, and others, establish long-term legislative intent for a robust environmental justice program throughout CalEPA's boards, departments, and office.

CalEPA's Environmental Justice Task Force: Established in 2013 by CalEPA Secretary Matthew Rodriquez, the Environmental Justice Task Force (Task Force) seeks to facilitate the use of environmental justice considerations in compliance and enforcement programs and enhance communications with community members to maximize benefits in disproportionately impacted areas. The Task Force coordinates the compliance and enforcement work of CalEPA's boards, departments and office in areas of California that are burdened by multiple sources of pollution and are disproportionately vulnerable to its effects. The Task Force's mission is to facilitate the use of environmental justice considerations in compliance and enforcement programs and enhance communications with community members to maximize benefits in disproportionately impacted areas.

The Task Force's work has evolved substantially since its inception in 2013. From 2013-2019, the Task Force utilized a geographic-based approach. After identifying a target area based on CalEnviroScreen and other factors, a multi-media team of agency representatives would meet with community members to better understand local concerns. The agencies would follow up

with compliance assistance for regulated businesses and coordinated, multi-agency enforcement sweeps to address environmental concerns. A brief summary describing these geographic-based initiatives are below:

Stockton: In 2019, the Task Force completed an environmental justice initiative in historically segregated neighborhoods in the city of Stockton. The multi-agency task force conducted more than 200 inspections, and took steps to address illegal dumping, air pollution near schools, drinking water issues and industrial pollution.

Imperial County: In 2018, the Task Force completed its first environmental justice initiative in a rural setting and the first with county-wide emphasis. The initiative addressed farmworker protections, cross-border pollution, and illegal off-road vehicle activity. CalEnviroScreen indicated that much of the county's census tracts fell within the top 80th to 95th percentile of census tracts in California for pesticide applications, homes near solid waste facilities, and homes near businesses that generate hazardous waste. Nearly 30 percent of 261 inspections resulted in findings of noncompliance or violations.

Pomona: In 2017-2018, the Task Force conducted an initiative focused on the industrial corridor of southeast Pomona and surrounding residential neighborhoods. CalEnviroScreen estimated the total pollution burden of this area was at the 92nd percentile, meaning only eight percent of areas in California had a higher cumulative pollution burden.

Oakland: In 2016-2017, the Task Force conducted an initiative focused on the communities of East and West Oakland. Both communities are overburdened by multiple sources of pollution and high rates of childhood asthma, according to CalEnviroScreen.

Los Angeles: In 2015-2016, the Task Force conducted an initiative focused on the Los Angeles communities of Boyle Heights and Pacoima. Both communities are among the top five percent of disadvantaged communities in California, according to CalEnviroScreen.

Fresno: In 2013-2014, the Task Force selected a portion of the city of Fresno and its surrounding unincorporated area for its first initiative, with the goal of increasing compliance with environmental laws in this area.

It is important to note that many enforcement cases brought by boards and departments under CalEPA lead to civil and sometimes criminal penalties and the AG's office provides support to CalEPA when needed.

Bureau of EJ within the DOJ: On February 22, 2018, Attorney General Xavier Becerra established the Bureau of EJ, and, on April 28, 2021, Attorney General Robert Bonta announced the expansion of the Bureau of EJ. The Bureau of EJ is comprised of 12 attorneys who are solely focused on fighting environmental injustices throughout the state of California and giving a voice to frontline communities who are all too often under-resourced and overburdened.

The Bureau of EJ's mission is to protect people and communities that endure a disproportionate share of environmental pollution and public health hazards.

The Bureau of EJ focuses on:

- Ensuring compliance with CEQA and land use planning laws;
- Penalizing and preventing illegal discharge to air and water from facilities located in communities already burdened disproportionately with pollution;
- Eliminating or reducing exposure to lead and other toxins in the environment and consumer products;
- Remediating contaminated drinking water; and,
- Challenging the Federal Government's actions that inadequately protect public health and environmental protections.

This bill: AB 3136 cements in statute the Bureau of EJ within the DOJ. Currently the Bureau of EJ was administratively established by AG Becerra and it can be eliminated by a future AG. With or without this bill, the AG is still required to enforce California laws. However, having a Bureau of EJ, provides the AG with a team of attorneys that can develop experience in environmental laws in order to better protect human health and safety and the environment. Additionally, with CalEPA's Task Force, having a team of experienced attorneys within the DOJ helps to support CalEPA's enforcement efforts.

Arguments in support: According to California Environmental Voters, "On February 22, 2018, Attorney General Becerra established the Bureau of Environmental Justice to protect people and communities that endure a disproportionate share of environmental pollution and public health hazards. The Bureau's sole focus is on fighting environmental injustices throughout the state of California and giving a voice to frontline communities who are all too often under-resourced and overburdened with pollution.

The Bureau has many different tools at its disposal to combat environmental injustice such as sending comment letters outlining environmental justice concerns for projects around the state, developing best practices such as when they did so for warehouse construction and siting, as well as filing lawsuits when projects violate CEQA or other environmental state laws.

While the past two Attorney Generals have been supportive of advancing environmental justice there is no guarantee that future Attorney Generals will continue this practice. A state entity that is codified and focused on environmental justice will ensure that Californians will always have a dedicated partner in the fight for environmental justice. AB 3136 would codify the Bureau of Environmental Justice and ensure fair treatment of people of all races, cultures, and incomes with respect to the development, adoption, implementation, and enforcement of environmental laws, regulations, and policies."

Arguments in opposition:

None on file.

Related legislation:

1) AB 652 (Lee, Chapter 662, Statutes of 2023). Establishes a DPR EJ Advisory Committee to integrate environmental justice considerations into the DPR's programs, policies, decision making, and activities.

2) AB 2108 (Robert Rivas, Chapter 347, Statutes f 2022). Requires the State Water Resources Control Board (State Water Board) and Regional Water Quality Control Boards (Regional Water Boards) to make programmatic findings on potential environmental justice, tribal

impact, and racial equity considerations when issuing regional or reissuing statewide waste discharge requirements or waivers of waste discharge requirements. Requires the State Water Board and Regional Water Boards to engage communities impacted by proposed discharges of waste throughout the waste discharge planning, policy, and permitting process.

3) AB 649 (Bennett, Chapter 492, Statutes of 2022). Establishes the Office of Environmental Justice and Tribal Relations within CalRecycle and prescribes the duties of the office, including, among others, ensuring that CalRecycle's programs effectively address the needs of disadvantaged communities, low-income communities, California Native American tribes, and farmworkers.

4) AB 1071 (Atkins, Chapter 585, Statutes of 2015). Requires each board, department, and office within the CalEPA to establish a policy on supplemental environmental projects that benefits environmental justice communities.

5) AB 32 (Núñez, Chapter 488, Statues of 2006). Establishes the California Global Warming Solutions Act of 2006 and requires CARB, by July 1, 2007, to convene an environmental justice advisory committee to advise it in developing the carbon neutrality scoping plan and any other matters pertinent in implementing the provisions of the bill.

6) SB 89 (Escutia, Chapter 728, Statutes of 2000). Requires CalEPA to establish a Working Group on Environmental Justice to assist in developing a strategy for identifying and addressing gaps in existing programs, policies, or activities that may hinder the achievement of environmental justice in the state. Requires the CalEPA secretary to convene an advisory committee to assist the working group by providing recommendations and information to, and serving as a resource for, the working group.

7) SB 115 (Solis, Chapter 690, Statutes of 1999). Defines environmental justice and requires CalEPA to conduct its programs, policies, and activities with consideration to environmental justice and to develop a model environmental justice mission statement for boards, departments, and offices within the agency, by January 1, 2001.

REGISTERED SUPPORT / OPPOSITION:

Support

California Environmental Voters (formerly CLCV)
Central Valley Air Quality Coalition (CVAQ)

Opposition

None on file.

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