Date of Hearing: April 14, 2026

ASSEMBLY COMMITTEE ON ENVIRONMENTAL SAFETY AND TOXIC MATERIALS
Damon Connolly, Chair
AB 1603 (Schultz) – As Amended April 6, 2026

SUBJECT: Perfluoroalkyl and polyfluoroalkyl substances (PFAS): Department of Pesticide Regulation

SUMMARY: Prohibits, commencing January 1, 2035, the use, manufacture, or sale of pesticides that contain intentionally added perfluoroalkyl and polyfluoroalkyl (PFAS) substances; prohibits the Department of Pesticide Regulation (DPR) from registering new pesticides that contain intentionally added PFAS; and places other prohibitions and restrictions on the use, manufacture, and sale of pesticides that contain intentionally added PFAS. Specifically, **this bill**:

1) Makers legislative findings about PFAS and pesticides and declares that it is the intent of the Legislature to address the use of PFAS pesticides as a class; reduce the presence of all PFAS pesticides on California-grown produce and in California's soil, air, and water; and, begin phasing out the use of PFAS pesticides already phased out elsewhere and to take additional steps to address other PFAS in pesticides.

2) Defines "perfluoroalkyl and polyfluoroalkyl substances" or "PFAS" as a class of fluorinated organic chemicals containing at least one fully fluorinated carbon atom.

3) Defines "PFAS-restricted material" as a registered pesticide containing PFAS that are intentionally added as active, adjuvant, or inert ingredients, as described.

4) Prohibits, commencing January 1, 2035, the use, manufacture, sale, delivery, holding, or offer for sale in commerce of any pesticide that contains PFAS that are intentionally added as active, adjuvant, or inert ingredients.

5) Prohibits, commencing January 1, 2030, the use, manufacture, sale, delivery, holding, or offer for sale in commerce of any pesticide that contains one of 23 specified PFAS chemicals that are intentionally added as active, adjuvant, or inert ingredients.

6) Deems, commencing July 1, 2028, a registered pesticide containing PFAS that are intentionally added as active, adjuvant, or inert ingredients as a restricted material.

    a) Provides that use of a PFAS-restricted material shall be permitted only in accordance with current restricted material law that authorizes agricultural use only under a written permit of the county agricultural commissioner (CAC).

    b) Requires the use permit for a PFAS-restricted material to state: "This product contains perfluoroalkyl and polyfluoroalkyl substances, or PFAS, and can contaminate produce, groundwater, drinking water, soil, and the environment."

7) Requires, commencing July 1, 2028, any public disclosure by DPR of the use of a PFAS-restricted material, including through DPR's SprayDays California program, to state: "This

product contains perfluoroalkyl and polyfluoroalkyl substances, or PFAS, and can contaminate produce, groundwater, drinking water, soil, and the environment."

8) Prohibits DPR from registering a pesticide that has not been previously registered by DPR and contains PFAS that are intentionally added as active, adjuvant, or inert ingredients.

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) Defines, under FIFRA, "unreasonable adverse effects on the environment" to mean: (1) 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 (2) a human dietary risk from residues that result from a use of a pesticide in or on any food, as defined. (7 U.S.C. §136 (bb))

3) 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.)

4) 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)

5) Authorizes the director of DPR, after a hearing, to cancel the registration of, or refuse to register, any pesticide that fulfills these, among other, criteria:
   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)

6) Requires, if during or after the registration of a pesticide the registrant has 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, the registrant to

submit the evidence to DPR. Authorizes the director of DPR to adopt regulations to carry out the reevaluation process. (FAC § 12825.5)

7) Prohibits, except for specified health, safety, and agricultural activities, the use of the rodenticides brodifacoum, bromadiolone, difenacoum, diphacinone, 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)

8) Prohibits a person from using or possessing a pesticide designated as a restricted material for any agricultural use except under a written permit of the CAC. (FAC § 14006.5)

9) Authorizes the director of DPR to, at any time, evaluate a registered pesticide to carry out specified statutory requirements. Requires the director 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. Requires, if the director finds from the investigation that a significant adverse impact has occurred or is likely to occur or that such an alternative is available, the pesticide involved to be reevaluated. (Title 3 of the California Code of Regulations (CCR) § 6220)

10) Prohibits the use, sale, and manufacturing of PFAS in many consumer and industrial products, including menstrual products, juvenile products, textiles, food packaging, cosmetics, and firefighting foam. (Various Health and Safety Code Sections)

FISCAL EFFECT: Unknown.

COMMENTS:

Need for the bill: According to the author, "PFAS pesticides are being spread in large quantities across our most valuable agricultural land and on our most popular crops. These chemicals are highly persistent, take a very long time to break down, and can contaminate soil and ground water for years to come. In addition, PFAS are associated with a range of serious health harms. Very low doses of PFAS in drinking water have been linked to the suppression of the immune system and are associated with an elevated risk of cancer, increased cholesterol, and reproductive and developmental harms, among other serious health concerns. For most people, food and drinking water are the primary routes of exposure to PFAS. That makes the use of these chemicals in agriculture especially concerning; PFAS do not belong on our food or dinner tables. We should not eat them. We need to end the use of these very problematic pesticides now."

Perfluoroalkyl and polyfluoroalkyl substances (PFAS): PFAS are synthetic, highly fluorinated substances that have been widely used in industrial and consumer applications for their heat, water, and lipid resistance properties for more than seven decades. In consumer products, PFAS are used in carpets, furniture fabrics, apparel, food packaging, non-stick cookware, personal care products, and other products designed to be waterproof; grease, heat, water and stain resistant; or, non-stick. Commercial applications span many sectors of the economy, including aerospace, automotive, building and construction, pharmaceuticals, medical devices, paints, electronics, semiconductors, energy, oil and gas exploration, first responder safety, firefighting foams, and health care. During production, use, and disposal, PFAS can migrate into the soil, water, and air.

Some PFAS are volatile, and can be carried long distances through the air, leading to contamination of soils and groundwater far from the emission source. Researchers have found PFAS in indoor and outdoor environments, plants, soil, food, drinking water, wildlife, companion animals, production animals, and humans at locations across the nation and around the globe. PFAS are extremely persistent and degrade very slowly over time, which has resulted in their accumulation in the environment since the onset of their production in the late 1940s. Currently, nearly 15,000 PFAS chemicals are included in the chemicals database CompTox, which is maintained by the US EPA.

Exposure to PFAS: The main route of exposure to PFAS is through ingestion of contaminated food or liquid (accounting for up to half of total exposure), through contact with consumer products, and through inhalation and ingestion of contaminated indoor air and dust. Food can become contaminated with PFAS through soil and water used to grow the food, food packaging containing PFAS, and equipment that uses PFAS during processing. Some foods, such as fish, meat, eggs, and leafy vegetables, may contain PFAS due to bioaccumulation and crop uptake. Studies have shown that PFAS can transfer from pregnant mothers to their fetuses via the placenta during gestation, as well as transfer from nursing mothers to their infants via breastfeeding. Dermal exposure is also possible when people touch products treated with PFAS, such as carpets or clothing. Young children may be exposed to higher levels of PFAS than adults because they ingest more dust containing PFAS and mouth PFAS-treated consumer products. Workers, such as carpet installers, carpet cleaners, firefighters, and workers in furniture, furnishings, outdoor clothing, and carpet stores, may also experience above average PFAS exposure levels. Exposure to PFAS in drinking water is an escalating concern due to the persistence of PFAS chemicals in the environment and their tendency to accumulate in groundwater. In 2022, PFAS were detected in 79 percent of the 150 public water systems tested throughout California.

Like humans, wildlife is exposed to PFAS by consuming contaminated water or food. Within aquatic food webs, PFAS are found to increase in concentration from ambient water to plankton and further up the food chain.

Hazard traits of PFAS: According to the Department of Toxic Substances Control (DTSC), all PFAS display at least one of the hazard traits identified in California's Safer Consumer Products (Green Chemistry) Hazard Traits Regulations (22 C.C.R § 69401, et seq.). An intrinsic property of PFAS is the extreme environmental persistence of the individual compounds, their degradation products, or both, resulting in their classification as "forever chemicals." Most PFAS are mobile in environmental media such as air and water, and thus are widespread in living organisms and the environment.

Scientific studies have shown that exposure to some PFAS can lead to adverse health outcomes in humans and animals. DTSC states that if humans are exposed to PFAS through diet, drinking water, or inhalation, some of these chemicals remain in the body for a long time. As people continue to be exposed to PFAS, the PFAS levels in their bodies may increase to the point that they suffer adverse health effects. According to the US EPA, current peer-reviewed scientific studies have shown that exposure to certain levels of PFAS may lead to: reproductive effects such as decreased fertility or increased high blood pressure in pregnant women; developmental effects or delays in children, including low birth weight, accelerated puberty, bone variations, or behavioral changes; increased risk of some cancers, including prostate, kidney, and testicular cancers; reduced ability of the body’s immune system to fight infections, including reduced

vaccine response; interference with the body's natural hormones; and, increased cholesterol levels and/or risk of obesity. In addition to direct human health impacts, some PFAS may have high global warming potential. Also, several PFAS bioaccumulate significantly in animals or plants and emerging evidence points to their phytotoxicity, aquatic toxicity, and terrestrial ecotoxicity.

The persistence and proliferation of PFAS chemicals makes it challenging to study and assess the cumulative potential human health and environmental risks of PFAS exposure.

Regulating PFAS as a class: DTSC adopted a rationale for regulating PFAS chemicals as a class, concluding, "it is both ineffective and impractical to regulate this complex class of chemicals with a piecemeal approach." This rationale was presented in the February, 2021, *Environmental Health Perspectives* article, "Regulating PFAS as a Chemical Class under the California Safer Consumer Products Program." The authors of the article, who define PFAS as "a group of manmade chemicals containing at least one fully fluorinated carbon atom," state,

> "The widespread use, large number, and diverse chemical structures of PFAS pose challenges to any sufficiently protective regulation, emissions reduction, and remediation at contaminated sites. Regulating only a subset of PFAS has led to their replacement with other members of the class with similar hazards, that is, regrettable substitutions... We at the California DTSC propose regulating certain consumer products if they contain any member of the class of PFAS because: *a*) all PFAS, or their degradation, reaction, or metabolism products, display at least one common hazard trait according to the California Code of Regulations, namely environmental persistence; and *b*) certain key PFAS that are the degradation, reaction or metabolism products, or impurities of nearly all other PFAS display additional hazard traits, including toxicity; are widespread in the environment, humans, and biota; and will continue to cause adverse impacts for as long as any PFAS continue to be used. Regulating PFAS as a class is thus logical, necessary, and forward-thinking."

Other researchers have made the case for managing PFAS as a chemical class, including in "Scientific Basis for Managing PFAS as a Chemical Class" published in June 2020, in *Environmental Science & Technology Letters,* and "Strategies for grouping per- and polyfluoroalkyl substances (PFAS) to protect human and environmental health," also published in June, 2020, in *Environmental Science: Processes & Impacts.*

Pesticides and pesticide components: Pesticides are used in the United States and around the world to kill or suppress unwanted organisms in homes, on farmland, in the environment, and in other areas where people live and work. Although pesticides are often efficacious at exterminating or thwarting the growth of target organisms, they can also cause serious unintended harm to both humans and nontarget plants and animals. Over 1,000 pesticides are approved for use in California, and approximately 176 million pounds of pesticides were used in California in 2023 alone.

The immense potential for human exposure and environmental contamination from pesticides underscores the importance of understanding complete pesticide product compositions and their environmental fate and transport. The 2021 *Environmental Health Perspective* article, "Forever Pesticides: A Growing Source of PFAS Contamination in the Environment" describes that pesticide products generally contain two types of ingredients: active and "inert." Active ingredients (AIs) are the primary components in pesticide products that kill or suppress the

targeted organism. AIs are disclosed on a pesticide's label. "Inerts" are other ingredients added to the pesticide product, including emulsifiers, solvents, carriers, aerosol propellants, fragrances, and dyes. The article argues that despite the name, "inert" ingredients are far from being inert, many having chemical properties that can influence the toxicity or alter the bioavailability of the active ingredient or have unintended off-target effects themselves to people and wildlife. Unlike active ingredients, "inerts" are not required to be publicly disclosed on the pesticide label and toxicity testing is limited. The authors of the article argue that this lack of transparency and insufficient toxicity testing—in the pesticide context and many others—accomplishes two things from a public health perspective: It can a) hamper the ability of medical professionals to effectively treat patients who fall ill following pesticide exposure and b) shield companies from accountability regarding the harms from their products. In addition to active and inert ingredients, in agriculture, pesticide products are commonly applied with adjuvants, which are separate products that can reduce drift/volatilization, facilitate application, or enhance pesticidal effects of pesticide products. Adjuvant ingredients are widely used in U.S. agriculture.

PFAS in pesticides: The scientists that drafted the 2021 *Environmental Health Perspective* article, "Forever Pesticides: A Growing Source of PFAS Contamination in the Environment," analyzed US EPA data on PFAS pesticides used in the U.S to determine the prevalence of PFAS. They found that of the 471 unique, conventional pesticide AIs that are currently registered in the U.S., 107 (23%) contained at least one carbon-fluorine bond and 66 (14%) are PFAS. The study also found that fluorination is a recent trend among new registrations of pesticide AIs. Of the 54 conventional AIs that had been approved from 2012 to 2021, the proportion of fluorination increased dramatically with 33 (61%) classified as organofluorines and 16 (30%) as PFAS. In addition to the AIs identified by the study as "intentional" PFAS pesticides; eight inert ingredients are PFAS registered for use in pesticides. Additionally, the authors of the study found that pesticides likely further accumulate PFAS contamination from leaching from fluorinated containers and other as-yet-undetermined sources. DPR indicates there are 53 pesticides with at least one fully fluorinated carbon registered in California, and 1,153 products currently registered for use in California that contain at least one of the 53 pesticides. US EPA appears to have registered nearly 20 additional PFAS pesticides that have not yet been approved for use in California.

PFAS pesticide use in California: A 2025 analysis by the Environmental Working Group (EWG) found that California agricultural fields are treated with an average of 2.5 million pounds of PFAS pesticides every year, and that between 2018 and 2023, nearly 15 million pounds of PFAS pesticides were applied to California farmland, according to data from DPR. Counties with the largest amounts of PFAS pesticide use during this period were Fresno with 2.1 million pounds, Kern with 1.6 million pounds, San Joaquin with 923,000 pounds, and Imperial with 898,000 pounds. Other counties where PFAS pesticides were used include Monterey, Riverside, and Sonoma.

Through their analysis, EWG found that PFAS pesticides are being used most heavily on some of California's most iconic and lucrative crops. The heaviest uses included almonds, pistachios, wine grapes, alfalfa and tomatoes. The analysis further revealed that 85% of PFAS pesticides used in the state were used for crop production. The remaining 15% were used for various structural practices, such as insecticide for termite control, herbicide for landscape maintenance, and rodenticide. In places like Imperial County, 98% of PFAS pesticides were used for crop production. EWG reports that among the most frequently applied pesticides are the herbicide oxyfluorfen, the insecticide bifenthrin, the herbicide trifluralin, the insecticide lambda-

cyhalothrin and the fungicide penthiopyrad. The analysis states that two of these pesticides, bifenthrin and trifluralin, have been banned in the European Union due to health and environmental concerns.

Pesticides marketed and used by consumers for home and lawn purposes are typically not reported in California and therefore weren't considered in EWG's analysis. EWG asserts, however, that these PFAS pesticides may also be a significant source of PFAS in the everyday environment.

PFAS on California produce: EWG released an additional analysis in March 2026 that found that 37% of non-organic, or conventionally grown, California produce samples contained residues of PFAS pesticides. The analysis found that a total of 17 different PFAS pesticide residues were found on 40 produce types, including peaches, plums, strawberries and grapes. Out of 930 samples of 78 types of non-organic, California-grown fruits and vegetables tested, 348 samples, or 37%, had traces of PFAS pesticides, based on state testing data EWG reviewed. Within those 78 produce categories, 40 individual types of fruits and vegetables, or 51% of the different categories, had some residue of PFAS pesticides.

After EWG published the findings of their analysis, DPR posted, "DPR conducts one of the nation's most comprehensive produce residue monitoring programs, collecting and testing thousands of domestic and imported fruits and vegetables each year – including those that may be categorized as PFAS under broader definitions. The produce is tested for hundreds of pesticides to see if there are detections of any pesticide and, if so, if those detections are above or below U.S. EPA tolerance levels… A detection alone does not indicate a health concern. Tolerance levels represent the scientifically established threshold for safety. California's residue monitoring consistently shows very low levels of pesticide residues. In 2023, of the 1,059 produce samples labeled as "grown in California," 99% had residues below US EPA tolerance levels. Across all samples tested – including organic and conventionally grown produce – more than 97% of fruits and vegetables sold in California contained no detectable pesticide residues or residues below federal safety standards."

Why is PFAS in pesticides? The 2021 *Environmental Health Perspective* article describes that fluorination is used to modify chemical attributes, such as stability and lipophilicity, improve stereochemical specificity, and increase residual activity of pesticide ingredients. Pesticide active ingredients are commonly fluorinated, with insecticides and acaricides more likely to be highly fluorinated. Fluorination can contribute to the molecular stability of active ingredients and can influence lipophilicity, which can alter membrane permeability and binding to target proteins. Fluorinated inerts can expedite dispersal of the sprayed pesticide on targeted surfaces such as leaves, aid in surfactancy, and facilitate the penetration of the pesticide into living organisms. The fluorination of inert ingredients can help prevent the formation of foam in the pesticide formulation to ensure efficient spreading of the pesticide after spraying, and fluorinated inerts are also used as propellants in aerosol pesticide products. Given that many adjuvant and inert ingredients perform similar functions, it is assumed that at least some adjuvant ingredients are fluorinated. PFAS are one subset of fluorinated molecules.

Potential impacts of PFAS in pesticides: The authors of the 2021 *Environmental Health Perspective* article state, "It is our view that PFAS in pesticides, particularly PFAS active ingredients, may be having unintended impacts on environmental and public health that must be mitigated or eliminated to prevent irreversible impacts… The long-term impacts of using

mixtures of extremely persistent chemicals on potentially hundreds of millions of acres of US land every year is, to us, a cause for concern. Most, if not all, PFAS in pesticide products or their degradates are going to be chronic persistent pollutants for the foreseeable future of humanity, and their ultimate impact on human and environmental health are largely unknown." The authors identified examples of potential consequences of PFAS in pesticides such as immunotoxicity (studies of impacts on the immune system indicate that it is one of the most sensitive targets of PFAS exposure, and both the US EPA and the European Food Safety Authority have identified immunotoxicity as the most potent adverse effect to humans from exposure to certain PFAS); environmental fate (all PFAS contain perfluoroalkyl moieties that are highly stable in the environment); water contamination (PFAS have been found in US streams, lakes, and rivers, often at levels that exceed aquatic safety thresholds); and, total organic fluorine in the environment (new or unidentified PFAS are increasingly contributing to the overall organofluorine exposure to people and the environment).

Regulation of pesticides in California: DPR's mission is, "We protect human health and the environment by fostering sustainable pest management and regulating pesticides." DPR notes that its oversight of pesticide use begins with product evaluation and registration; and continues through continuous evaluation, reevaluation and enforcement; statewide licensing of commercial and private applicators and pest control businesses; environmental monitoring; and, residue testing of fresh produce. Pesticides are registered and licensed for sale and use with the US EPA prior to California registration. It is currently unclear exactly how US EPA or DPR evaluates and accounts for cumulative human health and environmental impacts of PFAS pesticides.

This bill: This bill prohibits, commencing January 1, 2035, the use, manufacture, or sale of pesticides that contain intentionally added PFAS substances; prohibits, commencing January 1, 2030, the sale or use of 23 pesticides that contain intentionally added PFAS substances that the author contends are prohibited or restricted in the European Union; prohibits DPR from registering new pesticides that contain intentionally added PFAS; and, places other prohibitions and restrictions on the use, manufacture, and sale of pesticides that contain intentionally added PFAS.

Restricted materials: 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 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.

This bill: This bill deems, commencing July 1, 2028, a registered pesticide containing PFAS that are intentionally added as active, adjuvant, or inert ingredients as a restricted material that can only be used in accordance with current restricted material law. Additionally, the bill requires the use permit for a PFAS-restricted material to state: "This product contains perfluoroalkyl and polyfluoroalkyl substances, or PFAS, and can contaminate produce, groundwater, drinking water, soil, and the environment."

Alternatives to PFAS in pesticides. Should this bill be signed into law as drafted today, 53 PFAS pesticide AIs, which are currently registered for use in 1,153 products in California, will be prohibited for use, sale, or manufacture in California by 2035. Additionally, no other PFAS pesticides will be registered for use or sale in the state in the future. These prohibitions impact a wide range of sectors and uses, and include herbicides, insecticides, rodenticides, and miticides,

which are used on everything from food and feed crops to structural pests to pets and landscaping.

Supporters of the bill point to integrated pest management (IPM) for potential solutions for many of the current pest problems addressed by PFAS pesticides. According to the University of California Statewide IPM Program, IPM is 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 nontarget organisms, and the environment. Supporters also point to other chemistries that may have less potential for harm as alternatives to pesticides that contain PFAS, such as some organic-approved pesticide alternatives or other conventional chemistries.

Opponents of the bill argue that PFAS in pesticides serve important, targeted functions, and that, due to their unique properties, less overall PFAS pesticide is often needed than pesticides without PFAS. They also argue that prohibiting PFAS pesticides could prompt a shift toward, "Older chemistries that may require higher application rates and carry different environmental or public health risks that must be mitigated; broader-spectrum pesticides that are less targeted and may have greater impacts on non-target organisms; and, less effective tools that increase the risk of pest resistance, damage or loss."

Should the prohibition on PFAS pesticides in this bill be enacted without corresponding requirements for, or support of, an integrated pest management approach to pests managed by the prohibited PFAS chemicals, it is possible that the use of higher risk alternatives could increase. Instituting stronger state support of, or requirements for, integrated pesticide management approaches to pest control would likely reduce the use of pesticides overall.

As this bill moves through the legislative process, special effort should be taken to understand and address the potential for regrettable substitutions to PFAS in pesticides.

Arguments in support: A coalition of environmental, environmental justice, public health, consumer protection, and labor organizations write in support,

> "… Since California grows over half of the nation's produce, …findings suggest that Californians and families across the United States are regularly exposed to PFAS pesticides in their food. These findings also raise serious concerns around environmental and health-related harms associated with such broad PFAS pesticide applications.
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> …Despite these risks, California's regulatory infrastructure does not accurately characterize or regulate PFAS pesticides and is not equipped to address the magnitude of potential widespread PFAS contamination of water and soil. Already, state monitoring indicates that PFAS pesticides are frequently detected in surface waters, sediment and wastewater influent and effluent.
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> … PFAS are highly persistent, move easily in the environment, and do not break down in the environment… Their environmental and human impacts can span decades to centuries, as they contaminate ground and surface water, soil, and air.

…PFAS can also harm wildlife, with research showing PFAS chemicals are linked to tumors in animals and lower reproductive rates in birds. Honeybee populations exposed to very low concentrations of Perfluorooctanesulfonic acid (PFOS), one type of PFAS, halted all brood-rearing in the colony, reduced or stopped resource gathering, impaired activity, and significantly decreased hive population size.

…PFAS chemicals are linked to a litany of adverse health effects, including elevated risks of cancer, high cholesterol, immune dysfunction, developmental delays, and reproductive harm. According to the US EPA, food ingestion is a major human exposure route. Given that 37% of California-grown non-organic produce is tainted with PFAS pesticides, PFAS pesticides are a significant source of our food-derived exposure. Agricultural runoff also serves as a major source of PFAS contamination in waterways, where these 'forever chemicals' bioaccumulate through the food chain, creating significant health risks for fish consumers. Further, the release of PFAS pesticides into the environment may contribute to the PFAS detected in drinking water systems serving 25.4 million Californians. Millions of Californians are cumulatively exposed to PFAS chemicals, warranting expedited measures to decrease PFAS-related exposures.

…Counties with the highest PFAS application rates also have high percentages of Latino farmworker populations, who are on the frontlines of PFAS pollution and live or work near fields that regularly apply PFAS pesticides. This is truly concerning, as these populations are already disproportionately exposed to toxic pesticides as well as other PFAS exposure routes, such as in-field crop residues and pesticide handling.

…California utilizes 53 of the 70 PFAS pesticides approved by the United States Environmental Protection Agency. Yet, no additional oversight or scrutiny has been added to this class of pesticides. DPR's definition of PFAS does not correlate with the definition used by the Department of Toxic Substance Control, the California Biomonitoring Program, and multiple state statutes.

…Also, the evaluation of toxicity assessments for PFAS pesticides does not give special attention to breakdown products of PFAS pesticides, such as trifluoroacetic acid (TFA), which is a PFAS that degrades from other PFAS and is contaminating water sources. TFA is found at high rates in human blood, and is increasingly associated with reproductive toxicity and immunotoxicity.

…PFAS pesticides are not considered 'restricted use materials', even though they carry high and on-going risks to public health, workers, and the environment.

…The widespread presence of PFAS pesticides on California-grown produce underscores a concerning and largely unaddressed gap in pesticide oversight and PFAS use reductions. The California Legislature has recognized the need to drastically curb the use of PFAS by enacting numerous laws prohibiting PFAS in consumer products and firefighting foam. However, widespread use of PFAS pesticides – which contaminate our food – has gone unfettered."

Arguments in opposition: A coalition of farm, commercial, residential and industrial users, pest management professionals, and manufacturers writes in opposition,

"California's agricultural industry produces nearly $50 billion in revenue annually, and grows half of the country's fruits and vegetables, including 400 commodity crops. However, growers in the state face significant and increasing challenges including competition from growers out of state and out of the country, where pesticides containing PFAS would still be legal if AB 1603 passed, creating another significant obstacle to growing crops economically and with a high enough yield to remain profitable. If AB 1603 were to become law, produce with detectable levels of PFAS, below federally established tolerances, would still be legally sold to residents.

These same competitive and regulatory disparities would extend beyond agriculture, affecting other essential public health uses where comparable tools remain available outside of California, placing in-state operations at a disadvantage without corresponding public health or environmental benefit.

…Fluorinated chemistries in pesticides are designed to provide critical performance characteristics, including improved chemical stability, efficacy at low use rates, and highly targeted pest control... These properties can also enhance how a product adheres to plant surfaces and penetrates target pests, reducing off-target movement, drift, and wash-off into surrounding environments. As a result, these products often enable more precise applications with lower overall use rates, helping to minimize environmental loading. Importantly, the fluorinated chemistries used in pesticide active ingredients, inert or adjuvants are structurally and functionally distinct from legacy PFAS compounds associated with widespread environmental persistence and bioaccumulation concerns. A blanket restriction fails to account for these important scientific distinctions and the role these chemistries play in enabling effective and efficient pest management.

… Pesticides are among the most rigorously reviewed products in commerce, including for the presence of PFAS. Before any active ingredient can be registered, [US EPA] conducts extensive evaluations of human health, environmental fate, and ecological risk. In California, [DPR] applies an additional layer of review that is widely recognized as the most stringent in the nation. As DPR recently emphasized, California has "extensive, science-based processes in place to evaluate pesticides before they are allowed for use," including analysis of environmental persistence and human health impacts…. Importantly, DPR also conducts post application monitoring to evaluate ongoing safety of employees, consumers and the environment.

…Recent claims regarding PFAS pesticide residues, such as those advanced by the bill sponsor, lack important scientific context. These claims rely on DPR monitoring data but misinterpret what detection means in a regulatory framework. Detection of residues does not equate to risk… Failing to distinguish between presence and risk and ignoring context results in misleading conclusions and poor policymaking.

…The bill also asserts that the listed "twenty-three of the California-approved PFAS pesticides are not allowed to be used in the European Union." This assertion is inaccurate. In many cases, active ingredients are not approved in the European Union due to data gaps, lack of registrant support, or differing regulatory frameworks, not because of PFAS content. Additionally, the EU's draft restriction on PFAS published in 2023, includes an exemption for active substances in biocidal products, which is our equivalent to active ingredients in pesticides.

…AB 1603 would effectively eliminate a broad range of pesticide products used across agriculture, structural pest control, and public health tools. The scale of impact would be substantial. California agriculture is under threat of climatic changes that foster pest cycles that are new and more difficult to manage as well as rapidly changing interstate and international

commerce patterns that bring multiple opportunities for highly problematic agricultural pests and invasive species to enter food production regions. The bill itself acknowledges that dozens of PFAS pesticide active ingredients are registered and used in California. That could equate to hundreds of products, some uniquely designed to address a specific pest issue. Critically, eliminating these tools would not eliminate pest pressures. Instead, it would force a shift toward:

- Older chemistries that may require higher application rates and carry different environmental or public health risks that must be mitigated
- Broader-spectrum pesticides that are less targeted and may have greater impacts on non-target organisms
- Less effective tools that increase the risk of pest resistance, damage or loss

…The bill raises significant implementation and timing challenges. Much of California's specialty crops are considered low volume or minor crops, coupled with a duplicate regulatory requirement at DPR, registrants inevitably see less business value in pursuing registration in California. The result is an exceptionally long timeframe for new chemistries to be available for these crops.

…After years of negotiation with various stakeholders, the Legislature and the Administration, the Legislature enacted AB 2113 (Garica, Chapter 60, Statutes of 2024), which significantly increased mill assessment revenues to support DPR's work, including a mandate on achieving reevaluation targets of pesticide products of concern… AB 1603 undermines this framework by imposing broad legislative restrictions rather than allowing DPR to carry out its enhanced responsibilities."

Related pesticide regulation legislation:

1) AB 2552 (Friedman, Chapter 581, Statutes of 2024). 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.

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 2146 (Bauer-Kahan, 2022). Would have prohibited, beginning January 1, 2024, a person from selling, possessing, or using a neonicotinoid pesticide, as defined, for application to outdoor ornamental plants, trees, or turf, except for use on, or for the protection of, an agricultural commodity. This bill was vetoed by Governor Gavin Newsom.

4) AB 567 (Bauer-Kahan, 2021). Would have prohibited, on and after January 1, 2024, the use of a neonicotinoid on a seed. The bill was not heard in the Assembly Committee on Environmental Safety and Toxic Materials and the bill subsequently died on file.

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

6) 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.

7) SB 1282 (Leno, 2016). Would have prohibited the noncommercial use of neonicotinoids and would have required labeling, as specified, of all commercially available seeds and plants treated with a neonicotinoid pesticide. This bill failed passage on the Senate floor, was granted reconsideration, but subsequently died on file.

Related PFAS regulation legislation:

1. SB 682 (Allen, 2025). Would have prohibited a person from distributing, selling, or offering for sale five covered products that contain intentionally-added PFAS beginning January 1, 2028, and cookware containing intentionally-added PFAS beginning January 1, 2030. This bill was vetoed by Governor Gavin Newsom.

2. SB 903 (Skinner, 2024). Would have prohibited the distribution, sale, or offering for sale products that contain intentionally added PFAS unless the use of PFAS is currently unavoidable and would have authorized DTSC to establish regulations to administer the prohibition. This bill was held on the Senate Appropriations Committee's suspense file.

3. AB 2515 (Papan, Chapter 1008, Statutes of 2024). Prohibits, as specified, a person from manufacturing, distributing, selling, or offering for sale a menstrual product that contains regulated PFAS, as defined.

4. AB 1817 (Ting, Chapter 762, Statutes of 2022). Prohibits, beginning January 1, 2024, a person from distributing, selling, or offering for sale in the state a textile article, as defined, that contains regulated PFAS, and requires a manufacturer to use the least toxic alternative when removing regulated PFAS in textile articles to comply with the provisions of the bill.

5. AB 2771 (Friedman, Chapter 804, Statutes of 2022). 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 intentionally added PFAS.

6. AB 1200 (Ting, Chapter 503, Statutes of 2021). Prohibits, among other requirements, commencing January 1, 2023, the sale of food packaging that contains PFAS.

7. 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 products that contain PFAS.

8. SB 1044 (Allen, Chapter 308, Statutes of 2020). Prohibits the manufacture, sale, distribution, and use of firefighting foam containing PFAS chemicals by January 1, 2022, with some exceptions, and requires notification of the presence of PFAS in the protective equipment of firefighters.

9. AB 841 (Ting, Chapter 372, Statutes of 2019). As heard by the Assembly, would have required OEHHA to assess PFAS substances, especially as they might be found in drinking

water, to determine which might pose a potential risk to human health. The contents of this bill were deleted in the Senate and amended with unrelated content.

10. AB 958 (Ting, 2018). Would have required a manufacturer of food packaging or cookware sold in the state to visibly disclose on an exterior location of the food packaging or cookware packaging a specified statement relating to the presence of PFAS in the product. This bill was held on the Senate Floor.

11. SB 1313 (Corbett, 2008). Would have prohibited the manufacture, sale, or distribution of any food contact substance, as defined, which contains perfluorinated compounds, as defined, in any concentration exceeding 10 parts per billion. This bill was vetoed by Governor Arnold Schwarzenegger.

REGISTERED SUPPORT / OPPOSITION:

Support

Californians for Pesticide Reform (sponsor)
Center for Environmental Health (sponsor)
Environmental Working Group (sponsor)
Pesticide Action and Agroecology Network (sponsor)
350 Bay Area Action
Access to Thrive, INC
Acevedo Media LLC
Active San Gabriel Valley
Alliance of Nurses for Healthy Environments
American Nurses Association, California
Bay Area System Change Not Climate Change
Beyond Pesticides
Breast Cancer Prevention Partners
California Association of Sanitation Agencies
California Coastkeeper Alliance
California Environmental Justice Coalition
California Environmental Voters
California Nurses for Environmental Health and Justice
California Rural Legal Assistance Foundation
California Safe Schools
California Water Association
California Public Interest Research Group
Campaign for Organic and Regenerative Agriculture
Center for Biological Diversity
Center for Farmworker Families
Center for Food Safety
Center for Public Environmental Oversight
Center on Race, Poverty & the Environment
Central California Environmental Justice Network
Ceres Community Project
Children Now
Clean Water Action

Cleanearth4kids.org
Coalition Advocating for Pesticide Safety, Tulare
Community Water Center
Consumer Attorneys of California
Earthjustice
Encampment for Citizenship
Environmental Protection Information Center
Erin Brockovich Foundation
Facts: Families Advocating for Chemical & Toxics Safety
Farm2people
Foodwise
Fresh Approach
Friends Committee on Legislation of California
Go Green Initiative
Green Science Policy Institute
GreenAction for Health and Environmental Justice
Integrated Resource Management
Klamath Forest Alliance
Lift Economy
Los Angeles County Sanitation Districts
Lymphoma Foundation of America
Mixteco Indigena Community Organizing Project
Monterey Bay Central Labor Council, AFL-CIO
Non-toxic Neighborhoods
NorthCoast Environmental Center
Organization Advocating for Pesticide Safety 805
Parents Against Santa Susanna Field Laboratory
Physicians for Social Responsibility, Los Angeles
Resource Renewal Institute
Safe AG Safe Schools
Safe Alternatives for Our Forest Environment
San Francisco Bay Physicians for Social Responsibility
Sierra Club California
Sierra Harvest
Sonoma County Youth Environmental Action Committee
Sustainable Agriculture Education
The 5 Gyres Institute
Union of Concerned Scientists
Valley Improvement Project
West Berkeley Alliance for Clean Air and Safe Jobs
Wholly H20

Opposition

African American Farmers of California
Agricultural Council of California
Almond Alliance
Almond Alliance of California
American Chemistry Council

California Agricultural Aircraft Association
California Association of Pest Control Advisers
California Association of Wheat Growers
California Bean Shippers Association
California Chamber of Commerce
California Cotton Ginners and Growers Association
California Farm Bureau
California Fresh Fruit Association
California Grain & Feed Association
California Manufacturers & Technology Association
California Manufacturers and Technology Association
California Pear Growers Association
California Pest Management Association
California Seed Association
California Strawberry Commission
California Table Grape Commission
California Walnut Commission
California Warehouse Association
Chemical Industry Council of California
CropLife America
Golf Course Superintendents Association of America
Nisei Farmers League
Responsible Industry for a Sound Environment
United AG
Western Growers Association
Western Plant Health Association
Western Tree Nut Association

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