Date of Hearing: April 18, 2023

ASSEMBLY COMMITTEE ON ENVIRONMENTAL SAFETY AND TOXIC MATERIALS
Alex Lee, Chair
AB 727 (Weber) – As Amended April 13, 2023

SUBJECT: Product safety: cleaning products: perfluoroalkyl and polyfluoroalkyl substances

SUMMARY: Prohibits, commencing January 1, 2025, a person or entity from manufacturing or selling a cleaning product containing PFAS, as defined. 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 "automotive product" as a chemically formulated consumer product labeled to indicate that the purpose of the product is to clean, disinfect, maintain the appearance of, polish, protect, buff, condition, or otherwise care for a motor vehicle. Provides that automotive products include products for washing, waxing, polishing, cleaning, or treating the exterior or interior surfaces of motor vehicles.

3) Defines "cleaning product" as a finishing product that is an air care product, automotive product, general cleaning product, or a polish or floor maintenance product used primarily for janitorial, domestic, industrial, or institutional cleaning purposes, or a water vessel product.

4) Defines "general cleaning product" as a soap, detergent, or other chemically formulated consumer product labeled to indicate that the purpose of the product is to clean, disinfect, sanitize, or otherwise care for any of the following:
   a) Fabric, dishes, or other wares;
   b) Surfaces, including, but not limited to, floors, furniture, countertops, showers, or baths; or,
   c) Other hard surfaces, such as stovetops, microwaves, and other appliances.

5) Defines "intentionally added PFAS" as PFAS that a manufacturer has intentionally added to a product or component and that has a functional or technical effect in the product or component.

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

7) Defines "polish or floor maintenance product" as a chemically formulated consumer product, such as polish, wax, a stripper, or a restorer, labeled to indicate that the purpose of the product is to clean, disinfect, polish, protect, buff, condition, temporarily seal, strip, or maintain furniture, floors, metal, leather, or other surfaces.

8) Defines "water vessel product" as a chemically formulated consumer product, such as an all-purpose cleaner or wash, deck or nonskid surface cleaner, hull or bottom cleaner, product

that descales or dissolves marine growth, wax, polish, or restorer, labeled to indicate that the purpose of the product is to maintain the appearance of, or otherwise care for, a water vessel.

9) Prohibits, commencing January 1, 2025, a person or entity from manufacturing, selling, delivering, distributing, holding, or offering for sale in commerce in this state a cleaning product containing any of the following:
   a) Intentionally added PFAS; or,
   b) PFAS in a product or product component at or above the following thresholds:
      i) Commencing January 1, 2025, 50 parts per million.
      ii) Commencing January 1, 2027, 25 parts per million.

10) Provides that, upon an action brought by the Attorney General, a city attorney, a county counsel, or a district attorney, a person or entity that violates the PFAS restrictions of this bill shall be liable for a civil penalty not to exceed five thousand dollars ($5,000) for a first violation, and not to exceed ten thousand dollars ($10,000) for each subsequent violation.

11) Provides that these penalty provisions do not impair or impede any other rights, causes of action, claims, or defenses available under any other law. Provides that the remedies delineated in the bill are cumulative with any other remedies available under any other law.

EXISTING LAW:

1) Requires, commencing January 1, 2022, a person that sells firefighter personal protective equipment to provide a written notice to the purchaser if the firefighter personal protective equipment contains intentionally added PFAS chemicals. (Health and Safety Code (HSC) § 13029 (b)(1))

2) Prohibits, commencing January 1, 2022, a manufacturer of class B firefighting foam from manufacturing, or knowingly selling, offering for sale, distributing for sale, or distributing for use, and a person from using, class B firefighting foam containing intentionally added PFAS chemicals. (HSC § 13061 (b)(1))

3) 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, as defined, that contains intentionally added PFAS or PFAS at or above 100 ppm, as measured in total organic fluorine. (HSC § 108946)

4) Prohibits, on or after January 1, 2025, a person from manufacturing, distributing, selling, or offering for sale in the state any new, not previously used, textile articles that contain intentionally added PFAS, or PFAS at or above 100 PPM, and on or after January 1, 2027, 50 PPM, as measured in total organic fluorine. (HSC § 108971)

5) 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 any specified intentionally added ingredients, including some PFAS chemicals. (HSC § 108980 (a))

6) 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. (HSC § 108981.5)

7) Prohibits, commencing on January 1, 2023, a person from distributing, selling, or offering for sale in the state any food packaging that contains that contains intentionally added PFAS or PFAS at or above 100 ppm, as measured in total organic fluorine. (HSC § 109000)

8) Authorizes the State Water Resources Control Board (State Water Board) to order a public water system to monitor for PFAS; requires community water systems to report detections; and, where a detected level of these substances exceeds the response level, to take a water source out of use or provide a prescribed public notification. (HSC §116378)

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

1) 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)

2) 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)

3) Requires the Governor to publish a list of chemicals known to cause cancer or reproductive toxicity and to annually revise the list. The Office of Environmental Health Hazard Assessment (OEHHA) has listed perfluorooctanoic acid (PFOA) and perfluorooctane sulfonate (PFOS), which are members of the PFAS class, as chemicals known to the state to cause developmental toxicity. (HSC § 25249.8)

Under the Safer Consumer Products (Green Chemistry) statutes:

1) Requires the Department of Toxic Substances Control (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)

2) 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))

3) 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, "PFAS are synthetic chemicals that are found in a staggering array of consumer products, usually to create a nonstick, water-resistant, or stain-repellent coating. Nonstick pans, umbrellas, nail polish, grease-resistant packaging like popcorn bags, and plastic water bottles are examples of products commonly known to contain PFAS. These chemical compounds are extremely stable and are very difficult to break down, earning them the nickname "forever chemicals." Many PFAS compounds contain a strong carbon-fluorine bond which allows them to build up, accumulating over time.

According to the Agency for Toxic Substances and Disease Registry, PFAS can harm our heart, liver, reproductive, and renal systems, can increase cholesterol levels and increase blood pressure in pregnant women. Overexposure of PFAS can put individuals at risk of developing kidney cancer, can cause liver damage, and reduce the immune system's ability to fight infections. Our use of PFAS is not sustainable. In the very near future, our public entities, such as wastewater agencies, will have to undertake the very expensive work to remove PFAS from wastewater and other resources. As a state, we need to move forward and get rid of the sources of PFAS. This can only be done by greatly restricting the use of PFAS in products. AB 727 will address one significant source of PFAS in our indoor environments and in our wastewater by prohibiting the chemicals' use in cleaning products."

Perfluoroalkyl and polyfluoroalkyl substances (PFAS): Per- and polyfluorinated substances (PFASs) are a large group of 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. PFAS are long-lasting chemicals that break down very slowly over time. PFAS are ubiquitous, and 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. Scientific studies have shown that exposure to some PFAS may be linked to harmful health effects in humans and animals. More than 9,000 PFAS chemicals are included in the United States Environmental Protection Agency's (US EPA's) Master List of PFAS Substances. The persistence and proliferation of PFAS chemicals makes it challenging to study and assess the overall potential human health and environmental risks of PFAS exposure.

The breadth of uses of PFAS is immense, making it impossible to avoid exposure. PFAS are used extensively in surface coating and protectant formulations due to their unique ability to reduce the surface tension of liquids. In consumer products, PFAS is used in carpets, furniture fabrics, apparel, paper packaging for food, 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, apparel, 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.

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), and through inhalation and ingestion of contaminated indoor air and dust. Food can become contaminated with PFAS through contaminated soil and water used to grow the food, food packaging containing PFAS, and equipment that uses PFAS during food 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 susceptible to higher levels of exposure 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. Groundwater PFAS contamination typically has been associated with industrial facilities where these chemicals were manufactured or used in other products, and in airfields where the chemicals have been used for firefighting. PFAS chemicals can also enter the environment and drinking water through composting, landfilling, recycling, and incineration of products containing PFAS. The State Water Board indicates that the four major sources of PFAS in drinking water in California are fire training/fire response sites, industrial sites, landfills, and wastewater treatment plants/biosolids. The State Water Board notes that because of their presence and persistence in many drinking water supplies, PFAS remain a serious source of exposure decades after their release into the environment.

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

Hazard traits of PFAS: According to 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 either the individual compounds or 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. Several PFAS bioaccumulate significantly in animals or plants and emerging evidence points to their phytotoxicity, aquatic toxicity, and terrestrial ecotoxicity.

DTSC contends that exposure to PFAS can lead to adverse health outcomes in humans. 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.

Regulating PFAS as a class: DTSC has 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 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. Regulations that focus solely on perfluoroalkyl acids (PFAAs) are ineffective, given that nearly all other PFAS can generate PFAAs in the environment… 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.*

PFAS in cleaning products: Cleaning products are commonly listed on governmental and academic websites as known sources of PFAS. To illustrate the prevalence of PFAS in cleaning products, the sponsors of the bill point to an informal Environmental Working Group (EWG) analysis of online cleaning product data, which found that approximately 50% of industrial and institutional floor cleaners, finishes, polishes, and restorers contain PFAS. These products are used in public buildings, schools, and commercial offices. EWG's analysis also found that 1 in 6 household versions of these floor cleaning product categories contain PFAS.

A January 2022, study published in *Atmospheric Environment* focusing on PFAS in floor waxes conveys that the flooring industry reports a strong demand for PFAS-containing products. Fluorosurfactants are added to floor polishes to modify their flow, leveling, and wetting properties, or more specifically, to lower the surface tension of the floor polish. The article says that DuPont, one of the world's largest PFAS-containing product manufacturers, reports that almost every acrylic/wax floor polish formulation on the market contains a fluorosurfactant. The authors of the article conducted a study that demonstrated occupational exposure to PFAS during floor stripping and waxing. PFAS emitted during this process could also enter wastewater.

To further illustrate the problem, the sponsors of the bill report that many manufacturers indicate, but do not state, that their cleaning products contain properties (water-repellant, long-lasting, high shine) that are indicative of PFAS chemicals. They say that many other product categories are known to contain PFAS including car waxes, dishwasher rinse aids, furniture polishes and textile cleaners and treatments. In addition, the sponsors argue that manufacturers are marketing a type of PFAS for use as propellants in air-borne cleaning products and air fresheners.

This bill: This bill prohibits, commencing January 1, 2025, a person or entity from manufacturing or selling a cleaning product containing PFAS. For the purposes of the bill, cleaning products are defined as an air care product, automotive product, general cleaning

product, or a polish or floor maintenance product used primarily for janitorial, domestic, industrial, or institutional cleaning purposes, or a water vessel product.

Recent US EPA action on PFAS: According to the US EPA, "Under the Biden-Harris Administration, [US] EPA has restored scientific integrity and accelerated the pace of research and actions needed to tackle the PFAS crisis and protect American communities." On October 18, 2021, US EPA Administrator Michael S. Regan announced the agency's PFAS Strategic Roadmap, which laid out a whole-of-agency approach to addressing PFAS. The roadmap sets timelines by which US EPA plans to take specific actions and commits to, "bolder new policies to safeguard public health, protect the environment, and hold polluters accountable."

Additionally, the US EPA reported that since the roadmap's release in October 2021, US EPA has taken a number of key actions to address PFAS, including it proposed to designate two PFAS as hazardous substances under the federal Comprehensive Environmental Response, Compensation, and Liability Act; released drinking water health advisories for four PFAS; laid the foundation for enhancing data on PFAS; and, began distributing $10 billion in funding to address emerging contaminants under the Bipartisan Infrastructure Law.

State action on PFAS: California has undertaken efforts to address PFAS substances across several state entities.

At DTSC, all PFAS chemicals are "Candidate Chemicals" under the Safer Consumer Products (SCP, previously known as Green Chemistry) Program, because they exhibit a hazard trait and/or an environmental or toxicological endpoint, and the entire class of PFAS was added by the California Environmental Contaminant Biomonitoring Program to its list of priority chemicals.

On July 1, 2021, DTSC designated carpets and rugs containing PFAS as a "Priority Product." A Priority Product is a consumer product identified by DTSC that contains one or more Candidate Chemicals and that has the potential to contribute to significant or widespread adverse impacts to humans or the environment. The Priority Product designation required domestic and foreign carpet and rug manufacturers that use PFAS and related chemicals in their products to submit information on all of the manufacturer's products that contain PFAS and are sold in California, by August 30, 2021. Manufacturers were then required to show intent to remove or replace PFAS in their products, remove the product from the market, or identify potential alternatives to PFAS to be used in the product by December 28, 2021.

In regulations that went into effect on April 1, 2022, DTSC also designated treatments containing PFAS for use on converted textiles or leathers such as carpets, upholstery, clothing, and shoes as a Priority Product. Domestic and foreign manufacturers of treatments for converted textiles or leathers that contain any member of the class of PFAS selling their products in California were required to submit information on those products by May 31, 2022. After submitting the required information, manufacturers were then required to show intent to mitigate exposure to PFAS in their products by September 28, 2022.

DTSC has also proposed evaluating artificial turf with PFAS in their Draft Priority Product Work Plan for 2021-2023. Previously, DTSC proposed investigating PFAS in other product categories, such as food packaging and children's products, but during the investigative period the Legislature prohibited PFAS in those product categories and it appears DTSC has shifted its resources to investigating other product/ chemical combinations.

OEHHA, under the Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65), listed PFOA and PFOS as chemicals known to the state to cause reproductive toxicity. In July, 2021, OEHHA announced the release of a draft document for public review describing proposed Public Health Goals (PHGs) for PFOA and PFOS in drinking water. A PHG is the level of a chemical contaminant in drinking water that does not pose a significant risk to health. PHGs published by OEHHA are considered by the State Water Resources Control Board (State Water Board) in setting drinking water regulatory standards (Maximum Contaminant Levels, or MCLs) for California.

The State Water Board has taken a number of additional recent actions related to PFAS in drinking water, including, in July 2020, issuing investigative orders to publicly owned treatment works that receive PFAS in their influent wastewater flow to include sampling for 31 PFAS compounds. In August 2020, it also issued a General Order for public water systems to sample for and report PFAS. It also issued drinking water notification levels and response levels for several PFAS compounds.

Recently, the State Legislature has taken action on PFAS by enacting a slew of bills prohibiting PFAS at different levels across many product categories. These include a ban on textiles that contain PFAS (AB 1817,Ting, Chapter 762, Statutes of 2022); a ban on cosmetic products that contain PFAS (AB 2771, Friedman, Chapter 804, Statutes of 2022); a ban on food packaging that contains PFAS (AB 1200, Ting, Chapter 503, Statutes of 2021); a ban on new juvenile products that contain PFAS (AB 652, Freidman, Chapter 500, Statutes of 2021); and, a ban on firefighting foam containing PFAS (SB 1044, Allen, Chapter 308, Statutes of 2020). The Legislature also authorized the State Water Board to order public water systems to monitor for PFAS and required municipalities to notify consumers for PFAS detected above notification levels (AB 756, C. Garcia, Chapter 162, Statutes of 2019).

Chemical bans and the Safer Consumer Products 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 product applications. 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 include, in addition to the PFAS prohibitions listed above, a ban on flame retardants in children's products, mattresses, and upholstered furniture (AB 2998, Bloom,

Chapter 924, Statutes of 2018); a ban on BPA 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."

Enforcement and compliance for chemical prohibition laws: Most of the chemical prohibition bills listed previously are placed in a unique location in the California Codes, sometimes referred to as the "orphan codes." In these code sections, no state agency is designated to provide oversight of the provisions of the law. As a result, there is no direct enforcement, no compliance program, no guidance for manufacturers seeking to comply with these laws, and no related information for consumers. This means there are no regulations or public guidance documents clarifying the intent of the law and no state entity investigating complaints, testing affected products for compliance, or bringing enforcement actions against violators. Because of these deficiencies, it is challenging for some manufacturers to comply and impossible to know if any manufacturers are complying with the requirements of the law.

This bill: The provisions of this bill are placed in the "orphan code" section of the Health and Safety Code.

Unfair Competition Law (UCL): The only current option for enforcement of the prohibitions in the "orphan codes" is for a district attorney or the state Attorney General to bring an action against a manufacturer under the UCL (unless specified otherwise). The UCL is one of the primary tools currently available to government attorneys to protect the public from "any unlawful, unfair or fraudulent business act or practice and unfair, deceptive, untrue or misleading advertising[.]" (Business and Professions Code Section 17200.). As recently summarized by the California Supreme Court:

> The statute's purpose is to protect both consumers and competitors by promoting fair competition in commercial markets for goods and services. In service of that purpose, the Legislature framed the UCL's substantive provisions in broad, sweeping language to reach anything that can properly be called a business practice and that at the same time is forbidden by law. By proscribing any unlawful business practice, section 17200 borrows violations of other laws and treats them as unlawful practices that the unfair competition law makes independently actionable. [T]he Legislature…intended by this sweeping language to permit tribunals to enjoin on-going wrongful business conduct in whatever context such activity might occur. To that end, the Legislature has created a scheme of overlapping enforcement authority. […] While the UCL provides for both public and private enforcement, authorized public prosecutors have an additional tool to enforce the state's consumer protection laws: civil penalties. (Abbott Laboratories v. Superior Court (2020) 9 Cal. 5th 642, 651-52 [internal citations and quotations omitted.])

Remedies under the UCL include injunctive relief, restitution, and civil penalties. It is important to note that even though a district attorney or the Attorney General can take an action to enforce these chemical prohibitions in the "orphan codes" using the UCL, before a case is filed, a member of the public must purchase and test products at a certified laboratory for the prohibited chemical, which is expensive. Then, the Attorney General or district attorney must have the resources and ability to prioritize action on these complaints before other responsibilities.

To date, the Committee is unaware of any comprehensive report or investigation by any entity on compliance with the chemical prohibitions in the "orphan code," nor is it aware of any entity that is sampling, testing, or tracking compliance with the "orphan codes." Additionally, to date, the Committee is not aware of any enforcement actions taken by the Attorney General or a district attorney under the UCL, or any other law, to enforce any of the chemical prohibition laws under the "orphan codes."

This bill: While the provisions of this bill are placed under the "orphan" section of the Health and Safety Code, the author has added provisions that provide government attorneys with civil penalty options to bring against violators of the law. Specifically, this bill provides that, upon an action brought by the Attorney General, a city attorney, a county counsel, or a district attorney, a person or entity that violates the PFAS restrictions for covered surfaces as delineated in this bill shall be liable for a civil penalty, capped at $5,000 for a first violation and $10,000 for each subsequent violation. The bill additionally provides that these penalty provisions do not impair or impede any other rights, causes of action, claims, or defenses available under any other law. AB 727 also provides that the remedies delineated in the bill are cumulative with any other remedies available under any other law. These penalty provisions are in addition to the authority for government attorneys to enforce under the UCL, and are consistent with existing statutory penalties relating to PFAS in firefighting foam.

Acceptable levels of exposure to PFAS: This bill prohibits, in cleaning products, intentionally added PFAS, and, commencing January 1, 2025, any PFAS above 50 ppm, and, commencing January 1, 2027, any PFAS above 25 ppm. There are two other bills pending before the Committee with differing PFAS thresholds in different product categories, and 5 statutes with differing PFAS thresholds for other products (see the "Existing Law" section of this analysis.) As with enforcement, setting thresholds on chemicals in products would benefit from a public entity with oversight responsibility. In that case, a team of scientists with related public health backgrounds could set the appropriately protective thresholds and be able to update the thresholds through regulation consistent with emerging science. Without that resource, the Legislature is tasked with setting the appropriately protective standard in statute, and presumably updating those statutory thresholds by legislation when needed.

This bill: For the thresholds set in this bill, the sponsors of the bill argue, "No level of PFAS exposure is safe. We understand that as little as 50 ppm is intentionally added to cleaning products. So we are setting the 2025 threshold at 50 ppm and then lowering it to 25 ppm by 2027."

Regrettable substitutions: While each of the laws listed in the "orphan code" prohibit a chemical that has been suspected of or found to be toxic or hazardous the laws do not prevent a manufacturer from replacing the prohibited chemical with another hazardous chemical, or a chemical even more hazardous than the one prohibited. In addition, several of the laws dealing

with chemicals in the "orphan code" require manufacturers to use the least toxic alternative when replacing the chemical in question. Without a state entity overseeing these substitutions, it is difficult or impossible to know whether manufacturers are replacing prohibited chemicals with substances that are safer or more hazardous.

Moving forward: This bill, along with the other PFAS bills pending in front of the Committee, takes a step forward on statutory chemical prohibitions by adding civil penalties for violations of the restrictions in the bill. However, there remains no entity proving guidance or ensuring compliance with the prohibitions. Moving forward, the authors of these bills, along with stakeholders, the Committee, and the Administration, should continue to discuss effective oversight of these new and existing chemical prohibition laws.

Arguments in support: According to a coalition of supporters, "…PFAS are highly toxic to humans and the natural environment, and are incredibly persistent. These toxic chemicals are extremely resistant to breaking down in our bodies or in the environment. Decades of heavy use of PFAS have resulted in contamination of water, soil and the blood of people and animals in the farthest corners of the world. A recent study conducted by Environmental Working Group scientists highlighted the breadth of PFAS pollution by demonstrating that wild, freshwater fish caught in US waters contain an extraordinary amount of PFAS chemicals.

According to an informal EWG analysis of online cleaning product data, approximately 50% of institutional-grade floor polishes, which are used in public buildings, schools, and commercial offices, contain PFAS. Recent studies have demonstrated that these widely-used PFAS floor polishes can expose janitorial workers and the public to air-borne PFAS. This PFAS also enters wastewater when floors are mopped and cleaned.

In addition to floor polishes, other household cleaning products (including general cleaners, floor products, and dishwasher rinse aids) contain PFAS, as do automotive polishes, machinery cleaners, and air fresheners. And online information indicates that manufacturers are marketing a type of PFAS for use as new propellants in air-borne cleaning products and air fresheners. So if not banned, PFAS chemicals will soon be in the products that we spray inside our homes.

Consumers are unwittingly being exposed to PFAS from cleaners while spending time in their homes, schools, offices, and other commercial and public spaces. Cleaning product PFAS also ends up in household and industrial wastewater, and workers are exposed to the PFAS when cleaning buildings and homes.

It’s time to end the use of PFAS in cleaning products of all sorts. PFAS-free cleaning products are readily available and provide the same function as PFAS-containing products."

Arguments in opposition: According to a coalition of opponents, "This bill proposes to enact overly broad language and far-reaching product restrictions without any authoritative scientific evaluation or consideration of alternatives. All of the substances that meet the proposed definition of PFAS are not the same, and individual chemistries have their own unique properties and uses, as well as environmental and health profiles. As written, AB 727 would apply a one-size-fits-all approach to chemical regulation that creates new environmental concerns, and even prohibits technologies that are safe for humans and the environment.

AB 727, encompasses cleaning product categories without a comprehensive scientific review and, as a result, an entire product category will be decimated while creating new environmental challenges. Floor maintenance products used in schools, hospitals, and office buildings have no "drop in" raw material replacement to comply with AB 727 and would therefore be eliminated from use….

…PFAS properties vary widely across uses and applications. For this reason, it is important to distinguish between PFAS categories, use, function, exposure, and chemical properties as opposed to treating the substance as a single group. Chemical and structural differences among different types of PFAS may create properties that underline legitimate concerns over potential health and environmental risks associated with some substances—this most certainly does not apply to all PFAS chemicals and applications. For this reason, PFAS should not be considered as a single group or class, especially given it is possible to scientifically define distinct categories of PFAS based on shared properties.

Under California's Safer Consumer Products Program (SCP) -- implemented by the Department of Toxic Substances Control (DTSC) – regulations and product restrictions are put in place following a clear science-based process to "identify products that contain potentially harmful chemicals and to evaluate potential safer alternatives." …The Legislature is not designed to perform the same rigorous scientific evaluation of chemicals and products. California has established and funded programs like SCP for this purpose and by fast tracking restrictions through the legislature, it conveys a lack of confidence in these important programs."

Related legislation:

1. AB 246 (Papan). Prohibits, beginning January 1, 2025, a person from manufacturing, distributing, selling, or offering for sale a menstrual product that contains intentionally-added PFAS, and beginning January 1, 2027, a menstrual product that contains PFAS at or above 10 PPM. This bill is pending before the Assembly Environmental Safety and Toxic Materials Committee.

2. AB 1423 (Shiavo). Prohibits, commencing January 1, 2025, a person or entity from manufacturing, distributing, selling, or offering for sale in the state any covered surface that contains PFAS, as defined, and prohibits, commencing January 1, 2024, a public entity, a public or private school, or a public or private institution of higher learning, as specified, from purchasing or installing a covered surface that contains PFAS. This bill is pending before the Assembly Environmental Safety and Toxic Materials Committee.

3. 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.

4. 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.

5. AB 1200 (Ting, Chapter 503, Statutes of 2021). Prohibits, commencing January 1, 2023, the sale of food packaging that contains PFAS; requires, commencing January 1, 2024, cookware

manufacturers to label their product if it contains an intentionally added chemical on specified lists; and prohibits, commencing January 1, 2023, for the internet and January 1, 2024, for the cookware package, a cookware manufacturer from making a claim that cookware is free of a chemical, unless no chemical from that chemical class is intentionally added to the cookware.

6. 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.

7. 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.

8. SB 1056 (Portantino, 2020). Would have required the State Water Board to establish an analytical laboratory method that can be used as a tool to assess the extent of PFAS contamination in drinking water, surface water, groundwater, and wastewater. This bill was held in the Senate Environmental Quality Committee.

9. AB 756 (C. Garcia, Chapter 162, Statutes of 2019). Authorizes the State Water Board to order one or more public water systems to monitor for PFAS and requires municipalities to notify consumers for PFAS detected above notification levels.

10. 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.

11. 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.

12. 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 whose veto message said, "I have signed AB 1879 (Feuer) and SB 509 (Simitian) which mark the beginning of California's historic Green Chemistry Initiative. It is within this process that chemicals like PFCs should be addressed."

REGISTERED SUPPORT / OPPOSITION:

Support

California Association of Sanitation Agencies (Co-Sponsor)
Environmental Working Group (Co-Sponsor)
A Voice for Choice Advocacy
Active San Gabriel Valley
American College of Obstetricians and Gynecologists District IX

Ban Sup (Single Use Plastic)
Breast Cancer Over Time
Breast Cancer Prevention Partners
California Professional Firefighters
Californians for Pesticide Reform
CALPIRG
Center for Community Action and Environmental Justice
Center for Environmental Health
Center for Public Environmental Oversight
Clean Water Action
Cleanearth4kids.org
Defend Them All Foundation
East Bay Municipal Utility District
Facts Families Advocating for Chemical and Toxics Safety
GMO Science
Grassroots Environmental Education
Green Science Policy Institute
Indivisible Alta Pasadena
Los Angeles County Sanitation Districts
National Stewardship Action Council
Natural Resources Defense Council (NRDC)
Nontoxic Neighborhoods
Pesticide Action Network
Resource Renewal Institute
Responsible Purchasing Network
San Francisco Bay Area Physicians for Social Responsibility
The Growing Solutions Fund
Women's Voices for The Earth

Opposition

American Chemistry Council
California Manufacturers & Technology Association
Household and Commercial Products Association
National Aerosol Association
Western Aerosol Information Bureau

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

Date of Hearing: April 18, 2023

ASSEMBLY COMMITTEE ON ENVIRONMENTAL SAFETY AND TOXIC MATERIALS
Alex Lee, Chair
AB 1423 (Schiavo) – As Amended April 13, 2023

SUBJECT: Product safety: perfluoroalkyl and polyfluoroalkyl substances: artificial turf or synthetic surfaces

SUMMARY: Prohibits, commencing January 1, 2025, the manufacturing or sale of artificial turf that contains PFAS, as defined, and prohibits, commencing January 1, 2024, a public entity, a public or private school, or a public or private institution of higher learning, as specified, from purchasing or installing artificial turf that contains PFAS. Specifically, **this bill**:

1) Makes legislative findings about PFAS and PFAS exposure.

2) Defines "covered surface" as artificial turf or a synthetic surface that resembles grass.

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

4) Defines "regulated PFAS" as including either of the following:
   a) PFAS that a manufacturer has intentionally added to a product and that has a functional or technical effect in the product; or,
   b) The presence of PFAS in a product or product component at or above one part per million (ppm), as measured in total organic fluorine.

5) Requires, commencing January 1, 2024, a manufacturer or installer of a covered surface proposing to design, sell, or install a field with a covered surface to any party to notify the party at the earliest possible date that the covered surface contains regulated PFAS.

6) Prohibits, commencing January 1, 2024, a covered surface containing regulated PFAS from being purchased or installed by any of the following entities:
   a) A public entity, including a charter city, charter county, city, or county;
   b) A public or private school serving pupils in kindergarten or any of grades 1 to 12, inclusive; or,
   c) A public or private institution of higher education, except the University of California.

7) Requests, commencing January 1, 2024, the University of California to comply with the prohibition on the purchase or installation of a covered surface containing regulated PFAS.

8) Exempts those entities above that have concluded the design and permitting of a covered surface, contracted for the installation of a covered surface, or purchased a covered surface on or before December 31, 2023, from the prohibition on the purchase or installation of a covered surface containing regulated PFAS.

9) Prohibits, commencing January 1, 2025, a person or entity from manufacturing, distributing, selling, or offering for sale in the state any covered surface that contains regulated PFAS.

10) Provides that, upon an action brought by the Attorney General, a city attorney, a county counsel, or a district attorney, a person or entity that violates the PFAS restrictions in covered surfaces provisions of this bill shall be liable for a civil penalty not to exceed five thousand dollars ($5,000) for a first violation, and not to exceed ten thousand dollars ($10,000) for each subsequent violation.

11) Provides that these penalty provisions do not impair or impede any other rights, causes of action, claims, or defenses available under any other law. Provides that the remedies delineated in the bill are cumulative with any other remedies available under any other law.

12) Requires a manufacturer of a covered surface to use the least toxic alternative when replacing regulated PFAS in a covered surface.

EXISTING LAW:

1) Requires, commencing January 1, 2022, a person that sells firefighter personal protective equipment to provide a written notice to the purchaser if the firefighter personal protective equipment contains intentionally added PFAS chemicals. (Health and Safety Code (HSC) § 13029 (b)(1))

2) Prohibits, commencing January 1, 2022, a manufacturer of class B firefighting foam from manufacturing, or knowingly selling, offering for sale, distributing for sale, or distributing for use, and a person from using, class B firefighting foam containing intentionally added PFAS chemicals. (HSC § 13061 (b)(1))

3) 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, as defined, that contains intentionally added PFAS or PFAS at or above 100 ppm, as measured in total organic fluorine. (HSC § 108946)

4) Prohibits, on or after January 1, 2025, a person from manufacturing, distributing, selling, or offering for sale in the state any new, not previously used, textile articles that contain intentionally added PFAS, or PFAS at or above 100 PPM, and on or after January 1, 2027, 50 PPM, as measured in total organic fluorine. (HSC § 108971)

5) 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 any specified intentionally added ingredients, including some PFAS chemicals. (HSC § 108980 (a))

6) 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. (HSC § 108981.5)

7) Prohibits, commencing on January 1, 2023, a person from distributing, selling, or offering for sale in the state any food packaging that contains that contains intentionally added PFAS or PFAS at or above 100 ppm, as measured in total organic fluorine. (HSC § 109000)

8) Authorizes the State Water Resources Control Board (State Water Board) to order a public water system to monitor for PFAS; requires community water systems to report detections; and, where a detected level of these substances exceeds the response level, to take a water source out of use or provide a prescribed public notification. (HSC §116378)

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

1) 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)

2) 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)

3) Requires the Governor to publish a list of chemicals known to cause cancer or reproductive toxicity and to annually revise the list. The Office of Environmental Health Hazard Assessment (OEHHA) has listed perfluorooctanoic acid (PFOA) and perfluorooctane sulfonate (PFOS), which are members of the PFAS class, as chemicals known to the state to cause developmental toxicity. (HSC § 25249.8)

Under the Safer Consumer Products (Green Chemistry) statutes:

1) Requires the Department of Toxic Substances Control (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)

2) 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))

3) 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, "PFAS are a class of "forever chemicals" which, when ingested, inhaled, or contacted with the skin can harm human and environmental health. This includes negative impacts on the immune system, cardiovascular system, childhood development, and risks of cancer. Artificial turf has been found to contain PFAS, and as fields age, the artificial turf releases microplastic dust that contains PFAS. Children are particularly at risk of inhaling and ingesting this dust as they play on fields. AB 1423 empowers consumers to avoid artificial grass that uses PFAS in manufacturing, and it further ensures that fields installed in schools and by the state in the future will not contain PFAS, protecting youth and preventing the long term health impacts of PFAS."

Perfluoroalkyl and polyfluoroalkyl substances (PFAS): Per- and polyfluorinated substances (PFASs) are a large group of 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. PFAS are long-lasting chemicals that break down very slowly over time. PFAS are ubiquitous, and 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. Scientific studies have shown that exposure to some PFAS may be linked to harmful health effects in humans and animals. More than 9,000 PFAS chemicals are included in the United States Environmental Protection Agency's (US EPA's) Master List of PFAS Substances. The persistence and proliferation of PFAS chemicals makes it challenging to study and assess the overall potential human health and environmental risks of PFAS exposure.

The breadth of uses of PFAS is immense, making it impossible to avoid exposure. PFAS are used extensively in surface coating and protectant formulations due to their unique ability to reduce the surface tension of liquids. In consumer products, PFAS is used in carpets, furniture fabrics, apparel, paper packaging for food, 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, apparel, 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.

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), and through inhalation and ingestion of contaminated indoor air and dust. Food can become contaminated with PFAS through contaminated soil and water used to grow the food, food packaging containing PFAS, and equipment that uses PFAS during food 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 susceptible to higher levels of exposure 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. Groundwater PFAS contamination typically has been associated with industrial facilities where these chemicals were manufactured or used in other products, and in airfields where the chemicals have been used for firefighting. PFAS chemicals can also enter the environment and drinking water through composting, landfilling, recycling, and incineration of products containing PFAS. The State Water Board indicates that the four major sources of PFAS in drinking water in California are fire training/fire response sites, industrial sites, landfills, and wastewater treatment plants/biosolids. The State Water Board notes that because of their presence and persistence in many drinking water supplies, PFAS remain a serious source of exposure decades after their release into the environment.

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

Hazard traits of PFAS: According to 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 either the individual compounds or 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. Several PFAS bioaccumulate significantly in animals or plants and emerging evidence points to their phytotoxicity, aquatic toxicity, and terrestrial ecotoxicity.

DTSC contends that exposure to PFAS can lead to adverse health outcomes in humans. 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.

Regulating PFAS as a class: DTSC has 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 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. Regulations that focus solely on perfluoroalkyl acids (PFAAs) are ineffective, given that nearly all other PFAS can generate PFAAs in the environment… 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.*

Artificial turf: Artificial turf is also referred to as synthetic turf, SynTurf, AstroTurf, artificial/synthetic grass, or plastic grass. It is composed of a backing layer foundation, blades resembling grass, and a filling that serves as shock absorbing material. According to DTSC in its Safer Consumer Products Program 2021-2023 Priority Product Work Plan, the backing and fiber layers of artificial turf are made of similar materials as carpets and rugs, such as polyvinyl chloride, polypropylene, nylon, and polyurethane. DTSC points to information provided by the Synthetic Turf Council, which estimates that there are currently between 12,000 and 13,000 synthetic turf sports fields in the United States, with 1,200 to 1,500 new installations each year. The Synthetic Turf Council estimated that 750 fields are replaced each year. With the average field containing approximately 40,000 pounds of plastic carpet and 400,000 pounds of infill, this can create over 300 million pounds of waste annually.

DTSC argues that the use of artificial turf at outdoor facilities is of concern since these facilities are frequently used by sensitive subpopulations, including young children. While air circulation is generally better in an outdoor application, there is also an increased potential for exposure to concerning chemicals in turf due to faster material degradation by outdoor elements, such as ultraviolet light, and high friction athletic use. In addition to increasing the release of chemicals from artificial turf during use, these factors also affect the product's life and make it necessary to replace it every eight to 10 years.

PFAS in artificial turf: In its 2021-2023 Priority Product Work Plan, DTSC notes that it is interested in PFAS in synthetic turf due to multiple public comments received on their proposed regulations to list carpets and rugs containing PFASs as a Priority Product. DTSC points to testing on artificial turf commissioned by two non-profit organizations, Public Employees for Environmental Responsibility (PEER) and The Ecology Center. The testing, which appears to have been on 10 samples (one new, one manufactured in 2004, and 8 of unclear manufacturing dates), found elemental fluorine and specific PFAS chemicals, which they argue suggests that PFAS is an ingredient of the carpet grass fibers or the backing, or a byproduct of the manufacturing process. PEER and The Ecology Center also report that that they found turf patents and industry literature discussing the widespread use of PFAS as a plastic processing aid to enhance smoothness and reduce friction. They say that this may mean PFAS are in many other plastic products. It should be noted that, in response to the media coverage of these reports, the Synthetic Turf Council put out a statement that condemned the groups' "inaccurate, non-verified report using questionable test methods."

Through the Safer Consumer Products Program, DTSC has previously evaluated PFASs in carpets and rugs, as well as in other consumer products. DTSC says that, as with carpets and rugs, PFASs may be used in the manufacture of artificial turf as an aid in molding and extrusion of the plastic blades, or may be applied to the finished product to enhance surface properties. According to DTSC, the PFASs present in artificial turf have a similar potential to contribute to or cause adverse impacts to sensitive subpopulations. Therefore, DTSC plans to leverage its prior work on PFASs in carpets and rugs and other products to evaluate PFASs in artificial turf. This evaluation is pending.

Alternatives to PFAS in artificial turf: The author's office points to specific reports for examples of potential alternatives to PFAS in artificial turf. One is a March 22, 2023, proposal for

restriction of PFAS by the European Chemicals Agency, which reviews information on PFAS alternatives. This report overviews the various use cases and assessment of alternatives for PFAS. While there is no outright mention of turf, the author's office argues that a few examples are close, such as use of replacements in plastic packaging, where it is used as an aid to improve flow behavior. The author's office points out that the report indicates that there is strong evidence for alternatives for PFAS used as processing aids. The author's office also points to a Corning slide deck on the potential use of silicones for die stick resistance in extrusion in place of PFAS.

This bill: This bill prohibits, commencing January 1, 2025, a person or entity from manufacturing, distributing, selling, or offering for sale in the state any covered surface that contains PFAS at or above one ppm. It also prohibits, commencing January 1, 2024, a public entity, a public or private school, or a public or private institution of higher learning, as specified, from purchasing or installing a covered surface that contains PFAS at that level. Finally, also commencing January 1, 2024, it requires a manufacturer or installer of a covered surface proposing to design, sell, or install a field with a covered surface to any party to notify the party at the earliest possible date that the covered surface contains regulated PFAS.

Recent US EPA action on PFAS: According to the US EPA, "Under the Biden-Harris Administration, [US] EPA has restored scientific integrity and accelerated the pace of research and actions needed to tackle the PFAS crisis and protect American communities." On October 18, 2021, US EPA Administrator Michael S. Regan announced the agency's PFAS Strategic Roadmap, which laid out a whole-of-agency approach to addressing PFAS. The roadmap sets timelines by which US EPA plans to take specific actions and commits to, "bolder new policies to safeguard public health, protect the environment, and hold polluters accountable."

Additionally, the US EPA reported that since the roadmap's release in October 2021, US EPA has taken a number of key actions to address PFAS, including proposing to designate two PFAS as hazardous substances under the federal Comprehensive Environmental Response, Compensation, and Liability Act; releasing drinking water health advisories for four PFAS; laying the foundation for enhancing data on PFAS; and, beginning to distribute $10 billion in funding to address emerging contaminants under the Bipartisan Infrastructure Law.

State action on PFAS: California has undertaken efforts to address PFAS substances across several state entities.

At DTSC, all PFAS chemicals are "Candidate Chemicals" under the Safer Consumer Products (SCP, previously known as Green Chemistry) Program, because they exhibit a hazard trait and/or an environmental or toxicological endpoint, and the entire class of PFAS was added by the California Environmental Contaminant Biomonitoring Program to its list of priority chemicals.

On July 1, 2021, DTSC designated carpets and rugs containing PFAS as a "Priority Product." A Priority Product is a consumer product identified by DTSC that contains one or more Candidate Chemicals and that has the potential to contribute to significant or widespread adverse impacts to humans or the environment. The Priority Product designation required domestic and foreign carpet and rug manufacturers that use PFAS and related chemicals in their products to submit information on all of the manufacturer's products that contain PFAS and are sold in California, by August 30, 2021. Manufacturers were then required to show intent to remove or replace

PFAS in their products, remove the product from the market, or identify potential alternatives to PFAS to be used in the product by December 28, 2021.

In regulations that went into effect on April 1, 2022, DTSC also designated treatments containing PFAS for use on converted textiles or leathers such as carpets, upholstery, clothing, and shoes as a Priority Product. Domestic and foreign manufacturers of treatments for converted textiles or leathers that contain any member of the class of PFAS selling their products in California were required to submit information on those products by May 31, 2022. After submitting the required information, manufacturers were then required to show intent to mitigate exposure to PFAS in their products by September 28, 2022.

DTSC has also proposed evaluating artificial turf with PFAS in their Draft Priority Product Work Plan for 2021-2023. Previously, DTSC proposed investigating PFAS in other product categories, such as food packaging and children's products, but during the investigative period the Legislature prohibited PFAS in those product categories and it appears DTSC has shifted its resources to investigating other product/ chemical combinations.

OEHHA, under the Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65), listed PFOA and PFOS as chemicals known to the state to cause reproductive toxicity. In July, 2021, OEHHA announced the release of a draft document for public review describing proposed Public Health Goals (PHGs) for PFOA and PFOS in drinking water. A PHG is the level of a chemical contaminant in drinking water that does not pose a significant risk to health. PHGs published by OEHHA are considered by the State Water Resources Control Board (State Water Board) in setting drinking water regulatory standards (Maximum Contaminant Levels, or MCLs) for California.

The State Water Board has taken a number of additional recent actions related to PFAS in drinking water, including, in July 2020, issuing investigative orders to publicly owned treatment works that receive PFAS in their influent wastewater flow to include sampling for 31 PFAS compounds. In August 2020, it also issued a General Order for public water systems to sample for and report PFAS. It also issued drinking water notification levels and response levels for several PFAS compounds.

Recently, the State Legislature has taken action on PFAS by enacting a slew of bills prohibiting PFAS at different levels across many product categories. These include a ban on textiles that contain PFAS (AB 1817,Ting, Chapter 762, Statutes of 2022); a ban on cosmetic products that contain PFAS (AB 2771, Friedman, Chapter 804, Statutes of 2022); a ban on food packaging that contains PFAS (AB 1200, Ting, Chapter 503, Statutes of 2021); a ban on new juvenile products that contain PFAS (AB 652, Freidman, Chapter 500, Statutes of 2021); and, a ban on firefighting foam containing PFAS (SB 1044, Allen, Chapter 308, Statutes of 2020). The Legislature also authorized the State Water Board to order public water systems to monitor for PFAS and required municipalities to notify consumers for PFAS detected above notification levels (AB 756, C. Garcia, Chapter 162, Statutes of 2019).

Chemical bans and the Safer Consumer Products 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 product applications. 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 include, in addition to the PFAS prohibitions listed above, a ban on flame retardants in children's products, mattresses, and upholstered furniture (AB 2998, Bloom, Chapter 924, Statutes of 2018); a ban on BPA 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."

Enforcement and compliance for chemical prohibition laws: Most of the chemical prohibition bills listed previously are placed in a unique location in the California Codes, sometimes referred to as the "orphan codes." In these code sections, no state agency is designated to provide oversight of the provisions of the law. As a result, there is no direct enforcement, no compliance program, no guidance for manufacturers seeking to comply with these laws, and no related information for consumers. This means there are no regulations or public guidance documents clarifying the intent of the law and no state entity investigating complaints, testing affected products for compliance, or bringing enforcement actions against violators. Because of these deficiencies, it is challenging for some manufacturers to comply and impossible to know if any manufacturers are complying with the requirements of the law.

This bill: The provisions of this bill are placed in the "orphan code" section of the Health and Safety Code.

Unfair Competition Law (UCL): The only current option for enforcement of the prohibitions in the "orphan codes" is for a district attorney or the state Attorney General to bring an action against a manufacturer under the UCL (unless specified otherwise). The UCL is one of the primary tools currently available to government attorneys to protect the public from "any unlawful, unfair or fraudulent business act or practice and unfair, deceptive, untrue or misleading

advertising[.]" (Business and Professions Code Section 17200.). As recently summarized by the California Supreme Court:

> The statute's purpose is to protect both consumers and competitors by promoting fair competition in commercial markets for goods and services. In service of that purpose, the Legislature framed the UCL's substantive provisions in broad, sweeping language to reach anything that can properly be called a business practice and that at the same time is forbidden by law. By proscribing any unlawful business practice, section 17200 borrows violations of other laws and treats them as unlawful practices that the unfair competition law makes independently actionable. [T]he Legislature…intended by this sweeping language to permit tribunals to enjoin on-going wrongful business conduct in whatever context such activity might occur. To that end, the Legislature has created a scheme of overlapping enforcement authority. […] While the UCL provides for both public and private enforcement, authorized public prosecutors have an additional tool to enforce the state's consumer protection laws: civil penalties. (Abbott Laboratories v. Superior Court (2020) 9 Cal. 5th 642, 651-52 [internal citations and quotations omitted.])

Remedies under the UCL include injunctive relief, restitution, and civil penalties. It is important to note that even though a district attorney or the Attorney General can take an action to enforce these chemical prohibitions in the "orphan codes" using the UCL, before a case is filed, a member of the public must purchase and test products at a certified laboratory for the prohibited chemical, which is expensive. Then, the Attorney General or district attorney must have the resources and ability to prioritize action on these complaints before other responsibilities.

To date, the Committee is unaware of any comprehensive report or investigation by any entity on compliance with the chemical prohibitions in the "orphan code," nor is it aware of any entity that is sampling, testing, or tracking compliance with the "orphan codes." Additionally, to date, the Committee is not aware of any enforcement actions taken by the Attorney General or a district attorney under the UCL, or any other law, to enforce any of the chemical prohibition laws under the "orphan codes."

This bill: While the provisions of this bill are placed under the "orphan" section of the Health and Safety Code, the author has added provisions that provide government attorneys with civil penalty options to bring against violators of the law. Specifically, this bill provides that, upon an action brought by the Attorney General, a city attorney, a county counsel, or a district attorney, a person or entity that violates the PFAS restrictions for covered surfaces as delineated in this bill shall be liable for a civil penalty, capped at $5,000 for a first violation and $10,000 for each subsequent violation. The bill additionally provides that these penalty provisions do not impair or impede any other rights, causes of action, claims, or defenses available under any other law. AB 1423 also provides that the remedies delineated in the bill are cumulative with any other remedies available under any other law. These penalty provisions are in addition to the authority to enforce under the UCL, and are consistent with existing statutory penalties relating to PFAS in firefighting foam.

In addition to the penalty provisions currently included in the bill, the author has indicated that she is willing to continue to work with the Committee and stakeholders on a comprehensive enforcement program for dangerous chemicals in products.

Acceptable levels of exposure to PFAS: This bill prohibits PFAS in a covered surface at or above one ppm, as measured in total organic fluorine. There are two other bills pending before the Committee with differing PFAS thresholds in different products, and 5 statutes with differing PFAS thresholds for other products (see the "Existing Law" section of this analysis.) As with enforcement, setting thresholds on chemicals in products would benefit from a public entity with oversight responsibility. In that case, a team of scientists with related public health backgrounds could set the appropriately protective thresholds and be able to update the thresholds through regulation consistent with emerging science. Without that resource, the Legislature is tasked with setting the appropriately protective standard in statute, and presumably updating those statutory thresholds by legislation when needed.

For the thresholds set in this bill, the author's office argues, "Artificial turf requires a more stringent limit [than other uses of PFAS] due to a few factors and it should not be compared to other products like clothing, food packaging, and children's products. The most important distinctions are weathering and mechanical stress. In terms of weathering, artificial turf spends its entire life outside in the sun and rain. Many other products are not intended by the manufacturer to be used outside, full time, for 8-12 years in all weather. This weathering increases the risk posed by this product as it sheds PFAS laden plastic dust. ...For mechanical stress, artificial turf is intended to be played on with shoes, cleats, and other sports equipment with significant force. This mechanical grinding creates small particles that children inhale, ingest, and come into dermal contact with. A secondary concern is similar to other products in that it also leaches PFAS from its plastic "encapsulation"; however, the sheer size and scope of this product sitting outside statewide means that it should be treated differently with acres and acres of fields capable of leeching PFAS into stormwater and groundwater."

Regrettable substitutions: While each of the laws listed in the "orphan code" prohibit a chemical that has been suspected of or found to be toxic or hazardous the laws do not prevent a manufacturer from replacing the prohibited chemical with another hazardous chemical, or a chemical even more hazardous than the one prohibited. In addition, several of the laws dealing with chemicals in the "orphan code" require manufacturers to use the least toxic alternative when replacing the chemical in question. Without a state entity overseeing these substitutions, it is difficult or impossible to know whether manufacturers are replacing prohibited chemicals with substances that are safer or more hazardous.

This bill: This bill requires a manufacturer of a covered surface to use the least toxic alternative when replacing regulated PFAS in a covered surface.

Moving forward: This bill, along with the other PFAS bills pending in front of the Committee, takes a step forward on statutory chemical prohibitions by adding civil penalties for violations of the restrictions in the bill. However, there remains no entity proving guidance or ensuring compliance with the prohibitions. Moving forward, the authors of these bills, along with stakeholders, the Committee, and the Administration, should continue to discuss effective oversight of these new and existing chemical prohibition laws.

Related legislation:

1. AB 246 (Papan). Prohibits, beginning January 1, 2025, a person from manufacturing, distributing, selling, or offering for sale a menstrual product that contains intentionally-added PFAS, and beginning January 1, 2027, a menstrual product that contains PFAS at or above

10 PPM. This bill is pending before the Assembly Environmental Safety and Toxic Materials Committee.

2. AB 727 (Weber). Prohibits, beginning January 1, 2025, a person from manufacturing, selling, delivering, distributing, holding, or offering for sale, a cleaning product that contains intentionally-added PFAS or PFAS at or above 50 PPM, and on January 1, 2027, a cleaning product that contains PFAS at or above 25 PPM. This bill is pending before the Assembly Environmental Safety and Toxic Materials Committee.

3. 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.

4. 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.

5. AB 1200 (Ting, Chapter 503, Statutes of 2021). Prohibits, commencing January 1, 2023, the sale of food packaging that contains PFAS; requires, commencing January 1, 2024, cookware manufacturers to label their product if it contains an intentionally added chemical on specified lists; and prohibits, commencing January 1, 2023, for the internet and January 1, 2024, for the cookware package, a cookware manufacturer from making a claim that cookware is free of a chemical, unless no chemical from that chemical class is intentionally added to the cookware.

6. 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.

7. 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.

8. SB 1056 (Portantino, 2020). Would have required the State Water Board to establish an analytical laboratory method that can be used as a tool to assess the extent of PFAS contamination in drinking water, surface water, groundwater, and wastewater. This bill was held in the Senate Environmental Quality Committee.

9. AB 756 (C. Garcia, Chapter 162, Statutes of 2019). Authorizes the State Water Board to order one or more public water systems to monitor for PFAS and requires municipalities to notify consumers for PFAS detected above notification levels.

10. 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.

11. 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.

12. 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 whose veto message said, "I have signed AB 1879 (Feuer) and SB 509 (Simitian) which mark the beginning of California's historic Green Chemistry Initiative. It is within this process that chemicals like PFCs should be addressed."

REGISTERED SUPPORT / OPPOSITION:

Support

A Voice for Choice Advocacy
Active San Gabriel Valley
American College of Obstetricians and Gynecologists District IX
Ban Single Use Plastic (SUP)
California Product Stewardship Council
California Professional Firefighters
Clean Water Action
Climate Reality Project, Los Angeles Chapter
Climate Reality Project, San Fernando Valley
Elders Climate Action, NorCal and SoCal Chapters
Environmental Working Group
Friends Committee on Legislation of California
Glendale Environmental Coalition
National Stewardship Action Council
Natural Resources Defense Council (NRDC)
Safe Healthy Playing Fields, Inc.
Sierra Club California
Surfrider Foundation
Urban Ecology Project

Opposition

None on file.

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

Date of Hearing: April 18, 2023

ASSEMBLY COMMITTEE ON ENVIRONMENTAL SAFETY AND TOXIC MATERIALS
Alex Lee, Chair
AB 246 (Papan) – As Amended April 12, 2023

SUBJECT: Product safety: menstrual products: perfluoroalkyl and polyfluoroalkyl substances

SUMMARY: Prohibits, commencing January 1, 2025, a person from manufacturing, distributing, selling, or offering for sale in the state any menstrual products that contain regulated PFAS. Specifically, **this bill**:

1) Defines "menstrual product" as a product used to collect menstruation and vaginal discharge, including, but not limited to, tampons, pads, sponges, menstruation underwear, disks, and menstrual cups, whether disposable or reusable.

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 "regulated perfluoroalkyl and polyfluoroalkyl substances or PFAS" as either of the following:
   a) PFAS that a manufacturer has intentionally added to a product and that has a functional or technical effect in the product, including the PFAS components of intentionally added chemicals and PFAS that are intentional breakdown products of an added chemical that also have a functional or technical effect in the product; or,
   b) Commencing January 1, 2027, the presence of PFAS in a product or product component at or above 10 parts per million (ppm), as measured in total organic fluorine.

4) Prohibits, commencing January 1, 2025, a person from manufacturing, distributing, selling, or offering for sale in the state any menstrual products that contain regulated PFAS.

5) Requires a manufacturer to use the least toxic alternative, including alternative design, when removing regulated PFAS in menstrual products to comply with the restrictions in this bill.

6) Requires a manufacturer of a menstrual product to provide persons that offer the product for sale or distribution in the state with a certificate of compliance stating that the menstrual product is in compliance with the requirements of this bill and does not contain any regulated PFAS.

7) Requires a certificate of compliance provided pursuant to this bill to be signed by an authorized official of the manufacturer. Authorizes the certificate of compliance to be provided electronically.

8) Provides that a distributor or retailer of a menstrual product, if they are not also the manufacturer of the product, shall not be held in violation of the prohibitions in this bill if they relied in good faith on the certificate of compliance provided by the manufacturer.

9) Provides that, upon an action brought by the Attorney General, a city attorney, a county counsel, or a district attorney, a person or entity that violates the PFAS restrictions of this bill

shall be liable for a civil penalty not to exceed five thousand dollars ($5,000) for a first violation, and not to exceed ten thousand dollars ($10,000) for each subsequent violation.

10) Provides that these penalty provisions do not impair or impede any other rights, causes of action, claims, or defenses available under any other law. Provides that the remedies delineated in the bill are cumulative with any other remedies available under any other law.

EXISTING LAW:

1) Requires, commencing January 1, 2022, a person that sells firefighter personal protective equipment to provide a written notice to the purchaser if the firefighter personal protective equipment contains intentionally added PFAS chemicals. (Health and Safety Code (HSC) § 13029 (b)(1))

2) Prohibits, commencing January 1, 2022, a manufacturer of class B firefighting foam from manufacturing, or knowingly selling, offering for sale, distributing for sale, or distributing for use, and a person from using, class B firefighting foam containing intentionally added PFAS chemicals. (HSC § 13061 (b)(1))

3) 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, as defined, that contains intentionally added PFAS or PFAS at or above 100 ppm, as measured in total organic fluorine. (HSC § 108946)

4) Prohibits, on or after January 1, 2025, a person from manufacturing, distributing, selling, or offering for sale in the state any new, not previously used, textile articles that contain intentionally added PFAS, or PFAS at or above 100 PPM, and on or after January 1, 2027, 50 PPM, as measured in total organic fluorine. (HSC § 108971)

5) 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 any specified intentionally added ingredients, including some PFAS chemicals. (HSC § 108980 (a))

6) 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. (HSC § 108981.5)

7) Prohibits, commencing on January 1, 2023, a person from distributing, selling, or offering for sale in the state any food packaging that contains that contains intentionally added PFAS or PFAS at or above 100 ppm, as measured in total organic fluorine. (HSC § 109000)

8) Authorizes the State Water Resources Control Board (State Water Board) to order a public water system to monitor for PFAS; requires community water systems to report detections; and, where a detected level of these substances exceeds the response level, to take a water source out of use or provide a prescribed public notification. (HSC §116378)

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

1) 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)

2) 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)

3) Requires the Governor to publish a list of chemicals known to cause cancer or reproductive toxicity and to annually revise the list. The Office of Environmental Health Hazard Assessment (OEHHA) has listed perfluorooctanoic acid (PFOA) and perfluorooctane sulfonate (PFOS), which are members of the PFAS class, as chemicals known to the state to cause developmental toxicity. (HSC § 25249.8)

Under the Safer Consumer Products (Green Chemistry) statutes:

1) Requires the Department of Toxic Substances Control (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)

2) 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))

3) 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, "These once ubiquitous, forever compounds have been linked to health problems, including breast and other cancers, hormone disruption, kidney and liver damage, thyroid disease, developmental harm, and immune system disruption. The presence of PFAs in menstrual products contributes to existing to gender health inequities as exposure to PFAS is almost unavoidable. In a recent study, 48% of sanitary pads, incontinence pads, and panty liners tested were found to contain PFAS, as were 22% of tampons. Additionally, menstrual products have shown higher levels of PFAS than the levels found in tap water.

AB 246 takes a critical step towards protecting women's health and reducing the amount of PFAS in the environment by eliminating polyfluoroalkyl substances (PFAS) from menstrual products. California's pursuit for gender equity and clean drinking waters requires action to ensure that feminine hygiene products are safe, clean and free from forever chemicals. With viable alternatives available, there is no longer a good rationale for their use in menstrual products. Women's health must be prioritized over the use of these unnecessary chemicals. It's past time to protect women and our environment."

Perfluoroalkyl and polyfluoroalkyl substances (PFAS): Per- and polyfluorinated substances (PFASs) are a large group of 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. PFAS are long-lasting chemicals that break down very slowly over time. PFAS are ubiquitous, and 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. Scientific studies have shown that exposure to some PFAS may be linked to harmful health effects in humans and animals. More than 9,000 PFAS chemicals are included in the United States Environmental Protection Agency's (US EPA's) Master List of PFAS Substances. The persistence and proliferation of PFAS chemicals makes it challenging to study and assess the overall potential human health and environmental risks of PFAS exposure.

The breadth of uses of PFAS is immense, making it nearly impossible to avoid exposure. PFAS are used extensively in surface coating and protectant formulations due to their unique ability to reduce the surface tension of liquids. In consumer products, PFAS is used in carpets, furniture fabrics, apparel, paper packaging for food, 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, apparel, 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.

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), and through inhalation and ingestion of contaminated indoor air and dust. Food can become contaminated with PFAS through contaminated soil and water used to grow the food, food packaging containing PFAS, and equipment that uses PFAS during food 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 susceptible to higher levels of exposure 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. Groundwater PFAS contamination typically has been associated with industrial facilities where these chemicals were manufactured or used in other products, and in airfields where the chemicals have been used for firefighting. PFAS chemicals can also enter the environment and drinking water through composting, landfilling, recycling, and incineration of products containing PFAS. The State Water Board indicates that the four major sources of PFAS in drinking water in California are fire training/fire response sites, industrial sites, landfills, and wastewater treatment plants/biosolids. The State Water Board notes that because of their presence and persistence in many drinking water supplies, PFAS remain a serious source of exposure decades after their release into the environment.

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

Hazard traits of PFAS: According to 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 either the individual compounds or 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. Several PFAS bioaccumulate significantly in animals or plants and emerging evidence points to their phytotoxicity, aquatic toxicity, and terrestrial ecotoxicity.

DTSC contends that exposure to PFAS can lead to adverse health outcomes in humans. 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.

Regulating PFAS as a class: DTSC has 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 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. Regulations that focus solely on perfluoroalkyl acids (PFAAs) are ineffective, given that nearly all other PFAS can generate PFAAs in the environment… 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.*

PFAS in menstrual products: In the United States, approximately 72.7 million women are of reproductive age (15-49). During the reproductive stage of their lives, people who menstruate rely on a diverse range of menstrual products, from tampons to pads to menstrual cups to period underwear. To illustrate the prevalence of PFAS in menstrual products, the author of the bill points to tests on menstrual products commissioned by the consumer watchdog site, Mamavation, and Environmental Health News. Conducted at US EPA-certified laboratories between 2020 and 2022, the tests detected organic fluorine, a marker for PFAS, in several menstrual products. For example, 22% of the 23 tampon products tested had indications of PFAS, including 2 products advertised as "organic." Forty eight percent of 46 different sanitary pads, panty liners, and incontinence pads tested had indications of PFAS, including several products marketed as "organic" and "natural." Additional tests by these two organizations found that 65% of period underwear products tested, and 57% of the period underwear brands tested, had detectable levels of fluorine present. Exposure to PFAS through menstrual products is particularly concerning because the vagina is an extremely vascular area and dermal exposure in the vaginal area is often higher than other places of the body. Additionally, people using menstrual products are of reproductive age, thus exposure could potentially impact unborn children as well as the person using the product.

Recent US EPA action on PFAS: According to the US EPA, "Under the Biden-Harris Administration, [US] EPA has restored scientific integrity and accelerated the pace of research and actions needed to tackle the PFAS crisis and protect American communities." On October 18, 2021, US EPA Administrator Michael S. Regan announced the agency's PFAS Strategic Roadmap, which laid out a whole-of-agency approach to addressing PFAS. The roadmap sets timelines by which US EPA plans to take specific actions and commits to, "bolder new policies to safeguard public health, protect the environment, and hold polluters accountable."

Additionally, the US EPA reported that since the roadmap's release in October 2021, US EPA has taken a number of key actions to address PFAS, including it proposed to designate two PFAS as hazardous substances under the federal Comprehensive Environmental Response, Compensation, and Liability Act; released drinking water health advisories for four PFAS; laid the foundation for enhancing data on PFAS; and, began distributing $10 billion in funding to address emerging contaminants under the Bipartisan Infrastructure Law.

State action on PFAS: California has undertaken efforts to address PFAS substances across several state entities.

At DTSC, all PFAS chemicals are "Candidate Chemicals" under the Safer Consumer Products (SCP, previously known as Green Chemistry) Program, because they exhibit a hazard trait and/or an environmental or toxicological endpoint, and the entire class of PFAS was added by the California Environmental Contaminant Biomonitoring Program to its list of priority chemicals.

On July 1, 2021, DTSC designated carpets and rugs containing PFAS as a "Priority Product." A Priority Product is a consumer product identified by DTSC that contains one or more Candidate Chemicals and that has the potential to contribute to significant or widespread adverse impacts to humans or the environment. The Priority Product designation required domestic and foreign carpet and rug manufacturers that use PFAS and related chemicals in their products to submit

information on all of the manufacturer's products that contain PFAS and are sold in California, by August 30, 2021. Manufacturers were then required to show intent to remove or replace PFAS in their products, remove the product from the market, or identify potential alternatives to PFAS to be used in the product by December 28, 2021.

In regulations that went into effect on April 1, 2022, DTSC also designated treatments containing PFAS for use on converted textiles or leathers such as carpets, upholstery, clothing, and shoes as a Priority Product. Domestic and foreign manufacturers of treatments for converted textiles or leathers that contain any member of the class of PFAS selling their products in California were required to submit information on those products by May 31, 2022. After submitting the required information, manufacturers were then required to show intent to mitigate exposure to PFAS in their products by September 28, 2022.

DTSC has also proposed evaluating artificial turf with PFAS in their Draft Priority Product Work Plan for 2021-2023. Previously, DTSC proposed investigating PFAS in other product categories, such as food packaging and children's products, but during the investigative period the Legislature prohibited PFAS in those product categories and it appears DTSC has shifted its resources to investigating other product/ chemical combinations.

OEHHA, under the Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65), listed PFOA and PFOS as chemicals known to the state to cause reproductive toxicity. In July, 2021, OEHHA announced the release of a draft document for public review describing proposed Public Health Goals (PHGs) for PFOA and PFOS in drinking water. A PHG is the level of a chemical contaminant in drinking water that does not pose a significant risk to health. PHGs published by OEHHA are considered by the State Water Resources Control Board (State Water Board) in setting drinking water regulatory standards (Maximum Contaminant Levels, or MCLs) for California.

The State Water Board has taken a number of additional recent actions related to PFAS in drinking water, including, in July 2020, issuing investigative orders to publicly owned treatment works that receive PFAS in their influent wastewater flow to include sampling for 31 PFAS compounds. In August 2020, it also issued a General Order for public water systems to sample for and report PFAS. It also issued drinking water notification levels and response levels for several PFAS compounds.

Recently, the State Legislature has taken action on PFAS by enacting a slew of bills prohibiting PFAS at different levels across many product categories. These include a ban on textiles that contain PFAS (AB 1817,Ting, Chapter 762, Statutes of 2022); a ban on cosmetic products that contain PFAS (AB 2771, Friedman, Chapter 804, Statutes of 2022); a ban on food packaging that contains PFAS (AB 1200, Ting, Chapter 503, Statutes of 2021); a ban on new juvenile products that contain PFAS (AB 652, Freidman, Chapter 500, Statutes of 2021); and, a ban on firefighting foam containing PFAS (SB 1044, Allen, Chapter 308, Statutes of 2020). The Legislature also authorized the State Water Board to order public water systems to monitor for PFAS and required municipalities to notify consumers for PFAS detected above notification levels (AB 756, C. Garcia, Chapter 162, Statutes of 2019).

Chemical bans and the Safer Consumer Products 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 product applications. 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 include, in addition to the PFAS prohibitions listed above, a ban on flame retardants in children's products, mattresses, and upholstered furniture (AB 2998, Bloom, Chapter 924, Statutes of 2018); a ban on BPA 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."

Enforcement and compliance for chemical prohibition laws: Most of the chemical prohibition bills listed previously are placed in a unique location in the California Codes, sometimes referred to as the "orphan codes." In these code sections, no state agency is designated to provide oversight of the provisions of the law. As a result, there is no direct enforcement, no compliance program, no guidance for manufacturers seeking to comply with these laws, and no related information for consumers. This means there are no regulations or public guidance documents clarifying the intent of the law and no state entity investigating complaints, testing affected products for compliance, or bringing enforcement actions against violators. Because of these deficiencies, it is challenging for some manufacturers to comply and difficult or impossible to know if any manufacturers are complying with the requirements of the law.

This bill: The provisions of this bill are placed in the "orphan code" section of the Health and Safety Code.

Unfair Competition Law (UCL): The only current option for enforcement of the prohibitions in the "orphan codes" is for a district attorney or the state Attorney General to bring an action against a manufacturer under the UCL (unless specified otherwise). The UCL is one of the

primary tools currently available to government attorneys to protect the public from "any unlawful, unfair or fraudulent business act or practice and unfair, deceptive, untrue or misleading advertising[.]" (Business and Professions Code Section 17200.). As recently summarized by the California Supreme Court:

> The statute's purpose is to protect both consumers and competitors by promoting fair competition in commercial markets for goods and services. In service of that purpose, the Legislature framed the UCL's substantive provisions in broad, sweeping language to reach anything that can properly be called a business practice and that at the same time is forbidden by law. By proscribing any unlawful business practice, section 17200 borrows violations of other laws and treats them as unlawful practices that the unfair competition law makes independently actionable. [T]he Legislature…intended by this sweeping language to permit tribunals to enjoin on-going wrongful business conduct in whatever context such activity might occur. To that end, the Legislature has created a scheme of overlapping enforcement authority. […] While the UCL provides for both public and private enforcement, authorized public prosecutors have an additional tool to enforce the state's consumer protection laws: civil penalties. (Abbott Laboratories v. Superior Court (2020) 9 Cal. 5th 642, 651-52 [internal citations and quotations omitted.])

Remedies under the UCL include injunctive relief, restitution, and civil penalties. It is important to note that even though a district attorney or the Attorney General can take an action to enforce these chemical prohibitions in the "orphan codes" using the UCL, before a case is filed, a member of the public must purchase and test products at a certified laboratory for the prohibited chemical, which is expensive. Then, the Attorney General or district attorney must have the resources and ability to prioritize action on these complaints before other responsibilities.

To date, the Committee is unaware of any comprehensive report or investigation by any entity on compliance with the chemical prohibitions in the "orphan code," nor is it aware of any entity that is sampling, testing, or tracking compliance with the "orphan codes." Additionally, to date, the Committee is not aware of any enforcement actions taken by the Attorney General or a district attorney under the UCL, or any other law, to enforce any of the chemical prohibition laws under the "orphan codes."

This bill: While the provisions of this bill are placed under the "orphan" section of the Health and Safety Code, the author has added provisions that provide government attorneys with civil penalty options to bring against violators of the law. Specifically, this bill provides that, upon an action brought by the Attorney General, a city attorney, a county counsel, or a district attorney, a person or entity that violates the PFAS restrictions for menstrual products as delineated in this bill shall be liable for a civil penalty, capped at $5,000 for a first violation and $10,000 for each subsequent violation. The bill additionally provides that these penalty provisions do not impair or impede any other rights, causes of action, claims, or defenses available under any other law. AB 246 also provides that the remedies delineated in the bill are cumulative with any other remedies available under any other law. These penalty provisions are in addition to the authority to enforce under the UCL, and are consistent with existing statutory penalties relating to PFAS in firefighting foam.

In addition to the penalty provisions currently included in the bill, the author has indicated that she is willing to continue to work with the Committee and stakeholders on a comprehensive enforcement program for dangerous chemicals in products.

Acceptable levels of exposure to PFAS: This bill prohibits, in menstrual products, intentionally added PFAS, and commencing January 1, 2027, PFAS at or above 10 ppm, as measured in total organic fluorine. There are two other bills pending before the Committee with differing PFAS thresholds in different product categories, and 5 statutes with differing PFAS thresholds for other products (see the "Existing Law" section of this analysis.) As with enforcement, setting thresholds on chemicals in products would benefit from a public entity with oversight responsibility. In that case, a team of scientists with related public health backgrounds could set the appropriately protective thresholds and be able to update the thresholds through regulation consistent with emerging science. Without that resource, the Legislature is tasked with setting the appropriately protective standard in statute, and presumably updating those statutory thresholds by legislation when needed.

This bill: For the thresholds set in this bill, the author's office points to OEKO-TEX ECO PASSPORT standards for textile and leather chemicals, which designates 10 ppm as the threshold value that indicates no intentional use.

Regrettable substitutions: While each of the laws listed in the "orphan code" prohibit a chemical that has been suspected of or found to be toxic or hazardous the laws do not prevent a manufacturer from replacing the prohibited chemical with another hazardous chemical, or a chemical even more hazardous than the one prohibited. In addition, several of the laws dealing with chemicals in the "orphan code" require manufacturers to use the least toxic alternative when replacing the chemical in question. Without a state entity overseeing these substitutions, it is difficult to know whether manufacturers are replacing prohibited chemicals with substances that are safer or more hazardous.

This bill: This bill requires a manufacturer to use the least toxic alternative, including alternative design, when removing regulated PFAS in menstrual products to comply with the restrictions in this bill.

Moving forward: This bill, along with the other PFAS bills pending in front of the Committee, takes a step forward on statutory chemical prohibitions by adding civil penalties for violations of the restrictions in the bill. However, there remains no entity proving guidance or ensuring compliance with the prohibitions. Moving forward, the authors of these bills, along with stakeholders, the Committee, and the Administration, should continue to discuss effective oversight of these new and existing chemical prohibition laws.

Related legislation:

1. AB 727 (Weber). Prohibits, beginning January 1, 2025, a person from manufacturing, selling, delivering, distributing, holding, or offering for sale, a cleaning product that contains intentionally-added PFAS or PFAS at or above 50 PPM, and on January 1, 2027, a cleaning product that contains PFAS at or above 25 PPM. This bill is pending before the Assembly Environmental Safety and Toxic Materials Committee.

2. AB 1423 (Schiavo). Prohibits, commencing January 1, 2025, a person or entity from manufacturing, distributing, selling, or offering for sale in the state any covered surface that contains PFAS, as defined, and prohibits, commencing January 1, 2024, a public entity, a public or private school, or a public or private institution of higher learning, as specified,

from purchasing or installing a covered surface that contains PFAS. This bill is pending before the Assembly Environmental Safety and Toxic Materials Committee.

3. 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.

4. 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.

5. AB 1200 (Ting, Chapter 503, Statutes of 2021). Prohibits, commencing January 1, 2023, the sale of food packaging that contains PFAS; requires, commencing January 1, 2024, cookware manufacturers to label their product if it contains an intentionally added chemical on specified lists; and prohibits, commencing January 1, 2023, for the internet and January 1, 2024, for the cookware package, a cookware manufacturer from making a claim that cookware is free of a chemical, unless no chemical from that chemical class is intentionally added to the cookware.

6. 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.

7. 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.

8. SB 1056 (Portantino, 2020). Would have required the State Water Board to establish an analytical laboratory method that can be used as a tool to assess the extent of PFAS contamination in drinking water, surface water, groundwater, and wastewater. This bill was held in the Senate Environmental Quality Committee.

9. AB 1989 (C. Garcia, Chapter 272, Statutes of 2020). Requires a package or box containing menstrual products that was manufactured on or after January 1, 2023, for sale or distribution in this state to have printed on the label a plain and conspicuous list of all ingredients, as defined, in the product, by weight. Requires the same information to be posted on an internet website, as specified.

10. AB 756 (C. Garcia, Chapter 162, Statutes of 2019). Authorizes the State Water Board to order one or more public water systems to monitor for PFAS and requires municipalities to notify consumers for PFAS detected above notification levels.

11. 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.

12. 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.

13. 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 whose veto message said, "I have signed AB 1879 (Feuer) and SB 509 (Simitian) which mark the beginning of California's historic Green Chemistry Initiative. It is within this process that chemicals like PFCs should be addressed."

REGISTERED SUPPORT / OPPOSITION:

Support

California Association of Sanitation Agencies
California Legislative Women's Caucus
California Professional Firefighters
Los Angeles County Sanitation Districts
NARAL Pro-Choice California
Silicon Valley Youth Climate Action

Opposition

None on file.

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

Date of Hearing: April 18, 2023

ASSEMBLY COMMITTEE ON ENVIRONMENTAL SAFETY AND TOXIC MATERIALS
Alex Lee, Chair
AB 756 (Papan) – As Amended March 2, 2023

SUBJECT: Department of Transportation: contaminated stormwater runoff: salmon and steelhead trout bearing surface waters

SUMMARY: Requires the California Department of Transportation (CalTrans), to develop a programmatic environmental review process to prevent 6PPD and 6PPD-quinone from motor vehicle tires from entering salmon and steelhead trout bearing surface waters of the state. Specifically, **this bill**:

1) Defines "6PPD" as the chemical compound N-(1,3-Dimethylbutyl)-N'-phenyl-p-phenylenediamine, commonly contained in motor vehicle tires.

2) Defines "6PPD-quinone" as the reaction product of 6PPD that is acutely toxic to aquatic life.

3) Defines "biofiltration" as the effect of vegetated treatment facilities that reduce stormwater pollutant discharges by intercepting rainfall on vegetative canopy, and through incidental infiltration of evapotranspiration and filtration.

4) Defines "bioretention" as the effect of engineered facilities that store and treat stormwater by passing it through a specified soil profile, and either retain or detain the treated stormwater for flow attenuation.

5) Requires CalTrans, in consultation with the State Water Resources Control Board (State Water Board), the Department of Toxic Substances Control (DTSC), and the Department of Fish and Wildlife (DFW), to develop a programmatic environmental review process to prevent 6PPD and 6PPD-quinone from entering salmon and steelhead trout bearing surface waters of the state.

6) Requires CalTrans's 6PPD and 6PPD-quinone programmatic environmental review (6PPD environmental review) process to include all of the following:

    a) The pilot project, as further described, to study the effectiveness and cost effectiveness of installing and maintaining bioretention and biofiltration comparatively along CalTran's rights-of-way to eliminate the discharge of 6PPD and 6PPD-quinone into surface waters of the state;

    b) The map of all locations where CalTrans is likely to discharge stormwater into salmon or steelhead trout bearing surface waters of the state; and,

    c) The strategy to eliminate, by December 31, 2037, the discharge of 6PPD and 6PPD-quinone by CalTrans into salmon and steelhead trout bearing surface waters of the state.

7) Requires, no later than December 31, 2025, CalTrans, to construct a pilot project at the location where Highway 101 crosses the San Mateo Creek, in the City of San Mateo, to study the highest performance and most cost-effective methods to install bioretention and

biofiltration comparatively as a method to eliminate 6PPD and 6PPD-quinone from entering salmon and steelhead trout bearing surface waters of the state.

8) Requires, no later than December 31, 2026, the director of CalTrans to submit a report to the Legislature describing CalTrans's strategy to eliminate the discharge of 6PPD and 6PPD-quinone to all salmon and steelhead trout bearing surface waters of the state.

9) Requires CalTrans to provide consultation on a government-to-government basis with tribal communities, as appropriate, in order to allow tribal officials the opportunity to provide meaningful and timely input in the development of CalTrans's strategy to eliminate 6PPD and 6PPD-quinone from all salmon and steelhead trout bearing surface waters of the state.

10) Requires, commencing January 1, 2027, CalTrans to annually install bioretention and biofiltration controls at 10 percent of the locations identified in the map and strategy developed in the 6PPD environmental review process for 10 years, until CalTrans has installed bioretention or biofiltration controls at all locations where CalTrans is likely to discharge stormwater into salmon or steelhead trout bearing surface waters of the state.

11) Requires the director of CalTrans to prepare an annual report describing the status of CalTrans's progress in preventing the discharge of 6PPD and 6PPD-quinone. Requires this report to be given to the Legislature on or before October 31 of each year, through October 31, 2028.

EXISTING LAW:

1) Establishes the federal Clean Water Act (CWA) to regulate discharges of pollutants into the waters of the United States and to regulate quality standards for surface waters. (33 United States Code (U.S.C.) §1251 et seq.)

2) Establishes the National Pollutant Discharge Elimination System (NPDES) permit program requiring the State Water Board and the nine California Regional Water Quality Control Boards (Regional Water Boards) to prescribe waste discharge requirements which, among other things, regulate the discharge of pollutants in stormwater, including municipal stormwater systems. (33 USC § 1342)

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

4) Requires DTSC to adopt regulations to establish a process to identify and prioritize chemicals and chemical ingredients that may be considered chemicals of concern; establish a process to evaluate chemicals of concern and potential alternatives to those chemicals of concern to determine how to best limit exposure or to reduce the level of hazard posed by a chemical of concern; and, specify the range of potential regulatory responses that DTSC may take after the alternatives analysis is completed. (Health & Safety Code § 25252, et. seq.)

FISCAL EFFECT: Unknown.

COMMENTS:

Need for the bill: According to the author, "To build a strong, safe, and sustainable future for California we must take action to preserve the health and safety of rivers and streams. There are many dangers facing our waterways, including micro-particle pollutants and toxic storm water runoff that threaten native species and ecosystems. One such pollutant is known as 6PPD-Q and it is extremely dangerous for salmon and trout populations native to California surface waters. This toxic chemical is introduced to our environment every time we drive, as 6PPD is a prominent ingredient in vehicle tires. Fortunately, biofiltration and bioretention systems, readily available storm water filtration management practices, effectively treat the runoff of 6PPD in terms of both toxic chemical exposure and salmon spawner survival. Assembly Bill (AB) 756 which will require the Department of Transportation to develop and implement a strategy to eliminate 6PPD-Q from storm water discharges into our California aquatic systems. This is just one step towards preserving the health and wellness of our water system in California."

Stormwater: Stormwater is water from rain or snow melt that runs off surfaces such as rooftops, paved streets, highways, or parking lots. As stormwater moves through, it picks up contaminants, such as oil, pesticides, herbicides, sediment, trash, bacteria, and metals, ultimately resulting in a toxic soup of runoff entering California's water ways. The runoff can then drain directly into a local stream, lake, or bay. Both the US EPA and the Regional Water Boards have determined that stormwater and urban runoff are significant sources of water pollution that can threaten aquatic life and public health. However, stormwater may also act as a resource and recharge groundwater when properly managed.

Stormwater pollution in California's water bodies: In Los Angeles County, approximately 100 million gallons of contaminated water and debris drain through the storm drain system each dry day. On rainy days the daily flow can increase to 10 billion gallons per day. Because stormwater drains directly into local water bodies, contamination of water bodies throughout the state by various pollutants is continuous. According to the State Water Board, 1,357 of the 2,623 segments of water bodies in California contain harmful levels of one or more types of pollutants, such as bacteria, metals, and pesticides. Excessive amounts of these pollutants can detrimentally affect the environment, as well as the health of humans and aquatic life.

Biofiltration and bioretention: According to the Los Angeles County NPDES Municipal Separate Storm Sewer System Permit, "Biofiltration" means a low-impact development (LID) best management practice (BMP) that reduces stormwater pollutant discharges by intercepting rainfall on vegetative canopy, and through incidental infiltration and/or evapotranspiration, and filtration, and "Bioretention" means a LID BMP that reduces stormwater runoff by intercepting rainfall on vegetative canopy, and through evapotranspiration and infiltration. The bioretention system typically includes a minimum two-foot (2′) top layer of a specified soil and compost mixture underlain by a gravel-filled temporary storage pit dug into the in-situ soil.

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.

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.

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.

DTSC proposes Motor Vehicle Tires Containing 6PPD as a priority product: On May 20, 2022, DTSC initiated rulemaking to list motor vehicle tires containing N-(1,3-dimethylbutyl)-N'-phenyl-p-phenylenediamine (6PPD) as a Priority Product under the Safer Consumer Products (SCP) Regulations. As background for listing 6PPD as a priority product, DTSC's website provides the following summary:

> "The tire antidegradant 6PPD and its reaction product 6PPD-quinone are highly toxic to aquatic organisms. 6PPD has been used as an antidegradant for decades and is found in most, if not all, motor vehicle tires. 6PPD performs the critical function of protecting rubber from reactions with ozone and oxygen, which can lead to cracks.

However, 6PPD is toxic to aquatic organisms at multiple trophic levels, can impair wildlife survival, and is toxic to algae. 6PPD-quinone, a reaction product of 6PPD, is acutely toxic to coho salmon and kills fish within a few hours after exposure. While little is known about the effect of 6PPD-quinone on other organisms, 6PPD-quinone may also be toxic to closely related species such as steelhead and chinook. Tires release 6PPD-quinone into the aquatic environment, sometimes at levels lethal to coho salmon.

Over the life of a tire, 6PPD continuously migrates to the surface, where it provides protection from degradation caused by ozone and oxygen. Tire wear particles (TWP) are generated during use as tires roll across the road surface, particularly as vehicles brake, accelerate, and turn. TWP, and the 6PPD they contain, can then enter the aquatic environment from road dust into surface runoff and stormwater.

While it is unclear exactly where and how 6PPD-quinone is formed, detections of 6PPD-quinone in California waterways clearly indicate that it is sufficiently persistent in aquatic systems for aquatic organisms to be exposed to the chemical at levels that may cause harm. 6PPD-quinone has been measured in California streams at concentrations above those shown to kill at least half of coho salmon in laboratory experiments.

Based on the criteria in the Safer Consumer Product Regulations, DTSC has determined that aquatic organisms can be exposed to 6PPD and 6PPD-quinone derived from motor vehicle tires. This exposure may cause or contribute to significant adverse impacts to aquatic organisms, including two populations of coho salmon in California, one of which is endangered, the other threatened. 6PPD-quinone is present in California runoff and waterways above concentrations that kill coho in laboratory studies. Exposure to 6PPD and 6PPD-quinone may jeopardize the recovery of coho salmon and other imperiled species. The loss of coho salmon in California has significantly impacted Native American tribes in California that have traditionally relied on the species as an important food source. The loss of core traditional food sources for tribal communities has been linked to loss of culture, increased physical and mental health issues, and increased poverty."

This bill: AB 756 requires CalTrans to develop strategies to prevent the harmful chemicals 6PPD and 6PPD-quinone from entering salmon and steelhead trout bearing surface waters of the state. The bill, appropriately requires CalTrans to consult with the various state agencies with knowledge and expertise around these chemicals, related aquatic species and best management practices for reducing pollutants in stormwater. It is important to note that while DTSC has initiated a rulemaking to list 6PPD as a priority product, it is a process that could take several years before there is a regulatory response dealing with this chemical in tires. Additionally, it is unknown what, if any, regulatory action would be taken by DTSC. In the meantime, this bill seeks to prevent 6PPD and 6PPD-quinone from entering surface waters and negatively impacting aquatic species.

Arguments in support: According to Clean Water Action, "AB 756 would require Caltrans to develop and implement a strategy to eliminate 6PPD – a known fish killing chemical compound – from stormwater discharges into salmon and steelhead trout bearing waters. Puget Sound researchers identified a connection between stormwater from watersheds near roads and salmon deaths – the coho mortality phenomenon - decades ago. In 2020 the University of Washington released a report that identified the toxic chemical responsible for the fish kills as 6PPD-quinone.

AB 756 would require Caltrans to eliminate the exposure of 6PPD by identifying where state highways cross salmon and steelhead bearing waters and cost-effective biofiltration and bioretention systems in order to install such systems throughout the state. The legislation would require Caltrans, starting in 2027, to install biofiltration at 10% of its salmon or steelhead water-bearing crossings for 10 years until all crossings have biofiltration to prevent 6PPD from reaching surface waters of the state.

There are numerous reasons to support AB 756, which include protecting salmon and steelhead populations, promoting environmental justice and anti-racism by protecting subsistence and tribal consumers of these species, maintaining water quality, and addressing multiple contaminants in addition to 6 PPD."

Arguments in opposition:

None on file.

Related legislation:

AB 2106 (Robert Rivas, 2022). Would have required the State Water Board to modernize its stormwater tracking system, on or before December 31, 2025, and to establish a statewide commercial, industrial, and institutional national pollutant discharge elimination system order. This bill was vetoed by the Governor.

REGISTERED SUPPORT / OPPOSITION:

Support

California Coastkeeper Alliance
California Trout
Clean Water Action
Coachella Valley Waterkeeper
Defenders of Wildlife
Heal the Bay
Humboldt Baykeeper
Inland Empire Waterkeeper
Laane (Los Angeles Alliance for A New Economy)
Los Angeles Waterkeeper
Monterey Bay Aquarium
Monterey Waterkeeper
Orange County Coastkeeper
Pacific Coast Federation of Fishermen's Association
Planning and Conservation League
Restore the Delta
Russian Riverkeeper
San Diego Coastkeeper
San Francisco Baykeeper
Santa Barbara Channelkeeper
Sierra Club California

South Yuba River Citizens League
The Nature Conservancy
The Otter Project
Trout Unlimited
U.S. Tire Manufacturers Association
Ventura Coastkeeper
Water Climate Trust
Wishtoyo Chumash Foundation
Yuba River Waterkeeper

Opposition

None on file.

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

Date of Hearing: April 18, 2023

ASSEMBLY COMMITTEE ON ENVIRONMENTAL SAFETY AND TOXIC MATERIALS
Alex Lee, Chair
AB 347 (Ting) – As Amended April 11, 2023

SUBJECT: Household product safety: toxic substances: testing and enforcement

SUMMARY: Requires the Department of Toxic Substances Control (DTSC) to enforce and ensure compliance with three existing laws dealing with chemicals in juvenile products, cleaning products, and food packaging and cookware. Specifically, **this bill**:

1) Requires DTSC to enforce and ensure compliance with the following three laws:

    a) Health and Safety Code (HSC) § 108945, et, seq. which prohibits any person, on and after July 1, 2023, from selling or distributing any new juvenile product that contains regulated perfluoroalkyl and polyfluoroalkyl substances (PFAS);

    b) HSC § 108950, the Cleaning Product Right To Know Act of 2017, requires manufacturers of cleaning products to disclose ingredient information online on and after January 1, 2020 and on the product label on and after January 1, 2021; and,

    c) HSC § 109000 which prohibits, beginning on January 1, 2023, any person from selling any food packaging that contains PFAS and requires a manufacturer by January 1, 2024, to post specified information on its website if it sells any cookware that contains any ingredients on a specified list.

2) Requires DTSC to select and test samples, of the products identified above, taking into account a range of manufacturers and types of designated products specified in the bill.

3) Authorizes DTSC, if testing shows any product is in violation of any of the specified laws in the bill, to assess administrative fines against the manufacturer of the product.

4) Authorizes DTSC to assess administrative fines against any person that sells a product that DTSC has determined to be in violation of one of the specified laws.

5) Requires DTSC to make any information about any citation issued pursuant to the authority granted in this bill on its internet website.

6) Specifies the violation amount for administrative fines by DTSC to be:

    a) For the first violation, not less than $1,000 and not more than $2,500;

    b) For the second violation, not less than $2,500 and not more than $5,000;

    c) For the third violation, not less than $5,000 and not more than $7,500; and,

    d) For the fourth and any subsequent violations, not less than $7,500 and not more than $10,000.

7) Requires DTSC to adjust all minimum and maximum administrative fines for inflation every five years.

8) Requires DTSC to receive complaints from consumers concerning products regulated pursuant to the laws identified in this bill.

9) Authorizes DTSC to adopt guidelines to implement uniform standards or criteria to implement, interpret, or make specific for the laws identified in the bill.

EXISTING LAW:

1) Requires, commencing January 1, 2022, a person that sells firefighter personal protective equipment to provide a written notice to the purchaser if the firefighter personal protective equipment contains intentionally added PFAS chemicals. (HSC § 13029. (b)(1))

2) Prohibits, commencing January 1, 2022, a manufacturer of class B firefighting foam from manufacturing, or knowingly selling, offering for sale, distributing for sale, or distributing for use, and a person from using, class B firefighting foam containing intentionally added PFAS chemicals. (HSC § 13061 (b)(1))

3) Prohibits, on and after June 1, 2006, a person from manufacturing, processing, or distributing in commerce a product, or a flame-retarded part of a product, containing more than one-tenth of 1 percent of pentaBDE or octaBDE. (HSC § 108922)

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, dibutyl phthalate, or benzyl butyl phthalate. (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, diisodecyl phthalate, or di-n-octyl phthalate. (HSC § 108937(b))

6) 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)

7) 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 PFAS chemicals. (HSC § 108946)

8) Prohibits, commencing January 1, 2025, a person or entity from manufacturing, selling, delivering, holding, or offering for sale, any cosmetic product that contains any specified intentionally added ingredients. (HSC § 108980 (a))

9) Prohibits, commencing on January 1, 2023, a person from distributing, selling, or offering for sale in the state any food packaging that contains regulated PFAS. (HSC § 109000)

10) Prohibits, beginning January 1, 2025, a person from manufacturing, distributing, selling, or offering for sale in the state a new textile article, as defined, that contains regulated PFAS. (HSC § 108970)

11) Prohibits the offer for final sale, final sale, or distribution of compact fluorescent lamps starting January 1, 2024, and linear fluorescent lamps starting January 1, 2025, and makes exemptions for relevant products and applications. (HSC § 109020)

12) 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. (HSC § 108950)

13) Enacts the Product Recall Safety and Protection Act, which requires immediate removal from the market and notice to consumers for products subject to recall or warnings, as specified. (HSC § 108040)

14) Prohibits the sale of personal care products that contain plastic microbeads on and after January 1, 2020. (Public Resources Code § 42360)

15) Requires the Department of Toxic Substances Control (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)

16) 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))

17) 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)

18) Requires DTSC to revise its 2015-2017 Priority Product Work Plan to include lead acid batteries for consideration and evaluation as a potential priority product. (HSC § 25253.5)

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

FISCAL EFFECT: Unknown.

COMMENTS:

Need for the bill: According to the author, "California has been a nationwide leader on the regulation of Perfluoroalkyl and polyfluoroalkyl substances (PFAS) chemicals. Since 2020, the state has banned the use of PFAS in products like children's clothing, cookware, food packaging and most recently banned the use of these chemicals in textiles. Despite this important work, there is currently no system in place to assess how effective these regulations have been in banning the use of these chemicals and there is no state agency in charge of overseeing compliance. The end result is a lack of a meaningful enforcement mechanism for these laws,

which not only impacts consumers' exposure to these chemicals but also leaves companies without an entity to address their questions on the scope of the law. To address this issue, AB 347 would require the Department of Toxic Substances Control to ensure compliance with products that are already being regulated under law, like food packaging and juvenile products. DTSC would provide regulatory guidance on these laws and would have the authority to fine companies for noncompliance."

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.

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 include the following: 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; require DTSC to evaluate and prioritize product/candidate chemical combinations to develop a list of "priority products" for which alternatives analyses must be conducted; require responsible entities (manufacturers, importers, assemblers, and retailers) to notify DTSC when their product is listed as a priority product and then perform an alternatives analysis for the product; and, 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.

Since the adoption of the Safer Consumer Products regulation in 2013, DTSC has adopted 6 priority products and there is currently one proposed priority product.

History of product safety related legislation: Over the past twenty years the legislature has enacted a variety of product safety related legislation dealing with flame retardant chemicals, phthalates in products for young children, bisphenol A, cosmetics safety, and several other chemical/product cominations. Below is a more detailed description of each of these laws. These laws have one thing in common: none of them have any state entity in charge of enforcement, compliance, or providing guidance for the regulated industry.

> *Polybrominated Diphenyl Ethers*: AB 302 (Chan, Chapter 205, Statutes of 2003) prohibits a person from manufacturing, processing, or distributing in commerce a product, or a flame-retarded part of a product, containing more than 0.1% pentaBDE or octaBDE on and after January 1, 2008. An early version of this bill required the California Environmental Protection Agency to develop regulations; however, that was amended out of the bill - the bill was subsequently keyed non-fiscal and not heard in the Appropriations Committees.

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.

Unsafe products: recall or warning. AB 1860 (Huffman, Chapter 569, Statutes of 2008). Enacts the Product Recall Safety and Protection Act (Act), which requires immediate removal from the market and notice to consumers for products subject to recall or warnings, as specified. This bill established the following penalty provisions: any violation shall be subject to a civil penalty of up to one thousand dollars ($1,000) for each occurrence, up to a maximum of twenty thousand dollars ($20,000) and the remedies under this bill are in addition to, and do not supersede or limit, any and all other remedies, civil or criminal. The version of AB 1860 heard by this Committee in 2008 required DTSC to conduct enforcement. The bill was later amended (off of the Assembly Appropriations Suspense File) to eliminate DTSC from the bill.

Product safety: bisphenol A: 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 bisphenol A (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 bisphenol A in containers. The bill provides that if DTSC adopts a regulatory response regarding the use of bisphenol A in a product that is prohibited by this bill, then this law shall not apply to that product.

Plastic microbeads: AB 888 (Bloom, Chapter 594, Statutes of 2015) prohibits the sale of personal care products that contain plastic microbeads on and after January 1, 2020. Provides that a person who has violated the provisions of the bill is liable for a civil penalty not to exceed two thousand five hundred dollars ($2,500) per day for each violation in addition to any other penalty established by law. Specifically provides that actions pursuant to the bill may be brought by the Attorney General in the name of the people of the state, by a district attorney, by a city attorney, or by a city prosecutor in a city or city and county having a full-time city prosecutor.

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 comply with this bill.

Cosmetic products: safety: 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.

Firefighting equipment and foam: PFAS chemicals. SB 1044 (Allen, Chapter 308, Statutes of 2020) prohibits the manufacture, sale, distribution, and use of class B 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. Specifically authorizes an action brought by the Attorney General, a city attorney, a county counsel, or a

district attorney, a person that violates subdivision (a) shall be liable for a civil penalty not to exceed five thousand dollars ($5,000) for a first violation, and not to exceed ten thousand dollars ($10,000) for each subsequent violation.

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.

Plant-based food packaging: cookware: hazardous chemicals: AB 1200 (Ting, Chapter 503, Statutes of 2021). Prohibits, commencing January 1, 2023, the sale of food packaging that contains PFAS, as specified; requires, commencing January 1, 2024, cookware manufacturers to label their product if it contains an intentionally added chemical on specified lists; and prohibits, commencing January 1, 2023, for the internet and January 1, 2024, for the cookware package, a cookware manufacturer from making a claim that cookware is free of a chemical, unless no chemical from that chemical class is intentionally added to the cookware. Defines regulated PFAS as: PFAS that a manufacturer has intentionally added to a product and that has a functional or technical effect in the product, or the presence of PFAS in a product or product component at or above 100 parts per million, as measured in total organic fluorine.

Product safety: textile articles: perfluoroalkyl and polyfluoroalkyl substances (PFAS): AB 1817 (Ting, Chapter 762, Statutes of 2022). Prohibits, beginning January 1, 2025, a person from manufacturing, distributing, selling, or offering for sale in the state a new textile article, as defined, that contains regulated PFAS. This law defines regulated PFAS as: PFAS that a manufacturer has intentionally added to a product and that has a functional or technical effect in the product, or the presence of PFAS in a product or product component at or above the following thresholds, as measured in total organic fluorine: commencing January 1, 2025, 100 parts per million; commencing January 1, 2027, 50 parts per million.

Fluorescent lamps: sale and distribution: prohibition: AB 2208 (Kalra, Chapter 409, Statutes of 2022) bans the offer for final sale, final sale, or distribution of compact fluorescent lamps starting January 1, 2024, and linear fluorescent lamps starting January 1, 2025, and makes exemptions for relevant products and applications.

Regrettable substitutes: While each of the laws above has banned a chemical that has been suspected of or found to be toxic or hazardous, as enacted nothing in the laws prevent a manufacturer from replacing the banned chemical with another harmful chemical, or even potentially a chemical more harmful than the one banned. DTSC's Safer Consumer Product regulation requires manufacturers to evaluate alternatives to a chemical and encourages (and could eventually require through a regulatory response) the manufacturer to not use another harmful chemical as the replacement.

Enforcement and compliance for these product safety laws: The laws covered by this bill regarding product safety are placed in a unique place in the California Codes where there is not any state agency overseeing them, sometimes referred to as the "orphan codes". As a result there is no direct enforcement and no state entity to provide guidance to manufacturers seeking to comply with these laws. The only option for enforcement, for these orphan codes, is for a

district attorney or the state attorney general to bring an action against a manufacturer, under the UCL. For the laws that have penalties, the attorney general or a district attorney can add those penalties to the penalties under the UCL. Of course, before this type of enforcement action is taken someone first needs to purchase these products and test them for compliance – which is currently not being done. Additionally, for the laws under these orphan codes, manufacturers have no state entity to turn to for questions regarding compliance, whether a particular product is actually included or not. For example, one of the laws included in AB 347 prohibits regulated PFAS in any food packaging. Does this include pet food? The law does not exempt pet food and the law does not specify that the food is for human consumption. At the very least this is unclear, however, manufacturers of pet food packaging may need to be in compliance with this law just in case.

There are more than 10 different laws on the books in these orphan codes that prohibit specific chemicals or require ingredient disclosure, some as old as 20 years. It is unclear if any of the laws within these orphan codes are actually being followed. To date, the Committee is not aware of a single enforcement action taken or a single entity regularly sampling and testing products for compliance, under any of these existing product safety laws within these orphan codes.

Do consumers have a false-sense of security because these product safety laws are on the books?

Unfair Competition Law (UCL): The UCL is one of the primary tools currently available to government attorneys to protect the public from "any unlawful, unfair or fraudulent business act or practice and unfair, deceptive, untrue or misleading advertising[.]" (Business and Professions Code Section 17200.) As recently summarized by the California Supreme Court:

> The statute's purpose is to protect both consumers and competitors by promoting fair competition in commercial markets for goods and services. In service of that purpose, the Legislature framed the UCL's substantive provisions in broad, sweeping language to reach anything that can properly be called a business practice and that at the same time is forbidden by law. By proscribing any unlawful business practice, section 17200 borrows violations of other laws and treats them as unlawful practices that the unfair competition law makes independently actionable. [T]he Legislature…intended by this sweeping language to permit tribunals to enjoin on-going wrongful business conduct in whatever context such activity might occur. To that end, the Legislature has created a scheme of overlapping enforcement authority. […] While the UCL provides for both public and private enforcement, authorized public prosecutors have an additional tool to enforce the state's consumer protection laws: civil penalties. (*Abbott Laboratories v. Superior Court* (2020) 9 Cal. 5th 642, 651-52 [internal citations and quotations omitted.])

Remedies under the UCL include injunctive relief, restitution, and civil penalties. It is important to note that even though a district attorney or the attorney general can take an action to enforce these product safety laws using the UCL, before a cases is filed there will be considerable costs first, including purchasing the products and sending them to a certified laboratory to test for the banned chemical. To date, the Committee is not aware of any action taken by the Attorney General or a District Attorney under the UCL to enforce any of the product safety laws under the orphan codes.

Lack of oversight/compliance: Several of the laws dealing with chemicals in products require manufacturers to use the least toxic alternative when replacing the chemical in question.

Additionally, some of these product safety laws have different thresholds for the amount of the same banned chemical that can be in the product. However, since there is not a state agency to oversee this, it is impossible to know if any manufacturer has actually complied with any of these requirements in the law. Since the passage of these laws, questions have arisen as to what specific products may actually fall under certain statutory requirements. Usually, a state agency oversees a law and either adopts regulations to further clarify the law or adopts guidance to both assist businesses in complying with the law and provide consumers with related information. If there was state oversight, that state entity could not only investigate and test for compliance, but provide guidance to businesses and consumers. The state entity could evaluate the chemical thresholds in the laws and either recommend to the Legislature whether or not those thresholds should change or change them themselves, depending on how the law was structured. Additionally, the state entity could bring enforcement actions against any violators. All of the actions would provide better protection for the public and better guidelines and compliance assistance for affected industries. To date, the Committee is unaware of any comprehensive report or investigation by any entity tracking the potential compliance of any of these product safety laws under the orphan codes.

Options for enforcement/oversight: AB 347 requires DTSC to oversee three of these product safety laws. DTSC has faced criticisms for several of its programs, specifically because its safer consumer product regulation, is slow to adopt priority products (6 priority products adopted in 10 years since the regulation has been adopted). If DTSC is not the right agency to enforce these chemical ban laws, then how else could these laws be enforced? The Legislature could pick a different state agency. The law could be amended to allow for third-party enforcement of these product safety laws. Some of these laws contain penalty amends and direct authorization for the Attorney General and district attorneys to enforce them, so the rest of these laws could be amended to include the same penalty provisions. Another avenue would be for the Legislature to direct DTSC to identify as a priority products any of the products, under one of the above mentioned product safety laws, and then regulate it as such. One added benefit of identifying a product as a priority product is that during its evaluation alternatives would be evaluated and chemicals of concern are strongly discouraged (or even prohibited) from being used as an alternative, thus preventing regrettable substitutions.

Silence: It is interesting to note that the organizations that worked to place these laws into statute under these orphan codes have not weighed in on ensuring that these laws are actually enforced.

This bill: AB 347 adds enforcement and provides compliance assistance to three existing product safety laws. Under the provisions of this bill, affected products will be purchased and sent to state certified laboratories for testing for compliance with the applicable laws. It is important to note that the laws identified under the bill have an effective date that has already started, meaning manufacturers should already be in compliance with the laws identified in the bill. Should this bill become law, it will be the first time (with over 20 years of law on the books) that a state entity has checked for compliance with any of these product safety laws. At the very least, this is a very good first step in ensuring that California consumers are truly protected by these product safety laws.

Technical considerations: The bill is tackling a complex issue of how to enforce laws that ban chemicals in products or require ingredient disclosure of chemicals in products. As the bill moves through the legislative process, the author should continue to work with stakeholders to

address some of the issues raised such as the frequency of sampling and what constitutes a violation. Some of these questions could be answered by DTSC as part of implementation or answered sooner. Additionally, it is simpler to take a product and send it to a lab and test it for a particular chemical. It is much more complicated to take the same product (that is required to have certain ingredients disclosed) and test if for all of the possible chemicals that could be in it to see if those chemicals are present in the product, but not disclosed. Addressing this and other issues raised could help to strengthen the bill.

Arguments in support:

None on file.

Arguments in opposition:

The Household and Commercial Products Association (HCPA) and the Fragrance Creators Association (FCA), take an "oppose unless amended" position and argue, "HCPA and FCA were lead negotiators, and HCPA supported, the Cleaning Product Right to Know Act of 2017 (CPRKA), authored by then Senator Ricardo Lara. The CPRKA is not designed to be a toxic substance program or impose ingredient restrictions. Rather, the program is a labeling law focused on consumer ingredient communication. The disclosure law is only applicable to intentionally added ingredients, and does not require testing for, or disclosure of contaminants.

Given the sheer number of ingredients that could be present in a cleaning product, it may not be possible to conduct such analyses at scale, and at best, would demand a great deal of resources from DTSC currently directed at product safety programs.

It is unclear if the fines proposed in AB 347 apply to each product entered into commerce and belonging to the same stock keeping unit, or for one total violation. Just as the fines take into consideration good faith efforts on behalf of a manufacturer, so should the bill's provision requiring the department to make information about *any* citation available on its website. Well intentioned actors should have the chance to fix any issues identified by DTSC and pay the associated fine, as appropriate, without being posted on a website without context to the public. Therefore, AB 347 should be amended to make public citations apply only to ongoing non-compliance after DTSC's initial notification of non-compliance. Under AB 347, DTSC will be required to "receive complaints from consumers concerning products regulated by this section sold in the state." This section should make clear that complaints are limited to the scope of the CPRKA and PFAS restrictions in the bill."

Related legislation:

1) AB 246 (Papan). Prohibits, beginning January 1, 2025, a person from manufacturing, distributing, selling, or offering for sale a menstrual product that contains intentionally-added PFAS. This bill is pending before the Assembly Environmental Safety and Toxic Materials Committee.

2) AB 418 (Gabriel). Prohibits, beginning January 1, 2025, a person or entity from manufacturing, selling, delivering, distributing, holding, or offering for sale, in commerce a food product that contains any of the five specified substances. This bill is pending before the Assembly Environmental Safety and Toxic Materials Committee.

3) AB 727 (Weber). Prohibits, beginning January 1, 2025, a person from manufacturing, selling, delivering, distributing, holding, or offering for sale, a cleaning product that contains intentionally-added PFAS. This bill is pending before the Assembly Environmental Safety and Toxic Materials Committee.

4) AB 1423 (Schiavo). Prohibits, starting January 1, 2025, a person from manufacturing, distributing, selling, or offering for sale artificial turf that contains PFAS above specified levels. This bill is pending before the Assembly Environmental Safety and Toxic Materials Committee.

5) AB 2208 (Kalra, Chapter 409, Statutes of 2022). Prohibits the offer for final sale, sold at final sale, or distribution of compact fluorescent lamps starting January 1, 2024, and linear fluorescent lamps starting January 1, 2025, and makes exemptions for relevant products and applications.

6) AB 1817 (Ting, Chapter 762, Statutes of 2022). Prohibits, beginning January 1, 2025, a person from manufacturing, distributing, selling, or offering for sale in the state a new textile article, as defined, that contains regulated PFAS.

7) AB 1200 (Ting, Chapter 503, Statutes of 2021). Prohibits, commencing January 1, 2023, the sale of food packaging that contains PFAS; requires, commencing January 1, 2024, cookware manufacturers to label their product if it contains an intentionally added chemical on specified lists; and prohibits, commencing January 1, 2023, for the internet and January 1, 2024, for the cookware package, a cookware manufacturer from making a claim that cookware is free of a chemical, unless no chemical from that chemical class is intentionally added to the cookware.

8) 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.

9) 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.

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) 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.

12) 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.

13) AB 888 (Bloom, Chapter 594, Statutes of 2015). Prohibits the sale of personal care products that contain plastic microbeads on and after January 1, 2020.

14) 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 bisphenol A (BPA) if the item is primarily intended for children three years of age or younger.

15) AB 1860 (Huffman, Chapter 569, Statutes of 2008). Enacts the Product Recall Safety and Protection Act, which requires immediate removal from the market and notice to consumers for products subject to recall or warnings, as specified.

16) SB 1313 (Corbett, 2008). Would have prohibited the manufacture, sale, or distribution of any food contact substance, as defined, which contains PFAS, as defined, in any concentration exceeding 10 parts per billion. This bill was vetoed by Governor Arnold Schwarzenegger whose veto message said, "I have signed AB 1879 (Feuer) and SB 509 (Simitian) which mark the beginning of California's historic Green Chemistry Initiative. It is within this process that chemicals like PFCs should be addressed."

17) 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 that manufacturers to use the least toxic alternative when replacing phthalates in accordance with this chapter.

18) AB 302 (Chan, Chapter 205, Statutes of 2003). Prohibits a person from manufacturing, processing, or distributing in commerce a product, or a flame-retarded part of a product, containing more than 0.1% pentaBDE or octaBDE on and after January 1, 2008.

REGISTERED SUPPORT / OPPOSITION:

Support

None on file.

Opposition

American Cleaning Institute
Fragrance Creators Association
Household and Commercial Products Association

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

Date of Hearing: April 18, 2023

ASSEMBLY COMMITTEE ON ENVIRONMENTAL SAFETY AND TOXIC MATERIALS
Alex Lee, Chair
AB 418 (Gabriel) – As Amended April 13, 2023

SUBJECT: Food product safety

SUMMARY: Prohibits, commencing January 1, 2025, a person or entity from manufacturing, selling, delivering, distributing, holding, or offering for sale, in commerce a food product that contains any of several specified substances. Specifically, **this bill**:

1) Prohibits, commencing January 1, 2025, 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, red dye 3, and titanium dioxide.

2) Provides that upon an action brought by the Attorney General, a city attorney, a county counsel, or a district attorney a person or entity that violates the PFAS restrictions in covered surfaces provisions of this bill shall be liable for a civil penalty not to exceed five thousand dollars ($5,000) for a first violation, and not to exceed ten thousand dollars ($10,000) for each subsequent violation.

3) Provides that these penalty provisions do not impair or impede any other rights, causes of action, claims, or defenses available under any other law. Provides that the remedies delineated in the bill are cumulative with any other remedies available under any other law.

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) Creates the Food Safety Fund as a special fund in the State Treasury for use by the California Department of Public Health (CDPH), upon appropriation by the Legislature, for the purposes of providing funds necessary to carry out and implement the inspection provisions of the Sherman Law relating to food, licensing, inspection, enforcement, and to carry out and implement the provisions of the California Retail Food Code. (HSC § 110050)

10) Authorizes CDPH, upon the request of a health officer, to authorize the local health department of a city, county, city and county, or local health district to enforce the Sherman Law, and the regulations adopted pursuant to the Sherman Law that pertain to retail food establishments, as defined by regulation, if the department determines that the local health department has sufficient personnel with adequate training to do so. (HSC § 111020)

11) Authorizes a local health department that is authorized by CDPH to enforce the Sherman Law, to make inspections, take samples, make laboratory examinations, impose and remove embargoes, hold informal hearings, certify facts to the district attorney, and institute proceedings for the forfeiture, condemnation, and destruction of food found to be adulterated or misbranded. (HSC § 111030)

12) Authorizes the Attorney General or any district attorney, on behalf of CDPH, to bring an action in superior court; specifies that the court shall have jurisdiction upon hearing and for cause shown, to grant a temporary or permanent injunction restraining any person from violating any provision of the Sherman Law. (HSC § 111900)

13) In addition to the injunctive relief provided in law, or as a nonpunitive alternative, the court, after finding any person has violated the Sherman Law, shall award to CDPH all reasonable costs incurred by CDPH in investigating and prosecuting the action, including, but not limited to, the costs of storage and testing, as determined by the court. The award shall be paid to CDPH by the person found by the court to have violated the Sherman Law. (HSC § 111905)

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

15) 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. The Office of Environmental Health Hazard Assessment (OEHHA) has listed perfluorooctanoic acid (PFOA) and perfluorooctane sulfonate (PFOS), which are members of the PFAS class, as chemicals known to the state to cause developmental toxicity. (HSC § 25249.8)

FISCAL EFFECT: Unknown.

COMMENTS:

Need for the bill: According to the author, "Our government does not proactively regulate chemicals used in manufactured and packaged foods, and even allows food manufacturers to decide if a chemical is safe for public consumption. As a result, some harmful chemicals, such as the ones listed in this bill, end up in food that all of us, including our children, consume every day. Californians should not have to worry that the food they buy in their neighborhood grocery store might be full of dangerous additives or toxic chemicals. AB 418 will correct for a concerning lack of federal oversight and help protect our kids, public health, and the safety of our food supply."

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.

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. The Office of Environmental Health Hazard

Assessment (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.

History of product safety related legislation: Over the past twenty years, the Legislature has enacted a variety of product safety-related legislation dealing with chemicals in products, similar to what is contained in AB 418. Below is a sample of some of these laws. These laws all have one thing in common: none of them have any state entity in charge of enforcement, compliance, or providing guidance for the regulated industry.

Polybrominated Diphenyl Ethers: AB 302 (Chan, Chapter 205, Statutes of 2003) prohibits a person from manufacturing, processing, or distributing in commerce a product, or a flame-retarded part of a product, containing more than 0.1% pentaBDE or octaBDE on and after January 1, 2008. (An early version of this bill required the California Environmental Protection Agency to develop regulations. However that was amended out of the bill and the bill was subsequently keyed non-fiscal and not heard in the Appropriations Committees.)

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: bisphenol A: 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 bisphenol A (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 DTSC 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.

Cosmetic products: safety: 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.

Regrettable substitutes: While each of the laws above has banned a chemical that has been suspected of or found to be toxic or hazardous, as enacted nothing in the laws prevents a manufacturer from replacing the banned chemical with another harmful chemical, or even potentially a chemical more harmful than the one banned.

Enforcement and compliance for these product safety laws: These product safety laws and AB 418 are placed in a unique place in the California Codes where there is no state agency overseeing them, sometimes referred to as the "orphan codes." As a result there is no direct enforcement and no state entity to provide guidance to manufacturers seeking to comply with these laws. The only option for enforcement is for a district attorney or the state attorney general to bring an action against a manufacturer, under the UCL. For the laws that have penalties, the

Attorney General or a district attorney can add those penalties to the penalties under the UCL. Additionally for the laws under these "orphan codes", manufacturers have no state entity to turn to for questions regarding compliance, whether a particular product is actually included or not.

There are more than 10 different laws on the books in these "orphan codes" that prohibit specific chemicals or require ingredient disclosure, some as old as 20 years. It is unclear if any of the laws within these "orphan codes" are actually being followed. To date, the Committee is not aware of a single enforcement action taken or a single entity regularly sampling and testing products for compliance, under any of the existing product safety laws within these "orphan codes".

Unfair Competition Law (UCL): The UCL is one of the primary tools currently available to government attorneys to protect the public from "any unlawful, unfair or fraudulent business act or practice and unfair, deceptive, untrue or misleading advertising" (Business and Professions Code Section 17200.). As recently summarized by the California Supreme Court:

> "The statute's purpose is to protect both consumers and competitors by promoting fair competition in commercial markets for goods and services. In service of that purpose, the Legislature framed the UCL's substantive provisions in broad, sweeping language to reach anything that can properly be called a business practice and that at the same time is forbidden by law. By proscribing any unlawful business practice, section 17200 borrows violations of other laws and treats them as unlawful practices that the unfair competition law makes independently actionable. [T]he Legislature…intended by this sweeping language to permit tribunals to enjoin on-going wrongful business conduct in whatever context such activity might occur. To that end, the Legislature has created a scheme of overlapping enforcement authority. While the UCL provides for both public and private enforcement, authorized public prosecutors have an additional tool to enforce the state's consumer protection laws: civil penalties." (*Abbott Laboratories v. Superior Court* (2020) 9 Cal. 5th 642, 651-52 [internal citations and quotations omitted.])

Remedies under the UCL include injunctive relief, restitution, and civil penalties. It is important to note that even though a district attorney or the Attorney General can take an action to enforce these product safety laws using the UCL, considerable costs are incurred even before a case is filed. Costs include purchasing the products and sending them to a certified laboratory to test for the banned chemical.

To date, the Committee is not aware of any action taken by the Attorney General or a District Attorney under the UCL to enforce any of the product safety laws under the "orphan codes".

This bill: 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, red dye 3, and titanium dioxide. As noted below, some of these chemicals have been on the state's Proposition 65 list for decades due to their cancer-causing properties, all of them have been fully or partially banned in the European Union for use in food, they all have negative health effects, and they all have alternatives. It is important to also note that these chemicals have been removed by some retailers and brands and many of these retailers/brands are not very accessible to low-income communities. Many of these low-income communities are already over-burdened

with pollution and greatly rely upon the actions of government, including the actions proposed in AB 418, for the protection of their health and their children's health.

Brominated vegetable oil (BVO): BVO is used primarily to help emulsify citrus-flavored soft drinks, preventing them from separating during distribution. BVOs are found in sodas and sports drinks, primarily in fruity/citrus-flavored drinks. On May 5, 2014, Coca-Cola and PepsiCo said they would remove BVO from their products. As of 2020, Mountain Dew, manufactured by Pepsi, no longer uses BVO in their main line of beverages.

While it is still allowable in the U.S., BVO is banned as a food additive in some regions and countries, including the European Union, India, and Japan.

Health concerns about BVO stem from one of its ingredients, bromine. Bromine can irritate the skin and mucous membranes (the moist lining of the nose, mouth, lungs, and stomach). Long-term exposure can cause neurologic symptoms such as headache, memory loss, and impaired balance, or coordination. In the past, these symptoms were seen with chronic use of bromide salts as sleep medications. Fortunately, these drugs are no longer widely available in the U.S. Additional health risks include harm to the nervous system, thyroid, and reproductive system.

Alternatives to BVO include sucrose acetate isobutyrate and glycerol ester of wood rosin (aka ester gum).

Potassium bromate: Potassium-bromate is a white crystalline (sand-like) powder. It is used as a laboratory reagent, oxidizing agent, and food additive. Specifically in food, it is used as a dough conditioner to strengthen the dough and increase rising. Potassium-bromate has been included on the Proposition 65 list since 1990 as causing cancer. Potassium-bromate's impacts can result from inhalation or absorption through the skin. Repeated exposure may affect the nervous system causing headache, irritability, impaired thinking, and personality changes. Potassium-bromate can also damage the kidneys. Potassium-bromate is not permitted in the European Union and is also banned in food in Argentina, Brazil, Nigeria, South Korea, Peru, Sri Lanka, China, and India. Alternatives to potassium-bromate include sodium and calcium stearoyl lactylate, enzyme-based replacers, and ascorbic acid (Vitamin C).

Propylparaben: Parabens are preservatives commonly used in personal care products, pharmaceuticals, and foods. Propylparaben is used as a preservative and found in processed foods including tortillas and other baked goods. Health effects include endocrine disruption and reproductive effects. Some alternatives to propylparaben include:

- In baked goods, common preservatives include sorbic acid, potassium sorbate, calcium propionate, and phosphoric acid.
- Cultured dextrose is sold as a natural preservative, marketed for use in various foods including baked goods.
- Potassium sorbate and sorbic acid are two preservatives traditionally found in tortillas.

Red dye 3: Red dye 3 is a synthetic dye that is derived from petroleum and can be found in candies and other processed foods. Health risks of red dye 3 include cancer and neurobehavioral changes in children. It is banned in food in the European Union except in cocktail/candied

cherries. Alternatives include plant-derived colorants including those from various vegetables (beets, carrots, marigold, etc.)

According to the article, "Toxicology of food dyes" published in 2012 in the *International Journal of Occupational and Environmental Health*:

"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. 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."

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."

Titanium dioxide: Titanium-dioxide has been included on the Proposition 65 list since 2011 as causing cancer. Titanium-dioxide is an odorless, white powder. It is used in paints, cosmetics, plastics, paper and food. In food it is used as a white colorant, either on its own or to brighten

other colors, and, sometimes used to enhance texture. 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 European Food Safety Authority in May 2021:

"The present opinion deals with an updated safety assessment of the food additive titanium dioxide (E 171) 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 E 171 can no longer be considered as safe when used as a food additive."

Technical considerations: As previously mentioned, this bill is placed in what is referred to as the "orphan code". As a result several terms in the bill will not be automatically linked to definitions for similar terms in existing law unless the bill cites to these definitions or explicitly defines them for the purposes of the bill. If this bill were to be included under the Sherman Law, the term "food" is defined. Furthermore, regarding the term "food" (which is not defined in the bill), there are multiple state and federal definitions of "food," some of which include a reference to animal or pet food and some do not. As the bill moves through the legislative process, the author may wish to consider defining the term "food." Other terms the author may wish to consider defining include "manufacture" and "person," – both of which have multiple definitions in state law.

Additionally, the author may wish to consider strengthening the enforcement provisions of the bill. The author has added provisions that provide pubic attorneys with civil penalty options to bring against violators of the law. The author and stakeholders may wish to engage the Administration in a discussion of placing the language of AB 418 under the Sherman Law and discuss what that could mean for enforcement.

Arguments in support:

According to a coalition in support of the bill: "We are writing to express our support for AB 418, a bill that prohibits the use of five chemicals in food products sold in California. These chemicals are banned from food sold in the European Union, but are allowed in foods our children eat regularly.

Beginning on January 1, 2025, Assembly Bill 418 prohibits persons or entities from manufacturing, selling, delivering, distributing, holding, or offering for sale any food product in California containing Red Dye No. 3, Brominated Vegetable Oil, Potassium Bromate, Propyl Paraben, or Titanium Dioxide.

All of these chemicals are associated with serious health risks, such as increased risk of cancer, harm to the reproductive system, and harm to the immune system. But because of the US Food and Drug Administration’s inaction and regulatory loopholes, these chemicals are found in many food products, such as snacks, candy, and soda, consumed by children in California and the United States.

As mentioned above, food chemicals are largely unregulated by the FDA. Funding constraints and competing priorities indicate that stronger federal regulation of food chemicals is unlikely to happen anytime soon. But while the federal government's effort to properly regulate food additives stalls, consumers express concerns about the safety of food chemicals. In 2022, 54 percent of consumers answering an annual industry survey expressed dissatisfaction with efforts to protect them from carcinogens in food.

Californians want to be protected from harmful chemicals -- especially toxic food ingredients that are not allowed in food sold in many other countries."

Arguments in opposition:

According to a coalition in opposition:

"Food safety is a paramount concern to us and our members; however, this measure usurps the comprehensive food safety and approval system for these five additives and predetermines ongoing evaluations.

The United States Federal Government has a comprehensive food safety process that reviews food additives. In addition, California has several laws that require removing chemicals from foods, attaching warning labels, and checking alternatives if those food additives are unsafe or expose consumers to allergies. All five of these additives have been thoroughly reviewed by the federal and state systems and many international scientific bodies and continue to be deemed safe.

The food safety process is active and should be allowed to continue the appropriate review of these five and all additives. Several substances this bill proposes to ban are subject to petitions to these government entities initiated by many organizations supporting this measure. Scientific regulators work through these processes and make determinations to establish recognized safe thresholds. Then, when appropriate and supported by peer-reviewed scientific evaluations, they require additional labels or removal from the market. Additionally, our comprehensive system requires ingredient labeling allowing consumers to make informed decisions."

Related legislation:

1) AB 246 (Papan). Prohibits, beginning January 1, 2025, a person from manufacturing, distributing, selling, or offering for sale a menstrual product that contains intentionally-added PFAS. This bill is pending before the Assembly Environmental Safety and Toxic Materials Committee.

2) AB 727 (Weber). Prohibits, beginning January 1, 2025, a person from manufacturing, selling, delivering, distributing, holding, or offering for sale, a cleaning product that contains intentionally-added PFAS. This bill is pending before the Assembly Environmental Safety and Toxic Materials Committee.

3) AB 1423 (Schiavo). Prohibits, starting January 1, 2025, a person from manufacturing, distributing, selling, or offering for sale artificial turf that contains PFAS above specified

levels. This bill is pending before the Assembly Environmental Safety and Toxic Materials Committee.

REGISTERED SUPPORT / OPPOSITION:

Support

Consumer Reports (Co-Sponsor)
Environmental Working Group (Co-Sponsor)
A Voice for Choice Advocacy
Alliance of Nurses for Healthy Environments
American College of Obstetricians and Gynecologists District IX
American Nurses Association - California
As You Sow
Ban Sup (Single Use Plastic)
Beyond Pesticides
Breast Cancer Action
Breast Cancer Over Time
Breast Cancer Prevention Partners
California Federation of Teachers
California Health Coalition Advocacy
California Nurses for Environmental Health and Justice
California State Council of Service Employees International Union (seiu California)
CALPIRG
Center for Community Action and Environmental Justice
Center for Democratic and Environmental Rights
Center for Environmental Health
Center for Food Safety; the
Center for Progressive Reform
Children Now
Childrens Environmental Health Network
Cleanearth4kids.org
Community Union, INC.
Defend Our Health
Facts Families Advocating for Chemical and Toxics Safety
Food and Water Watch
Food Chain Workers Alliance
Friends Committee on Legislation of California
Friends of The Earth
GMO Science
Grassroots Environmental Education
Green Science Policy Institute
Healthy Babies Bright Futures
John Burton Advocates for Youth
Jonas Philanthropies
Learning Disabilities Association of America
Long Beach Gray Panthers
Maternal and Child Health Access
Mysafetynest.org

Nontoxic Neighborhoods
Nontoxic Schools
Pesticide Action Network
Pesticide Free Zone
Poison Free Malibu
Progressives for Democracy in America
Public Health Advocates
Recolte Energy
Resource Renewal Institute
San Francisco Bay Area Physicians for Social Responsibility
See (Social Eco Education)
SEIU California
Sierra Club California
Sonoma Safe Agriculture Safe Schools (Sonoma Sass)
Stories Matter Media
The Latino Cancer Institute
United Nurses Associations of California/Union of Health Care Professionals
Women's Voices for The Earth

Opposition

American Bakers Association
American Beverage Association
American Chemistry Council
California Chamber of Commerce
California Grocers Association
California League of Food Producers
California Manufacturers & Technology Association
California Retailers Association
Chemical Industry Council of California
Consumer Brands Association
Council for Responsible Nutrition
International Association of Color Manufacturers
National Confectioners Association
North American Millers' Association

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

Date of Hearing: April 18, 2023

ASSEMBLY COMMITTEE ON ENVIRONMENTAL SAFETY AND TOXIC MATERIALS
Alex Lee, Chair
AB 899 (Muratsuchi) – As Amended April 12, 2023

SUBJECT: Food safety: infant formula and baby food

SUMMARY: Requires an in-state or out-of-state manufacturer of infant formula or baby food for sale or distribution in California to test their final infant formula or baby food product for toxic heavy metals, including lead, mercury, cadmium, and arsenic; post on the manufacturer's website the name and level of toxic heavy metals present in their product; and disclose on a product label that the product has been tested for a toxic heavy metal for which there is an action level, regulatory limit, or tolerance level established by the federal Food and Drug Administration (FDA). Specifically, **this bill**:

1) Establishes the following definitions, for the purposes of the bill:

    a) "Baby food" means food packaged in jars, pouches, tubs, and boxes represented or purported to be specifically for babies and young children less than two years old.

    b) "Final infant formula or baby food product" means the finished product of infant formula or baby food and not the constituent ingredients of infant formula or baby food.

    c) "Infant formula" means a food that purports to be or is represented for special dietary use solely as a food for infants by reason of its simulation of human milk or its suitability as a complete or partial substitute for human milk.

    d) "Product label" means a display of written, printed, or graphic material that is affixed to a product or its immediate container.

    e) "Production aggregate" means a quantity of product, or, in the case of an infant formula produced by continuous process, a specific identified amount produced in a unit of time, that is intended to have uniform composition, character, and quality, and is produced according to a master manufacturing order.

    f) "Representative sample" means a sample that consists of a number of units that are drawn based on rational criteria, such as random sampling, and intended to ensure that the sample accurately portrays the material being sampled.

2) Requires an in-state or out-of-state manufacturer of infant formula or baby food for sale or distribution in California to do all of the following:

    a) Test, beginning on January 1, 2024, a representative sample of each production aggregate of their final infant formula or baby food product for toxic heavy metals, including levels of lead, mercury, cadmium, and arsenic. Manufacturers are authorized to test their final infant formula or baby food product before individual units are packaged for sale or distribution;

b) Disclose, on and after January 1, 2025, product information to consumers for infant formula or baby food products sold, manufactured, delivered, held, or offered for sale in the state by doing all of the following:

i) Make publicly available on the manufacturer's website the name and level of toxic heavy metals present in each production aggregate of their final infant formula or baby food product.

ii) Disclose on a product label that the product is a part of a production aggregate that has been tested for a toxic heavy metal that the FDA has established an action level, regulatory limit, or tolerance for.

iii) Include a product label showing that the product meets FDA guidance for a toxic metal, if the production aggregate that the product is a part of does not exceed an action level, regulatory limit, or tolerance established by the FDA for that heavy metal.

3) Prohibit a person or entity from selling, manufacturing, delivering, holding, or offering for sale in the state any baby food or infant formula that does not comply with the requirements of the bill.

EXISTING LAW:

1) Defines, for the purposes of federal infant formula requirements under the federal Food, Drug, and Cosmetic Act (FD&C Act), "infant formula" to mean a food which purports to be or is represented for special dietary use solely as a food for infants by reason of its simulation of human milk or its suitability as a complete or partial substitute for human milk. (21 Code of Federal Regulations (CFR) § 106.3)

2) Defines "production aggregate" to mean a quantity of product, or, in the case of an infant formula produced by continuous process, a specific identified amount produced in a unit of time, that is intended to have uniform composition, character, and quality, within specified limits, and is produced according to a master manufacturing order. (21 CFR § 106.3)

3) Defines "representative sample" to mean a sample that consists of a number of units that are drawn based on rational criteria, such as random sampling, and intended to ensure that the sample accurately portrays the material being sampled. (21 CFR § 106.3)

4) Specifies minimum good manufacturing practices that are to be used in, and the facilities or controls that are to be used for, the manufacture, processing, packing, or holding of an infant formula; specifies that failure to comply with federal regulations for the manufacture, processing, packing, or holding of infant formula shall render the formula adulterated. (21 CFR § 106.5 et seq.)

5) Specifies nutrient testing requirements for infant formula, including that manufacturers test a representative sample of each production aggregate of finished products for nutrient levels. (21 CFR § 106.91 et seq.)

6) Requires a manufacturer to establish controls to ensure that federally-mandated nutrient levels are maintained in the formula, and that the formula is not contaminated with microorganisms or other contaminants. (21 CFR § 106.5)

7) Prohibits, under the federal FD&C Act, the introduction or delivery for introduction into interstate commerce of any food that is adulterated or misbranded. (21 United States Code § 331(a))

8) Authorizes the establishment of a tolerance, regulatory limit, or action level for an added poisonous or deleterious substance in food, as follows (21 CFR § 109.4):

   a) A tolerance may be established by regulation to prohibit any detectable amount of the substance in food.

   b) A regulatory limit may be established by regulation to prohibit any detectable amount of the substance in food. The regulatory limit established represents the level at which food is adulterated.

   c) An action level may be established to define a level of contamination at which a food may be regarded as adulterated. Whenever an action level is established or changed, a notice shall be published in the Federal Register, call attention to the material supporting the action level, and invite public comment on the action level.

9) Specifies that a regulatory limit may be established if there is no tolerance for an added poisonous or deleterious substance in a particular food; specifies that an action level will be withdrawn when a tolerance or regulatory limit for the same substance and use has been established. (21 CFR § 109.6)

10) Establishes the state Sherman Food, Drug, and Cosmetics Law (Sherman Law), administered by the California Department of Public Health (CDPH), which regulates the manufacture, packaging, labeling, and advertising of food, drugs, and cosmetics. (Health and Safety Code (HSC) § 109875-111929.4)

11) Defines the following under the Sherman Law:

   a) A label to mean a display of written, printed, or graphic matter upon a food, drug, device, or cosmetic or upon its immediate container. (HSC § 109955)

   b) Manufacture to mean 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)

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

13) Prohibits, under the Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65), 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)

14) Provides that any person who violates the above provision under Proposition 65 may be enjoined in any court of competent jurisdiction and shall be liable for a civil penalty not to exceed $2,500 per day for each violation in addition to any other penalty established by law. (HSC § 25249.7)

15) Authorizes, under Proposition 65, a warning to be provided by general methods, such as labels on consumer products, posting of notices, placing notices in public news media, and the like, provided that the warning is clear and reasonable; provides that regulations implementing Proposition 65 shall, to the extent practicable, place the obligation to provide any warning materials on the producer or packager rather than on the retail seller, except where the retail seller itself is responsible for introducing a chemical known to the state to cause cancer or reproductive toxicity. (HSC § 25249.11(f))

FISCAL EFFECT: Unknown.

COMMENTS:

Need for the bill: According to the author:

"AB 899 protects babies from harmful toxins. In September 2021, the US House of Representatives Subcommittee on Economic and Consumer Policy released a report detailing concerning levels of heavy metals in baby food products. The report found products from multiple leading baby food producers in violation of FDA heavy metal limits, specifically in regards to arsenic levels in rice products.

The Subcommittee recommended that manufacturers be required by the FDA to test final products for heavy metal levels, not just test their ingredients. The Subcommittee also recommended that manufacturers be required to report levels of heavy metals in their products.

AB 899 acts on these recommendations and empowers parents by requiring baby formula and baby food manufacturers to test their finished products for heavy metal levels and to make publicly available on their website the name and level of toxic heavy metals present in the final product."

Consequences of heavy metal exposure in children: This bill specifically requires manufacturers to test for arsenic, cadmium, lead, and mercury. Below are descriptions of these heavy metals and their health implications for children.

- ***Arsenic:*** According to the federal Agency for Toxic Substances and Disease Registry (ATSDR), children are exposed to arsenic in many of the same ways that adults are, although children may be at higher risk of exposure because of normal hand-to-mouth activity. Since arsenic is found in soil, water, food, and air, children may take in arsenic in the air they breathe, the water they drink, and the food they eat. In addition, since children tend to eat or drink less of a variety of foods and beverages than adults do, ingestion of contaminated food, juice, or infant formula made with arsenic-contaminated water may represent a significant source of exposure.

Some of the effects of arsenic exposure in children may be similar to those noted in adults, including irritation of the stomach and intestines, blood vessel damage, skin changes, and reduced nerve function. There is also some evidence that long-term exposure to inorganic arsenic in children may result in lower IQ scores, and that exposure in early life (including gestation and early childhood) may increase mortality later in life, in young adulthood.

- ***Cadmium:*** According to the ATSDR, in the United States, the primary source of cadmium exposure for nonsmokers is from the food supply. In general, potatoes, grains, peanuts, soybeans, sunflower seeds, and leafy vegetables such as lettuce and spinach contain high levels of cadmium. Because cadmium binds strongly to organic matter, it can enter the food supply by accumulating in aquatic organisms and agricultural crops.

  According to a literature review by Flannery et al. (2022) in *Regulatory Toxicology and Pharmacology*, 90% of cadmium exposure is dietary in those who are not exposed through smoking or occupation. In adults, cadmium is known to accumulate in organs over time, leading to kidney dysfunction and decreased bone density, among other adverse effects. More studies are needed to better understand the adverse effects of cadmium exposure in infants and children, although the ATSDR states that the health effects seen in children from exposure to toxic levels of cadmium are expected to be similar to the effects seen in adults (kidney and lung damage). A few studies in animals suggest that younger animals absorb more cadmium than adults, and that young animals are more susceptible than adults to bone loss and decreased bone strength resulting from cadmium exposure.

- ***Lead:*** According to the Centers for Disease Control and Prevention (CDC), research shows that there is no safe level of lead and even very low levels can have negative and irreversible health effects, especially in children. 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. These health impacts can in turn lead to decreased attention and underperformance in school among lead-exposed children. One study by Evens et al. (2015), published in *Environmental Health*, examined data for nearly 58,000 children attending Chicago public schools and found that increasing blood lead levels were associated with increasing failure rates on standardized reading and math tests. The authors found that this effect persisted, even when they controlled for other predictors of school performance, including poverty, race, ethnicity, gender, maternal education, birth weight, and prematurity. Among children with the lowest blood lead levels, even small increases in blood lead levels were associated with what the authors described as "steeper failure rates."

- ***Mercury:*** According to the ATSDR, food is the most common route of exposure to mercury. Most people are exposed to organic mercury compounds (typically methylmercury) in foods such as fish, seafood, and rice. The health effects of mercury exposure depend on a number of factors, including the amount and form of mercury, route and length of exposure, and age. All forms of mercury can affect the nervous system and the kidneys. People who eat foods with high levels of methylmercury may experience tremors, coordination problems, impaired vision, impaired learning and memory, and mood changes. Some children born in communities that ate food with high levels of organic mercury had learning, sensory, and movement problems. In people exposed to high levels of methylmercury in their diets, birth defects have occurred. In addition, research shows that some humans and animals that ate mercury compounds had high blood pressure and alterations in their immune systems, and

animals that ate high levels of mercury compounds showed decreased fertility and/or birth defects.

Equity concerns relating to formula: Infant formula can be an essential and life-giving food for many babies. However, the potential presence of heavy metals raises both short- and long-term health concerns. Higher rates of infant formula use among certain socioeconomic, racial, and ethnic groups can mean that babies from these communities are more likely to be exposed, if heavy metals are present in their formula. In 2022, the Kaiser Family Foundation released an analysis of formula use using nationwide data from the CDC. The analysis showed that:

- More than half (54%) of infants born in 2018 received formula, either exclusively or as a supplement, by three months of life.

- Infants in low-income families, infants of color, and infants living in rural communities are more likely to use formula. Infants in lower income households are less likely than those in higher income households to report exclusive breastfeeding through the first three months of life. Similarly, data show that lower shares of Black and Hispanic infants are exclusively breastfed through their first three months of life compared to White infants. CDC data also show Black infants born in 2018 are less likely to have ever been breastfed compared to Asian, White, and Hispanic infants. Infants living in rural areas are also less likely to have ever been breastfed than those in urban areas.

- The majority of children under the age of one covered by Medicaid and the Children's Health Insurance Plan (CHIP) are infants in low-income families and infants of color. Over one-third (34%) of all children who reported receiving formula during the first 12 months of their life were covered by Medicaid/CHIP only.

- Almost half of all formula in the United States is purchased by families enrolled in the Women, Infants, and Children program (WIC). WIC is a nationwide program designed to support low-income women, infants, and children up to age five found to be at nutritional risk.

Regulation of heavy metals in baby food and infant formula: Both federal and state laws regulate contaminants in consumer products; these laws have, to varying degrees, been used to regulate contaminants specifically in baby food and infant formula. Two major bodies of law—the federal FD&C and Proposition 65—and their use in regulating heavy metals in baby food and infant formula are described further below.

- ***The FDA and the federal Food, Drug, and Cosmetics Act (FD&C):*** Under the FD&C, the FDA is authorized to establish tolerances, regulatory limits, or action levels for contaminants in food. Exceedance of established regulatory limits or action levels can be used to deem a food "adulterated," which gives the FDA the authority to initiate enforcement actions that can range from issuing a letter notifying the individual or firm of a violation and requesting correction, to criminal prosecution of the individual or firm. The FDA maintains that while action levels are a useful tool for driving down contaminant levels in foods, the agency does not need an action level for a contaminant to take enforcement action. By law, food manufacturers and processors have a responsibility to implement preventive controls as needed to minimize or prevent exposure to chemical hazards—including lead, arsenic, cadmium, and mercury. However, in light of results from a Congressional investigation of

heavy metals in baby food (described below), it is unclear to what extent the FDA is using its authority to hold manufacturers accountable for heavy metals in their products.

As of 2023, the FDA has used its authority under the FD&C to establish contaminant standards for only a handful of foods, only one of which is a type of baby food. These standards are:

- Action Levels: apple juice (10 parts per billion (ppb) lead, 10 ppb inorganic arsenic), chocolate and hard candy (100 ppb lead), and infant rice cereal (100 ppb inorganic arsenic); and,

- Bottled water standards: 5 ppb lead, 10 ppb arsenic, 5 ppb cadmium, 2 ppb mercury.

In April 2021, the FDA announced the Closer to Zero initiative, which identifies actions the FDA will take to reduce exposure to lead, arsenic, cadmium, and mercury in foods eaten by babies and young children to the lowest levels possible. The FDA has prioritized babies and young children because their smaller body sizes and metabolism make them more vulnerable to the harmful effects of contaminants. To meet the goals of Closer to Zero, the FDA will focus on:

- Research and analysis, to include developing new and improved testing methods to measure lower levels of contaminants in food;

- Regulation, to include establishing action levels, increasing targeted compliance and enforcement activities, and monitoring levels over time to determine possible adjustments to action levels. Through a process that may include engagement with stakeholders, advisory committees, public workshops, and consultation with scientific experts, federal agency partners and other stakeholders, the FDA will establish interim reference levels (IRLs) as appropriate. An IRL is a "measure of exposure to a contaminant from food that the FDA may use to determine if the amount of exposure to the contaminant, across foods, could result in a specific health impact." The FDA may use IRLs to inform the development of action levels; and,

- Consultation, to include encouraging adoption of agricultural and processing best practices by industry to lower levels of environmental contaminants in agricultural commodities and products.

In 2023, the FDA released its first set of draft guidance under the Closer to Zero initiative. The draft guidance lists potential action levels for lead in baby foods. Action levels are as follows:

- 10 ppb for fruits, vegetables (excluding single-ingredient root vegetables), mixtures (including grain and meat-based mixtures), yogurts, custards/puddings, and single-ingredient meats;

- 20 ppb for root vegetables (single ingredient); and,

- 20 ppb for dry infant cereals.

In 2018, the FDA developed an IRL for dietary lead to serve as an interim standard while action levels undergo review, and to replace the FDA's prior provisional tolerable total daily intake (PTTDI), which had been developed in the early 1990s. The IRL, updated in 2022, is set at 2.2 micrograms (μg) of lead/day for children. For comparison, the PTTDI had been set at 6 μg of lead/day. Draft action levels and guidance for arsenic and cadmium are expected to be developed some time in 2024; the FDA has not yet specified a date for the development of draft guidance or action levels for mercury.

Importantly, the FDA notes that "FDA's guidance documents do not establish legally enforceable responsibilities. Instead, guidances describe FDA's current thinking on a topic and should be viewed only as recommendations, unless specific regulatory or statutory requirements are cited. The use of the word *should* in FDA guidances means that something is suggested or recommended, but not required." **This raises a question about the extent to which industry will abide by FDA's guidance, in the absence of FDA enforcement actions and/or mandates for compliance and transparency established at the state level.**

For infant formula, the FDA has established manufacturer requirements relating to nutrient content, nutrient quantity, nutrient quality control, recordkeeping, reporting, and product recalls under the FD&C Act. In addition, the FD&C Act requires persons responsible for the manufacture or distribution of infant formula to register with the FDA and to make a submission to the FDA for any new infant formula, which includes any infant formula that has had a major change in its formulation or processing. After the first processing of a new infant formula, but before marketing, persons responsible for the manufacture or distribution of infant formula must submit to the FDA a written verification demonstrating that the formula complies with the FD&C Act's requirements.

Under the authority of the FD&C Act, the FDA has also promulgated regulations that specify rules on infant formula nutrient quality control procedures, records and reports, submission requirements, labeling, the terms and conditions under which certain infant formula may be exempt from some of the FD&C Act's requirements, nutrient specifications, and infant formula recalls.

In 2014, the agency revised its infant formula regulations to establish quality factors, current good manufacturing practices, and revised quality control procedures. Manufacturers are required to establish controls that ensure mandated nutrient levels are maintained, and that the formula is not contaminated with microorganisms or other contaminants. Notably, FDA regulations on good manufacturing practices only explicitly mention "heavy metals" in a provision stating that manufacturers "shall not reprocess or otherwise recondition an ingredient, container, or closure rejected because it is contaminated with microorganisms of public health significance or other contaminants, such as heavy metals." (21 CFR § 106.4(e)(3))

California's 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 concerns 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. Proposition 65 also

prohibits businesses 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, which can take the form of product labels or notices. The Office of Environmental Health Hazard Assessment (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.

OEHHA has established safe harbor levels for many of the chemicals on the Proposition 65 list. Exposure levels that are below these safe harbor levels are exempt from the requirements of Proposition 65. The safe harbor levels for the heavy metals specified in AB 899 are 10 μg/day for arsenic, 4.1 μg/day for cadmium, and 15 μg/day for lead and lead compounds. No safe harbor level has been specified for mercury; businesses that expose individuals to mercury are required to provide a Proposition 65 warning, unless they can show that the anticipated exposure level will not pose a significant risk of cancer or reproductive harm.

In 2018, California Attorney General Xavier Becerra announced the issuance of two cease and desist letters and a lawsuit filed against two businesses, Nutraceutical Corp. and Graceleigh Inc., due to the discovery of dangerously elevated levels of lead in their toddler formulas (formulas that are generally intended for children over 12 months of age). Testing conducted by the California Department of Justice on two products—Peaceful Planet Toddler Supreme and Sammy's Milk Free-Range Goat Milk Toddler Formula—revealed that these formulas contained enough lead to result in exposure between 13 and 15 times the level allowed under California law without a Proposition 65 warning. Both formulas also exceeded the FDA's PTTDI. In the lawsuit, the Attorney General alleged that the two companies had violated California's Unfair Competition Law, False Advertising Law, and Proposition 65. In response to the lawsuit, the two companies pulled the products out of California.

Also in 2018, the Attorney General and ten district attorneys filed a lawsuit against Perrigo Company after testing showed that the company's infant and toddler formula products contained levels of lead that exceeded the Proposition 65 warning threshold. In 2022, the Attorney General announced a settlement with Perrigo Company that sets maximum lead levels of 5-7 ppb for most of these products, levels that are much lower than applicable guidance levels established for this type of product by any U.S. regulatory authority.

AB 899 requires that manufacturers post on their internet websites the names and levels for heavy metals detected in their infant formula and baby food products, but does not specify that this information must be posted in conjunction with information about standards for these chemicals. Without this information, parents and caregivers may not know how to interpret manufacturers' findings on heavy metal levels; this could be especially problematic for families with babies who rely on infant formula as their primary source of nutrition. The author may wish to consider adding a requirement that manufacturers also post information about applicable standards for heavy metals in baby food and infant formula established by the FDA, to help parents and caregivers contextualize and understand information about the posted levels and their risks. Where FDA standards do not currently exist or are under development for a particular heavy metal, the author could consider specifying a different standard, such as those established under Proposition 65.

Heavy metals in infant formula and baby food: Several reports and investigations have documented the presence of heavy metals in baby food and infant formula. Below is an overview of this documentation.

- ***Baby food:*** On November 6, 2019, the Subcommittee on Economic and Consumer Policy (Subcommittee; part of the Committee on Oversight and Reform at the U.S. House of Representatives) acted on reports alleging high levels of toxic heavy metals in baby foods by requesting internal documents and test results from seven of the largest manufactures of baby food in the U.S. The manufacturers were:

  - Nurture, Inc., which sells Happy Family Organics, including baby food products under the brand name HappyBABY;
  - Beech-Nut Nutrition Company;
  - Hain Celestial Group, Inc., which sells baby food products under the brand name Earth's Best Organic;
  - Gerber;
  - Campbell Soup Company, which sells baby food under the name Plum Organics;
  - Walmart Inc.; and,
  - Sprout Foods, Inc.

  Four of the companies responded to the subcommittee's requests and produced internal testing policies and test results for ingredients/finished products and documentation about what the companies did with ingredients/finished products that exceeded their internal testing limits. However, Walmart, Campbell, and Sprout Organics Foods refused to cooperate with the subcommittee's investigation.

  On February 4, 2021, the Subcommittee released the report, "Baby foods are tainted with dangerous levels of arsenic, lead, cadmium, and mercury," which details findings from its investigation. Findings include:

  - Commercial baby foods are tainted with significant levels of toxic heavy metals, including arsenic, lead, cadmium, and mercury. Exposure to toxic heavy metals causes permanent decreases in IQ, diminished future economic productivity, and increased risk of future criminal and antisocial behavior. Toxic heavy metals endanger infant neurological development and long-term brain function;

  - Arsenic, lead, and cadmium were present in baby foods made by all of the responding companies, and mercury was detected in baby food of the only responding company that tested for it. Nurture sold finished baby food products containing as much as 10 ppb mercury, Beech-Nut and Hain did not test for mercury, and Gerber rarely tested for mercury in its baby foods;

  - Internal company standards permit dangerously high levels of toxic heavy metals. Documents revealed that the manufacturers have often sold foods that exceeded FDA levels (where levels have been established) and that have, in some cases, even exceeded manufacturers' own internal standards. In some instances, manufacturers' internal standards were higher than the FDA limit. For example, although the FDA has a standard of 100 ppb inorganic arsenic in infant rice cereal, Nurture set its internal

standard for that product 15% higher than the FDA limit;

- The Subcommittee expressed grave concerns about baby food products produced by Walmart, Sprouts, and Campbell, which refused to cooperate with the Subcommittee, and that their lack of cooperation might obscure the presence of even higher levels of toxic heavy metals in their baby products, compared to their competitors' products; and,

- In 2019, industry shared information with federal regulators, but not the general public, that revealed corporate policies to test only ingredients, not final products, a practice that may underrepresent the levels of toxic heavy metals in baby foods. The information also revealed that baby food producers may be adding ingredients that have high levels of toxic heavy metals into their products, such as vitamin/mineral pre-mix.

Based on its findings, the Subcommittee issued the recommendations listed below. The first two—mandatory testing and labeling—are consistent with requirements established in AB 899.

- **Mandatory testing**: Baby food manufacturers should be required by the FDA to test their finished products for toxic heavy metals, not just their ingredients;
- **Labeling**: Manufacturers should be required by the FDA to report levels of toxic heavy metals on food labels;
- **Voluntary phase-out of toxic ingredients**: Manufacturers should voluntarily find substitutes for ingredients that are high in toxic heavy metals, or phase out ingredients that have high amounts of toxic heavy metals, such as rice;
- **Standards**: The FDA should set maximum levels of toxic heavy metals permitted in baby foods; and,
- **Parental vigilance**. Parents should avoid baby foods that contain ingredients testing high in toxic heavy metals, such as rice products.

In July 2022, the FDA released a report that summarizes analytical results for elements in food, through its Total Diet Study (TDS) for fiscal years 2018 through 2020. The TDS is a continuous survey and one of the tools the FDA uses to monitor the country's food supply. For the TDS, FDA collects foods from retail outlets and measures concentrations of various nutrients and contaminants in food. In fiscal year 2019, additional sampling of baby foods was conducted as part of TDS. The FDA found that:

- The foods with the highest mean lead concentrations were baby food sweet potatoes, baby food teething biscuits, and sandwich cookies.
- Approximately 51% of the baby food samples analyzed had detectable levels of total arsenic. The highest levels of total arsenic were found in infant cereals and snacks like teething biscuits and puffed snacks.
- The highest level (49 ppb) of cadmium in baby food was in a sample containing spinach as an ingredient. The second highest result for cadmium was 41 ppb in baby food carrots.
- The highest mean mercury concentrations were found in fish; mercury was not detected in 97% of baby food samples.

- ***Infant formula:*** In 2017, the Clean Label Project released findings from an investigation of heavy metal levels in over 530 baby and toddler food products, including formulas, cereals, jars, pouches, juices, drinks, and snacks. The organization reports that lead was detectable in 36% of the products; cadmium was detected in 58% of the products; soy-based formulas

contained seven times the amount of cadmium as compared to other formulas; and, arsenic was detected in 65% of all products tested and found in nearly 80% of the formulas tested. It does not appear that the majority of these findings were published in a peer-reviewed journal, and it is difficult, based on materials available on Clean Label Project's website, to assess the investigation's methodology.

In 2019, an author associated with the Clean Label Project co-published a peer-reviewed article entitled "Lead and cadmium contamination in a large sample of United States infant formulas and baby foods," in *Science of the Total Environment*. This article appears to present a subset of findings from the Clean Label Project's investigation. The article contains the following findings: out of 91 infant formula samples, 22% exceeded Proposition 65 lead guidelines; 23% exceeded Proposition 65 cadmium guidelines; and, 14% exceeded the tolerable cadmium intake levels established by the World Health Organization for a four-month-old baby.

This bill: AB 899 requires manufacturers of infant formula or baby food to test their final infant formula or baby food product for toxic heavy metals, including lead, mercury, cadmium, and arsenic. The bill also requires manufacturers to post on their websites the names and levels of toxic heavy metals present in their product, and to disclose on a product label that the product has been tested for a toxic heavy metal and, if applicable, is within FDA guidance for that metal. The bill's testing and product disclosure requirements act on recommendations made by the United States House of Representatives Subcommittee on Economic and Consumer Policy, and could help provide a level of transparency about heavy metal contamination in baby food and infant formula that is not currently available parents and caregivers.

Arguments in support: According to the American Academy of Pediatrics, California:

"In September 2021, the US House of Representatives Subcommittee on Economic and Consumer Policy released a report detailing concerning levels of heavy metals in baby food products. The report found products from multiple leading baby food producers in violation of FDA heavy metal limits, specifically in regard to arsenic levels in rice products.

While compiling the 2021 report, investigators found that some companies were not testing their finished food products at all. Instead, manufacturers were testing heavy metal levels in ingredients and using those levels to estimate levels in finished products. This method was determined to understate the toxic heavy metal levels in finished products. The Subcommittee recommended that manufacturers be required to test their final products for heavy metal levels, not just their ingredients. The Subcommittee also recommended that manufacturers be required to report levels of heavy metals in their products.

In June 2021, public health officials in the State of Alaska found that multiple samples of Beech-Nut and Gerber’s infant rice cereals exceeded the FDA’s 100 parts per billion (ppb) limits for inorganic arsenic in infant rice cereal. Beech-Nut had tested the rice flour used to make the rice cereal and found arsenic levels below the FDA guidance levels, highlighting the ineffectiveness of ingredient-only testing.

Researchers find repeatedly that heavy metals are detrimental to cognitive development. Exposure to heavy metals at an early age has been linked to lower IQs, behavior problems, cardiovascular issues, and attention deficit hyperactivity disorder. In 2017, researchers at Duke

University studied 565 adults who had their lead levels measured as children. Those with high childhood lead readings had IQ levels 4.25 points lower on average.

AB 899 acts on recommendations made by the Subcommittee on Economic and Consumer Policy and empowers parents by requiring manufacturers to test for and publicize levels of toxic heavy metals in their baby food and infant formula products."

Comments in concern: According to the Infant Nutrition Council of America (an association comprised of Abbott Nutrition, Perrigo Nutrition, and Reckitt, all manufacturers of infant formulas and toddler milks):

"AB 899 proposes that infant formula manufacturers test and make public the results of lead, mercury, cadmium, and arsenic results. The required public posting of infant formula test results in the absence of federal guidance and a federal action level for these metals would create significant confusion among parents and caregivers and result in mistrust of fully compliant and safe infant formulas available on the market. We do not recommend any actions that might erode confidence in U.S. infant formula products and unintentionally create fear and panic that could further strain the availability of safe infant formula products that meet all FDA regulatory requirements.

Further, AB 899 would require a label change for infant formulas to denote the product has been tested for heavy toxic metals when FDA establishes industry guidance for such testing. This could equally result in confusion for consumers if they expect that every can of infant formula has been sampled and tested as opposed to a representative sample across the batch. It is impossible to test each can and still have product to distribute to the market. Further, while other testing is required of infant formula, there are no labeling provisions to denote as such. This creates an inequitable view of the infant formula regulations and could create trade issues across the United States.

AB 899 proposes requirements prior to allowing FDA experts to establish appropriate action levels, and could create confusion related to safe, nutritious infant formulas currently on the market."

Arguments in opposition: None on file.

Related legislation:

1) AB 228 (Wilson). Requires CDPH and the Office of Emergency Services, in coordination with other state agencies, to establish an infant formula stockpile. This bill is pending action in the Assembly Appropriations Committee.

2) AB 418 (Gabriel). Prohibits, commencing January 1, 2025, 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, red dye 3, and titanium dioxide. This bill is currently pending action in the Assembly Environmental Safety and Toxic Materials Committee.

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, and prohibits all sales of such products

that do not meet the new standard beginning July 1, 2023. Requires labeling of products that comply with the definition of "lead free" to indicate compliance in an easily identifiable manner.

4) AB 1200 (Ting, Chapter 503, Statutes of 2021). Prohibits, commencing January 1, 2023, the sale of food packaging that contains PFAS; requires, commencing January 1, 2024, cookware manufacturers to label their product if it contains an intentionally added chemical on specified lists; and prohibits, commencing January 1, 2023, for the internet and January 1, 2024, for cookware packaging, a cookware manufacturer from making a claim that cookware is free of a chemical, unless no chemical from that chemical class is intentionally added to the cookware.

5) AB 1316 (Quirk, Chapter 507, Statutes of 2017). Requires CDPH to revise its regulations for the Childhood Lead Poisoning Prevention Program to redefine the assessment of risks for the purposes of evaluating a child's risk for lead exposure.

6) 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.

7) SB 1019 (Leno, Chapter 862, 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

American Academy of Pediatrics, California
Center for Food Safety; the
Consumer Attorneys of California
Educate. Advocate.
Environmental Working Group

Opposition

None on file.

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

Date of Hearing: April 18, 2023

ASSEMBLY COMMITTEE ON ENVIRONMENTAL SAFETY AND TOXIC MATERIALS
Alex Lee, Chair
AB 1059 (Friedman) – As Amended April 11, 2023

SUBJECT: Product safety: consumer products: fiberglass and covered flame retardant chemicals

SUMMARY: Prohibits the manufacturing, selling, offering, or distributing in commerce any juvenile product, mattress, or upholstered furniture that contains fiberglass, and restricts the use of flame retardant chemicals in adult mattresses, as specified. Specifically, **this bill**:

1) Sunsets, on January 1, 2027, the current statutory exemption for components of adult mattresses (other than foam) from restrictions on flame retardant chemicals, thus prohibiting flame retardant chemicals at levels above 1,000 parts per million in all parts of adult mattresses after January 1, 2027.

2) Prohibits, on and after January 1, 2027, a person, including, but not limited to, a manufacturer, retailer, importer, or online seller, from manufacturing, selling, offering, or distributing in commerce in this state any new, not previously owned juvenile product, mattress, or upholstered furniture that contains, or a constituent component of which contains, fiberglass.

3) Prohibits, on and after January 1, 2027, a custom upholsterer from repairing, reupholstering, recovering, restoring, or renewing any mattress, juvenile product, upholstered furniture, or reupholstered furniture using a replacement component that contains, or a constituent component of which contains, fiberglass.

4) Defines "fiberglass" as textile yarns whose composition includes one or more continuous glass filaments in a form suitable for knitting, weaving, or otherwise intertwining to form a textile fabric. Excludes the following from the definition of fiberglass:
    a) Thread or fiber when used for stitching mattress components together; and,
    b) Yarns in which the glass filaments are corespun or sheathed by another fiber.

5) Requires the Bureau of Household Goods and Services (Bureau) to enforce and ensure compliance with the prohibition of fiberglass in juvenile products, mattresses, and upholstered furniture.

6) Provides that if a person continues to sell or distribute products in commerce in this state belonging to the same stock keeping unit (SKU) as products that do not comply with the prohibition of fiberglass in juvenile products, mattresses, and upholstered furniture, after notice of the violation is posted on the Bureau's internet website, the Bureau may assess fines against the person for the continued sale or distribution of those products.

7) Requires the Bureau to make information about any citation issued pursuant to the provisions of this bill available to the public on its internet website, and to develop a process for keeping interested persons informed about updates to notices of violation posted on the Bureau's internet website.

8) Subjects violators of the fiberglass prohibition to a statutory penalty schedule.

EXISTING LAW:

1) Establishes the Home Furnishings and Thermal Insulation Act (Act) and requires it to be administered by the Bureau within the Department of Consumer Affairs (DCA). (Business and Professions Code (BPC) § 19000 et seq.)

2) Requires protection of the public to be the highest priority for the Bureau in exercising its licensing, regulatory, and disciplinary functions. Requires, whenever the protection of the public is inconsistent with other interests sought to be promoted, the protection of the public to be paramount. (BPC § 19004.1)

3) Specifies that the Act applies to upholstered furniture, bedding and filling materials, and insulation sold in California regardless of its point of origin. (BPC § 19070)

4) Requires a manufacturer of upholstered furniture to indicate whether or not the product contains added flame retardant chemicals by including a statutorily required "flame retardant chemical statement" and an "X" indicating the presence of flame retardant chemicals on the required flame retardant label, per TB 117-2013. (BPC § 19094 (b)(1))

5) Requires the Bureau to ensure compliance with the flame retardant labeling and documentation requirements for upholstered furniture. (BPC § 19094 (c)(2))

6) Prohibits, on or after January 1, 2020, a person, including a manufacturer, from selling or distributing in commerce in this state any new, not previously owned juvenile products, mattresses, or upholstered furniture that contains, or a constituent component of which contains, covered flame retardant chemicals, as defined, at levels above 1,000 parts per million. (BPC § 19101(a))

7) Prohibits, on or after January 1, 2020, a custom upholsterer from repairing, reupholstering, recovering, restoring, or renewing upholstered furniture or reupholstered furniture using replacement components that contain covered flame retardant chemicals at levels above 1,000 parts per million. (BPC § 19101(b))

8) Specifies exemptions to the two flame retardant prohibitions above, including:
   a) Electronic components of juvenile products, mattresses, reupholstered furniture, upholstered furniture, or any associated casing for those electronic components;
   b) Upholstered or reupholstered furniture components, as specified;
   c) Thread or fiber when used for stitching mattress components together; and,
   d) Components of adult mattresses other than foam. (BPC § 19101(c))

9) Authorizes the director of the Bureau to adopt regulations and rules necessary or appropriate for the implementation and enforcement of the flame retardant restrictions in juvenile products, upholstered furniture, and mattresses. (BPC § 19102)

10) Requires the Bureau to enforce and ensure compliance with the flame retardant restrictions in juvenile products, upholstered furniture, and mattresses. (BPC § 19103 (a))

11) Requires the Bureau to provide the Department of Toxic Substances Control (DTSC) with a selection of samples from juvenile products, upholstered furniture, and mattresses subject to flame retardant restrictions. (BPC § 19103 (b)(1))

12) Authorizes the Bureau, if DTSC's testing shows that any reupholstered furniture or new, not previously owned juvenile products, mattresses, or upholstered furniture is in violation of flame retardant restriction provisions, to assess fines according to a statutory schedule. (BPC § 19103 (b)(2)(A))

13) Outlines a schedule for fines for violations of the flame retardant restrictions. (BPC § 19103 (c))

14) Requires all mattresses and mattress sets manufactured for sale in this state to be fire retardant. Defines, for these products, "fire retardant" as a product that meets the standards for resistance to open-flame tests adopted by the United States Consumer Product Safety Commission (CPSC) and set forth in the Code of Federal Regulations. (BPC § 19161 (a))

15) Authorizes the chief of the Bureau to, subject to the approval of DCA and in his or her discretion, exempt items of upholstered furniture which are deemed not to pose a serious fire hazard from fire retardant requirements. (BPC § 19161.5)

16) Requires, under the Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65), the Governor to cause a list to be published of those chemicals known to the state to cause cancer or reproductive toxicity, and to cause the list to be revised and republished in light of additional knowledge at least once per year. More than a dozen flame retardant chemicals are listed under Proposition 65. (Health and Safety Code (HSC) § 25249.8)

17) Requires, under Safer Consumer Products (Green Chemistry) statutes, DTSC to identify and prioritize chemicals of concern and to adopt regulations to evaluate chemicals of concern in consumer products to determine how best to limit exposure or to reduce the level of hazard posed by a chemical of concern. Authorizes DTSC to take specified regulatory actions to limit exposure or to reduce the level of hazard posed by a chemical of concern. DTSC listed two flame retardant chemicals in children's foam padded sleeping products in their first actions under this law. (HSC § 25251 et. seq.)

18) Prohibits a person from manufacturing, processing, or distributing in commerce a product or part of a product that contains more than 1/10th of 1% of pentaBDE or octaBDE. (HSC § 108922)

19) Requires, pursuant to Technical Bulletin (TB) 117-2013, beginning January 1, 2015, all filling materials and cover fabrics contained in any article of upholstered furniture and added to reuphosltered furniture sold in California to meet certain smolder resistant testing standards, and to be labeled as specified. (Article 13, Division 3, Title 4, California Code of Regulations (CCR) § 1374)

20) Exempts from compliance with TB 117-2013 the following juvenile products: bassinets, booster seats, car seats, changing pads, floor play mats, highchairs, highchair pads, infant bouncers, infant carriers, infant seats, infant swings, infant walkers, nursing pads, nursing

pillows, playpen side pads, playards, portable hook-on chairs, and strollers. (Article 13, Division 3, Title 4 , CCR § 1374.2)

21) Requires mattresses and mattress pads to meet a standard for flammability through a cigarette ignition resistance test. (16 Code of Federal Regulations (CFR) 1632)

22) Requires mattresses and mattress sets to meet a standard for flammability through an open flame test. (16 CFR 1633)

FISCAL EFFECT: Unknown.

COMMENTS:

Need for the bill: According to the author,

"Both the federal government and the State of California have set standards that limit the flammability of mattresses and upholstered furniture. These items pose a danger to a home or building if they catch on fire. For a long time, toxic flame retardant chemicals were used to meet these standards, but in recognition of their health impacts, the laws and regulations were changed at federal and state levels to prohibit the use of these chemicals.

While most manufacturers altered their manufacturing methods to use naturally flame resistant materials such rayon, latex, and wool to meet the standard, some turned to fiberglass as a thermal barrier. Fiberglass is a man-made mineral fiber that is composed of silica sand, limestone, recycled glass, and soda ash that has a lifespan of more than 50 years.

When individuals unzip or open mattress covers, unintentional exposures to fiberglass can occur. In addition, there is concern that even when the mattress or couch covers are not disturbed, the fiberglass particles escape to the surface leading to exposures. In one study, fiberglass was detected in the covers of mattresses manufactured by Zinus and Graco that were certified as having chemical-free foam. Since fiberglass is present in many mattresses, it can be difficult to tell whether a specific mattress contains fiberglass in the foam or cover. The mattress label, which lists the components of the mattress, may or may not contain the terms "fiberglass", "glass fiber", or "glass wool" if fiberglass is present within the mattress or its cover.

Fiberglass can be irritating to the eyes, skin, and lungs. Rashes, itching, and blisters can occur when fiberglass comes into contact with human skin, even for short periods of time. Long-term exposure to fiberglass is associated with lung disease, including pulmonary fibrosis. Short-term inhalational exposure to fiberglass may cause lung inflammation and bronchiolitis. Fiberglass fibers can also cause visual changes, bleeding, and scarring if they become embedded within the eye

AB 2998 (Bloom, 2018) required the International Sleep Products Association to survey producers of new mattresses, including those registered with the California Bureau of Electronic and Appliance Repair, Home Furnishings, and Thermal Insulation concerning the materials used to meet mattress flammability standards. They found that 13.1% of mattresses contain fiberglass as a thermal barrier.

Given the small amount of mattresses on the market containing fiberglass and the availability of alternatives to meet federal and state flammability standards, AB 1059 would ban the use of fiberglass to protect public health."

Fiberglass: According to the article, "Fiberglass and Other Flame-Resistant Fibers in Mattress Covers" published in February 2022, in the *International Journal of Environmental and Public Health,* fiberglass, which is sometimes also referred to as man-made vitreous fibers, is a known respiratory, skin and eye irritant and an asthmagen. In occupational settings, fiberglass exposure has been found to correlate with recurrent chest infections and pulmonary fibrosis. Fiberglass fibers can vary in diameter, length, and chemical composition, but are predominantly amorphous (non-crystalline) mixtures of oxides of silicon, calcium, and other metals. Common commercial uses for fiberglass include insulation and fire protection.

The article reports that, prompted by historical concerns that chronic inhalation of fiberglass fibers could pose lung cancer risks, the International Agency for Research on Cancer (IARC) reviewed the literature on at least two occasions, and concluded in 2001 that the evidence for carcinogenicity from fiberglass exposure met the criteria for Group 3 (unclassifiable as to human carcinogenicity). This conclusion was supported by a subsequent review of the occupational epidemiology literature, including case–control, cohort, and meta-analyses, in 2011. The carcinogenicity of a given fiberglass fiber depends on both its inhalability (aerodynamic size) and its biopersistence (durability and clearance rate from the lung*).*

Flammability standards, mattresses: The inclusion of flame retardant chemicals and flame-resistant fibers in mattresses is primarily driven by California and federal flammability regulations. All mattresses sold in the United States must meet the requirements of 16 CFR Parts 1632 and 1633, as regulated by the CPSC. 16 CFR 1632 requires mattresses and mattress pads to meet a standard for flammability through a cigarette ignition resistance test, and 16 CFR 1633 requires mattresses and mattress sets to meet a standard for flammability through an open flame test. California has additional regulations for mattresses. While mattress flammability requirements can be met without the use of harmful compounds or flame retardant chemicals, the requirements do not prohibit their use.

Fiberglass in mattresses: In response to increased evidence of the health and environmental risks associated with exposure to flame retardant chemicals, AB 2998 (Bloom, Chapter 924, Statutes of 2018), among other things, restricted the use of certain flame-retardant chemicals in several consumer products, including mattresses. To better understand which materials might be substituted in the manufacturing of mattresses under the new flame retardant restrictions, AB 2998 required the International Sleep Products Association (ISPA) to survey producers of new mattresses, including those registered with the Bureau, about the materials used to meet mattress flammability standards. The resultant report notes that while combinations of flame retardant fibers, fire barriers, and closing thread used to meet flammability standards are constantly changing, survey participants reported that they use fiberglass fiber in the exterior barriers of 2% of the mattresses they produced, and in 13.1% of the interior barriers of mattresses they produced.

Fiberglass exposure from mattresses: The *International Journal of Environmental and Public Health* article notes that several anecdotal reports and numerous public complaints have raised concerns that some mattresses in the current marketplace may be potential sources of airborne fiberglass exposures. Children and infants represent a special potential risk group, both due to

their increased susceptibility and the possibility that children may play or jump on beds. In one case investigated by the California Department of Public Health in 2021, a 6-year old child was found to have persistent skin and respiratory irritation linked to the suspected leakage of fiberglass from a mattress purchased in 2018. The resulting clean-up of the home included disposal of the mattress, carpet, and clothing items from which the fiberglass fibers could not be removed by cleaning. A search of the Consumer Product Safety Commission website found 128 complaints from January 1 to December 31, 2020 linked to fiberglass exposure in several different brands of mattresses, and news media have reported on a growing number of relevant health complaints.

The authors of the *International Journal of Environmental and Public Health* article sampled and analyzed the covers of four newly purchased mattresses, and found that two of the mattress covers contained over 50% fiberglass in their inner sock layers. Up to 1% of the fiberglass had migrated to adjacent fabric layers, representing a potential risk of consumer exposure if the zipper on the outer cover is opened. They reported that the observed fiberglass fragments were of a size that suggested that they are potentially inhalable into the nose, mouth, and throat, but likely too large to penetrate deeper into the lungs. No fiberglass was observed on the brand new mattresses' outer surfaces. Synthetic fibers also present in the sock layers were consistent with flame resistant modacrylic containing vinyl chloride and antimony. The authors concluded that the use of fiberglass and other chemicals in mattress covers poses a potential health risk if these materials are not adequately contained.

This bill: This bill prohibits, on and after January 1, 2027, a person, including, but not limited to, a manufacturer, retailer, importer, or online seller, from manufacturing, selling, offering, or distributing in commerce in this state, among other products, any new, not previously owned mattresses that contains, or a constituent component of which contains, fiberglass.

Flame retardant chemicals. Flame retardant chemicals are chemicals added to plastic, foam, textiles, and other constituents and products to slow or prevent the start or growth of fire. Flame retardant chemicals are often added or applied to furnishings, electronics and electrical devices, building and construction materials, insulation materials, and transportation products.

Human exposure to flame retardant chemicals: Human exposure to flame retardant chemicals occurs mainly through inhalation or ingestion of flame retardant chemical contaminated dust, which enters households and the environment when foam treated with flame retardant chemicals in upholstered furniture and other products breaks down and escapes the product. Food and water contaminated with flame retardant chemicals is another source of exposure. Exposure from dermal contact with contaminated soil and dust may also occur. Medical studies have linked flame retardant chemicals to job-related cancer and other illnesses in American firefighters, indicating heightened exposure during fires.

Human health impacts of flame retardant chemicals: According to the National Institute of Environmental Health Sciences, a growing body of evidence shows that many flame retardant chemicals are associated with adverse health effects in animals and humans, including endocrine and thyroid disruption, impacts to the immune system, reproductive toxicity, cancer, and adverse effects on fetal and neurobehavioral function. There are currently more than a dozen flame retardant chemicals listed in California, through Proposition 65, as known to cause cancer, birth defects, or other reproductive harm.

Legislative action on flame retardants in mattresses: To reduce the use of and exposure to flame retardant chemicals, AB 2998 (Bloom, 2018) prohibits, on or after January 1, 2020, a person, including a manufacturer, from selling or distributing in commerce any new, not previously owned mattresses that contain, or a constituent component of which contains, flame retardant chemicals at levels above 1,000 parts per million. The bill exempted from the restrictions on flame retardants components of adult mattresses other than foam.

This bill: To address the potential that mattress manufacturers could replace the use of fiberglass in the component parts of their products with flame retardant chemicals, this bill additionally sunsets, on January 1, 2027, the current statutory exemption for components of adult mattresses (other than foam) from restrictions on flame retardant chemicals. This statutory change will therefore prohibit flame retardant chemicals at levels above 1,000 parts per million in all parts of adult mattresses after January 1, 2027.

Flammability standards, upholstered furniture: The Bureau develops flammability standards in the form of Technical Bulletins (TBs), which are adopted through regulation. The most recent TB relating to upholstered furniture is TB 117- 2013. TB 117-2013 contains smolder tests for cover fabrics, barrier materials, filling materials, and decking materials, if used, for upholstered furniture. For fabrics that do not pass the smolder test, a compliant barrier may be used.

There are also a number of federal flammability standards overseen by the U.S. Consumer Product Safety Commission (CPSC) that are currently in effect nationwide. On December 27, 2020, H.R. 133, the "COVID–19 Regulatory Relief and Work From Home Safety Act" (Act) was signed into law by President Trump. The Act adopted California's TB 117-2013 as a national flammability standard to be administered by the CPSC. The Act also establishes a new label requirement, which manufacturers are required to use to certify that their product complies with the federal standard. While TB 117 2013 can be met without the use of flame retardant chemicals, it does not prohibit their use.

Legislative action on flame retardants in upholstered furniture: AB 2998 prohibits, on or after January 1, 2020, a person, including a manufacturer, from selling or distributing in commerce any new, not previously owned upholstered furniture that contains, or a constituent component of which contains, covered flame retardant chemicals at levels above 1,000 parts per million. It also prohibits, on or after January 1, 2020, a custom upholsterer from repairing, reupholstering, recovering, restoring, or renewing upholstered furniture or reupholstered furniture using replacement components that contain covered flame retardant chemicals at levels above 1,000 parts per million. The bill exempted from the flame retardant restrictions certain upholstered or reupholstered furniture components.

This bill: This bill additionally prohibits, on and after January 1, 2027, a person, including, but not limited to, a manufacturer, retailer, importer, or online seller, from manufacturing, selling, offering, or distributing in commerce in this state any new, not previously owned upholstered furniture that contains, or a constituent component of which contains, fiberglass.

Policy consideration: At this time, it is unclear whether manufacturers or reupholsterers use fiberglass in upholstered furniture. If they do, to prevent a situation of regrettable substitutions in which a manufacturer replaces fiberglass in the component parts of upholstered furniture with flame retardant chemicals, the author may wish to consider deleting the current statutory exemption for upholstered or reupholstered furniture components from restrictions on flame

retardant chemicals. This change would prohibit flame retardant chemicals in upholstered or reupholstered furniture components.

Juvenile products and flammability standards: In 2010, the Bureau found that some juvenile products contain a much lesser fuel load content (i.e. foam, batting) than average adult seating furniture. In addition, these products are less likely to be ignited or come in contact with an ignition source under the exercise of reasonable care and supervision of adults. Therefore, in December 2010, the Bureau exempted strollers, infant carriers, and nursing pillows from the TB 117 flammability requirements (the precursor regulation to TB 117- 2013). In November 2013, the Bureau again amended regulations to exempt fifteen additional juvenile products from meeting the flammability requirements of the now-in-effect TB 117-2013. The exempted juvenile products (total of eighteen) are: bassinets, booster seats, car seats, changing pads, floor play mats, highchairs, highchair pads, infant bouncers, infant carriers, infant seats, infant swings, infant walker, nursing pads, nursing pillows, playpen side pads, playards, portable hook-on chairs, and strollers. This full exemption became effective on January 1, 2014.

This bill: This bill additionally prohibits, on and after January 1, 2027, a person, including, but not limited to, a manufacturer, retailer, importer, or online seller, from manufacturing, selling, offering, or distributing in commerce in this state any new, not previously owned juvenile products that contains, or a constituent component of which contains, fiberglass. "Juvenile product" is defined in the Business and Professions Code § 19100 as a product designed for residential use by infants and children under 12 years of age, including, but not limited to, a bassinet, booster seat, changing pad, floor playmat, highchair, highchair pad, infant bouncer, infant carrier, infant seat, infant swing, infant walker, nursing pad, nursing pillow, playpen side pad, playard, portable hook-on chair, stroller, and children's nap mat. At this time, it is unclear whether manufacturers use fiberglass in juvenile products.

Enforcement provisions: AB 2998 requires the Bureau to enforce and ensure compliance with the juvenile products, upholstered furniture, and mattresses flame retardant restriction provisions, and authorizes the director of the Bureau to adopt regulations and rules necessary or appropriate for the implementation and enforcement of these provisions. It also sets a penalty schedule for violations of the flame retardant restrictions. In alignment with current statue, AB 1059 also requires the Bureau to enforce and ensure compliance with the juvenile products, upholstered furniture, and mattresses fiberglass prohibition and authorizes the director of the Bureau to adopt regulations and rules necessary or appropriate for the implementation and enforcement of these provisions. AB 1059 subjects violators of the fiberglass prohibition to the statutory penalty schedule laid out for violations of flame retardant restrictions.

Arguments in support: According to a coalition of supporters, "Due to changing flammability standards, most toxic chemicals are no longer used in mattresses and furniture. Instead naturally flame resistant materials such rayon, latex, silica, and wool are used, however fiberglass is sometimes used as a thermal barrier. When individuals unzip or open mattress covers, unintentional exposures to fiberglass can occur. In addition, there is concern that even when the mattress or couch covers are not intentionally disturbed, over time, the fiberglass particles escape to the surface leading to exposures…

Fiberglass can be irritating to the eyes, skin, and lungs. Rashes, itching, and blisters can occur when fiberglass comes into contact with human skin, even for short periods of time. Long-term exposure to fiberglass is associated with lung disease, including pulmonary fibrosis. Short-term

inhalational exposure to fiberglass may cause lung inflammation and bronchiolitis. Fiberglass fibers can also cause visual changes, bleeding, and scarring if they become embedded within the eye. California's Dept. of Public Health stated in a February 2022 study, "Fiberglass was observed in two of the four [mattress] covers, including potentially inhalable fiberglass fragments that pose a health risk if the covers are opened by consumers."

…Mattresses and furniture can be constructed with thermal barriers that meet all standards without using fiberglass."

Comments in concern: The International Sleep Products Association (ISPA) writes, "to respectfully express concerns regarding AB 1059." ISPA continues, "ISPA does support the proposed changes to the fiberglass provision of this bill. Our organization appreciates the opportunity to discuss a reasonable phase out date, definition of fiberglass and enforcement to ensure a level playing field between domestic and international manufacturers. We greatly appreciated the willingness of your office and bill sponsor to consider our feedback on the bill in print and had several productive conversations around this issue. However, ISPA was only recently informed that the scope of AB 1059 will expand far beyond fiberglass to include a much broader ban on specified flame retardants for mattresses. We have strong concerns with this change.

… All mattresses and mattress pads must pass a cigarette ignition resistance test mandated by one federal flammability standard (codified at 16 CFR Part 1632), and all mattresses and mattress sets (that is, a mattress and foundation when sold together) must pass an open-flame test mandated by a second federal flammability standard (codified at 16 CFR Part 1633). California has additional, conforming flammability regulations for mattresses. These standards…are critical to helping reduce the risks of death, injury, and property damage associated with fires that result from the ignition of a mattress. It is important to note that mattresses MUST meet both federal standards to be sold in the United States.

… ISPA understands that concerns have been raised about which materials mattress manufacturers would use in place of fiberglass, if fiberglass were banned. These concerns in turn prompted the recent decision to repeal the existing exemption for adult mattress components codified at section 19001(c)(4).

If fiberglass is banned from mattresses, the mattress industry has no intention of using substitute barriers made by adding any of the chemicals described section 19000(c)(1)(B), enacted in AB 2998. Nevertheless, we have concerns with how these definitions will be interpreted with respect to two specific fibers that the industry has safely used in barrier fabrics for years. These fibers are not flame-retardant chemicals themselves. Instead, these fibers are inherently fire resistant. That means that no chemicals need to be added to these fibers to make them resist ignition.

…Nevertheless, these fibers are comprised of atoms that are listed in the section 19000 definitions of the chemicals banned by AB 2998. For example, one of them (modacrylic fiber) contains chlorine (included in the halogenated chemicals definition) and the other (aramid fiber) contains carbon and nitrogen (included in the organonitrogen definition). We are concerned that the agency with enforcement authority for AB 2998 (and now AB 1059) might conclude that these fibers are covered by the AB 2998 prohibitions. Such an interpretation would significantly disrupt the mattress industry.

…If the law were clarified to state that AB 2998 does not apply to these fibers, ISPA would not object to the repeal of section 19001(c)(4)."

Arguments in opposition:

None on file:

Related legislation:

1) AB 2998 (Bloom, Chapter 924, Statutes of 2018). Prohibits, on or after January 1, 2020, a person from selling or distributing in commerce any reupholstered furniture or any new juvenile products, mattresses, or upholstered furniture that contain, or a constituent component of which contains, covered flame retardant chemicals above specified levels.

2) SB 763 (Leno, 2015). Would have required manufacturers of juvenile products manufactured on or after July 1, 2016 to indicate on a label whether or not the product contains added flame retardant chemicals. This bill was substantially amended in the Assembly Appropriations Committee, and later deleted and amended to contain provisions in an unrelated subject area.

3) SB 1019 (Leno, Chapter 862, Statutes of 2014). Requires a manufacturer of upholstered furniture to indicate on the product label whether or not a product contains added flame retardant chemicals.

4) AB 2197 (Mitchell, 2012). Would have required the Bureau to revise regulations to require all seating furniture sold or offered for sale to meet a smolder flammability test rather than an open flame-test. This bill was not heard in the Assembly ESTM committee, at the author's request. The provisions of this bill were largely implemented through regulation through the adoption of TB 117-2013.

5) SB 147 (Leno, 2011). Would have required the Bureau, on or before March 1, 2013, to modify the requirements for flammability of upholstered furniture to include a smolder flammability test as an alternative method of compliance. This bill failed passage in the Senate Committee on Business, Professions, and Economic Development. Note: The provisions of this bill were largely implemented through regulation through the adoption of TB 117-2013.

6) SB 1291 (Leno, 2010). Would have required DTSC to include, as a chemical under consideration in the Green Chemistry process, any chemical that is used, or is proposed to be used, as a flame retardant. This bill was placed on the inactive file on the Senate Floor and died on file.

7) SB 772 (Leno, 2009). Would have exempted "juvenile products," as defined, from flame retardant regulations, unless the Bureau determined that the juvenile product posed a serious fire hazard. This bill was held under submission in the Assembly Appropriations Committee. Note: The provisions of this bill have been largely implemented through regulation.

8) AB 706 (Leno, 2008). Would have required, commencing July 1, 2010, seating furniture and bedding products to comply with certain requirements, including that they not contain a

chemical or component not in compliance with alternatives assessment requirements, and would have required DTSC to adopt methodology for an alternative assessment to review the classes of chemicals used to meet fire retardant standards. This bill failed passage on the Senate Floor.

9) AB 302 (Chan, Chapter 205, Statutes of 2003). Prohibited the use of penta and octa PBDEs after January 1, 2008.

REGISTERED SUPPORT / OPPOSITION:

Support

California Against Waste
California Product Stewardship Council
Californians Against Waste
Environmental Working Group
Facts: Families Advocating for Chemical & Toxics Safety
National Stewardship Action Council
Wholly H2O

Opposition

None on file.

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

Date of Hearing: April 18, 2023

ASSEMBLY COMMITTEE ON ENVIRONMENTAL SAFETY AND TOXIC MATERIALS
Alex Lee, Chair
AB 1403 (Garcia) – As Amended April 6, 2023

SUBJECT: Public safety: fireworks: enforcement: funding

SUMMARY: Requires, by January 1, 2025, the Office State Fire Marshall (OFSM) to collect and analyze data relating to dangerous illegal fireworks and safe and sane fireworks; authorizes local agencies, as specified, to adopt an ordinance for the actual and reasonable costs associated with safe and sane and illegal fireworks; and requires the OSFM and the Department of Toxic Substances Control (DTSC) to develop training for the proper management of seized fireworks. Specifically, **this bill**:

1) Requires, on or before January 1, 2025, the OFSM to collect and analyze data relating to fires, damages, seizures, arrests, administrative citations, and fireworks disposal issues caused by the sale and use of both dangerous illegal fireworks and safe and sane fireworks.

2) Requires, on or before January 1, 2025, the OFSM to provide to the appropriate policy and budget committees of the respective houses of the Legislature a workload analysis of resources needed to further assist in the training of local fire and law enforcement personnel regarding the seizure, collection, transportation, and storage of seized fireworks; the enforcement of statewide programs concerning illegal and dangerous fireworks; prosecution related to seized fireworks; and, investigations of illegal and dangerous fireworks.

3) Authorizes a charter city, city, county, fire protection district, or city and county, to adopt through an ordinance or resolution, a requirement that an applicant that received a permit (for the sale or use of fireworks) to pay a fee for the actual and reasonable costs related to the processing and issuing of permits; inspection of fireworks stands; public education and awareness campaigns regarding the safe and responsible use of safe and sane fireworks; enforcing provisions of their respective code with respect to the sale and use of safe and sane fireworks; and, fire operation and suppression efforts that are directly related to safe and sane fireworks.

4) Subject to an appropriation by the Legislature, requires the OFSM and DTSC to train local fire and law enforcement personnel on the requirements associated with the management of seized fireworks.

5) Requires the OFSM, subject to an appropriation by the Legislature, in consultation with relevant state and local public agencies, the fireworks industry, and other relevant stakeholders, to develop, publish, and provide necessary guidance and training to local agencies that seize, collect, transport, store, and treat seized fireworks.

EXISTING LAW:

1) Defines "dangerous fireworks" as any of the following:

    a) Any fireworks which contain any of the following:

i) Arsenic sulfide, arsenates, or arsenites;
ii) Boron;
iii) Chlorates, except as specified;
iv) Gallates or gallic acid;
v) Magnesium, except magnesium-aluminum alloys;
vi) Mercury salts;
vii) Phosphorous, red or white, except as specified;
viii) Picrates or picric acid;
ix) Thiocyanates;
x) Titanium, except in specified sizes; and,
xi) Zirconium.

b) Firecrackers;

c) Skyrockets and rockets, including all devices which employ any combustible or explosive material and which rise in the air during discharge;

d) Roman candles, including all devices which discharge balls of fire into the air;

e) Chasers, including all devices which dart or travel about the surface of the ground during discharge;

f) Sparklers more than 10 inches in length or one-fourth of one inch in diameter;

g) All fireworks designed and intended by the manufacturer to create the element of surprise upon the user, including, but not limited to, auto-foolers, cigarette loads, exploding golf balls, and trick matches;

h) Fireworks known as "devil-on-the-walk", or any other firework which explodes through means of friction, unless otherwise classified by the OFSM pursuant to state law;

i) Torpedoes of all kinds which explode on impact;

j) Fireworks kits; and,

k) Such other fireworks examined and tested by the OFSM and determined by the OFSM, with the advice of the State Board of Fire Services, to possess characteristics of design or construction which make such fireworks unsafe for use by any person not specially qualified or trained in the use of fireworks. (Health and Safety Code (HSC) § 12505)

2) Defines "exempt fireworks" as any special item containing pyrotechnic compositions which the OFSM, with the advice of the State Fire Advisory Board, has investigated and determined to be limited to industrial, commercial, agricultural use, or religious ceremonies when authorized by a permit granted by the authority having jurisdiction. (HSC § 12508)

3) Defines "safe and sane fireworks" as any fireworks not under the definition of "dangerous fireworks" or "exempt fireworks." (HSC § 12529)

4) Authorizes the OFSM to issue any of several licenses (HSC § 12570), including:

a) A manufacturer's license allowing the manufacture of fireworks and other pyrotechnic devices of all types; the sale and transport to licensed wholesalers in California only; and the sale to special effects pyrotechnic operators, as specified (HSC § 12571);

b) A wholesaler's license allowing the sale and transportation of all types of fireworks to licensed retailers, or retailers operating under a permit, licensed public display operators, and others, as specified (HSC § 12572);

c) An importer's and exporter's license allowing fireworks to be imported into or exported from the state, as specified (HSC § 12573);

d) A retail sales license allowing the retail sale of safe and sane fireworks for private use (HSC § 12574);

e) A special public display license allowing the holding and conducting at various times of public displays of dangerous fireworks at a single location only (HSC § 12575);

f) A general public display license allowing the holding and conducting of public displays of dangerous fireworks at various locations and times (HSC § 12576); and,

g) A limited public display license allowing the performance of a single public display action of a single nature with dangerous fireworks at one location, to be executed at one or more performances or exhibitions. (HSC § 12577)

5) Authorizes, through a retail license, the retail sale of safe and sane fireworks within the state only during the period of noon on the 28th of June through noon on the 6th of July of a calendar year, unless prohibited by local ordinance. (HSC § 12599)

6) Authorizes the OFSM, his or her salaried deputies, or any chief of a fire department, or his or her authorized representatives, any fire protection agency, or any other public agency authorized by statute to enforce the OFSM's regulations, to seize any fireworks described in HSC § 12500 – 12728. (HSC § 12721)

7) Authorizes the seizure of dangerous fireworks, including fireworks kits-used, possessed, stored, manufactured, or transported by a person who does not possess a valid permit authorizing an activity listed in HSC § 12500 – 12728. (HSC § 12722(h))

8) Requires the OFSM to manage dangerous fireworks, seized pursuant to state law, in a manner prescribed by the OFSM at any time after final determination of petition proceedings pursuant to HSC § 12724, or upon final termination of proceedings under HSC § 12593, whichever is later. Authorizes the OFSM to manage the seized fireworks, if no petition proceedings are commenced, in a manner prescribed by the OFSM and in accordance with the following:

a) Requires the OFSM to ensure that any dangerous fireworks seized that are identified by the OFSM as hazardous waste are managed in accordance with California and federal hazardous waste laws and regulations. Requires the OFSM to ensure that this hazardous waste is shipped only by registered hazardous waste transporters and treated, stored, or disposed of only by authorized hazardous waste facilities.

b) Prohibits, when managing seized fireworks, the OFSM from repurposing, transferring, or selling the seized fireworks for purposes of retail sale.

c) Requires the management of seized fireworks to only involve the following actions:

i) Use by fire and law enforcement agencies for safety, education, training, testing, and enforcement purposes;

ii) Use by the OFSM and the federal Consumer Product Safety Commission for regulatory compliance testing and comparison;

iii) Held for testing, comparison, or disposal in the interest of public safety, if identified and seized pursuant to a recall issued by the federal Consumer Product Safety Commission;

iv) Reclassification by the OFSM from a consumer product to a hazardous waste, and disposed of in accordance with applicable laws governing hazardous waste;

v) Deconstruction or alteration by the arson and bomb unit of OFSM, local public safety bomb squads, the federal Bureau of Alcohol, Tobacco, Firearms and Explosives, or the Federal Bureau of Investigations, for purposes of testing, as it relates to the investigation of criminal, terrorist, or civil disobedience acts;

vi) Held for investigation, as it relates to counterfeit or illicit seals of the OFSM, product packaging, labeling, coding, inspection labeling, manufacturer labeling, or importer or exporter labeling;

vii) Held by the OFSM as evidence for local, state, or federal criminal prosecution; and,

viii) Use by the arson and bomb unit of the OFSM for fireworks education, testing, disposal, enforcement, and investigations not addressed in subparagraphs (A) to (G), inclusive. (HSC § 12726)

9) Requires local government entities, if administrative fines or penalties are collected upon seizure of dangerous fireworks pursuant to a local ordinance, to forward 65 percent of the collected moneys to the Controller for deposit in the OFSM Fireworks Enforcement and Disposal Fund. (HSC § 12726(c))

10) Establishes the OFSM Fireworks Enforcement and Disposal Fund in the State Treasury and requires all moneys collected pursuant to state law and deposited in the fund to be available, upon appropriation by the Legislature, to the OFSM for the exclusive use in statewide programs for the enforcement, prosecution related to, disposal, and management of seized dangerous fireworks, and for the education of public safety agencies in the proper handling and management of dangerous fireworks. (HSC § 12728 (a-b))

FISCAL EFFECT: Unknown.

COMMENTS:

Need for the bill: According to the author, "AB 1403 is necessary for communities across the state because there has been much disruption and safety concerns that illegal fireworks have caused in our communities. We must take other measures to ensure that illegal fireworks are not putting the lives of people in danger. This is why the creation of the State Fire Marshal Statewide Illegal Fireworks Enforcement Action Fund in the State Treasury is crucial. All monies transferred into the fund will be used by the State Fire Marshal to assist in the enforcement of statewide and local programs concerning illegal and dangerous fireworks."

California Fireworks Program: According to the OFSM, California's Fireworks Law, passed in 1938, established the OFSM as the only fireworks classification authority in California. Today, the SFM is located within the California Department of Forestry and Fire Protection (CalFIRE). Fireworks are classified through laboratory analysis, field examinations, and test firing of items. As part of the program, OSFM requires the licensing of all pyrotechnic operators, fireworks manufacturers, importer-exporters, wholesalers, retailers, and public display companies. Pyrotechnic operators who discharge fireworks at public displays or launch high-powered and experimental rockets must also pass a written examination and provide proof of experience.

State law defines "dangerous fireworks" as any firework containing any of a specified list of chemicals such as, among others, arsenic sulfide, boron, mercury salts, red or white phosphorous, picrates, and thyocyanates. Types of dangerous fireworks include firecrackers; skyrockets; Roman candles; chasers; large sparklers; any firework designed to create an element of surprise, including but not limited to auto-foolers, cigarette loads, exploding golf balls, and trick matches; devil-on-the-walk; torpedoes of all kinds that explode on impact; fireworks kits; and, other fireworks examined and tested by the OSFM and determined to possess characteristics of design or construction that make the fireworks unsafe for use by a person not specially qualified or trained in the use of fireworks.

The OSFM can also deem a firework to be "exempt" if it is limited to industrial, commercial, agricultural use, or religious ceremonies. All fireworks that are neither dangerous nor exempt are, by definition, "safe and sane" fireworks. The retail sale of these is legal in California between noon on June 28 and noon on July 6 of every calendar year, but may be prohibited locally through ordinances. For example, the City of Los Angeles prohibits all fireworks. Public fireworks shows can be conducted by state-licensed pyrotechnicians with licenses obtained from the OFSM.

Currently, there are approximately 290 communities in California that permit the sale and use of state-approved fireworks for the July Fourth holiday. Retailers must obtain a license to sell safe and sane fireworks from the OSFM annually and pay associated fees to the state. Local jurisdictions may include an administrative fee related to the processing of permits and a percentage of gross sales collected by the jurisdiction. The revenue is generally used for education, over-time staffing, enforcement duties, and other fireworks related activities.

It is a misdemeanor crime to violate the California State Fireworks Law. Violators are subject to a maximum $1,000 fine and up to one year in a county jail. However, penalties increase for possession of large quantities of dangerous fireworks, and prosecutors could charge the violator with a felony, punishable by up to three years in state prison and fines up to $50,000. Federal law also prohibits the transport of fireworks across state lines to a state where the use or possession of the firework is illegal. This is particularly relevant as dangerous fireworks often make their way into California from neighboring states.

Fire risk: According to the National Fire Protection Association, an estimated 19,500 fires were started by fireworks nationwide in 2018. These fires caused five civilian deaths, 46 civilian injuries, 17,100 outside and other fires, 1,900 structure fires, 500 vehicle fires, and $105 million in direct property damage. In the same year, United States (U.S.) emergency rooms treated over 9,000 people for fireworks related injuries, with children younger than age 15 accounting for 36% of all injuries, according to a U.S. Consumer Product Safety Commission report.

Hot and arid conditions, in combination with the prolonged drought conditions plaguing the state, significantly increase the risk of fires due to fireworks and accelerate the spread of fires. In 2022, California experienced the driest period between January and March on record and as of June 14, 2022, over 70% of the state was in a state of either extreme or exceptional drought, according to data from the National Oceanic and Atmospheric Administration.

In a July 2021 *LA Times* article titled, "No such thing as 'safe and sane' fireworks in a bone-dry California primed to burn", the LA County fire chief, Daryl Osby, described the situation in the county, saying "It's out of control. Every year, we confiscate more illegal fireworks. We think that's a good year, but if you live in Los Angeles County, you can see all the aerial fireworks that go up. They're all illegal."

In 2020, the San Francisco Fire Department reported over 100 grass fires and the Los Angeles Fire Department nearly 400 fires, many thought to have been started by fireworks. Fireworks at a gender-reveal party in Yucaipa set off the El Dorado fire in September 2020, a blaze that killed one firefighter and took until November of that year to extinguish. Data reported by the OSFM in June 2022 on fires caused by fireworks in the state between 2012 and 2021 demonstrate the magnitude of the problem (see table). In the 10-year period, 8,427 fires caused by fireworks were reported to the OSFM.

YEAR	FIREWORKS FIRES	PROPERTY LOSS ($)	ACRES BURNED
2012	584	2,213,934	2,903
2013	565	1,556,883	305
2014	528	1,599,376	8,658
2015	561	5,931,945	411
2016	663	1,661,670	422
2017	907	3,364,471	568
2018	780	2,624,044	1,084
2019	877	2,541,424	743
2020	2,046	8,069,210	3,201
2021	916	3,293,844	472
TOTAL	**8,427**	**32,856,801**	**18,767**

Firework fires reported to the State Fire Marshal between 2012 and 2021. Data reported on June 8, 2022 by the Office of the State Fire Marshal.

Seized fireworks: Unburned fireworks may be hazardous because they are reactive (i.e., explosive), and may contain a number of toxic metals and chemicals, as described above. Each

year, the OFSM seizes hundreds of thousands of pounds of unburned and confiscated fireworks. Under current law, seized fireworks, including safe and sane fireworks seized in a jurisdiction in which they are illegal, are required to be managed by the OFSM. If classified as hazardous, seized fireworks must be managed under state and federal hazardous waste requirements.

According to DTSC, thousands of tons of consumer fireworks are shipped into California each year, only a fraction of which are confiscated by local law enforcement. According to the OSFM, seizures of illicit fireworks have been increasing each year and mostly occur from March through the July Fourth celebrations. Notably, several previous legislative attempts to establish a second legal period for fireworks use over the New Year's holiday in the state have failed; though, from a fire risk perspective, fireworks set off in summer are riskier than those ignited in winter.

The magnitude of the problem in the state is exacerbated by the arrival of fireworks that may be headed for other (western) states in the Ports of Long Beach, Los Angeles, and Oakland. In recent years, there have been major seizures of illegal fireworks that had arrived in the ports of Los Angeles and Long Beach, ranging from 15 to 25 tons each.

Disposal of seized fireworks: Once a hazardous waste determination by the OFSM has been made or after the seized fireworks are no longer subject to a judicial hold, DTSC regulations require the hazardous waste to be transferred to a permitted hazardous waste facility within 90 days. The disposal is complicated by the sheer volume of seized fireworks, the associated cost, and logistical challenges. Currently, local law enforcement agencies notify the SFM of seized fireworks. These have to be separated into dangerous and safe and sane fireworks and are held in trust by local agencies until disposal is further managed by the OFSM. Loose fireworks must be placed in labeled, quality cardboard boxes with functional lids. The OSFM recommends local agencies to store seized fireworks in storage buildings, trailers, semitrailers, metal shipping containers, or magazines. Consequently, storage space is an issue when thousands of pounds of material are seized.

For disposal, the OSFM contracts with a federally approved hazardous waste transporter to ship the fireworks to a facility in Utah, one of only two facilities nationwide permitted to process final disposal of fireworks. No such authorized facility exists in California. The facility in Louisiana is currently not being used by the state due to location and its close proximity to inhabited housing and the potential for groundwater contamination at the site. Transport and disposal costs $10 per pound of fireworks, bringing the annual cost to the state to the low millions. This does not include the cost of storage.

Environmental pollution by fireworks: According to the American Chemical Society, most fireworks contain a small tube, known as the aerial shell, made of gunpowder and small inclusions of explosive materials, called stars. The explosion of these stars is what gives fireworks their colors and shapes. Each star contains four chemical ingredients: an oxidizing agent, a fuel, a metal-containing colorant, and a binder. In the presence of an ignition source, the oxidizing agent and the fuel react chemically to create intense heat and gas. The energy from the high temperatures excites electrons in the colorants' metals. Almost immediately after excitation, the electrons return to their original energy state, emitting their distinct color spectrum in the process. Different metals in the fireworks produce different colors of light when heated. For example, lithium salts produce pink, sodium salts yellow or orange, strontium salts red, barium salts green, and copper salts blue colors.

Given the toxic chemicals, including metals and perchlorates, in fireworks and the aerial dispersal of chemicals that can move into local soil and water, setting off fireworks can contribute significantly to environmental pollution. The oxidized metal compounds are aerosolized and can have negative health impacts on people and wildlife. The combustion reaction further releases gases such as carbon dioxide, carbon monoxide, and nitrogen.

In a 2015 study published in *Atmospheric Environment*, Dian Seidel and colleagues explored the effects of fireworks set off over the Fourth of July holiday on air quality at 315 sites across the U.S. over multiple years. The researchers investigated particulate matter with particle diameters smaller than 2.5 micrometers (PM2.5) as a measure of air quality, since PM2.5 particles are inhalable and can reach the lungs and bloodstream where they can have systemic adverse health effects. On average, the concentrations of PM2.5 for the 24-hour period starting 8pm on July 4 were 42% greater than on control days. In addition to greenhouse gases, according to the U.S. Environmental Protection Agency, the spike in emissions includes perchlorate which has the ability to disrupt the thyroid's ability to produce hormones critical to normal growth and development.

Seizures of fireworks by the state: According to a July 3, 2020 press release by the Governor's Office of Emergency services: "The California Department of Forestry and Fire Protection (CAL FIRE) concluded a statewide operation designed to prevent illegal fireworks from entering California. The statewide operation, conducted between June 26th and June 30th, resulted in 29 felonies, 165 misdemeanor citations, 25 infractions and the confiscation of over 48,440 pounds of illegal fireworks.

CAL FIRE is taking a zero tolerance stand against anyone in possession of or transporting illegal fireworks. Every year hundreds of injuries and fires are caused by illegal and misused fireworks.

Fireworks that are illegal in California are those that explode, leave the ground, or move about the ground uncontrollably. Illegal fireworks include items such as skyrockets, bottle rockets, and roman candles. Anyone caught with illegal fireworks could face severe fines and even arrest.

All legal fireworks include a "Safe and Sane" logo from the California State Fire Marshal on the packaging but some illegal fireworks, especially those from out of the state, may have a forged logo on them. If you are not sure if your fireworks are legal, you can contact your nearest CAL FIRE facility or local fire station."

While the state tracks and arrests and prosecutes those that bring in illegal fireworks into the state, the OFSM has a total of five personnel that are dedicated to the management of seized fireworks, including coordinating with local police and fire departments, conducting investigations, and any other enforcement actions relating to illegal fireworks.

This bill: AB 1403 is a balanced approach that seeks additional information from the OFSM regarding illegal fireworks and the resources needed to improve the state's management and enforcement of illegal fireworks as well as acknowledging the training and funding needs for local police and fire departments.

Arguments in support: According to the City of Elk Grove, "This bill addresses the growing crisis of the illegal importation and sales of dangerous illegal fireworks into California and how

the Office of the State Fire Marshal (OSFM), local jurisdictions, and California-licensed Safe and Sane Fireworks wholesalers are trying to put a stop to this now year-round menace.

In addition, AB 1403 would authorize all of the 297 California communities that currently permit the sale and use of State Fire Marshal-Approved, Safe and Sane Fireworks each 4th of July to levy a fee on each retail sales permit to sell said state-approved fireworks to assist that local jurisdiction in offsetting the actual and reasonable costs incurred by that jurisdiction for, among other things, processing and issuing fireworks permits, inspection of fireworks stands, public awareness and education campaigns regarding the safe and responsible use of safe and sane fireworks, and related fire operation and suppression efforts. The City of Elk Grove has experienced a huge uptick in fires between 1 a.m. and 5 a.m. because people did not properly dispose of their July 4th fireworks."

Arguments in opposition:

None on file.

Related legislation:

1) SB 277 (Archuleta, Chapter 238, Statutes of 2022). Authorizes the OSFM to manage, instead of requiring the OSFM to dispose of, dangerous fireworks that are seized in the state, as specified. Requires the OSFM to dispose of any seized dangerous fireworks that were identified as hazardous waste to be managed in accordance with California and federal hazardous waste laws and regulations.

2) AB 2740 (Carrillo, 2020). Would have expanded the definition of dangerous fireworks; required the OSFM to identify and evaluate methods to track all containers containing dangerous fireworks, as specified; repealed existing law relating to a model ordinance governing enforcement and administrative fine procedures; required any seized dangerous and safe and sane fireworks to be managed by the OSFM; and, would have required commercially viable, federally approved dangerous consumer fireworks or safe and sane fireworks, seized and managed pursuant to the bill, to be made available for sale by any California licensed fireworks importer-exporter or wholesaler of fireworks, as specified. This bill was never referred to committee, and subsequently died on file.

3) SB 794 (Stern, 2017). Would have, until January 1, 2024, established the Fireworks Stewardship Program to create a uniform statewide policy regarding a state, county, special district, and local government entity's safe seizure, storage, repurposing, destruction, or disposal of 1.4G these federally approved dangerous fireworks and 1.4G California-classified safe and sane fireworks. This bill was referred to, but not heard, in the Assembly Governmental Organization Committee.

4) SB 677 (Mendoza, 2015). Would have authorized the sale of safe and sane fireworks during the week preceding New Year's Day and would have made numerous changes to the state laws governing fireworks sales and disposals. This bill failed passage in the Senate Governmental Organization Committee.

5) AB 1371 (V. Manuel Pérez, 2011). Would have allowed New Year's fireworks sales and authorized local governments to impose permit fees. This bill was held in the Assembly

Governmental Organization Committee.

6) SB 839 (R. Calderon, Chapter 563, Statutes of 2007). Established the OSFM Fireworks Enforcement and Disposal Fund. Created a mechanism for fireworks enforcement and disposal through new and increased fines and penalties with a revenue sharing component for local jurisdictions as an incentive for increased enforcement of illegal fireworks.

7) AB 475 (Redwine, Chapter 534, Statutes of 1939). Established California's Fireworks Law, which, among other things, defined "dangerous fireworks" and "safe and sane fireworks," and prohibited any person without a permit from manufacturing, possessing, or selling any dangerous fireworks; from selling any safe and sane fireworks as a retailer; and from discharging dangerous fireworks in any place.

REGISTERED SUPPORT / OPPOSITION:

Support

Elk Grove; City of
Phantom Fireworks Western Region, LLC

Opposition

None on file.

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

Date of Hearing: April 18, 2023

ASSEMBLY COMMITTEE ON ENVIRONMENTAL SAFETY AND TOXIC MATERIALS
Alex Lee, Chair
AB 1042 (Bauer-Kahan) – As Amended March 16, 2023

SUBJECT: Pesticides: seeds

SUMMARY: Requires the director of the Department of Pesticide Regulation (director) to adopt regulations to govern the use and disposal of seeds treated with a pesticide. Specifically, **this bill**:

1) Requires the director to adopt regulations to govern the use and disposal of seeds treated with a pesticide.

2) Requires that regulations adopted to govern the use and disposal of seeds treated with a pesticide prohibit the use of such seeds that meet any of the existing statutory conditions for the cancelation of the registration of a pesticide.

3) Prohibits a person from selling, delivering, or using seeds treated with a pesticide that are not registered for that use.

4) Requires, on and after January 1, 2025, a use report to be submitted by, or on behalf of, a grower to the director or a County Agricultural Commissioner (CAC), on a form and in a manner prescribed by the director, when seeds treated with a pesticide are used by the grower in the state.

5) Requires, based on those use reports, the director or CAC, on and after January 1, 2026, to annually report to the public both of the following:

    a) The pounds of pesticides applied as seed treatment in California, separated by crop type, active ingredient, and county of application; and,

    b) The cumulative acres planted with seeds treated with a pesticide in California, separated by crop type, active ingredient, and county of application.

6) Requires the director to endeavor to eliminate from use in the state any seed treated with a pesticide that endangers the agricultural or nonagricultural environment, is not beneficial for the purposes for which it is sold, or is misrepresented. Requires the director, in carrying out this responsibility, to develop an orderly program for the continuous evaluation of all seeds treated with a pesticide.

7) Requires the director to prohibit or regulate the use of environmentally harmful materials, including seeds treated with a pesticide.

8) Corrects dated gender references in existing statute.

EXISTING LAW:

1) Establishes the state's program for the registration, sale, transportation, and use of pesticides. (Food and Agriculture Code (FAC) § 11401 et seq.)

2) Provides that the purpose of California's pesticide program is to, among other things:
   a) Provide for the proper, safe, and efficient use of pesticides essential for the production of food and fiber and for the protection of public health and safety;
   b) Protect the environment from environmentally harmful pesticides by prohibiting, regulating, or ensuring proper stewardship of those pesticides;
   c) Assure agricultural and pest control workers of safe working conditions where pesticides are present; and,
   d) Encourage the development and implementation of pest management systems, stressing application of biological and cultural pest control techniques with selective pesticides when necessary to achieve acceptable levels of control with the least possible harm to nontarget organisms and the environment. (FAC § 11501)

3) Requires the director, and the 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)

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

5) 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)

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

7) Requires, before a substance is registered as a pesticide for the first time, there to be a thorough and timely evaluation. Authorizes appropriate restrictions to be placed upon the pesticide's use, including, but not limited to, limitations on quantity, area, and manner of application. Requires that all pesticides for which renewal of registration is sought to be evaluated. (FAC § 12824)

8) Authorizes the director, after hearing, to cancel the registration of, or refuse to register, any pesticide that, among other things:
   a) 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; and,

d) That, when properly used, is detrimental to vegetation, except weeds, to domestic animals, or to the public health and safety. (FAC § 12825)

9) Requires the director to prohibit or regulate the use of environmentally harmful materials, as specified. Requires the director, in so doing, to consider the effect of all such materials upon the environment, and take whatever steps the director deems necessary to protect the environment. (FAC § 14102)

FISCAL EFFECT: Unknown.

COMMENTS:

Need for the bill: According to the author: "One would think that the Department of Pesticide Regulation would regulate all pesticide uses – that is not true. DPR does not protect Californians from the pesticides used to treat seeds. As a result, a huge volume of pesticide use in California may be completely unknown. AB 1042 takes the long-overdue step of resolving this loophole by ensuring [DPR] regulates pesticide-treated seeds, consistent with its mandate."

Pesticide treated seeds: Pesticides, such as fungicides, insecticides, bactericides, algaecides, slimicides, and nematicides, are applied to seeds prior to planting to protect them from diseases, insects, or other pests. Pesticide treatments on seeds are used for localized plant protection; to protect against soil and aboveground pests; and, as systemic pesticides that absorb into the plant and distribute throughout its tissues. Treatments are made to a variety of crop seeds from grains and oilseed crops (e.g., wheat, corn, canola, etc.), to fruits and vegetables (e.g., broccoli, melons, etc.), as well as to "seed pieces" (e.g., potatoes). Treatment of seeds can occur in commercial seed treatment facilities, after which growers can purchase and plant already-treated seed, or growers may choose to treat seed on their own – known as "on-farm" seed treatment – and then plant the treated seed.

According to the United States Environmental Protection Agency (US EPA), treating seeds with pesticides has become a common agricultural practice to improve seed quality by reducing soil borne diseases and by discouraging insects or other pests.

In addition to agricultural use, treated seeds can be used in residential gardens.

Fate of pesticide treated seeds in the environment: According to a summary of the fate of neonicotinoid-treated seeds in the environment presented by the Department of Pesticide Regulation (DPR), 90% or more of pesticides applied to seeds can move offsite and leach into water or soil and be taken up by non-crop plants. Additionally, approximately 2 – 3% of the neonicotinoids on treated seeds is lost as dust at planting, and another 2 – 3 % is taken up by plants. Neonicotinoids applied to seeds protect the plant from root feeding plants for a maximum of 2 – 3 weeks. Other pesticide classes, such as fungicides, are commonly in seed treatment products, however less is known about the environmental fate of non-neonicotinoid pesticides used in seed treatment products.

DPR reports that managed pollinators, such as honey bees, and wild pollinators are exposed to the pesticides applied to treated seeds through dust, agricultural soil, crop flowers, and nearby wildflowers. Birds are also exposed to the pesticides on seeds through the seeds themselves, such as by ingestion, and through the water. Aquatic invertebrates are exposed to pesticides

from treated seeds through dust, seeds, and water. Pesticides from treated seeds can also be absorbed by aquatic plants.

Occupational exposure: According to the US EPA, workers at commercial seed treatment facilities can be exposed to pesticides on treated seeds when performing tasks directly associated with the seed treating and coating processes; performing tasks associated with the packaging, storing, or transporting of treated seeds; cleaning treatment machinery; and, loading and planting the seeds.

For on-farm seed treatment, workers can be exposed to the pesticides used on seeds when treating seeds prior to loading them into planters or when directly applying liquid or solid product to seeds already in planting equipment.

Regulation of pesticide treated seeds: According to DPR's website, "Pesticide-treated seeds are exempted from review by the [US EPA] under the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) as "treated articles." To the extent that a seed is treated to protect the seed, the seed does not fall under the state definition of "pesticide" and is excluded from review by DPR. Seed treatment products must be registered by [US EPA] and DPR when the coating process is conducted in California. However, there is limited information on which commodities utilize treated seeds, which active ingredients are used for each commodity, and the extent to which treated seeds are used in California."

California Department of Food and Agriculture seed inspection data from 2010 – 2021 show that many seed treatment products found on seeds in California are not registered for use in the state, meaning that pesticides not allowed for use in California are entering the state and planted via treated seeds.

Statutory definition of pesticide: The California Food and Agricultural Code (FAC) Section 12753 defines a "pesticide" as including any spray adjuvant and "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."

How much treated seed is used in California? While regulators concur that treated seed use has significantly increased over recent decades, little direct information is available to assess treated seed use in California. DPR requires reporting of all agricultural pesticide use, including the type of pesticide applied, the amount applied, the area treated, and the application method. However, DPR argues that pesticide-treated seeds do not fall under the state definition of a pesticide and are exempt from pesticide use reporting. They say that seed treatment products are considered industrial use and do not have the same reporting requirements. Therefore, publicly available pesticide use data in California does not currently account for pesticides applied as seed treatments and little direct or detailed information is known about the amount and types of pesticides on seeds in the state.

In the absence of formal tracking data on the use of treated seeds in California, the report *Neonicotinoids in California: Their Use and Threats to the State's Aquatic Ecosystems and Pollinators, with a Focus on Neonic-Treated Seeds* estimates that if seed treatments were fully used on crops where they are allowed, the amount of [neonicotinoid pesticides] applied as seed treatments would equal 512,000 pounds annually. This total exceeds the 410,000 pounds of

[neonicotinoid pesticides] that are applied by other means and reported through the [pesticide use report]. This potential use of [neonicotinoid]-treated seeds would cover roughly 76% of the total cropland area in California, approximately 4 million acres. Neonicotinoid pesticides are just one class of pesticides. They are known to harm pollinators and other non-target insects, and have been linked to adverse effects in other wildlife and humans.

Unfortunately, the lack of data on treated seeds is a national problem. According to a May 2020, article in *BioScience*, pesticide use data in the United States also does not currently account for pesticides applied as seed treatments. The article notes that while we find that seed treatment use has increased in major field crops over the last several decades, there is a high degree of uncertainty about the extent of acreage planted with treated seeds, the amount of regional variability, and the use of certain active ingredients. The article says that one reason for this uncertainty is that farmers are less likely to know what pesticides are on their seed than they know about what pesticides are applied conventionally to their crops. This lack of information affects the quality and availability of seed treatment data and also farmers' ability to tailor pesticide use to production and environmental goals.

DPR's treated seed workshop: DPR held a virtual Pesticide-Treated Seed Public Workshop on November 15, 2021, to articulate the current regulatory framework surrounding pesticide-treated seeds; to characterize potential for off-site movement of seed coatings; and, to gather additional information on current use and potential impacts of pesticide-treated seeds. Some of the facts on treated seeds cited in previous sections of this analysis were presented by DPR at that workshop.

Following the workshop, DPR requested public comment, to be submitted by February 15th 2022, on specific questions about pesticide-treated seeds, including:

- What California crops are typically grown from pesticide-treated seeds? Is there any industry tracking the portion of those crops that rely on pesticide-treated seeds?
- Is there any tracking of how much (e.g., acres treated, pounds applied) total pesticide treated seed is planted in California?
- What kind of insect or other pest pressures do seeds face?
- For crops that use pesticide-treated seeds, are these primarily imported, treated in California at a treatment facility or seed retailer, or treated on site?
- Is there any industry tracking or documentation that details how much pesticide treated seed is imported into California for use in California?
- How much seed treatment product does the seed retain versus how much is lost in the treatment process? What information is available on the mass of pesticide on the seed at the time of planting?
- The peer-review literature heavily focuses on environmental impacts from neonicotinoid treated seeds. Is there information focused on other active ingredients utilized in pesticide treated seeds?
- Is there any information on the relative environmental impact of pesticide-treated seeds versus other application methods?

The types of questions posed by DPR illustrate the profound lack of, and need for, information on treated seeds used in the state, as well as the need for a regulatory program governing the tracking and use of pesticide-treated seeds.

DPR's website lists the public comment received, but there does not appear to be any additional reporting on DPR's website on subsequent actions taken, or planned to be taken, on treated seeds since the public comment process.

This bill: This bill sets up a regulatory program at DPR to both gather information on and regulate the use of pesticide-treated seeds using a similar structure under which DPR currently regulates other methods of pesticide use. Specifically, this bill requires the director to adopt regulations to govern the use and disposal of seeds treated with a pesticide, and requires that those regulations prohibit the use of such seeds that meet any of the existing statutory conditions for the cancelation of the registration of a pesticide. These provisions are consistent with existing statutory requirements on other uses of pesticides in the state.

Litigation on pesticide-treated seeds in California: On February 17, 2023, the Natural Resources Defense Council, on behalf of Californians for Pesticide Reform, Friends of the Earth, Center for Biological Diversity, and Pesticides Action Network North America, filed a lawsuit against DPR in Alameda County Superior Court regarding the regulatory status of pesticide-treated seeds in California. This action followed a previous petition filed in 2020, which prompted the lawsuit.

Under the lawsuit, the petitioners/plaintiffs claim,

> "…the failure of [DPR] to comply with their duties under California's Administrative Procedure Act (APA), Cal. Gov't Code §§ 11340 et seq., when developing a policy that allows one of the largest sources of pesticide contamination in California to go unregulated under state law. DPR is responsible for regulating pesticide use in California, "tak[ing] whatever steps" are "necessary to protect the environment." Cal. Food and Agric. Code (FAC) § 14102. DPR has effectively exempted from regulation all crop seeds treated with pesticides prior to planting… without following the procedures required by law, resulting in severe consequences to the environment and public health.
>
> For decades, DPR has maintained a policy that treated seeds are not "pesticides" subject to regulation… Because DPR did not give notice to the public of this policy, allow members of the public to request hearings or comment on it, or otherwise comply with the requirements of the APA in adopting the treated-seeds policy, it constitutes an "underground regulation" in violation of the APA.
>
> …DPR has a duty to prohibit or regulate pesticides as necessary to "protect the environment." FAC § 14102. It also must "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." Id. §12824. By effectively exempting treated seeds from regulation as pesticides under California law, DPR has shirked its duties, leading to environmental harms described above. Furthermore, by failing to follow APA requirements, DPR prevented those impacted by its treated-seeds policy from commenting on the policy before it was adopted."

Previous related legislation:

SB 1282 (Leno and Allen, 2016). Would have required all commercially available seeds and plants sold at retail establishments, excluding noxious weed seeds and plants that have been

treated with a neonicotinoid pesticide to be labeled as such. This bill failed passage on the Senate floor, was grated reconsideration, and subsequently died on the inactive file.

Arguments in support: According to a coalition of supporters, "Seed treatments are potentially the greatest source of pesticide contamination in the United States, yet due to a gaping loophole in federal pesticide law, The Treated Article Exemption, they go unregulated. As such, they are not tracked, labeled, or regulated in the same manner as other pesticides. The Environmental Protection Agency has upheld the current classification despite repeated efforts by concerned citizens and organizations. 210 products are registered as seed treatments by CDPR, representing 68 unique active ingredients. This does not account for seeds imported from other states which may use other active ingredients or products. However, CDPR itself stated in a 2021 workshop: "…[pesticide-coated] seed does not fall under the state definition of 'pesticide' and is excluded from review by CDPR."

Coated seeds are incredibly damaging to the environment. A single seed coated with a neonicotinoid insecticide can kill a songbird. There is enough active ingredient on a single seed to kill 80,000 bees. As much as 95% of the coating dusts or sloughs off, killing local wildlife, persisting in soil for up to three years, and infecting ground and surface water.

A CDPR evaluation found 93% of urban water samples in Los Angeles, Orange, and San Diego County and 67% in urban areas of Alameda, Contra Costa, Placer, Sacramento, and Santa Clara County contained seedcoating chemicals at levels above EPA's chronic benchmark for harm to aquatic ecosystems.

AB 1042 is not a chemical ban; it simply clarifies CDPR's authority to regulate pesticide-coated seeds within currently prescribed California state law. Californians and the land, water, and wildlife they steward have a right to be protected from pesticide pollution and effects, especially when current applications may have no benefit to the growers paying for them."

Arguments in opposition: According to a coalition of opponents, "[AB 1042] would require unnecessary and burdensome regulations of treated seeds, resulting in fewer pest and disease prevention options available to California farmers. This additional regulatory review will add significant expense to the California Department of Pesticide Regulation (CDPR) and County Agricultural Commissioners, whose budgets are already fiscally challenged.

Treated seeds protect plants against pests, diseases, and fungi from infancy, at the most vulnerable stage. This treatment provides the best chance to develop into healthy, high-quality plants, maximizing the harvest potential. Additionally, treating the seed often reduces the need for and or number of foliar applications of pesticide materials, providing better environmental protection and fewer passes with equipment through the field, resulting in reduced carbon emissions.

…Treated seeds are regulated by the US EPA and CDPR as a "treated article."… Because these products are being protected by the already regulated and approved pesticide, there is no reason to duplicate that review. Similarly, the "seed" or "article" is treated with a material that appropriate regulators have already reviewed; this relieves EPA, CDPR, and County Agricultural Commissioner from duplicating efforts and allows them to focus scarce resources on regulating and enforcing the existing pesticide regulatory system. Given the thorough review of the pesticide material, the duplicated review required by AB 1042 would have no additional benefit to health, safety, or the environment.

…AB 1042 would "ban" the sale of treated seeds, then require timely, extensive regulatory review across multiple products, greatly reducing the availability of safe and effective crop protection tools… Until this duplicative review is accomplished, no treated seeds will be available, likely for several years. In the likely event that proponents of this measure or any other interested parties would fight budget augmentations, personnel allocations, and the regulations themselves (therefore further delaying and preventing treated seeds from being regulated), an effective ban would be created only in California to the detriment of California farmers."

REGISTERED SUPPORT / OPPOSITION:

Support

American Bird Conservancy
Audubon California
Ban Sup (Single Use Plastic)
California Native Plant Society
Californians for Pesticide Reform
CALPIRG, California Public Interest Research Group
Center for Community Action & Environmental Justice
Center for Food Safety; the
Clean Water Action
Endangered Habitats League
Environment America
Environment California
Environmental Justice for Clean Water
Environmental Protection Information Center
Environmental Working Group
Facts Families Advocating for Chemical and Toxics Safety
Friends Committee on Legislation of California
Friends of Harbors, Beaches and Parks
Friends of The Earth
Midpeninsula Regional Open Space District
Natural Resources Defense Council (NRDC)
Nontoxic Schools
Peregrine Audubon Society
Point Blue Conservation Science
Raptors are The Solution
Sierra Club California
The Growing Solutions Fund
Urban Wildland Group, The

Opposition

Agricultural Council of California
American Seed Trade Association
California Agricultural Aircraft Association
California Alfalfa & Forage Association
California Association of Pest Control Advisers

California Association of Wheat Growers
California Cotton Ginners and Growers Association
California Farm Bureau Federation
California Fresh Fruit Association
California Grain & Feed Association
California Seed Association
California Warehouse Association
Croplife America
Far West Equipment Dealers Association
Grower-Shipper Association of Central California
Nisei Farmers League
Pacific Seed Association
Plant California Alliance
Western Agricultural Processors Association
Western Growers Association
Western Plant Health Association

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

Date of Hearing: April 18, 2023

ASSEMBLY COMMITTEE ON ENVIRONMENTAL SAFETY AND TOXIC MATERIALS
Alex Lee, Chair
AB 1716 (Committee on Environmental Safety and Toxic Materials) – As Amended April 10, 2023

SUBJECT: Hazardous wastes and materials: certified unified program agencies

SUMMARY: Makes various technical changes to the six unified hazardous waste and hazardous materials management regulatory programs that are overseen by the Certified Unified Programs Agencies (CUPAs). Specifically, **this bill**:

1) Allows a recyclable material to be excluded from classification as a waste if the material is held in a container, tank, containment building, waste pile, or on a drip pad that meets the requirements of the Department of Toxic Substances Control's (DTSC) interim status regulation applicable to containers, tanks, containment buildings, waste piles, or drip pads that store hazardous waste.

2) Requires a person providing information to the statewide information management system in a format developed by the CUPA's.

3) Defines an "emergency tank system" as an underground storage tank system that stores diesel fuel or kerosene solely for use by one or more of the following stationary emergency devices: an emergency generator that provides power supply in the event of a commercial power failure or disruption; a fire suppression system used to extinguish, control, or prevent spreading of fires; and, a steam generation pressure tank.

4) Requires a unified program facility to pay a permit fee established by the CUPA and any fine or penalty associated with the permit.

5) Authorizes a CUPA to withhold, suspend, or revoke any unified program facility permit for all of the following reasons: failing to pay a permit fee; failing to pay a fine or penalty associated with a permit; and, failing to comply with an order or written notice issued by the CUPA relating to a release of a hazardous material that poses an imminent and substantial endangerment to public health.

6) Clarifies that a CUPA cannot withhold, suspend, or revoke a unified program facility permit of the United States Department of Defense for failing to pay a permit fee or pay a fine or penalty associated with a permit.

7) Exempts from the reporting requirements of the hazardous materials business plan oil-filled electrical distribution equipment that is not part of a utility facility, and liquid or gaseous fuel in fuel tanks on vehicles or motorized equipment.

EXISTING LAW:

1) Enacts the Emergency Planning and Community Right-to-Know Act (EPCRA) of 1986 which was created to help communities plan for chemical emergencies. EPCRA requires industry to report on the storage, use, and releases of hazardous substances to federal, state,

and local governments. It also requires state and local governments, and Indian tribes to use this information to prepare their community for potential risks. (42 United States Code § 11001 et seq.)

2) Defines "Certified Unified Program Agency" or "CUPA" as the agency certified by the Secretary of the California Environmental Protection Agency (CalEPA) to implement the unified program within a jurisdiction. (Health and Safety Code (HSC) § 25404(a)(1)(A))

3) Defines "Unified Program Agency" or "UPA" as the CUPA to implement or enforce a particular Unified Program element. UPAs have the responsibility and authority to implement and enforce the unified program requirements and implementing regulations. (HSC § 25404(a)(1)(C))

4) Requires the Secretary of CalEPA to adopt implementing regulations and implement a unified hazardous waste and hazardous materials management regulatory program, known as the unified program. (HSC § 25404(b))

5) Requires a business to establish and implement a Business Plan of a hazardous material if the business meets specified criteria. (HSC § 25507(a))

FISCAL EFFECT: Unknown.

COMMENTS:

Need for the bill: According to the author, "AB 1716 provides clarity and clears up confusion to better assist the regulators of six state-wide programs that are administered by the CUPAs. Specifically the bill clarifies what is exempt under the hazardous material business plan; updates and clarifies terms dealing with excluded recyclable materials; defines the appropriate equipment included within the definition of "emergency generator underground storage tank systems"; clarifies the ability of a CUPA to assess risk of an accident with a pesticide used by a farm or nursery; and, removes inconsistencies dealing with the prevention of releases of regulated substances at stationary sources regulated under the California Accidental Release Prevention Program."

Certified Unified Program Agencies (CUPAs): CUPAs are local agencies certified by the Secretary of CalEPA to implement and enforce six "unified hazardous waste and hazardous materials management" regulatory programs (Unified Program). Currently, there are 81 CUPAs in California tasked with implementation and enforcement of the following:

1) Hazardous Materials Release Response Plans and Inventories (Business Plans);
2) California Accidental Release Prevention (CalARP) Program;
3) Underground Storage Tank Program (USTP);
4) Aboveground Petroleum Storage Act (APSA);
5) Hazardous Waste Generator and Onsite Hazardous Waste Treatment Programs; and,
6) California Uniform Fire Code: Hazardous Material Management Plans and Hazardous Material Inventory Statements.

Hazardous Materials Business Plan (Business Plan) program: The Business Plan program was enacted in 1986 with the purpose of preventing or minimizing the damage to public health and safety and the environment that can be caused by a release or threatened release of hazardous

materials. The Business Plan satisfies community right-to-know laws, mandated by the 1986 federal EPCRA. Community right-to-know provisions help increase the public's knowledge and access to information on chemicals at individual facilities, their uses, and releases into the environment. Crucially, the Business Plan enables first responders to make informed decisions in the event of an emergency to protect public health, safety, and the environment.

California Accidental Release Prevention (CalARP) program: The goal of the CalARP program is to prevent accidental releases of substances that can cause serious harm to the public and the environment, to minimize the damage if releases do occur, and to satisfy community right-to-know laws. CalARP requires businesses that produce, handle, process, distribute, or store certain chemicals over a threshold quantity to develop a Risk Management Program, prepare a Risk Management Plan (RMP), and submit the RMP to their CUPA. Regulated substances are those listed either on the federal list (40 Code of Federal Regulations § 68.130) or the state list (22 California Code of Regulations § 2770.5). An RMP is a detailed engineering analysis of the potential accidental factors present at a business and the mitigation measures that can be implemented to reduce this accident potential. The RMP contains safety information; a hazard review; operating procedures; training requirements; maintenance requirements; compliance audits; and, incident investigation procedures. The RMP must also consider proximity to sensitive populations such as children or seniors and external factors such as seismic activity.

The California Environmental Reporting System (CERS): CERS is a statewide online system that supports the electronic exchange of unified program information among businesses, CUPAs, and the United States Environmental Protection Agency. Unified program information that must be submitted to CERS includes facility data regarding hazardous material regulatory activities (such as the Business Plan); hazardous waste generation; and inspection, compliance, and enforcement actions.

This bill: AB 1716 makes numerous technical changes to improve the consistency and enforceability of the programs regulated by the CUPAs. Specifically, the bill includes additional equipment as part of the definition of "emergency generator underground storage tank systems"; clarifies that fuel on a vehicle or motorized equipment is exempt from Business Plan requirements; clarifies a CUPA's authority to withhold, suspend or revoke a permit; makes clarifying changes to the excluded recyclable materials requirements; clarifies that certain elements of a Business Plan are not required to be reported by the CUPA if those elements do not exist; requires a CUPA to consult with the Department of Food and Agriculture or a County Agricultural Commissioner when determining the reasonable likelihood that the use of a pesticide by a farm or nursery poses a regulated substance accident risk; and, makes statutory changes to harmonize with the regulations adopted under the CalARP program. While this bill reflects months of work with the CUPAs and stakeholders, discussions with the regulated community and the Administration continue. As the bill moves through the process, there likely will be further clarifications to ensure standard enforcement and compliance among the 81 CUPAs throughout the state.

Arguments in support: According to the California Association of Environmental Health Administrators (CAEHA): "We would like to offer our sincere appreciation to you, your committee and committee staff for carrying this legislation for these local agencies. As you are aware, most of the requirements of the Unified Program exist in statute – thus requiring the law to be periodically amended to keep up with necessary environmental, health and public safety protections as well as changes in the regulated industry.

AB 1716 is intended to be a technical and non-controversial "clean-up" bill that has been in the works for the past three years. It seeks to clarify a number of elements in the Unified Program in order to facilitate compliance – and enforcement. These include:

- Requiring that excluded recyclable material be clearly marked as hazardous waste until such time it is recycled onsite or removed for shipment offsite.
- Refining the definition of retail exemptions and add some strengthening provisions under the Hazardous Materials Business Plan.
- Providing clarifying language for when an UPA may withhold issuance, suspend or revoke a permit.
- Improving the process for submitting a risk management plan.
- Adding to the list of hazardous materials exempt from the business plan requirement a liquid of gaseous fuel in fuel tanks on vehicles or motorized equipment if the tank is integral to the operation of the vehicle or motorized equipment.

This measure is a work in progress because of the complexity of the issues. The recent amendments reflect the commitment of the sponsors and your committee to work collaboratively with all stakeholders in this process. Specifically, an amendment was taken at the request of the Department of Defense (DOD) to ensure that the UPA would not shut down a DOD operation for non-payment of permit fees. Given that the Unified program is a fee-for-service program, CAEHA still needs an assurance from DOD that these facilities will not use this exemption to avoid payment of regulatory fees to local agencies.

We continue to work closely with the regulated industry and the Administration to ensure that these statutory changes do in fact clarify and improve the program as intended."

Arguments in opposition:

None on file.

Related legislation:

1) AB 2059 (Carrillo, Chapter 278, Statutes of 2022). Requires specified suppliers of hazardous materials to maintain records of sales and provisions of hazardous materials of specified quantities to a business in the state for at least one year, and provide such records to a CUPA within five days of a request. Narrows the definition of retail establishment for purposes of hazardous material reporting and limits current exemptions of consumer products as specified from inclusion in a business plan for emergency response to a release or threatened release.

2) AB 1429 (Chen, Chapter 66, Statutes of 2019). Authorizes a business that handles hazardous materials to submit their Business Plan to CERS once every three years, instead of annually, if that business is not required to submit Tier II chemical inventory information under the federal EPCRA of 1986.

3) AB 1500 (Carrillo, 2019). Would have authorized a CUPA or a local health officer to temporarily suspend a facility permit, including the shutdown of a facility, if conditions at the facility pose an imminent or substantial endangerment to public health and safety. Clarifies

the authority of a CUPA, subject to its jurisdiction, to fine or penalize a facility that is operating without a permit.

4) AB 1689 (ESTM Committee, Chapter 159, Statutes of 2017). Adds combustible metals and metal alloys to the list of materials a business must include in its hazardous materials business plan.

REGISTERED SUPPORT / OPPOSITION:

Support

California Association of Environmental Health Administrators (CAEHA) (Sponsor)

Opposition

None on file.

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

Date of Hearing: April 18, 2023

ASSEMBLY COMMITTEE ON ENVIRONMENTAL SAFETY AND TOXIC MATERIALS
Alex Lee, Chair
AB 861 (Santiago) – As Amended March 23, 2023

SUBJECT: Hazardous waste: Exide Technologies facility

SUMMARY: Requires the Board of Environmental Safety (Board) to contract with an entity (contractor) that has expertise in remediating contaminated sites for the purpose of reviewing the Department of Toxic Substances Control's (DTSC's) residential cleanup near the former Exide Technologies (Exide) lead-acid battery recycling facility in the City of Vernon. Specifically, **this bill**:

1) Requires the Board to contract with a contractor that has expertise in remediating contaminated sites for the purpose of reviewing DTSC's residential cleanup near Exide.

2) Requires the contractor to, but not be limited to, meet with members of the community near Exide to hear comments or concerns about the residential cleanup.

3) Requires the contractor to, no later than January 1, 2027, provide its findings to the Board and requires the Board to post these findings on its internet website.

EXISTING LAW:

1) Creates the Hazardous Waste Control Law (HWCL), which authorizes DTSC to regulate the management of hazardous waste in California. (Health and Safety Code (HSC) § 25100 et. seq.)

2) Establishes the Carpenter-Presley-Tanner Hazardous Substance Account Act (HSAA) program to provide for response authority for releases of hazardous substances, including spills and hazardous waste disposal sites, that pose a threat to public health or to the environment. (HSC § 25300 et seq.)

3) Establishes the Board within DTSC with five voting members as follows: three members appointed by the Governor; one member appointed by the Senate Committee on Rules; and, one member appointed by the Speaker of the Assembly. (HSC § 25125).

4) Requires the Board, beginning January 1, 2022, to conduct no fewer than six public meetings per year, at least three of which shall be held outside the greater Sacramento area. (HSC §

5) Requires the Board to do all of the following:
   a) Set fees pursuant to requirements in existing law for hazardous waste fees and the environmental fee;

   b) Hear and decide appeals of hazardous waste facility permit decisions;

   c) Provide opportunities for public hearings on individual permitted or remediation sites;

d) Review and consider for approval the director of DTSC's (director) annual priorities for each program under DTSC and, after consulting with the director, adopt clear performance metrics for DTSC and each of DTSC's programs;

e) Conduct an analysis of the fee structure supporting the department's activities funded by the Hazardous Waste Control Account, the Hazardous Waste Facilities Account, and the Toxic Substances Control Account and, to the extent necessary, develop recommendations for funding the department's activities;

f) Conduct an analysis of the department's programs, the relationship between those programs and related programs in other regulatory agencies, and, to the extent necessary, develop recommendations to improve coordination between programs, and to reduce or eliminate duplication or overlap; and,

g) Develop, in consultation with the director and with consideration of available resources, a multiyear schedule for the discussion of long-term goals for the following departmental activities:

   (i) DTSC's processing of hazardous waste facility permits and proposals to improve the efficiency of the permitting process;

   (ii) DTSC's duties and responsibilities in law and proposals to improve DTSC's ability to meet those duties and responsibilities;

   (iii) The site mitigation program and proposals for the prioritization of the cleanup of contaminated properties; and,

   (iv) DTSC's implementation of its enforcement activities. (HSC § 25125.2)

6) Requires the director, or a designee to present and respond to the Board, if requested by the Board, on any issue or item brought forward by a member of the public, the Board ombudsperson, or a Board member. (HSC § 25125.6)

FISCAL EFFECT: Unknown.

COMMENTS:

Need for the bill: According to the author, "Our goal for nearly a decade has been to get pollution out of our communities by cleaning up Exide's lead contamination. Over the years, the clean-up has been wrought with many problems and frustrations, to say the least. Most recently, the LA Times highlighted findings from a USC study that has caused even more distrust among the community with strained relationships between contractors and many community members. While we learn more about the study, we must improve the relations between the community members and contract workers. AB 861 aims to create trust, accountability and transparency between contractors and community members. My community has suffered enough and we must restore trust."

California Hazardous Waste Control Law (HWCL): The HWCL is the state's program that implements and enforces federal hazardous waste law in California and directs DTSC to oversee and implement the state's HWCL. Any person who stores, treats, or disposes of hazardous waste

must obtain a permit from DTSC. The HWCL covers the entire management of hazardous waste, from the point that hazardous waste is generated to management, transportation, and ultimately disposal of waste into a state or federally- authorized facility.

Carpenter-Presley-Tanner Hazardous Substances Account Act (HSAA): State law, the HSAA, provides DTSC with general administrative responsibility for overseeing the state's responses to spills or releases of hazardous substances, and for hazardous waste disposal sites that pose a threat to public health or the environment. The HSAA provides DTSC with the authority, to investigate, remove, and remediate contamination at sites.

Board of Environmental Safety: Senate Bill 158 (Budget, Chapter 73, Statutes of 2021) created the Board to improve DTSC's transparency, accountability, and fiscal stability. The Board is comprised of 4 part-time members and one full-time member. Three of the Board members are appointed by the Governor, including the full-time Board Chair, and subject to confirmation by the Senate. The Senate and Assembly each appoint one additional member.

The Board's duties and authorities include developing a multi-year schedule to develop long-term goals for DTSC's programs; reviewing and approving the Director's priorities and adopting performance metrics; adjusting fee rates based upon changes made in the annual Budget Act; hearing and deciding hazardous waste facility permit appeals; providing opportunities for public hearings on permitted and remediation sites; conducting an analysis of DTSC's fee structure; conducting an analysis of DTSC's programs and their relationship with related programs in other agencies; and, forming advisory subcommittees on any topic, including fees and environmental justice. SB 158 also established an Office of the Ombudsperson within the Board and requires the DTSC Director and the Board Chair to appear annually before Legislative policy committees.

Exide facility: In 2000, Exide Technologies, headquartered in Georgia, purchased a facility—first opened in 1922—in the City of Vernon, a few miles southeast of downtown Los Angeles. The facility occupied 15 acres in a heavily industrial region with surrounding residential areas. Facility operations included recycling lead-bearing scrap materials obtained from spent lead-acid batteries. The facility processed about 25,000 batteries a day, providing a source of lead for new batteries. The Department of Health Services (DHS) Toxic Substances Control Division issued an interim status authorization in 1981 to the operator of the facility at the time, Gould, Inc. While seeking a hazardous waste facility permit, the facility operated under that interim authorization until it closed in 2015.

Activities conducted at the former Exide facility that may have contributed to contamination of offsite properties include battery breaking, smelting, refining lead, and storage, handling, and transportation of batteries, finished lead product, and other materials associated with lead recycling operations. Many of these activities occurred for decades before environmental statutes or regulations existed and without proper environmental control measures, and may have contributed to releases of lead in the residential area near the facility. In March 2015, DTSC informed Exide that its hazardous waste permit application would be denied, and Exide permanently closed the facility.

Residential cleanup near Exide: The Exide residential cleanup project constitutes the largest cleanup effort undertaken by California. DTSC is the lead agency overseeing the investigation and cleanup of residential properties, schools, parks, daycare, and childcare centers within the approximately 1.7-mile radius of the former Exide facility.

In July 2017, DTSC released the Final Removal Action Plan (Cleanup Plan), and a Final Environmental Impact Report (EIR) related to the cleanup of properties in the preliminary investigation area (PIA). The Cleanup Plan focused on cleaning up approximately 2,500 residential properties, schools, parks, daycare centers, and childcare facilities within the PIA. The PIA includes sections of the cities of Vernon, Bell, Huntington Park, Commerce, Maywood, Los Angeles (Boyle Heights neighborhood), and an area of unincorporated Los Angeles County (East Los Angeles neighborhoods). The Cleanup Plan held the goal of cleaning up all properties with lead sampling results that exceed the representative soil lead concentration of 80 ppm. Additionally, the EIR analyzed a larger cleanup project, up to approximately 10,000 properties in the PIA, allowing DTSC to continue the cleanup of properties beyond the 2,500 initially selected properties, as funds allow.

Funding provided for the Exide cleanup:

- In the 2015 budget, $1.7 million was allocated to DTSC to implement the Exide Enforcement Order and $7 million was allocated to DTSC for sampling up to 1,500 properties near Exide and to develop a cleanup plan;
- In 2016 a $176.6 million General Fund loan was allocated to DTSC for the cleanup of residential properties near Exide;
- In 2018 $6.5 million was allocated to DTSC to sample and cleanup parkways in the communities near Exide;
- In 2019 a $74.4 million dollar loan from the General Fund was allocated to DTSC for clean-up activities relating to Exide. This funding was needed to cover increased costs relating to the current cleanup of residential properties as well as accelerate the cleanup of additional properties within the PIA; and,
- In 2021, SB 158 (Budget, Chapter 73, Statutes of 2021) provided $322 million to DTSC for activities related to the cleanup and investigation of properties contaminated with lead in the communities surrounding the former Exide Technologies facility in the City of Vernon and for job training activities related to the cleanup and investigation of the properties contaminated with lead in the communities surrounding the former Exide facility.

Recent concerns over residential cleanup: Some concerns over the quality of the cleanup were raised in the February 10, 2023, *Los Angeles Times* article, "California's biggest environmental cleanup leaves lead contamination and frustration." According to the article, here are some of the issues raised:

> "California's largest and most expensive environmental cleanup has failed to properly remove lead pollution from some homes and neighborhoods near a notorious battery recycler in southeast Los Angeles County, leaving residents at continued risk, a Times investigation shows. Six years after DTSC embarked on a massive remediation effort around the shuttered Exide plant, numerous homes targeted for cleanup have been left with concentrations in excess of state health standards.
>
> In findings shared exclusively with The Times, researchers at the University of Southern California (USC) and Occidental College reported that they had tested surface soil from the yards of 93 remediated homes and found 73 had a least one sample with lead concentrations

> over the California health threshold of 80 parts per million. They also found that 22 of the homes had a least one sample that tested over 400 parts per million, the federal limit.
>
> The high lead concentrations have raised serious questions about DTSC's oversight of the $750 million project – as well as its commitment to making these predominantly Latino and historically underserved neighborhoods safe from a brain-damaging metal.
>
> Officials with DTSC have acknowledged missteps, but say many of those issues have been addressed. They say the agency is forging ahead with work to remove lead from another 1,500 properties by 2025. "We don't claim to have gotten everything right on this critical project," said Meredith Williams, DTSC's director since 2019. "There was no blueprint based on similar projects that could inform our work. I'm not sure any state department or agency anywhere in the country would have gotten there."

Los Angeles County Supervisors Hilda Solis ad Janice Hahn, who represent the affected communities, are now calling for an audit to explain why residents are still living with lead. "These people thought they had a clean bill of health and, in fact, they don't," Hahn said. "We will not be happy until we know that these homes have been cleaned up --- for good."

As the cleanup progressed, Jill Johnston, an associate professor of environmental health at USC, noticed that many residents were wary of enjoying their yards even after contaminated soil was replaced. To alleviate concerns, Johnston and other researchers offered free testing to people whose homes had been cleaned. What they found was not reassuring. "It raises a lot of questions about how systematic the cleanup is in these homes," Johnston said.

Asked for comment on the USC testing results, DTSC said it needed more information. "While DTSC has been made aware of USC's sampling, we have not been given access to the full study and do not know which properties were sampled, where on the property the samples were taken, or how the samples were analyzed," the agency said in a statement. "Those details will be critical to confirming a scientific apples-to-apples comparison and informing our ongoing work at the site."

This bill: AB 861 requires the Board to hire a contractor to review DTSC's oversight of the residential cleanup near Exide and report back to the Board. Given the importance of cleaning up lead in communities and ensuring that the cleanup actually removed the lead-contaminated soil, it is very reasonable to seek a review of DTSC's work to get this right. It is important to note that at the writing of this analysis, the Committee has not seen or received the USC study. Also, it is also important to remember that DTSC's cleanup plan for the residential area near Exide did state that in some instances lead soil would remain on certain properties under certain conditions: near utility lines; near the base of trees, fences, or structures; and, under hardscape, decks, or areas not readily accessible to residents. AB 861 will help the Legislature and communities near Exide have a better understanding of the efficacy of the cleanup near Exide.

Arguments in support:

None on file.

Arguments in opposition:

None on file.

Related legislation:

1) SB 158 (Budget, Chapter 73, Statutes of 2021). Establishes a 5-member Board of Environmental Safety; revises, recasts and increases hazardous waste fees; makes changes to DTSC financial assurance requirements for hazardous waste facilities and cleanup sites; and, makes improvements to the permitting of hazardous waste facilities.

2) AB 1 (C. Garcia, 2021). Would have created the Board of Environmental Safety within the California Environmental Protection Agency (CalEPA) to provide policy direction to and oversight of DTSC. Would have raised and recast existing fees within the Hazardous Waste Control Account (HWCA) to fill a projected deficit of approximately $18 million. The contents of the bill were later deleted and was no longer pursued due to the compromise legislation in SB 158. The bill was amended to contain provisions in a different subject area.

3) AB 1024 (Santiago, Chapter 474, Statutes of 2021). Requires DTSC to post on its internet website easily accessible information for each contaminated site cleanup project, as specified. Additionally, requires that moneys recovered by the State from responsible parties relating to the Exide cleanup site be used to repay the General Fund, the Lead Acid Battery Cleanup Fund, and any other fund sources for costs incurred during the cleanup of contaminated sites near Exide.

4) AB 995 (C. Garcia, 2020). Would have created the Board of Environmental Safety within CalEPA to provide policy direction to and oversight of DTSC. Raises and recasts existing fees within the HWCA to fill a projected deficit of approximately $18 million. This bill was vetoed by the Governor.

5) AB 2677 (Santiago, 2020). Would have created, within the CalEPA, the position of community liaison, which would be responsible for community outreach and dissemination of information relating to the cleanup of lead contamination in the areas surrounding the Exide facility. Additionally, would have required the community liaison to work with DTSC to address issues raised by residents affected by the lead contamination near Exide. This bill was not heard in the Assembly Environmental Safety and Toxic Materials Committee and subsequently died on file.

6) AB 118 (Santiago, Chapter 10, Statutes of 2016). Appropriated $176.6 million to DTSC to use for activities related to the cleanup and investigation of properties contaminated with lead in the communities surrounding Exide.

REGISTERED SUPPORT / OPPOSITION:

Support

None on file.

Opposition

None on file.

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

Date of Hearing: April 18, 2023

ASSEMBLY COMMITTEE ON ENVIRONMENTAL SAFETY AND TOXIC MATERIALS
Alex Lee, Chair
AB 990 (Grayson) – As Amended April 17, 2023

SUBJECT: Water quality: low impact development: infill housing projects

SUMMARY: Requires the San Francisco Bay Regional Water Quality Control Board to initiate modifications to a specified provision in its 2022 Municipal Regional Stormwater National Pollutant Discharge Elimination System (NPDES) Permit (2022 NPDES Permit); to engage specified stakeholders in developing these modifications; and, to make several findings relating to infill housing before finalizing the modifications. Specifically, **this bill**:

1) Defines "Regional Water Board" to mean the regional board established pursuant to California's Porter-Cologne Water Quality Control Act (Porter-Cologne Act), with geographic boundaries for the San Francisco Bay region, established pursuant to the Porter-Cologne Act.

2) Requires, by July 1, 2024, the Regional Water Board to initiate modifications, pursuant to the federal Clean Water Act (CWA), to Provision C.3.e.ii of the Regional Water Board's 2022 NPDES Permit. Requires, in developing these modifications, the Regional Water Board to:

    a) Consult with, and fully consider input from, the Association of Bay Area Governments (ABAG) and the Metropolitan Transportation Commission (MTC) regarding potential impacts of Provision C.3.e.ii on the development of housing on infill sites, and on the implementation of infill site proposals established in the sustainable communities strategy for the San Francisco Bay Area, developed pursuant to Government Code (GC) § 65080(b)(2); and,

    b) Consult with, and fully consider input from, stakeholders with interests in infill housing development that may be impacted by Provision C.3.e.ii of the 2022 NPDES Permit, including local governments, housing developers, business groups, community-based organizations, and residents.

3) Requires that modifications to Provision C.3.e.ii be completed within six months of the initiation of modifications.

4) Requires the Regional Water Board to make the following findings before finalizing modifications to Provision C.3.e.ii:

    a) Concerns regarding the potential impacts of the draft NPDES permit requirements on the development of housing on infill sites have been adequately addressed;

    b) Draft NPDES permit requirements are feasible and effective strategies for managing stormwater pollution, and will not severely impair the development of housing on infill sites or implementation of infill site proposals established in the sustainable communities strategy for the San Francisco Bay Area, developed pursuant to Government Code (GC) § 65080(b)(2); and,

c) Provision C.3.e.ii is substantially similar to the provision as it was in the Regional Water Board's previous NPDES Permit (2015 NPDES Permit), such that it does not condition its benefits on affordable housing requirements.

5) Specifies that Section 13276.5 of the Water Code (the statute described above) will become inoperative on July 1, 2027 and repealed on July 1, 2028.

6) Requires—before modification, reissuance, or issuance of NPDES permits for stormwater discharges pursuant to the federal CWA—the Regional Water Board to consult with, and fully consider input from, ABAG and MTC on any draft NPDES permit provision for new development and redevelopment that may impact infill housing or the implementation of infill proposals established in the sustainable communities strategy for the San Francisco Bay Area, developed pursuant to GC § 65080(b)(2).

EXISTING LAW:

1) Establishes the federal CWA to regulate discharges of pollutants into the waters of the United States and to regulate quality standards for surface waters. (33 United States Code (USC) § 1251 et seq.)

2) Establishes the NPDES permit program to prescribe waste discharge requirements which, among other things, regulate the discharge of pollutants in stormwater, including municipal stormwater systems; authorizes states to administer their own NPDES permit programs if specified conditions are met. (33 USC § 1342)

3) Authorizes modification of NPDES permits under specified conditions, including when new information becomes available that was not available at the time of permit issuance and would have justified the application of different permit conditions. (40 Code of Federal Regulations § 122.62).

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

5) Divides, for the purpose of the Porter-Cologne Act, the state into nine regions, and establishes boundaries for the San Francisco Bay region. (WC § 13200)

6) Establishes a Regional Water Board for each of the state's nine regions. (WC § 13201)

7) Requires, as part of a regional transportation plan, each metropolitan planning organization to prepare a sustainable communities strategy. Requires the sustainable communities strategy to address specified planning topics, including topics relating to the housing, transportation, and greenhouse gas reduction needs of the region. (GC § 65080 et seq.)

8) Provides that within MTC's jurisdiction, ABAG and MTC shall be responsible for specified portions of the sustainable communities strategy. (GC § 65080(b)(2)(C)(i))

9) Establishes the MTC as a local area planning agency, and not a part of the executive branch of the state government, to provide comprehensive regional transportation planning for the

region comprised of the City and County of San Francisco and the Counties of Alameda, Contra Costa, Marin, Napa, San Mateo, Santa Clara, Solano, and Sonoma. (GC § 66502)

FISCAL EFFECT: Unknown.

COMMENTS:

Need for the bill: According to the author:

"Over the past several years, California has enacted numerous policies to remove barriers that slow down housing production or make it more difficult. However, recent actions taken by the San Francisco Bay Regional Water Quality Board undermine those actions. In May 2022, the Board adopted the reissuance of the Municipal Regional Stormwater Permit (MRP), or MRP 3.0. These new permits included significant changes to the thresholds at which certain parcels are regulated during development and added inclusionary requirements to qualify for the Board's minimum credits, including infill housing. These requirements will have a significant impact on housing projects that are already in the works, which will delay them or potentially kill these projects. The high income thresholds required by these new regulations may leave many developments without the needed space and money to apply for certain low-impact development measures.

AB 990 would require the San Francisco Bay Area Regional Water Quality Board to revise a part of the MRP 3.0 permit that imposed high inclusionary housing requirements. The bill would require the Board to consider input from ABAG and MTC, local governments, housing developers, business groups, and community-based groups in the revision process. The bill would also require the Board to consider input from these groups in future revisions of the permit. Additionally, it would require the revised permit to be substantially similar to the existing permit. This would allow the production of housing that is much needed in the Bay Area, while also recognizing the need to maintain and support the health of our waterways and protecting the Bay."

The National Pollution Discharge Elimination System (NPDES) Permit Program: In 1972, amendments to the Federal Water Pollution Control Act of 1948—the first major United States law to address water pollution—created what is commonly known today as the CWA. The federal CWA establishes the basic structure for regulating discharges of pollutants into waters of the United States and regulating quality standards for surface waters. Under the CWA, the United States Environmental Protection Agency (US EPA) implements pollution control programs that include setting water quality standards for all contaminants in surface waters. The CWA made it unlawful to discharge any pollutant from a point source into navigable waters without a permit.

As authorized by the federal CWA, the NPDES Permit Program controls water pollution by regulating point sources—or discrete conveyances such as pipes, or human-made ditches—that discharge pollutants into waters of the United States. Examples of pollutants include, but are not limited to, rock, sand, dirt, and agricultural, industrial, and municipal waste. Industrial, municipal, and other facilities must obtain an NPDES permit to discharge into surface water.

In California, implementation of the NPDES Permit Program has been delegated to the State Water Board and nine Regional Water Boards, which maintain regional jurisdiction within

boundaries that are based on major watersheds. The State Water Board oversees implementation of the NPDES Permit Program throughout the state and, as such, coordinates with and supports Regional Water Board efforts, and reviews Regional Water Board actions. While the State Water Board has issued some NPDES permits, the Regional Water Boards issue the vast majority of NPDES permits in the state and ensure compliance with their permits through compliance inspections, monitoring report reviews, and enforcement actions. Each Regional Water Board makes critical water quality decisions for its region; in the San Francisco Bay Area, the San Francisco Bay Regional Water Quality Control Board oversees NPDES Permit Program implementation for all or portions of Alameda, Contra Costa, San Francisco, Santa Clara (north of Morgan Hill), San Mateo, Marin, Sonoma, Napa, and Solano counties (see graphic below for the Regional Water Board's jurisdictional boundaries).

Stormwater regulation: Stormwater is defined by the US EPA as runoff generated when precipitation from rain and snowmelt events flows over land or impervious surfaces, without percolating into the ground. Stormwater is often considered a nuisance because it mobilizes pollutants such as motor oil, trash, and microplastics. According to the State Water Board, in most cases, stormwater flows directly to water bodies through sewer systems, contributing a major source of pollution to rivers, lakes, and the ocean. Because of their propensity to contain and mobilize pollutants, stormwater discharges in California are regulated through NPDES permits. However, when properly managed, stormwater may also act as a resource and recharge groundwater sources.

Throughout California, the Municipal Storm Water Program regulates stormwater discharges from municipal separate storm sewer systems (MS4s), defined by the US EPA as a conveyance or system of conveyances, including roads with drainage systems, municipal streets, catch basins, curbs, gutters, ditches, human-made channels, or storm drains. Under the federal CWA, stormwater permits are required for discharges from an MS4 serving a population of 100,000 or more. In California, systems of this size are regulated by the Regional Water Boards under the "Phase I Permit Program." Under this program, the Regional Water Boards adopt NPDES permits to regulate stormwater for municipalities. Most of these permits are issued to a group of co-permittees encompassing an entire metropolitan area. Phase I MS4 permits require the discharger to develop and implement a Stormwater Management Plan/Program, with the goal of reducing the discharge of pollutants to the maximum extent practicable.

Infill development as an environmental, housing, and community revitalization strategy: According to the US EPA, after World War II, many communities in the United States developed outside city and town centers, leaving older neighborhoods, traditional downtowns, and central business districts abandoned and underserved. In the past two decades, some communities have revitalized their central neighborhoods through infill development. However, economically distressed communities have been less able to attract infill development and attain the accompanying economic, environmental, health, and quality of life benefits.

Infill development occurs in a built-up neighborhood, often using vacant land or rehabilitating existing properties. Infill development can bring many benefits, including financial savings for

municipalities, increased property values for residents and businesses, easier travel, reduced pollution, and economic stabilization of neighborhoods.

In a white paper entitled "Infrastructure financing for infill development in the Bay Area," the MTC—the region's transportation planning agency—highlights infill development as a key building strategy. The MTC states that a shift towards infill development has occurred over the past decade as regional market trends and land supply constraints have oriented growth patterns inward, back toward the Bay Area's previously-developed city centers, commercial corridors, and older suburbanized areas. The regional market trends supporting infill development include:

- The concentration of post-recession job creation in San Francisco, the Peninsula, and Silicon Valley;
- Demographic and socioeconomic trends that have increased demand for rental and for-sale housing in higher-density, walkable urban locations with transit access; and,
- Increasing commute times from suburban areas and the relatively limited capacity for additional "greenfield" development in outlying areas where traditional single-family subdivision development has historically occurred.

Regional policy has also driven a shift toward infill development. In 2013, the MTC and ABAG adopted the region's first Sustainable Communities Strategy (required under both state and federal law) that established long-range transportation and land-use/housing plans. The strategy, called "Plan Bay Area," forecasted growth in areas with greater accessibility to transit, job centers, shopping, schools, parks, recreation, and other amenities, while planning for environments that better support walking and biking.

In its 2021 report, "Attracting infill development in distressed communities: 30 strategies," the US EPA recommends that local governments support infill development by expediting developmental review. In an assessment tool, designed to help local governments determine their status or progress for each strategy, the US EPA includes the following question: "Does the state government have incentives or exemptions for infill development in any permit requirements, such as environmental review or stormwater permitting?"

Development of the 2022 NPDES Permit for the San Francisco Bay Area: In 2018, the San Francisco Bay Regional Water Quality Control Board (Board) began the reissuance process for its Municipal Regional NPDES Stormwater Permit, which had last been issued in 2015. The reissuance process began with a plenary steering committee meeting in late 2018, followed by provision-specific workgroup meetings starting in 2019. Both steering committee and workgroup meetings continued into spring 2022, when discussions focused on clarifications, revisions, and comments received for the draft permit.

The tentative order (or draft permit) was released in September 2021 for a 60-day review and comment period. Over the next two months, the Board held a two-day workshop to hear permittee and stakeholder testimony on the tentative order and extended the period for comments to mid-November. From November 2021-March 2022, the Board revised the tentative order based on written comments, testimony, and subsequent discussions with permittees. The revised tentative order was then posted in April, followed by issuance of the finalized 2022 NPDES Permit on May 11, 2022.

Comparison of the 2015 and 2022 NPDES permits: Like the 2015 NPDES Permit, the 2022 NPDES Permit requires permittees to implement Low Impact Development (LID) methods, which are designed to "reduce runoff and mimic a site's predevelopment hydrology by minimizing disturbed areas and impervious cover and then infiltrating, storing, detaining, evapotranspiring, and/or biotreating stormwater runoff close to its sources." Example practices used to adhere to LID principles include measures such as rain barrels and cisterns, green roofs, permeable pavement, preserving undeveloped open space, and biotreatment through rain gardens, bioretention units, bioswales, and planter/tree boxes.

Also like the prior permit, the 2022 NPDES Permit includes an "LID Treatment Reduction Credit," made available out of recognition that density and space limitations for certain types of projects—termed "Special Projects"—may make it infeasible to treat 100% of runoff using LID methods. To be deemed a "Special Project," permittees must first establish that treating 100% of their project's runoff using onsite LID measures is infeasible, and cannot be resolved through offsite LID treatment measures, or by paying in-lieu fees to treat 100% of the runoff with offsite LID treatment measures.

Both the 2015 and 2022 NPDES Permits allow permittees with Special Projects to use the LID Treatment Reduction Credit to treat a percentage (based on the amount of credit they receive) of their project's runoff using specified, non-LID treatment methods that are less space intensive. Having the ability to use less space intensive methods for stormwater management may be especially beneficial for infill housing developments in urban areas, where space constraints can be particularly challenging.

Despite the above similarities, the 2015 and 2022 NPDES permits differ substantially in how their LID Treatment Reduction Credits are structured. In particular, to qualify for the LID Treatment Reduction Credit under the new (2022) permit, high density developments that are planned near transit hubs must meet a different set of requirements. Under the 2015 NPDES Permit, these types of developments could access the LID Treatment Reduction Credit under "Category C Special Project Criteria" that applied to projects that were "transit-oriented," referring to the clustering of homes, jobs, shops, and services in close proximity to public transportation. Under the 2015 NPDES Permit, if a project was deemed "Category C," it was then eligible for the LID Treatment Reduction Credit, calculated as the sum of the project's location, density, and minimized surface parking credits.

In contrast, the 2022 NPDES Permit bases eligibility for the LID Treatment Reduction Credit on affordable housing criteria. Under the 2022 NPDES Permit, the total LID Treatment Reduction Credit is the sum of the project's affordable housing, location, density, and minimized surface parking credits. However, if a Category C Special Project does not qualify for the affordable housing credit, then the project cannot qualify for any of the other credit types; in other words, Special Projects classified as Category C, under the 2022 NPDES Permit, cannot qualify for the LID Treatment Reduction Credit unless they first meet affordable housing specifications. To access the largest affordable housing credit, a project must meet the following requirements:

- 100 percent of a project's dwelling units must have monthly rent/mortgage rates no greater than 30 percent of the moderate household income level, as defined by the California Department of Housing and Community Development;
- At least 75 percent must have rates no greater than 30 percent of the low income household level;

- At least 50 percent must have rates no greater than 30 percent of the very low household income level; and,
- At least 25 percent must have rates no greater than 30 percent of the extremely low household income level.

In the 2022 NPDES Permit, infill developments are specifically mentioned as eligible for a 10 percent location credit, but, again, they cannot access this credit unless they first qualify for an affordable housing credit.

Stakeholder concerns about impacts on housing: A public record of comments from fall 2021 on the tentative order ("Response to Comments on September 10, 2021, Tentative Order") shows that multiple stakeholders raised concerns about possible impacts of the 2022 NPDES Permit on housing development. For example, the record contains the following statement from the Building Industry Association, Bay Area (a membership association comprised of home builders, trade contractors, suppliers, and residential development industry professionals; pg. 212): "California is in a housing crisis, and C.3 [the provision containing the affordable housing criteria] undermines the State's goal of increasing housing production and improved affordability."

The Board responded to the above comment as follows:

"C.3 has been designed to appropriately address the water quality impacts of new and redevelopment projects while supporting those projects' completion. We disagree that C.3 will undermine increased housing production and affordability. We considered California's current housing situation in considering revisions to C.3 from the previous permit, the need to appropriately control pollutants in discharges associated with housing, and approaches taken in other municipalities...The proposed Order takes an incremental, evolutionary approach to addressing discharges that impact water quality that is consistent with NPDES MS4 permits elsewhere in the U.S….Thoughtful and timely incorporation of clean water controls into project designs, as practiced in communities like Portland, Oregon, and Seattle, Washington, and in the Bay Area, minimizes incremental costs while improving livability and, in some cases, reducing costs to residents (e.g., by reducing urban heat island effects, or from reductions in parking costs associated with elimination of mandatory minimum parking requirements to reduce project impervious surfaces). Significant cost drivers for housing are outside the Permit's scope…"

Despite the Board's statement that "cost drivers for housing are outside the Permit's scope," an attachment to the 2022 NPDES Permit also contains the following statement:

"The Order also incentivizes much-needed affordable housing in the Bay Area by providing regulatory flexibility for affordable housing projects in meeting low impact development requirements. The new requirements to address discharges associated with unsheltered homelessness may also encourage the development of housing, as Permittees may control discharges associated with homelessness by providing and expanding access to temporary or permanent housing."

In combination, these statements provoke questions about whether it is reasonable to seek to influence housing policy through an NPDES Permit, and whether it makes sense to try to incentivize affordable housing without considering cost drivers for these projects.

In response to stakeholder concerns, the Board agreed to delay implementation of the above provisions by one year, to July 1, 2023, and convened an Alternative Treatment Systems Workgroup in August 2022 and a Category C Special Projects/Affordable Housing Workgroup in September 2022.

On April 7, 2023, the Board released an informal draft of revised language for both affordable housing and alternative treatment controls, based on workgroup input. The informal draft contains proposed revisions relating to how the affordable housing credits are calculated, although the credits remain based on the percentage of dwelling units a project has in each household income category (moderate, low, very low, extremely low, and acutely low), and the other credits—location, density, and minimized surface parking—are still inaccessible unless a project first qualifies for an affordable housing credit.

The Board plans to take comments until May 1, 2023 and continue workgroup meetings, to discuss and consider additional changes to the draft language. The proposed revisions, along with changes made during the informal review period, will be circulated for a formal 30-day public review period starting in late May. The proposed changes are expected to come before the Board for consideration later in the year.

The 2022 NPDES Permit in the context of a housing crisis: Like much of California, the San Francisco Bay Area is in the midst of a housing crisis. According to the California Association of Realtors Housing Affordability Index, only 20 percent of households in the region can afford to purchase the median priced single-family home (50 percent less than the national average). A 2011 report, "On the edge of homelessness: The vulnerability of extremely low-income households in the Bay Area," from UC Berkeley's Terner Center for Housing Innovation, found that over half of renters, and 80 percent of low-income renters, are "rent burdened," meaning that they are in households paying more than 30 percent of their income toward housing and, as a result, have less to pay for other essentials such as food, transportation, and health care. Data from the state's Homeless Data Integration System also show that in 2022, over 37,000 Bay Area residents experienced homelessness on a given night. A major cause of the state's housing crisis is the mismatch between the supply of housing and the need for housing. The Statewide Housing Plan adopted by the California Department of Housing and Community Development in 2022 determined that, to address this mismatch, in the next eight years, the Bay Area will need approximately 440,000 units of housing, including 180,000 units affordable to lower income households.

Unlike market-rate housing, which is privately financed, the creation of affordable housing requires public subsidization. This subsidization is necessary to compensate for the fact that the rents or sales prices of these deed-restricted units cannot cover the cost of construction. Recognizing this, the Legislature has expended $16 billion in public subsidy for affordable housing, in addition to the $4 billion approved by voters for bonds. However, the amount of public subsidy does not fully meet the demand for funding. This is exemplified by the fact that, for the most recent round of funding for affordable housing projects issued by the Department of Housing and Community Development, there were six times as many projects seeking funding as there was funding available.

Despite the flexibility that the Board sought to incorporate into the 2022 NPDES Permit's affordable housing requirements, it is unclear if the requirements are achievable, given that a key impediment to the production of affordable housing is the lack of public subsidy. It is also

unclear to what extent ABAG and MTC had opportunities to provide meaningful feedback as the Board developed the 2022 NPDES Permit's affordable housing requirements. The most recent Sustainable Communities Strategy, called "Plan Bay Area 2050" and released in October 2021, contains a 30-year plan with strategies designed to improve housing, the economy, transportation, and the environment across the San Francisco Bay Area. The plan's housing strategies are also designed to encourage less water use by promoting a mix of different housing types, including infill development and multi-family developments. It is unclear whether the 2022 NPDES Permit's affordable housing provisions may impact implementation of the plan's housing strategies.

This bill: AB 990 requires the San Francisco Bay Regional Water Quality Control Board to initiate modifications to its 2022 NPDES Permit, to address concerns relating to the permit's affordable housing requirements. The bill also requires that the Board engage stakeholders and consult with ABAG and MTC; these requirements can help inform the direction of conversations that the Board has already initiated regarding potential permit revisions, and ensure that unintended adverse impacts on infill housing are addressed through the revisions.

Arguments in support: According to one of the bill's co-sponsors, the Housing Action Coalition:

"In May 2022, the San Francisco Bay Regional Water Quality Control Board adopted the reissuance of the Municipal Regional Stormwater Permit, or MRP 3.0. The new MRP 3.0 permits added additional inclusionary criteria to qualify for Low Impact Development (LID) Treatment Reduction Credits for certain housing projects, including infill housing.

The changes made to the MRP 3.0 will have a major impact on a number of developments currently in process by forcing them to be redesigned, ultimately delaying or ending the projects altogether. Many developments may not even qualify for the LID credits due to the high inclusionary zoning thresholds."

Arguments in opposition: None on file.

Related legislation:

1) AB 140 (Budget Committee, Chapter 111, Statutes of 2021). Establishes the Regional Early Action Planning Grants Program of 2021 for the purpose of providing regions with funding for transformative planning and implementation activities. Defines "transformative planning and implementation activities" to mean housing, planning, and infrastructure investments that support infill housing, and other actions that enable meeting housing goals that also result in per capita vehicle miles traveled reductions, including accelerating infill development, supporting residents through realizing multimodal communities, shifting travel behavior through reducing driving, and increasing transit ridership.

2) SB 10 (Wiener, Chapter 163, Statutes of 2021). Authorizes a city or county to pass an ordinance that is not subject to the California Environmental Quality Act to zone any parcel for up to ten units of residential density if the parcel is located in a transit-rich area or an urban infill site.

3) SB 205 (Hertzberg, Chapter 470, Statutes of 2019). Requires a business operation in a regulated industry to demonstrate enrollment in the NPDES permit program when applying for an initial business license or business license renewal.

4) SB 743 (Steinberg, Chapter 386, Statute of 2013). Provides that aesthetic and parking impacts of a residential, mixed-use residential or employment center project, on an "infill site" and within a "transit priority area," cannot be considered significant impacts on the environment.

REGISTERED SUPPORT / OPPOSITION:

Support

Bay Area Council (Co-Sponsor)
Housing Action Coalition (Co-Sponsor)
California Apartment Association
California Building Industry Association

Opposition

None on file.

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

Date of Hearing: April 18, 2023

ASSEMBLY COMMITTEE ON ENVIRONMENTAL SAFETY AND TOXIC MATERIALS
Alex Lee, Chair
AB 1597 (Alvarez) – As Introduced February 17, 2023

SUBJECT: Water quality: California-Mexico cross-border rivers

SUMMARY: Appropriates $50 million to the North American Development Bank (NADBank) for loans, grants, and direct expenditures that address water quality problems of the California-Mexico cross-border rivers, including the New and Tijuana Rivers; authorizes appropriation of funds to recipients that are authorized to work in Mexico, if recipients are, or consent to be, subject to the jurisdiction of the California courts for enforcement purposes, and if the project will provide water quality benefits to California. Specifically, **this bill**:

1) Requires $50 million to be made available from the General Fund, upon appropriation by the Legislature, to NADBank for loans, grants, and direct expenditures to address water quality problems arising in California-Mexico cross-border rivers. Establishes the following requirements for the expenditure of these funds:

    a) Requires that funds be made available for purposes consistent with the New River Water Quality, Public Health, and River Parkway Development Program, and water quality projects for the Tijuana River.

    b) Requires that 5 percent of funds be made available for the administrative costs of NADBank, and 5 percent for the administrative costs of the State Water Resources Control Board (State Water Board) to support implementation.

    c) Requires NADBank—in consultation with the California Environmental Protection Agency (CalEPA), State Water Board, San Diego Regional Water Quality Control Board, Colorado River Basin Regional Water Quality Control Board, and International Boundary and Water Commission (IBWC) Minute 320 Work Groups—to administer the funds and engage in specified activities that include developing grant guidelines that establish a timeline for funding disbursement, project prioritization, and monitoring requirements.

2) Requires expenditures to be consistent with the work of the CalEPA Border Affairs Program and for priority to be given to projects that have funding committed by the United States (U.S.), Republic of Mexico, State of Baja California, or the Cities of Tijuana or Mexicali.

3) Authorizes, for activities or projects in the State of Baja California, the provision of funding through direct expenditures and grants to an eligible recipient authorized to work in Mexico. Establishes the following provisions for the purposes of this authorization:

    a) Specifies that eligible funding recipients are entities that are, or consent to be, subject to the jurisdiction of California courts for the purpose of funding agreement enforcement.

    b) Authorizes, to the extent that a funding recipient is eligible to undertake a project, expenditures to be made available for actions in California or the State of Baja California,

provided the actions provide water quality benefits to the portions of rivers and coastal waters that are in California.

4) Authorizes grant funding to be conditioned on enforceability and accountability mechanisms agreed upon by the State Water Board and the recipient, including, but not limited to, both of the following:

   a) Progress reports accompanying each disbursement request; and,

   b) An enforceable commitment to operate and maintain the funded project for the project's useful life or 30 years, whichever is less.

5) Provides that the authority to enforce the terms of funding agreements pursuant to this bill is expressly reserved for the Office of the Attorney General.

6) Requires CalEPA to notify the leadership office in each house of the Legislature about cross-border collaboration and the expenditure of funding made available pursuant to this bill.

7) Authorizes direct expenditures under this section to be provided in a lump sum in advance of costs incurred.

EXISTING LAW:

1) Establishes the Porter-Cologne Water Quality Control Act, which prohibits the discharge of pollutants to surface waters unless the discharger obtains a permit from the State Water Board. (Water Code § 1300 et seq.)

2) Requires the California-Mexico Border Relations Council (Council) to establish the New River Water Quality, Public Health, and River Parkway Development Program to coordinate funding for, and the implementation of, the strategic plan developed by the Council. (Public Resources Code (PRC) § 71103.6)

3) Requires—upon an appropriation of funds from the Legislature—CalEPA and the California Natural Resources Agency, including their subsidiary agencies, to collaborate to create a Tijuana River Valley Watershed Action Plan, known as the Tijuana River Plan, as specified. (PRC § 71107)

FISCAL EFFECT: Unknown.

COMMENTS:

Need for the bill: According to the author:

"The border region and surrounding communities have been suffering from an environmental disaster for decades and the problem continues to worsen. In December 2022, billions of gallons of urban runoff and untreated wastewater flowed across the California-Mexico border impacting sensitive habitat and putting public health at risk. In March 2023, the Scripps Institution of Oceanography released a study that found a significant amount of potentially infectious bacteria in the City of Imperial Beach that has been linked to cross-border pollution. This is a regional problem that requires a regional solution and California needs to be a partner in this effort.

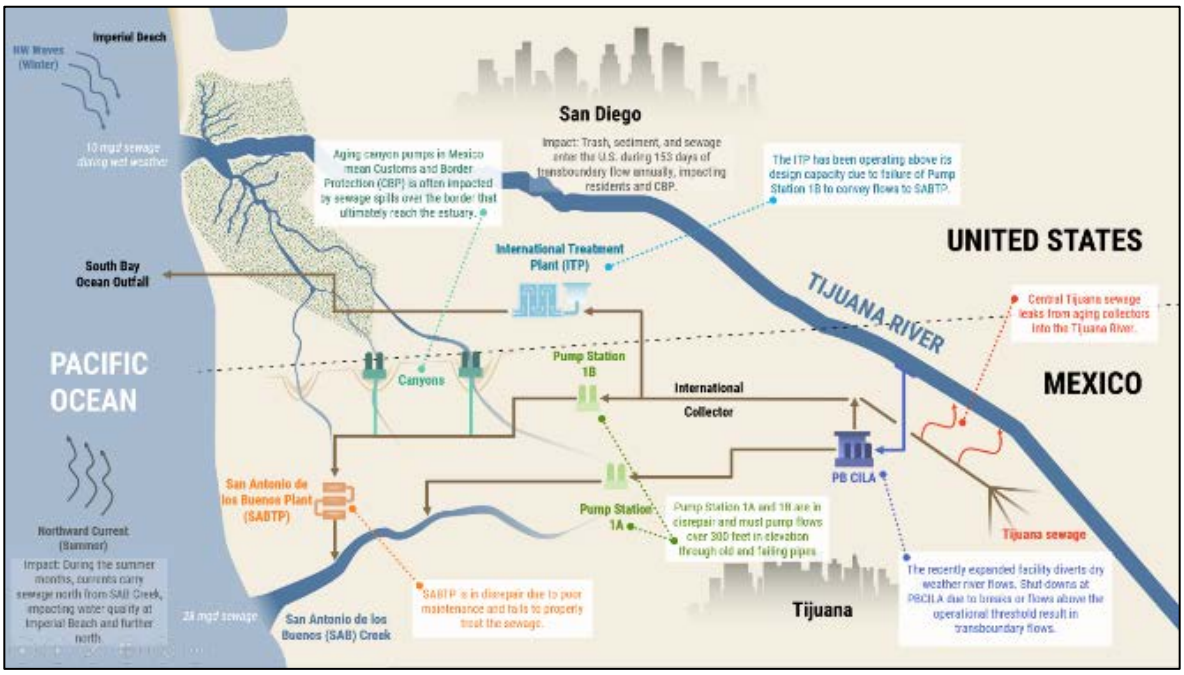
California's shoreline is routinely impacted by this pollution, with Imperial Beach being closed for 365 days in 2022 and more than 200 days on average the past 3 years. In 2023, beaches more than 50 miles north of the border (Oceanside) have been closed due to cross-border pollution.

NADBank can leverage the proposed public dollars with existing Bank funding to maximize the investment and have a trusted partner oversee sustainable infrastructure development to mitigate this environmental disaster."

Cross-border rivers: According to the United States Environmental Protection Agency (US EPA), several waterbodies in the border region—including the Tijuana and New rivers—either originate in or run through Mexico and flow northward into the United States. Transboundary water migration and lack of clean drinking water affect both the environment and the health of people on each side of the border. Since the 1990s, actions at both the federal and state levels have been taken, out of recognition that human health along the border suffers from a lack of access to proper water and wastewater service and that investments are needed to address inadequate wastewater infrastructure. Below is a description of challenges, as well as actions taken, for both the Tijuana and New Rivers.

The Tijuana River:

- *Tijuana River watershed:* According to the San Diego Regional Water Quality Control Board, the Tijuana River watershed is a large binational watershed of approximately 1,750 square miles that lies across the California-Mexico border. A large portion of the watershed (approximately 75%) is within Mexico and encompasses the densely urbanized city of Tijuana, Mexico. The watershed drains into the Tijuana River Estuary in the U.S. and ultimately to the Pacific Ocean in the city of Imperial Beach.



Land uses in the watershed are diverse, from largely undeveloped open space in the upper watershed to highly-urbanized, residential, commercial, military, and industrial areas in the lower watershed. Over the past 30 years, Tijuana, Mexico has experienced tremendous

population and industrial growth, along with rapid urbanization, which has strained the aging Mexican sewage infrastructure. Emerging sewage infrastructure inadequacies have created recurring pollution problems on both sides of the California-Mexico border. At times, sewage generated on the Mexico side of the watershed travels north into California through the Tijuana River or other cross-border canyon tributaries in the Tijuana River Valley. The sewage flows degrade water quality in the Tijuana River Estuary and adjacent beach coastal waters and also pose a significant public health risk to residents and visitors along both sides of the border. While significant improvements in wastewater treatment have, in recent years, improved water quality on both sides of the border, stormwater flows continue to bring substantial amounts of sediment, trash, and other contaminants into the valley, which impairs water quality, jeopardizes public health, threatens life and property from flooding, degrades valuable habitats, and impacts recreational opportunities for residents and visitors. As the *San Diego Union-Tribune* reported in 2021, Tijuana River pollution required the closing of beaches north of the border on 295 days in 2020. Deteriorating water quality has led to both conflict and increased efforts to address water quality in the Tijuana River. The above graphic, from the US EPA, summarizes key challenges and community impacts associated with pollution in the Tijuana River.

- *International Boundary and Water Commission (IBWC):* Bi-national concerns about Tijuana River water quality date back to 1934, when the U.S. and Mexican governments instructed the International Boundary Commission (predecessor to IBWC) to prepare a report on the Tijuana sewage problem. When the U.S. and Mexico signed the Water Treaty of 1944, Article III made the use of cross-border waters subject to "sanitary measures or works." The two governments also agreed to give preferential attention to the solution of all border sanitation problems.

  In light of continued cross-border sanitation issues, the U.S. and Mexico created a binational interagency "Clean Water Partnership." In 1990, the IBWC authorized construction of a treatment plant on the Tijuana River, north of the border, called the South Bay International Water Treatment Plant. This treatment plant is capable of treating 25 million gallons per day (MGD), but has an expansion capability of up to 100 MGD. Once treated, water from the plant flows through a 4.5-mile, 11-foot pipe leading to the South Bay Ocean Outfall.

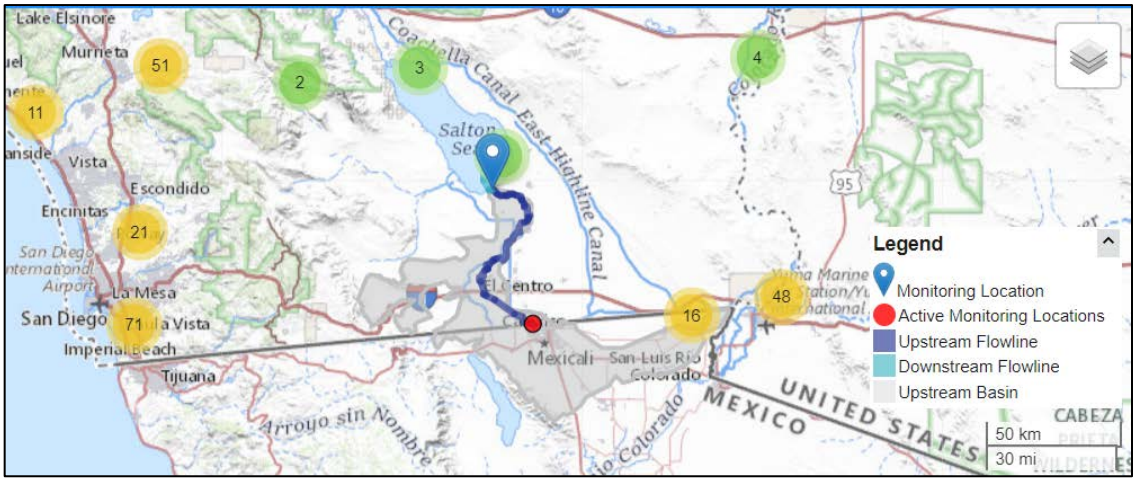
- *Tijuana River Valley Recovery Team:* In 2009, responding to public complaints and concerns regarding trash, sediment, water pollution, and flooding in the Tijuana River, the San Diego Regional Water Quality Control Board convened the organizations that eventually formed the Tijuana River Valley Recovery Team (Recovery Team). The Recovery Team is a collaboration of more than 30 federal, state, and local agencies and other interested parties from both sides of the U.S./Mexico border, and is focused on addressing sediment, trash, and associated environmental issues. In 2014, the San Diego Regional Water Quality Control Board convened a binational summit to identify specific projects to advance through a strategy developed by the Recovery Team, as well as the IBWC Minute 320, then in development. The IBWC Minute 320 was signed in October 2015 and acknowledged that in the Tijuana River Basin, there are various transboundary issues that require binational coordination, including water quality and the control of wastewater discharges. To address these issues, the IBWC formed three work groups focused on water quality, sediment, and solid waste. Each work group is made up of stakeholders from both countries who have relevant interest and expertise.

The San Diego Regional Water Quality Control Board states that although the Recovery Team has made progress on several projects, the flows of waste across the border continue largely undiminished, and local and state agency members of the Recovery Team continue to spend millions of dollars annually removing transboundary wastes. Private property owners, residents, visiting members of the public, U.S. Customs and Border Protection agents, and U.S. Navy facilities in Imperial Beach and Coronado continue to be impacted by unabated transboundary flows of waste.

- *U.S.-Mexico-Canada Agreement:* When Congress approved the U.S.-Mexico-Canada Agreement in 2019, California Congressional representatives succeeded in adding $300 million to identify infrastructure solutions to address the significant negative impacts of water pollution in cross-border rivers on water quality, public health, and the environment. In 2020, the U.S. government committed funding to the US EPA to be used to address Tijuana River water quality problems. In November 2021, U.S. Ambassador Ken Salazar and US EPA Administrator Michael S. Regan met with Mexican officials and stakeholders at the Tijuana border to discuss the results of the US EPA's alternatives analysis for solutions to Tijuana River water quality issues. The results outlined a plan to address water quality on both sides of the border, throughout the watershed. The plan identifies an estimated capital cost of approximately $627 million and approximately $25 million for operations and maintenance.

The New River:

- *The New River Waterway:* The New River is a transboundary river that flows from Mexicali, Mexico into the City of Calexico and drains into the Salton Sea. According to the Colorado River Basin Regional Water Quality Control Board, although discharges from U.S. sources are treated and disinfected to meet state and federal standards, the water entering the U.S. contains raw sewage; industrial, domestic, and agricultural wastes; trash; and, other solid pollutants, owing mostly to Mexicali's overburdened and deteriorating infrastructure. Bacteria from fecal matter, present in raw sewage flowing from Mexicali, accounts for the highest concentration of waste. This results in a serious threat to public health and ecosystems, and hinders economic development in the Imperial Valley. The graphic below, from the United States Geological Survey, shows the New River watershed and the broad expanse of land on either side of the border that feeds water into the New River.



The U.S. and Mexico acknowledged the water's poor quality as far back as the 1940s, but took little action until 1980, and only after the situation had worsened due to a population boom and industrial development in Mexicali.

- *Binational Technical Committee:* As part of the U.S./Mexico Water Treaty of 1944, the Binational Technical Committee (BTC) was established in 1994. The IBWC established teams of technical personnel and technical advisers from agencies of each country with expertise in wastewater infrastructure. The BTC serves to help identify pollution problems, oversees the development and implementation of the binational sanitation projects agreed upon by Mexico and the U.S., and makes project and policy recommendations to address New River pollution from Mexico.

  A series of quick fix sanitation projects were implemented in various locations in Mexicali in 1992 and 2007 as part of the U.S./Mexico Water Treaty. These projects focused on improvements to the collection system and rehabilitation of pumping plants in 1992, and the construction of a new wastewater treatment plant in 2007. Pollution worsened due to rapid population growth and industrial development in Mexicali. These projects were not designed with this population boom in mind, resulting in treatment capacity issues. In 2013, new problems began to emerge in Mexicali due to aging infrastructure, inadequate oversight of operations and maintenance, and continued sewage spills. The failing sanitation system in Mexicali continues to discharge raw sewage and other waste into the New River, which in turn threatens the health of Calexico residents, harms wildlife and the ecosystem, and undermines Salton Sea management and restoration efforts.

- *New River Improvement Project:* Other efforts to help address New River pollution at the border include the New River Improvement Project Strategic Plan. AB 1079 (Perez, 2009) required the California-Mexico Border Relations Council to create a strategic plan to study, monitor, remediate, and enhance the New River's water quality to protect human health. The project plan, originally published in 2011, was amended in 2016 and features a pipe that will encase dirty water as it bypasses Calexico, minimizing the community's exposure to the polluted river, as well as an automated trash screen at the border to remove solid waste. The estimated cost of the project is $28 million. Unlike the "fixes" to Mexicali's sanitation system that were completed by 2007 and funded by both countries, the New River Improvement Project is a California undertaking.

California Legislature's work on border river water quality: The California Legislature has been considering and addressing water quality in its border rivers for the last 20 years, as water quality issues have evolved. It has passed bills to require state agency projects to improve water quality and held informational hearings on efforts to improve border river water quality. State budgets since 2017 have included appropriations for border river water quality, as follows:

- 2017: Reappropriated $2.1 million from a 2014 California Wildlife, Coastal, and Park Land Conservation Fund of 1988 for acquisition of lands in the Tijuana River Valley;
- 2019: Appropriated $15 million for Tijuana River pollution control;
- 2020: Appropriated $18 million from the General Fund and $10 million from Proposition 68 water bond funds for the New River Project;
- 2021: Appropriated $20 million to improve water quality in border rivers; and,
- 2022: Appropriated $15 million for border rivers cleanup.

The North American Development Bank (NADBank): AB 1597 is substantially similar to a prior year bill, AB 2248 (E. Garcia, Ward, 2022), although a key difference is that AB 1597 provides funding to NADBank to support projects that address water quality problems arising in California-Mexico cross-border rivers; AB 2248 would have provided funding through the State Water Board for similar purposes. NADBank is a binational financial institution established by the governments of the U.S. and Mexico in 1994, to fund the development of environmental infrastructure within 100 kilometers (about 62 miles) north of the international boundary in the four U.S. states of Texas, New Mexico, Arizona and California, and within 300 kilometers (about 186 miles) south of the border in the six Mexican states of Tamaulipas, Nuevo Leon, Coahuila, Chihuahua, Sonora, and Baja California. NADBank is capitalized in equal parts by each government and provides both financing and technical assistance to support the development and implementation of environmental infrastructure projects.

As a binational financial institution, NADBank is subject to U.S. laws and a charter developed jointly by the U.S. and Mexico. NADBank is authorized to make investments in environmental infrastructure on both sides of the border, with the aim of preserving, protecting, and enhancing the environment to advance the well-being of people in both countries. Infrastructure projects funded through NADBank address issues relating to potable water, wastewater treatment, and solid waste management; they also include projects aimed at improving air quality, conserving water, reducing energy consumption, and developing renewable energy sources.

In addition to an initial capital investment of $202.5 million each from the U.S. and Mexican governments, NADBank receives an annual federal appropriation through the US EPA's Border Environment Infrastructure Fund (BEIF), totaling $711 million since 1997. According to NADBank, the amount of requested funds outstrips available funding; for the 53 projects NADBank currently has in its pipeline for BEIF, $352.3 million have been requested, but only $52 million are available.

Despite the funding shortfall through BEIF, as of December 31, 2022, NADBank had been able to invest a total of $10.8 billion, through loans and grants, in 295 projects—142 in the U.S., and 153 in Mexico—by combining funding from the US EPA, grants from other entities, and additional funds garnered through financial leveraging. Of these projects, 199 were focused on water and resulted in the following infrastructure gains: 26 water treatment plants, 350 miles of water distribution pipes, 66 wastewater treatment plants, and 1,638 miles of sewer lines.

As of December 2022, NADBank had several active projects involving the Tijuana and New Rivers, including the following:

- A project focused on the rehabilitation of a sewer main in Tijuana, Mexico, to reduce the risk of line breaks and leaks, and help prevent the discharge of untreated wastewater that could affect the Tijuana River.

- Two projects focused on the rehabilitation of wastewater infrastructure, including the replacement of 7.3 miles of pipeline in a wastewater collection system, in Mexicali, Mexico, to ensure the provision of adequate infrastructure that can safely convey wastewater to existing treatment plants, and to reduce the risk of pipeline failures that can cause sewage overflows into the New River.

In addition to appropriating funds through NADBank, AB 1597 requires priority to be given to projects that have funding committed by the U.S., Republic of Mexico, State of Baja California, or the Cities of Tijuana or Mexicali. Complementing the bill's investment with NADBank's other funding streams could strengthen efforts to address the issues plaguing the Tijuana and New Rivers, by increasing the number or scale of projects receiving funding.

This bill: AB 1597 aims to address water quality and public health issues arising from the migration of pollution through rivers that flow from Mexico into California. The bill appropriates $50 million to NADBank, a bi-national institution that is authorized to fund environmental infrastructure projects in both the U.S. and Mexico.

Arguments in support: According to a coalition of support organizations, comprised of the League of California Cities, California State Association of Counties, and the Rural County Representatives of California:

"The New River is the most polluted river in the United States and poses significant acute and long-term health risks for nearby populations, including the City of Calexico. The New River is contaminated by raw sewage, pathogens, trash, and numerous other pollutants that result from industrial activities across the border in Mexicali, Baja California. Similarly, the Tijuana River is often contaminated by raw sewage resulting from the failure or overflow of sewage systems in Mexico. These problems present chronic and persistent health risks for Californians and the environment. While both the United States and Mexico have historically provided funding for cross-border pollution prevention projects, funding is always in short supply. As such, even a modest investment in state resources in cross-border pollution prevention projects could result in substantial state savings in avoided health impacts, mitigation measures, and emergency response. Even more importantly, this bill will help protect the health and safety of hundreds of thousands of Californians who live, work, and recreate in the border region."

Arguments in opposition: None on file.

Double-referral: Should AB 1597 be approved by the Assembly Environmental Safety and Toxic Materials Committee, it will be re-referred to the Assembly Judiciary Committee.

Related legislation:

1) AB 1567 (E. Garcia) of this Session would enact the Safe Drinking Water, Wildfire Prevention, Drought Preparation, Flood Protection, Extreme Heat Mitigation, and Workforce Development Bond Act of 2024, which, if approved by the voters, would authorize the issuance of $15.1 billion in bonds to finance safe drinking water, wildfire prevention, drought preparation, flood protection, extreme heat mitigation, and workforce development program projects. At least $50 million each would be made available for the Tijuana River Border Pollution Control Project and the New River Water Quality, Public Health, and River Parkway Development Program. This bill is currently pending action before the Assembly Water, Parks, and Wildlife Committee.

2) AB 2248 (E. Garcia, Ward, 2022). Would have provided $100 million to the State Water Board from the state's General Fund, upon appropriation by the Legislature, for grants and direct expenditures to address water quality problems arising in California-Mexico cross-border rivers. This bill was vetoed by Governor Newsom.

3) SJR 22 (Hueso, Chapter 241, Statutes of 2018). Urges the federal government and the U.S. Section of the IBWC to take immediate action to adequately address cross-border pollution in the Tijuana River Valley.

4) SB 507 (Hueso, Chapter 542, Statutes of 2017). Authorizes funds granted to the County of San Diego in the 2014 Budget Act to be available for development, improvement, rehabilitation, protection, restoration, and studies of natural and park lands in the Tijuana River Valley.

5) AB 1059 (E. Garcia, Chapter 584, Statutes of 2015). Requires the Office of Environmental Health Hazard Assessment to update its CalEnviroScreen 2.0 tool by using any relevant environmental data relating to known impacts of air pollution, water pollution, and toxic sites on the environmental quality of the communities in the California-Mexico border region.

6) AB 965 (E. Garcia, Chapter 668, Statutes of 2015). Requires the California-Mexico Border Relations Council to establish the New River Water Quality, Public Health, and River Parkway Development Program to coordinate funding for, and the implementation of, recommendations from the New River Strategic Plan. Provides the Border Relations Council with a consultative and coordinating role on the development, implementation, and funding of specified border-related projects.

7) SCR 90 (Hueso, Chapter 80, Statutes of 2014). Declared the Legislature's intent to work with the Tijuana River Valley Recovery Team to take various actions to protect and preserve the Tijuana River Valley; to encourage collaboration with the team to protect and enhance natural resources through improved management of sediment and trash, flood control, ecosystem management, and recreation and education; and, to promote bilateral ties with Mexico.

8) AB 1079 (V. M. Pérez, Chapter 382, Statutes of 2009). Required the Border Relations Council to create a strategic plan to study, monitor, remediate, and enhance the New River's water quality to protect human health and develop a river parkway suitable for public use and enjoyment.

9) AB 3021 (Núñez, Chapter 621, Statutes of 2006). Establishes the Border Relations Council to serve as the central organizing body for overseeing and collaborating on California-Mexico border issues.

REGISTERED SUPPORT / OPPOSITION:

Support

Calchamber
California State Association of Counties (CSAC)
City of Coronado
City of Imperial Beach
League of California Cities
Rural County Representatives of California (RCRC)
San Diego Regional Chamber of Commerce
Wildcoast

Opposition

None on file.

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