

Date of Hearing: March 22, 2022

ASSEMBLY COMMITTEE ON ENVIRONMENTAL SAFETY AND TOXIC MATERIALS

Bill Quirk, Chair

AB 1817 (Ting) – As Amended March 15, 2022

SUBJECT: Product safety: textile articles: perfluoroalkyl and polyfluoroalkyl substances (PFAS)

SUMMARY: 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 perfluoroalkyl and polyfluoroalkyl substances (PFAS), and requires a manufacturer to use the least toxic alternative when removing regulated PFAS in textile articles to comply with the provisions of this bill. Specifically, **this bill**

- 1) Defines "apparel" as either of the following:
 - a) Clothing items intended for regular wear or formal occasions, including, but not limited to, undergarments, shirts, pants, skirts, dresses, overalls, bodysuits, vests, dancewear, suits, saris, scarves, tops, leggings, school uniforms, leisurewear, athletic wear, sports uniforms, everyday swimwear, formal wear, onesies, bibs, diapers, footwear, and everyday uniforms for workwear; or,
 - b) Clothing items intended primarily for outdoor activities, including, but not limited to, hiking, camping, skiing, climbing, bicycling, and fishing.
- 2) Excludes personal protective equipment for industrial applications from the definition of clothing items intended for regular wear or formal occasions.
- 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 perfluoroalkyl and polyfluoroalkyl substances or PFAS" as either of the following:
 - a) PFAS that a manufacturer has intentionally added to a product and that have 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) The presence of PFAS in a product or product component at or above the practical quantitation limit, as measured in total organic fluorine.
- 5) Defines "textile" as any item made in whole or part from a natural, manmade, or synthetic fiber, yarn, or fabric, and includes, but is not limited to, leather, cotton, silk, jute, hemp, wool, viscose, nylon, or polyester.
- 6) Defines "textile articles" as textile goods of a type customarily used in households and businesses, and includes, but is not limited to, apparel, costumes and accessories, handbags,

backpacks, draperies, shower curtains, furnishings, upholstery, beddings, towels, napkins, and tablecloths.

- 7) Excludes carpets and rugs regulated under the Safer Consumer Products (Green Chemistry) Program from the definition of "textile articles."
- 8) Prohibits, commencing on January 1, 2024, a person from distributing, selling, or offering for sale in the state any textile articles that contain regulated perfluoroalkyl and polyfluoroalkyl substances or PFAS.
- 9) Requires a manufacturer to use the least toxic alternative, including alternative design, when removing regulated perfluoroalkyl and polyfluoroalkyl substances or PFAS in textile articles to comply with the provisions of this 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. (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 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, in commerce any cosmetic product that contains any of 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) 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)
 - a) Identifies, pursuant to regulation, chemicals that are candidates for the above-described process that exhibit a hazard trait and/or an environmental or toxicological end-point and is included on one of many specified authoritative lists (this is often referred to as the "list of lists"). (22 California Code of Regulations (C.C.R.) § 69502.2)
 - b) Requires, pursuant to regulation, DTSC to consider various factors when identifying and implementing regulatory responses for priority products, such as public health and environmental protection. (22 C.C.R. 69506)
- 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, "Perfluoroalkyl and polyfluoroalkyl substances (PFAS) are a class of "forever" chemicals that are widely used, extremely persistent, and can lead to adverse health outcomes. While PFAS has been banned in a variety of consumer products, these chemicals are still utilized in textiles, including clothing, predominantly for stain and water repellency. The use of PFAS in textiles not only impacts the health of consumers, but contaminates our environment when PFAS-containing fabrics get washed. In California, water systems serving up to 16 million people have already been found to have PFAS contamination, and it is more prevalent in disadvantaged communities. California has already enacted a series of laws to protect consumers and the environment from the hazardous impacts of PFAS, including AB 1200, which I championed and was signed into law just last year, prohibiting the use of PFAS in paper-based food packaging. These laws were passed on the premise that prevention is the best cure, and eliminating PFAS in consumer products is the best way to reduce the adverse health impacts of these chemicals on California residents. AB 1817 would extend this same logic to the textile industry by banning the sale of textiles that contain PFAS by 2024. By forcing manufactures to use safer alternatives, AB 1817 ensures California consumers and the environment are protected [from] the toxic impacts of these forever chemicals."

Perfluoroalkyl and polyfluoroalkyl substances (PFAS): PFAS are a class of synthetic chemicals that have been in use in industrial and consumer products since the 1940s for their heat, water, and lipid resistance properties. PFAS are synthetic fluorinated organic compounds that contain at least one fully fluorinated carbon atom that share one common trait – extremely stable carbon-fluorine bonds that make them or their final degradation products highly persistent in the environment. Most PFAS are mobile and some are volatile, leading to contamination of soils and groundwater far from the source of the PFAS emission. PFAS have been detected in all corners of the globe, from penguin eggs in Antarctica to polar bears in the Arctic.

PFAS have been used extensively in surface coating and protectant formulations due to their unique ability to reduce the surface tension of liquids, including in consumer products such as carpets, clothing, fabrics for furniture, apparel, paper packaging for food, non-stick cookware, and other products designed to be waterproof or water resistant; grease, heat and stain resistant; or, non-stick. Applications span many sectors of the economy, including aerospace, apparel, automotive, building and construction, chemicals and pharmaceuticals, electronics and semiconductors, energy, oil and gas exploration, first responder safety, and health care. During production, use, and disposal, PFAS can migrate into the soil, water, and air.

As of September 2020, more than 9,000 PFAS chemicals were included in the United States Environmental Protection Agency's (US EPA's) Master List of PFAS Substances. Of all PFAS compounds, perfluoroalkyl acids (PFAAs), which include perfluorooctanesulfonic acid (PFOS) and perfluorooctanoic acid (PFOA), are the most extensively studied and are associated with a number of health hazards, including endocrine disruption, developmental and reproductive toxicity, and immune dysregulation. PFOA, most commonly known as the chemical that had

been used to produce Teflon, and PFOS, formerly used in Scotchgard, are known as "long-chain" chemicals, meaning they have six or more carbon molecules. These chemicals are extremely persistent in soil and water due to their resistance to typical environmental degradation processes, and can bioaccumulate and persist in human and animal tissues. According to DTSC, the majority (~85%) of PFAS are PFAA precursors, meaning they can degrade or metabolize into PFAAs in the environment or in living organisms.

While the use of PFOS, PFOA, and other long-chain PFAS has recently declined, short-chain PFAS, including short-chain PFAAs, are widely used as alternatives to long-chain PFAS. Emerging data on these newer chemicals indicate that they are also highly persistent in the environment; behave in a similar fashion in the human body, particularly at the cellular level, as long-chain PFAS; and, are even more mobile in the environment than long-chain PFAS. This means that they travel even more easily, can be harder to clean up, and are more likely to be released from consumer products than long-chain PFAS.

PFAS are ubiquitous, and are found in indoor and outdoor environments, plants, wildlife, companion animals, production animals, food, drinking water, and humans. Scientists have found PFOA and PFOS in the blood of nearly all people tested. According to the Centers for Disease Control and Prevention (CDC), blood levels of both PFOS and PFOA have steadily decreased in US residents since 1999-2000. Nonetheless, the National Health and Nutrition Examination Survey still routinely detects several PFAS in the blood of nearly all participants. As the number of PFAS compounds continues to grow, exposure to these new chemicals is difficult to assess.

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 "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 where they suffer from 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, through its SCP Program 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 also recently 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 textiles: A study commissioned by the European Commission Directorate-General for Environment found that PFAS have been used for a wide range of functional applications within textiles, upholstery, leather, apparel, and carpets in both the consumer and industrial segments. The study reports that water, oil, and dirt repellence were the primary functions for use of PFAS in textiles. Thermal resistance and 'breathability' were other uses of PFAS identified in certain types of clothing applications. The study states that where these textile products contain PFAS, their production, placement on the market, and use can contribute to the overall emissions of PFAS, including contamination of soil and drinking water. According to the Danish Environmental Protection Agency, globally, coatings for textiles represent 50% of the total use of PFAS.

According to the Washington State Department of Ecology, people, including infants, young children, and people of childbearing age, are exposed to PFAS from leather and textile furnishings. It states that PFAS from textiles can be released into indoor air and accumulate in dust, and that human exposure to PFAS occurs when people inhale and ingest this contaminated air and dust. The State Water Board notes that people can also be exposed to PFAS by touching products treated with PFAS, such as carpets or clothing.

DTSC states, "Most waste or end-of-life converted textiles or leathers in California are disposed of in landfills, where they become sources of PFASs to the environment via leachates and gaseous emissions. Wastewater treatment plants that collect landfill leachates, surface runoff, and residential and commercial wastewater do not effectively remove PFASs. As a result, when wastewater effluent is discharged into surface waters, PFASs are released into the environment, contaminating aquatic ecosystems and drinking water sources. Sewage sludge also contains PFASs, thus the application of biosolids on soil can contaminate terrestrial ecosystems, drinking water, and human food supplies. Carpets, rugs, upholstery, clothing, shoes, and other consumer products to which treatments containing PFASs have been applied become major sources of exposure for infants and children via direct contact and incidental indoor dust ingestion. Young children have been shown to ingest more soil and dust than adults, due to greater hand-to-mouth transfer; this can result in higher exposure to PFASs found in these contaminated environmental media. Carpet and upholstery cleaners, workers in stores selling upholstered furniture, furnishings, carpets, clothing, or shoes, and auto dealership workers and auto detailing technicians may also experience above-average PFAS exposure levels."

Alternatives to PFAS in textiles: While some PFAS could be currently considered "essential" to a product because they provide vital health and safety functions and are currently without established alternatives, such as certain occupational protective clothing, many uses of PFAS in textiles were characterized by scientists as a "non-essential" use of PFAS in a 2019 review titled "The concept of essential use for determining when uses of PFAS can be phased out" by Cousins et al. An "essential" use is necessary for health or safety or is critical for the functioning of society, *and* has no available technically and economically feasible alternatives. It has been argued that the production and use of PFAS should be limited to "essential" uses only.

According to the Washington State Department of Ecology, there are a number of ways to meet the function of stain, oil, and water resistance in textiles and furnishings, including by using PFAS chemistries, non-PFAS "drop in" alternatives, or fibers that are inherently stain resistant. Non-PFAS "drop in" solutions include siloxane polymers, polyurethanes, sulfonation, and silicate clay-based repellent. Inherently stain resistant fibers include wool, polypropylene, polyethylene terephthalate, and polytrimethylene terephthalate. These alternatives require further study to ensure that there are no toxic impacts, but they should not share the same exposure hazards as PFAS chemicals.

The author of AB 1817 reports that several leading companies in various textile industries have already committed to banning PFAS or have fully phased out PFAS in their products. Some examples, which have not been independently verified by the Committee, include:

Footwear:

- Keen (fully phased out)
- Puma (fully phased out)
- VF (parent brand of North Face and Timberland) (commitment to eliminate PFAS use for 99% of materials by 2025)
- Nike (commitment to eliminate PFAS-based finishes by 2021)

Everyday clothing:

- Levi's (full phased out)
- H&M (fully phased out)
- Inditex (parent company of Zara) (fully phased out)
- Gap Inc. (commitment to eliminate PFAS-based finishes by 2023)
- Target (commitment to eliminate all PFAS from own brands textiles by 2022, in communication to NRDC)
- Victoria's Secret (fully phased out)

Outdoor apparel:

- Jack Wolfskin (fully phased out)
- Polartec (fully phased out)
- Patagonia (commitment to phase out by 2024)
- VF (parent brand of North Face and Timberland) (commitment to eliminate PFAS use for 99% of materials by 2025)

Textile-based accessories:

- Osprey (backpacks) (commitment to eliminate by 2022)
- Deuter (backpacks) (fully phased out)

Home textiles:

- IKEA (fully phased out)
- Inditex (parent company of Zara Home) (fully phased out)

This bill: This bill prohibits, beginning January 1, 2024, a person from distributing, selling, or offering for sale in the state a textile article, as defined, that contains PFAS.

Historic US action on PFAS: Federal interest in PFAS has spanned decades, and manufacturers have been aware of the PFAS' adverse impact potential since the 1970s or 1980s. In 2005, the US EPA's Office of Pollution Prevention and Toxics Science Advisory Board labeled PFOA a 'likely' carcinogen in humans. In 2007, the CDC published the results of two studies of human exposure to 11 PFAS. In both studies, PFOS and PFOA, as well as another PFAS, perfluorohexane sulfonic acid (PFHxS), were detected in approximately 98% of the population.

While research on PFOA was being compiled by federal agencies, in 2004, the US EPA took administrative action against DuPont, a manufacturer of PFOA, for violating the law for repeatedly failing to report known information to US EPA about substantial risk of injury to human health or the environment from PFOA from 1981 through 2001. In 2005, the US EPA settled with DuPont for violations related to PFOA exposure for the largest civil administrative penalty US EPA had ever obtained under any federal environmental statute.

Beginning in 2003, the US EPA negotiated with multiple parties to produce missing information on PFOA through enforceable consent agreements, memoranda of understanding, and voluntary commitments. In January 2006, the US EPA and eight prominent companies in the industry, including 3M and DuPont, created the 2010/15 PFOA Stewardship Program. Under the program, the companies committed to voluntarily reduce emissions and product content of PFOA and related chemicals on a global basis by 95 percent by 2010, and to work toward eliminating emissions and product content of these chemicals by 2015.

According to the US EPA's website, all participating companies state that they met the PFOA Stewardship Program goals. Companies reported that to meet the program goals, most stopped the manufacture and import of long-chain PFAS, and then transitioned to alternative chemicals. Many of these alternatives were other PFAS. Other companies exited the PFAS industry altogether.

Regrettable substitutions due to federal action: Unfortunately, according to the February 2021 article "Regulating PFAS as a Chemical Class under the California Safer Consumer Products Program" in *Environmental Health Perspectives*, the approach of regulating only individual PFAS or a limited subset of PFAS has led to the replacement of those PFAS with other members of the class that have less well-characterized hazard profiles. The article argues that these alternatives may even be worse, in some respects, than the PFAS being replaced, thus constituting a "regrettable substitution." For example, the article points out that since the voluntary phaseout of the longer-chain PFAS in some regions, manufacturers have shifted to PFAS with six or fewer carbons, such as perfluorohexanoic acid (PFHxA) and other shorter-chain PFAS chemistries, which are less studied but have also been documented to display multiple hazard traits.

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." The US EPA reports that since January 2021, it has undertaken numerous actions to better understand and regulate PFAS, including, planning to conduct expanded nationwide monitoring for PFAS in drinking water, establishing a national primary drinking water standard for PFOA/PFOS, establishing a robust review process for new PFAS; creating a US EPA Council on PFAS; expanding data collection efforts on PFAS; rule development for designating PFOA/PFOS as hazardous substances; developing a national PFAS testing strategy; and, expanding PFAS monitoring in drinking water.

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

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 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 a Priority Product Notification (PPN), which names 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 will go 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 new 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 must submit a PPN for those products by May 31, 2022. After submitting the PPN, manufacturers will then be required to show intent to mitigate exposure to PFAS in their products by September 28, 2022.

DTSC has also proposed investigating 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 products/ chemical combinations.

While DTSC's work on PFAS in carpets, rugs, and textile treatments will inform potential action on the products covered under AB 1817, the bill is intended to prohibit PFAS in textile products not included in DTSC's regulations.

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 (POTW) that receive PFAS in their influent wastewater flow to include sampling for 31 PFAS compounds. It also issued a General Order, in August 2020, for public water systems to sample for and report PFAS.

Recently, the State Legislature has taken action on PFAS by enacting 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 (SCP) Program: In 2008, California enacted AB 1879 (Feuer, 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 SCP 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 was 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, SCP statute does not preclude the Legislature from taking legislative action on consumer products or 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, including 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); a ban on firefighting foam containing PFAS (SB 1044, Allen, Chapter 308, Statutes of 2020); a ban on flame retardants in children's products (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 [SCP] 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."

Clarity needed: The intent of AB 1817 is to prohibit the use of PFAS in textile articles. The bill is not intended to include personal protective equipment necessary for the health and safety of workers in the PFAS prohibitions in the bill, nor to include products currently undergoing the SCP regulatory process at DTSC. Therefore, the author may wish to consider amendments that add treatments containing PFAS for use on converted textiles or leathers to the list of products excluded from the definition of "textile articles," and to also more clearly define personal protective equipment.

Arguments in support: A coalition of fifty seven supporters, including the Natural Resources Defense Council, Breast Cancer Prevention Partners, Green Science Policy Institute, and Worksafe argue, "PFAS have been linked to severe health problems, including but not limited to breast and other cancers, hormone disruption, kidney and liver damage, thyroid disease, harm to developing infants and children, and immune system disruption... PFAS are released into the environment when products containing them, including clothes and textiles, are manufactured, used, cleaned, and disposed of. Californians are exposed to them when they work with PFAS or PFAS-containing products, use PFAS-containing products in their homes, drink PFAS-contaminated water, eat PFAS-contaminated food, and breathe PFAS pollution in the air... A particular concern regarding PFAS in clothing is the contamination that can occur when these products are washed and the wastewater is released into our environment. In California, water systems serving up to 16 million people have already been found to have PFAS contamination, and contamination is more prevalent in disadvantaged communities. This is just one of many ways in which clothing and textiles can lead to PFAS exposures throughout their lifecycle, from production to disposal... Recognizing the health and environmental concerns about PFAS in textiles, many leading companies, like Levi's, Gap, H&M, Puma, Keen, Osprey, Patagonia, Jack Wolfskin, Ikea, and Zara, have either eliminated or made commitments to eliminate PFAS from their products. It's time to require the rest of the industry to phase out this unnecessary use of PFAS, just as California has required the elimination of PFAS in paper-based food packaging, children's products, and fire-fighting foam, to protect our health, drinking water, and environment."

The Association of California Water Agencies (ACWA) writes, "Managing PFAS contamination is a top priority for ACWA and our members. However, remediation and treatment are difficult and costly, especially for many water agencies facing financial constraints. Therefore, source control is a critical policy objective for dealing with PFAS compounds in the watershed. Currently, water supplies are at risk for contamination from clothing containing PFAS when they are washed and wastewater is released. AB 1817 would address these risks and reduce human exposure."

Arguments in opposition: A coalition of five opponents, such as the American Chemistry Council, the California Manufacturers & Technology Association, and the Juvenile Products Manufacturers Association, which take an "oppose unless amended position," argue, "As it relates to AB 1817, we note that the bill lacks any mechanism for a product or component manufacturer to demonstrate that certain PFAS in specific product applications do not present any hazards or exposure potential to the user or harm to the environment. A broad-brush approach that forces these materials out of the marketplace will create additional pressure on supply chains for alternatives, creating scarcity and increasing costs for consumers without achieving any additional human health or environmental protection. Furthermore, previous legislation in this space – AB 652 (Friedman, 2021) - acknowledged the varying uses and potential exposure pathways by including critical exemptions for a variety of product categories that contain PFAS chemistries. These exemption provisions reinforce the need to avoid a broad-brush approach. We respectfully request that [the author] work with the manufacturing and retail stakeholders to create a pathway in this legislation for product-specific determinations based on reliable scientific evidence, and on amendments to address the following issues that would create impediments to implementation and development of alternatives and restrict access to high-performance products." The issues denoted include: conformity with existing PFAS legislation; definition of "textile" and other clarifications are needed; alignment with Safer Consumer

Products Program listing; the proposed PPE exclusion is too narrow; and more transition time is needed."

The National Council of Textile Organizations (NCTO), which also takes an "oppose unless amended position," argues, "Our industry is working in earnest to develop textile alternatives to fluorotechnology, but there is not a sufficient alternative yet that provides the strength, durability, waterproof and greaseproof that industries need in their textiles such as first responders, military, medical health care (including personal protective equipment), outdoor apparel and equipment, construction, transportation and automotive uses. Additionally, the challenges of the supply chain alone in the textile industry makes the date in AB 1817 impossible to meet at this stage... Customers are extremely sophisticated about making educated purchases, as illustrated with GMO or BPA labeling in products. NCTO would like to work with the author on amendments to AB 1817 that would create clear labels for purchasers to make informed decisions about the products they are buying, but still allow those that need performance materials to access them while the industry continues its current work on alternatives."

Related legislation:

1. 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.
2. 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.
3. 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.
4. 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.
5. 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.
6. 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.

7. 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.
8. 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
 Alliance of Nurses for Healthy Environments
 American Congress of Obstetricians & Gynecologists - District IX
 Association of California Water Agencies (ACWA)
 Bay Area Pollution Prevention Group
 Breast Cancer Action
 Breast Cancer Over Time
 Breast Cancer Prevention Partners
 Breathe Southern California
 California Association of Sanitation Agencies
 California Black Health Network
 California Coastkeeper Alliance
 California Health Coalition Advocacy
 California Municipal Utilities Association
 California Product Stewardship Council
 California Professional Firefighters
 California Water Service Company
 CALPIRG, California Public Interest Research Group
 Center for Biological Diversity
 Center for Community Action & Environmental Justice
 Center for Oceanic Awareness, Research, & Education
 Center for Public Environmental Oversight
 Central California Asthma Collaborative
 City of Oceanside Water Utilities Department
 Clean and Healthy New York
 Clean Label Project
 Clean Production Action
 Clean Water Action
 Community Water Center
 Consumer Federation of California
 East Bay Municipal Utility District
 Educate. Advocate.

Emphysema Foundation of America
Environmental Health Trust
Environmental Working Group
Erin Brockovich Foundation
Facts: Families Advocating for Chemical & Toxins Safety
Fashion Revolution USA
Fibershed
Friends Committee on Legislation of California
Friends of The Earth
Green America
Green Science Policy Institute
Heal the Bay
Integrated Resource Management
Leadership Counsel for Justice & Accountability
Made Safe
National Association of Environmental Medicine (NAEM)
National Stewardship Action Council
Natural Resources Defense Council (NRDC)
Northern California Recycling Association
Physicians for Social Responsibility - Los Angeles
Plastic Oceans International
Plastic Pollution Coalition
Regional Water Authority
Safer States
San Francisco Bay Physicians for Social Responsibility
San Francisco Baykeeper
San Francisco Public Utilities Commission
Save Our Shores
Save the Albatross Coalition
Seventh Generation Advisors
Sierra Club California
Silent Spring Institute
The 5 Gyres Institute
The Keep a Breast Foundation
Upstream
West County Wastewater
Wishtoyo Chumash Foundation
Women's Voices for The Earth
Worksafe
Zero Waste Sonoma
Zero Waste USA

Opposition

American Chemistry Council
American Forest & Paper Association
California Manufacturers & Technology Association
California Retailers Association

Juvenile Products Manufacturers Association
National Council of Textile Organizations (NCTO)

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

Date of Hearing: March 22, 2022

ASSEMBLY COMMITTEE ON ENVIRONMENTAL SAFETY AND TOXIC MATERIALS

Bill Quirk, Chair

AB 2059 (Carrillo) – As Amended March 15, 2022

SUBJECT: Hazardous materials business and area plans: consumer products: recordkeeping

SUMMARY: Requires specified suppliers of hazardous materials to maintain electronic records of sales and provisions of hazardous materials of specified quantities to a business in the state for at least 5 years and immediately provide such records to a unified program agency (UPA) upon 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 (Business Plan).

Specifically, **this bill:**

- 1) Defines consumer product as a commodity that is used for personal, family, or household purposes, or present in the same form, concentration, and quantity as a product prepackaged for distribution to a consumer for these purposes; and specifically excludes products not used for such purposes from the definition.
- 2) Specifies that retail establishment means a business that sells consumer products prepackaged for direct distribution to, and intended for use by, the end user.
- 3) Defines a supplier as a manufacturer, distributor, wholesaler, or retailer in the state that sells or provides hazardous materials to a business in the state.
- 4) Specifies that a hazardous material is only exempt from inclusion in a Business Plan if that hazardous material meets the definition of a consumer product and is handled at, and found in, a retail establishment and intended for direct sale to the end user.
- 5) Specifies that the exemption for a hazardous material from the Business Plan does not apply to a consumer product handled at a manufacturing facility, warehouse, or distribution center where there are no direct sales to consumers.
- 6) Excludes from the exemption for a hazardous material from the Business Plan any consumer product sold at a retail establishment with specified National Fire Protection Association or Hazardous materials Identification System ratings and stored in specified quantities.
- 7) Excludes from the exemption for a hazardous material from the Business Plan a consumer product stored at a retail establishment if an UPA determines it to be stored at or above the reportable threshold as defined and to pose a significant potential hazard.
- 8) Requires specified suppliers of hazardous materials to maintain electronic records for the sale or provision of those hazardous materials to a business in the state within a 30-day period in quantities equivalent to, or exceeding, 165 gallons of a liquid, 600 cubic feet of a gas, or 1,500 pounds of a solid.

- 9) Requires suppliers to maintain records containing specified information about the sale or provision of hazardous materials for at least five years and make them immediately available to an UPA upon request.
- 10) Requires handlers of hazardous materials to notify the UPA, if any hazardous materials are to be removed from the storage or handling location and transferred to another location, and include specified information about the transfer, if so directed by the UPA.
- 11) Makes technical and conforming changes.

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 the regulations adopted to implement those. (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, which shall be known as the unified program. (HSC § 25404(b))
- 5) Defines business as an employer, self-employed individual, trust, firm, joint stock company, corporation, partnership, limited liability partnership or company, or other business entity. Includes for-profit and non-profit businesses, a handler that operates or owns a unified program facility, the federal government as authorized by law, an agency, department, office, board, commission, or bureau of state, city, county, or district governments, California Community Colleges, the California State University, and the University of California. (HSC § 25501(c))
- 6) Defines "retail establishment" as a business that sells consumer products, as specified, to the general public. (HSC § 25501(p))
- 7) Defines "consumer product" as a commodity used for personal, family, or household purposes, or is present in the same form, concentration, and quantity as a product prepackaged for distribution to and use by the general public. (HSC § 25501(j))

- 8) Defines "handle" as to use, generate, process, produce, package, treat, store, emit, discharge, or dispose of a hazardous material in any fashion. Store does not include the storage of hazardous materials incidental to transportation. (HSC § 25501(l))
- 9) Defines "handler" as a business that handles a hazardous material, as defined in HSC § 25501(n). (HSC § 25501(m))
- 10) Requires a business to establish and implement a Business Plan of a hazardous material if the business meets specified criteria. (HSC § 25507(a))
- 11) Sets, as a requirement for the Business Plan, the reportable quantity threshold for hazardous materials present at any one time during the reporting year at 55 gallons for a liquid, 200 cubic feet for a gas, and 500 pounds for a solid. (HSC § 25507(a)(1)(A))
- 12) Exempts from the Business Plan a hazardous material contained solely in a consumer product, handled at, and found in, a retail establishment, and intended for sale to, and use by, the public. Excludes from the exemption a consumer product handled at a manufacturing facility, warehouse, or distribution center of that consumer product. (HSC § 25507(b)(5)).
- 13) Authorizes the Director of the Department of Health Care Services (Director) or local health officer to declare a local health emergency in the jurisdiction or any area thereof affected by the threat to the public health, if a release, spill, escape, or entry of waste occurs and the Director or the local health officer reasonably determines that the waste is a hazardous waste or medical waste, or that it may become a hazardous waste or medical waste because of a combination or reaction with other substances or materials, and the Director or local health officer reasonably determines that the release or escape is an immediate threat to the public health, or whenever there is an imminent and proximate threat of the introduction of any contagious, infectious, or communicable disease, chemical agent, noncommunicable biologic agent, toxin, or radioactive agent. (HSC § 101080)

FISCAL EFFECT: Unknown.

COMMENTS:

Need for the bill: According to the author, this bill will give our first responders and Certified Unified Program Agencies additional tools to identify caches of hazardous materials that have not been properly reported, by requiring sellers and shippers to make records available as to where those potentially dangerous materials are being shipped and moved from. Additionally, it will get rid of a loophole that allows individuals to store large quantities of flammable materials if it is classified as available for the general public to purchase.

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 from 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.

The Business Plan specifies a business' activities; identifies the owner/operator; lists an inventory of stored and/or generated hazardous materials, as required by law; provides a facility site map; outlines an emergency response plan in the event of a release or threatened release of hazardous material and/or hazardous waste; and, details an employee training plan with communications and safety procedures. The owners/operators of a business that handles or stores hazardous materials/waste at or above 55 gallons (208.2 liters) of a liquid, 200 cubic feet (5.66 cubic meters) of a gas, or 500 pounds (226.8 kilograms) of a solid, or extremely hazardous materials/waste at or above specified amounts, at any one time during the reporting year must maintain a Business Plan. A business must review and recertify its Business Plan annually; or, amend it within 30 days if the quantity of hazardous material/waste handled increases by 100% or more; if it starts handling a previously undisclosed hazardous material/waste at reportable quantities; or, it changes its name, ownership, or address. Businesses that fail to establish and submit a Business Plan face penalties of up to \$5,000 per day under state law and up to \$75,000 per day under federal law.

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 (Title 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 (U.S. EPA). 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 2059 expands electronic reporting requirements to include the sale or provision of specified hazardous materials by a supplier. The bill sets quantity thresholds for reporting at 3 times those of the thresholds that require a business to develop a Business Plan. According to the sponsor, these quantities were determined to meet reasonable regulatory standards of flammability and risk without adding further administrative burdens to hundreds of businesses. Suppliers are required to maintain these records for at least five years, allowing CUPAs to gain a better understanding of the hazardous materials/waste present in their jurisdictions and better assess compliance of businesses. AB 2059 also gives CUPAs the authority to request limited information from handlers on the transfer of any hazardous material from one location to another. The author may wish to consider how to best strike a balance between improving oversight of the inventory and movement of hazardous materials and imposing additional administrative burden on businesses that already comply with the Business Plan.

Issue with retail exemption: The current exemption from reporting of certain quantity thresholds of hazardous materials was meant to apply to retail locations. However, there is some confusion due to a lack of clarity with that definition and some distribution facilities that move consumer products in bulk may be using this exemption. The reporting requirements in the Business Plan are intended for large-scale storage of hazardous materials, as employed by distribution facilities. To this end, AB 2059 is changing the definition to ensure that these hazardous materials are reported under the Business Plan.

Los Angeles fire at wholesale distributor for butane hash oil supplies: On May 16, 2020, a structure fire at the Smoke Tokes warehouse on Boyd Street in Los Angeles led to a large explosion while firefighters were inside the building to identify the source of the fire. Eleven firefighters were injured. An investigation found that Smoke Tokes, a supplier of materials to make butane hash oil, had undisclosed and illegally stored hazardous materials at the site. Butane is typically stored in gaseous form and is classified as an extremely flammable hydrocarbon that may explode when heated. Smoke Tokes had presumably used butane to extract active ingredients from cannabis to produce oils illegally.

This bill: AB 2059 seeks to address the lack of clarity with the definition of a consumer product to specify it must be sold to the end user. This way, a warehouse distributing consumer products in bulk to other businesses would be aware that they are not eligible to claim an exemption for the hazardous material simply based on the prepackaging or intended final sale to the general public. The bill further authorizes CUPAs to determine, at their discretion, that a consumer product stored at or above specified levels during the reporting year may be deemed a hazardous material and therefore qualifies for reporting requirements by a retail establishment.

National Fire Protection Association (NFPA) and Hazardous Materials Identification System (HMIS) rating: The National Fire Protection Association marks many hazardous chemicals with the use of the "NFPA 704 Diamond" which indicates the health, flammability, reactivity, and special hazards. This system is primarily designed to provide information to emergency personnel responding to a fire or spill. The Hazardous Materials Identification System is a voluntary hazard rating scheme developed by the American Coatings Association to help employers comply with workplace labeling requirements set by the U.S. Occupational Safety and Health Administration (OSHA). HMIS specifies health effects, flammability, physical hazard, and personal protection needs to handle a labeled chemical. Both NFPA and HMIS use numerical ratings for each category, ranging from 0-4 indicating least to most hazardous.

This bill: AB 2059 sets reporting requirements for suppliers of substances with an NFPA or HMIS rating of 3 or 4, the most hazardous categories. The same rating is also used to determine exemption status of a consumer product. Moving forward, the author may wish to clarify whether a rating of 3 or 4 in a specific category or all categories should lead to product inclusion in the Business Plan.

Further conversations: This bill makes several changes to the reporting requirements under the Business Plan. While no formal opposition has been received by the committee at time of this analysis, several stakeholders have reached out to the author seeking further clarification. Given the importance of reporting under the Business Plan and the desire to achieve good policy, it is likely that the author will continue to have conversations with stakeholders to further clarify the language of the bill.

Arguments in Support:

The sponsor of the bill, the California Association of Environmental Health Administrators, writes, "This measure will strengthen local authority to identify unpermitted hazardous materials handlers and provide enhanced transparency in the movement and storage of hazardous materials throughout the state. These measures will enhance public safety, protect our first responders and support enforcement of hazardous materials inventory disclosures and community-right-to-know laws without establishing a whole new routine reporting obligation on businesses."

The United Firefighters of Los Angeles City Local 112 write in support, "This issue is especially important to our LAFD Inspectors here in the City of Los Angeles, where we serve as an international hub for commerce and the handling of hazardous materials. Just two years ago more than a dozen LAFD Firefighters were sent to the Grossman Burn Center after an explosion [...] caused by illegally stored and undisclosed hazardous materials. It is our hope that statewide legislation will help to address these issues and prevent future catastrophic accidents from taking place that put our firefighters and the public in danger."

Related legislation:

- 1) AB 1429 (Chen, Chapter 66, Statutes of 2019). Authorizes a business that handles hazardous materials to submit their Business Plan to the 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.
- 2) 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.
- 3) AB 1646 (Muratsuchi, Chapter 588, Statutes of 2017). Requires an implementing agency to, in coordination with local emergency management agencies, unified program agencies, local first response agencies, and the public, develop an integrated alerting and notification system to be used to notify the community surrounding a petroleum refinery in the event of an incident at the refinery.

- 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:

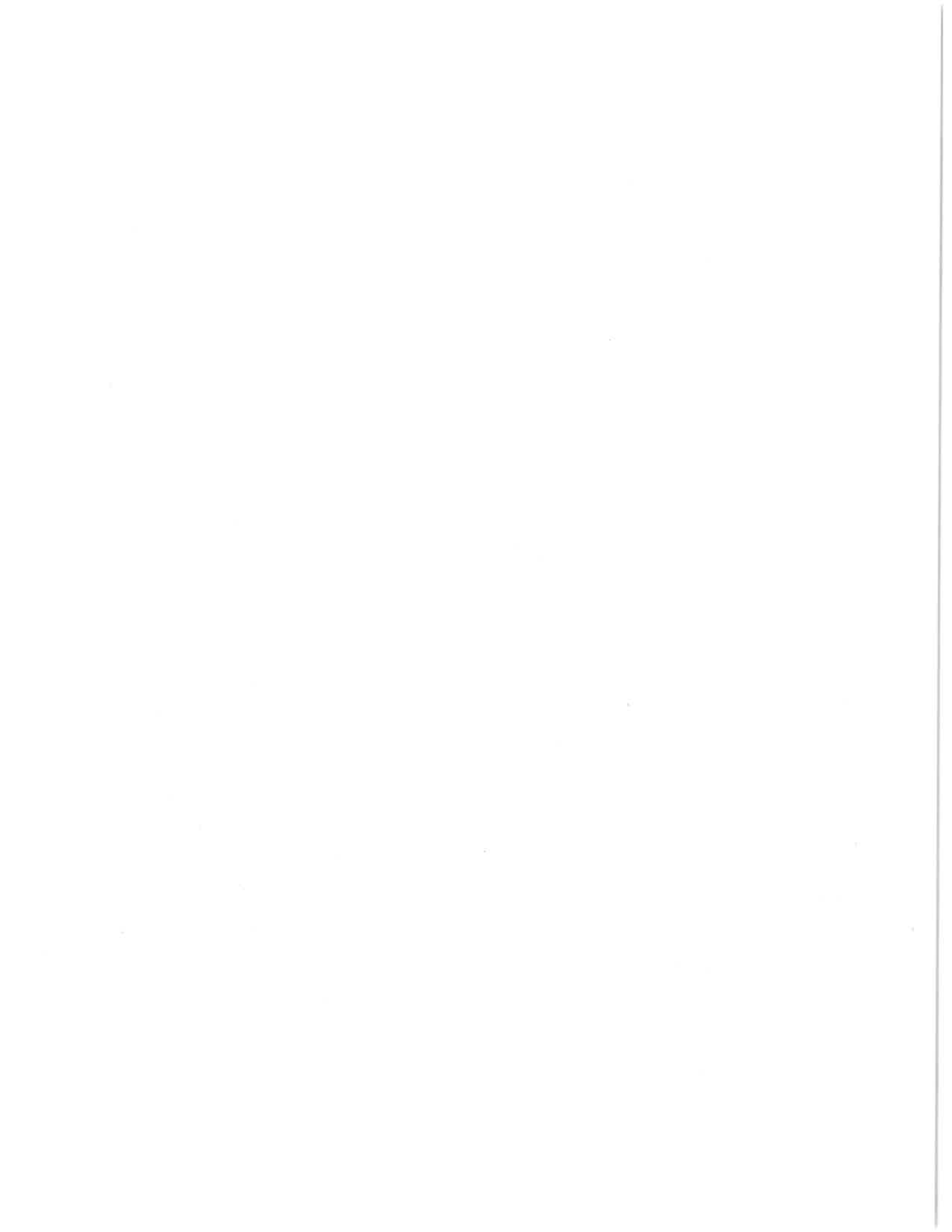
Support

California Association of Environmental Health Administrators (CAEHA) (Sponsor)
United Firefighters of Los Angeles City (UFLAC)

Opposition

None on file.

Analysis Prepared by: Manar Zaghlula / E.S. & T.M. /



Date of Hearing: March 22, 2022

ASSEMBLY COMMITTEE ON ENVIRONMENTAL SAFETY AND TOXIC MATERIALS

Bill Quirk, Chair

AB 2163 (Blanca Rubio) – As Introduced February 15, 2022

SUBJECT: San Gabriel Basin Water Quality Authority Act

SUMMARY: Extends the sunset from July 1, 2030 to July 1, 2050 for the San Gabriel Basin Water Quality Authority (Authority).

EXISTING LAW:

- 1) Pursuant to the San Gabriel Basin Water Quality Authority Act (Act) (Chapter 776, Statutes of 1992 (Water Code Appendix, §134-101, et seq.)):
 - a) Requires the Authority to develop and adopt a basinwide groundwater quality management and remediation plan that includes certain components, such as characterization of Basin contamination, development and implementation of a comprehensive Basin cleanup plan, a financing plan, and a public information and participation plan.
 - b) Establishes election procedures for electing members to the Authority.
 - c) Requires the Authority to provide a status report to the State Water Resources Control Board (State Water Board) and the Los Angeles Regional Water Quality Control Board every six months on activities undertaken pursuant to the Basin groundwater quality management and remediation plan. Requires the status report to include certain information, such as an overview of contamination, coordination with other agencies, funding from potentially responsible parties and other sources, status of certain plans, and project activities information.
 - d) Sunsets the Act on July 1, 2030.

FISCAL EFFECT: Unknown.

COMMENTS:

Need for the bill: According to the author, "For years, the San Gabriel Valley has grappled with pollution of its ground water as a result of decades of poor chemical disposal practices. The severity of this pollution on the Basin's environment and population is so severe it is deemed a federal superfund site. In 1992, the State established the San Gabriel Basin Water Quality Authority (WQA) to oversee and provide funding for the clean up of the Basin. While the necessity and success of the WQA's efforts have been well established and its repeal has been extended 5 times previously, there is still work to be done in the basin that is expected to continue for decades to come. Ensuring the WQA can forecast projects and contract effectively in the future as needed is critical for the success of its mission and the constituents of the San Gabriel Valley."

The San Gabriel Valley: The San Gabriel Valley is a suburban, largely-developed portion of Los Angeles County containing more than one million residents and covering more than 170 square miles.

The San Gabriel Valley is also a distinct watershed shaped by local mountains, rivers, streams and other geological formations. A major, natural source of water for the Valley are the San Gabriel River and streams, ponds, lakes, dams, and reservoirs connected to it that are located either in the San Gabriel Mountains or the Valley itself. Beneath the Valley is the San Gabriel Basin, the primary source of water for the San Gabriel Valley's water supply system.

The San Gabriel Valley Basin Superfund site: As the Authority affectionately refers to it in the January 22, 2019, *Section 406 San Gabriel Basin Groundwater Quality Management and Remediation Plan*, the San Gabriel Valley's groundwater basin "has the dubious distinction of being one of the most contaminated in the nation." The Basin's groundwater is contaminated from ground disposal—dating back to World War II—of volatile organic compounds (VOCs) used primarily as solvents in industrial and commercial activities.

The seriousness of the groundwater contamination problem became evident when high concentrations of VOCs were discovered in Azusa in 1979 near a major industrial complex. That led the United States Environmental Protection Agency (US EPA) to place four portions of the basin on the National Priorities List in 1984 under authority of the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA), also known as the federal Superfund program. These areas are referred to as operable units under CERCLA. Currently, there are six active operable (treatment) units within the San Gabriel Valley Basin: Baldwin Park, El Monte, South El Monte, Puente Valley, Area 3, and Whittier Narrows.

Finding that there was no existing local entity with all of the necessary authority and jurisdiction to coordinate an effective cleanup program, the Legislature created the San Gabriel Basin Water Quality Authority Act in 1992 (Russell, Chapter 776, Statutes of 1992) to develop, finance, and implement groundwater treatment programs in the San Gabriel Basin. Pursuant to the Act, the Authority is under the direction and leadership of a seven-member board. The board is comprised of one member from each of the overlying municipal water districts, one from a city with prescriptive water pumping rights, one from a city without prescriptive water pumping rights, and two members representing water producers in the San Gabriel Basin.

The mission of the Authority is to coordinate, plan, and implement groundwater quality management programs to efficiently remediate groundwater contamination, address the problem of the migration of contaminated groundwater within the San Gabriel Basin, protect and promote the beneficial use of groundwater supplies, and assist in preventing future contamination.

Cleanup status: Groundwater continues to be an important source of drinking water to residents and businesses in the San Gabriel Valley. Local water utilities continue to pump water from clean areas, and, in locations affected by the pollution, have installed water treatment equipment to remove pollutants.

The Authority implements the cleanup under a Cooperative Agreement with the US EPA. The agreement funds groundwater extraction and treatment systems operated by the City of Monterey Park, San Gabriel Valley Water Company, and Golden State Water Company.

After the pollution was discovered in 1979, the US EPA's Superfund program estimated that it would cost \$800 million over 30 years to remove all of the contaminants from the Basin. Since the inception of the Authority in 1993, its sponsored projects have led to the removal of nearly 45 tons of contaminants from the San Gabriel Valley Basin; more than 50 percent of the total contaminants have been removed from the basin since their discovery in 1979. On the 25th anniversary of the creation of the Authority in 2018, the US EPA said cleanup has cost the US EPA, the water agencies, and the parties responsible for the contamination about \$500 million so far. Authority assessments to accomplish cleanup of the San Gabriel Basin have averaged \$7.25 per household per year.

Long-term cleanup: AB 2163 recognizes the reality that the remaining contamination of the groundwater in the San Gabriel Basin will take decades to cleanup and therefore extends the existence of the Authority until 2050.

Related Legislation:

- 1) SB 413 (Rubio, Chapter 370, Statutes of 2019). Requires the San Gabriel Basin Water Quality Authority (Authority) to annually update and incorporate a status report on activities related to its basin-wide groundwater quality management and remediation plan to the State Water Resources Control Board (State Water Board) and the Los Angeles Regional Water Quality Control Board (LA Regional Water Board).
- 2) SB 429 (Hernández, Chapter 214, Statutes of 2013). Extended the sunset date on the Act from July 1, 2017, to July 1, 2030.
- 3) AB 1010 (Hernández, Chapter 404, Statutes of 2007). Extended the sunset date on the Act from July 1, 2010, to July 1, 2017. Required the Authority, commencing April 1, 2008, and on at least a quarterly basis thereafter, to update its Internet Web site with information regarding its activities undertaken pursuant to the basin-wide groundwater quality management and remediation plan. Required the Authority to submit by March 31, 2008, and every 6 months thereafter, a status report on its activities undertaken pursuant to the plan to the State Water Board and the LA Regional Water Board.
- 4) SB 334 (Romero, Chapter 192, Statutes of 2003). Extended the sunset date on the Act from July 1, 2005, to July 1, 2010. Deleted a consultation requirement relating to the status report. Authorizes the Authority to impose an annual pumping right assessment in an amount that does not exceed \$10 per acre-foot.
- 5) AB 2544 (Calderon, Chapter 905, Statutes of 2000). Extended the sunset date on the Act from July 1, 2002, to July 1, 2005. Required the appointment to the board of the Authority of two additional producer members and their alternates, pursuant to specified procedures, and prescribes their terms of office.
- 6) AB 2173 (Margett, Chapter 281, Statutes of 1996). Extended the sunset date on the Act from January 1, 1998, to July 1, 2002. Decreased the authorized pumping right assessment from \$35 per acre-foot to \$20 per acre-foot, and authorized the Authority to adopt, by resolution, rules and regulations for the collection of pumping right assessments.
- 7) SB 1679 (Russell, Chapter 776, Statutes of 1992). Enacted the Act.

REGISTERED SUPPORT / OPPOSITION:

Support

City of Baldwin Park
City of Covina
City of El Monte
City of Glendora
City of Industry
City of La Puente
City of South El Monte
San Gabriel Valley Municipal Water District
Three Valleys Municipal Water District

Opposition

None on file.

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

Date of Hearing: March 22, 2022

ASSEMBLY COMMITTEE ON ENVIRONMENTAL SAFETY AND TOXIC MATERIALS

Bill Quirk, Chair

AB 2106 (Robert Rivas) – As Amended March 15, 2022

SUBJECT: Water quality: permits

SUMMARY: Requires, on or before December 2024, the California State Water Resources Control Board (State Water Board) to, modernize its Stormwater Multiple Application and Report Tracking System (SMARTS) database. Additionally, Requires the State Water Board to establish a statewide commercial, industrial, and institutional national pollutant discharge elimination system (NPDES) order. Specifically, **this bill:**

- 1) Requires, on or before December 2024, the State Water Board to modernize its SMARTS database through all of the following:
 - a) Reducing costs associated with permittee data upload and reporting requirements by using modern technology;
 - b) Improving efficient State Water Board enforcement;
 - c) Including system-level tracking and accounting of how best management practices reduce pollutant loading to receiving waters; and,
 - d) Modernizing the database to be geographic information system (GIS) based in order to evaluate progress towards stormwater program compliance.
- 2) Requires the State Water Board to establish a statewide commercial, industrial, and institutional NPDES order pursuant to the federal Clean Water Act (CWA). Requires the State Water Board to publish a draft order of the statewide order for public comment no later than December 31, 2024.
- 3) Requires, on or before January 31, 2024, the State Water Board to initiate a series of hearings to evaluate the California stormwater program and the state's progress towards attainment of beneficial uses and compliance with water quality standards as they pertain to permits issued pursuant to the federal CWA.
- 4) Requires, on or before December 31, 2024, the State Water Board, after holding public workshops and soliciting public comments, to develop and submit to the Legislature a report evaluating the state's progress toward attainment of beneficial uses and compliance with water quality standards as they pertain to permits issued pursuant to the federal CWA.

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 (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 (WC) § 13000 et seq.)
- 4) Requires the State Water Board to develop a comprehensive guidance document for evaluating and measuring the effectiveness of municipal stormwater management programs and permits. (WC § 13383.9)

FISCAL EFFECT: Unknown.

COMMENTS:

Need for the bill: According to the author,

"AB 2106 will modernize California's stormwater program by making several key changes to improve water quality while also reducing the compliance burden on permittees.

First, AB 2106 will require the State Water Board to conduct a holistic review of the state's stormwater program aimed at improving environmental outcomes while lowering compliance costs. This process will incorporate feedback from all interested stakeholders and put the state back on track to restore our waterways.

Second, AB 2106 will improve the State Water Board's data collection systems. The status quo puts the onus on permittees to collect large amounts of data, which can be expensive and time-consuming. But because the Water Board's existing data collection systems are so outdated, a large amount of that data can't ultimately be used. AB 2106 will create a simplified, streamlined data collection system that will reduce costs but improve results.

Finally, AB 2106 will require the State Water Board to issue a new order regulating stormwater from facilities with large parking lots that are not currently regulated. A federal court ordered the Los Angeles region to address the toxic metals, oil, and grease coming off these parking lots in 2018, but the problem persists, leaving municipalities unfairly responsible for addressing pollution that they did not cause. Regulation of stormwater from all sources will ensure that costs of compliance are distributed evenly across permittees and achieve better results for the environment.

Together, these changes will ensure reductions in water pollution in California's most disadvantaged communities while simplifying the stormwater permitting process and reducing compliance costs on many permittees."

Federal Clean Water Act (CWA): The Federal Water Pollution Control Act of 1948 was the first major U.S. law to address water pollution. The law was amended in 1972, and became commonly known as the Clean Water Act (CWA). The federal CWA establishes the basic structure for regulating discharges of pollutants into the waters of the United States and regulating quality standards for surface waters. Under the CWA, the United States Environmental Protection Agency (US EPA) has implemented pollution control programs,

including setting wastewater standards for industrial facilities, as well as 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. Industrial, municipal, and other facilities must obtain a permit under the National Pollutant Discharge Elimination System in order to discharge into surface water.

National Pollution Discharge Elimination System (NPDES): As authorized by the CWA, the NPDES Permit Program controls water pollution by regulating point sources that discharge pollutants into waters of the United States. Point sources are discrete conveyances such as pipes or man-made ditches. Examples of pollutants include, but are not limited to, rock, sand, dirt, and agricultural, industrial, and municipal waste discharged into waters of the United States. The NPDES Program is a federal program which has been delegated to the State of California for implementation through the State Water Board and the Regional Water Boards.

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. For example, high levels of certain types of bacteria in a water body can cause serious illnesses, such as gastrointestinal illnesses, respiratory illnesses, and skin infections in people who come into contact with contaminated water.

Additional impacts from stormwater: According to the San Francisco Bay Estuary Institute (SFEI), "Understanding Microplastic Levels, Pathways, and Transport in the San Francisco Bay Region" 2019 study, "We measured microparticles and microplastics in stormwater from 12 small tributaries comprising 11% of the watershed drainage area to San Francisco Bay (6% of total flow to Bay). These tributaries varied in urban and non-urban land uses and were distributed across the region. Microparticles were identified in stormwater from all 12 small tributaries, which discharged between 1.3 and 30 microparticles per liter. Fragments (59%) and fibers (39%) constituted nearly all microparticles sampled.

Using an existing stormwater model developed for other contaminants, we estimated the annual discharge of microparticles via stormwater from small tributaries to be 11 trillion microparticles to the Bay. Approximately two thirds of these microparticles were estimated to be plastic, yielding an estimated annual discharge of 7 trillion microplastics per year. This estimate of

microplastic load is approximately 300 times greater than the estimated annual discharge from all wastewater treatment plants discharging into San Francisco Bay."

Regulation of stormwater: The Federal CWA prohibits certain discharges of storm water containing pollutants, except if in compliance with a NPDES permit. The NPDES stormwater program regulates some stormwater discharges from three potential sources: municipal separate storm sewer systems (MS4s), construction activities, and industrial activities. The Industrial General Permit regulates industrial storm water discharges and authorized non-stormwater discharges from industrial facilities in California. The Industrial General Permit is called a general permit because many industrial facilities are covered by the same permit, but comply with its requirements at their individual industrial facilities.

Dischargers whose projects disturb one or more acres of soil or whose projects disturb less than one acre but are part of a larger common plan of development that in total disturbs one or more acres, are required to obtain coverage under the General Permit for Discharges of Storm Water Associated with Construction Activity. Construction activity subject to this permit includes clearing, grading and disturbances to the ground such as stockpiling, or excavation, but does not include regular maintenance activities performed to restore the original line, grade, or capacity of the facility. The Construction General Permit requires the development of a Storm Water Pollution Prevention Plan (SWPPP) by a certified Qualified SWPPP Developer (QSD).

The Municipal Storm Water Program regulates storm water discharges from municipal separate storm sewer systems (MS4s) throughout California. US EPA defines an MS4 as a conveyance or system of conveyances (including roads with drainage systems, municipal streets, catch basins, curbs, gutters, ditches, man-made channels, or storm drains) owned or operated by a state (40 CFR 122.26(b)(8)).

Pursuant to the Federal Water Pollution Control Act (Clean Water Act) section 402(p), storm water permits are required for discharges from an MS4 serving a population of 100,000 or more. The Municipal Storm Water Program manages the Phase I Permit Program (serving municipalities over 100,000 people), the Phase II Permit Program (for municipalities less than 100,000), and the Statewide Storm Water Permit for the State of California Department of Transportation.

At time of this analysis, the committee is not aware of a stormwater permit for large parking lots in the state.

State Water Board enforcement: The State Water Board and Regional Water Boards enforce the pollution control and cleanup requirements that are established for discharges and contaminated sites. Where violations of regulatory requirements are detected, enforcement actions of varying types and levels of stringency are taken. For the most serious violations, penalties are often imposed. The State Water Board also collaborates with federal, state, and local law enforcement, as well as other environmental agencies, to address violations. In all cases, the principal goal of enforcement is to encourage compliance with requirements so that water quality is protected. According to the State Water Board during Fiscal Year 2019-2020, there were approximately 3,820 enforcement actions, with approximately \$12 million in penalties assessed. Of this amount, approximately \$3.6 million in penalties were for NPDES wastewater or NPDES stormwater violations.

Court case regarding stormwater pollution: A recent court case, *L.A. Waterkeeper v. Pruitt*, U.S. District Court, August 9, 2018, dealt with stormwater pollution. According to the Court, "Plaintiffs' petitions requested that EPA make a determination that currently unpermitted stormwater discharges from privately-owned commercial, industrial, and institutional ("CII") sources are contributing to violations of water quality standards in the watersheds, and therefore require NPDES permits pursuant to 33 U.S.C. § 1342(p). The petitions provided evidence that stormwater discharges from commercial, industrial, and institutional sources are impairing water quality in both watersheds. Before the Court are the parties' cross-motions for summary judgment on Plaintiffs' claims against the U.S. Environmental Protection Agency ("EPA"). The Court grants Plaintiffs' motion for summary judgment and denies Defendants' motion for summary judgment."

Finding stormwater solutions: The overall goal of AB 2106 is to improve water quality throughout the state. While the State Water Board and Regional Water Boards have requirements for discharges to water and require NPDES permits of municipalities and businesses, stormwater particularly from parking lots of commercial, industrial, and institutional facilities does not seem to be captured within the current regulatory framework. Therefore, the bill requires the State Water Board to adopt an order to regulate stormwater from these sources. Like any regulation, there may be tradeoffs, and like any regulation there will be a public process where those tradeoffs will be discussed. There does not seem to be any disagreement on the importance of reducing pollutants from stormwater the key questions are who is regulated and who pays. However, absent any changes, and if parking lots are not included, tighter controls on other sources or on municipal stormwater permits, may be necessary to make up the difference.

Arguments in Support: According to a coalition in support including the California Coastkeeper Alliance, the Surfrider Foundation, and 7th Generation Advisors, "We write in strong support of AB 2106 to modernize California's stormwater permitting program so that it is focused on only the most effective water quality controls to attain fishable, swimmable, and drinkable waters for all Californians. While stormwater pollution is harmful to all communities, it poses a greater risk to those communities that have historically lacked the political power to shape stormwater management decisions. These communities are often dominated by paved surfaces and industries associated with high levels of pollutants. California currently regulates stormwater runoff from three sources: (1) municipal separate storm sewer systems, (2) construction activities, and (3) industrial activities. However, large commercial, industrial, and institutional parking lots also greatly contribute to stormwater pollution. Despite this, commercial sources are not regulated under the state's stormwater program. Since these commercial facilities are not regulated, cities and counties are currently held legally responsible for the heavy metals, oil, and grease that runoff these commercial parking lots."

Arguments in Opposition: According to the California Chamber of Commerce, "The California Chamber of Commerce opposes these requirements, which will potentially subject a wide range of businesses and other facilities, such as hospitals and universities to costly compliance and citizen lawsuits, in addition to limiting the State Water Board's ability to improve its stormwater programs collaboratively with all impacted stakeholders. Requiring NPDES permits subject businesses to potentially costly compliance and litigation. Lastly, we must oppose the language in Section 4, which would ultimately limit the State Water Board's discretion and stakeholder engagement when evaluating California's stormwater program."

Related Legislation:

- 1) AB 377 (R. Rivas, 2021). Would have required, by January 1, 2025, the State Water Board and the Regional Water Boards to evaluate impaired state surface waters and report to the Legislature a plan to bring all water segments into attainment by January 1, 2050. Would have required, by January 1, 2023, the State Water Board and Regional Water Boards to prioritize enforcement of water quality standard violations that are causing or contributing to an exceedance of a water quality standard in a surface water of the state. This bill was not heard in the Assembly Appropriations Committee.

REGISTERED SUPPORT / OPPOSITION:**Support**

7th Generation Advisors
California Coastkeeper Alliance
Coachella Valley Waterkeeper
Heal the Bay
Humboldt Baykeeper
Inland Empire Waterkeeper
Los Angeles Waterkeeper
Mono Lake Committee
Monterey Coastkeeper
Orange County Coastkeeper
Ourwaterla Coalition
Russian Riverkeeper
Santa Barbara Channelkeeper
Save the Bay
Sierra Club California
Social Eco Education (SEE-LA)
South Yuba River Citizens League
Surfrider Foundation
The Otter Project
Yuba River Waterkeeper

Opposition

California Chamber of Commerce

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

Date of Hearing: March 22, 2022

ASSEMBLY COMMITTEE ON ENVIRONMENTAL SAFETY AND TOXIC MATERIALS

Bill Quirk, Chair

AB 2108 (Robert Rivas) – As Amended March 15, 2022

SUBJECT: Water policy: environmental justice: disadvantaged and tribal community representation

SUMMARY: Requires the California State Water Resources Control Board (State Water Board) and the Regional Water Quality Control Boards (Regional Boards) to ensure that at least one member of the State Water Board and each of the Regional Water Boards has specialized experience to represent environmental justice or tribal communities. Additionally, requires the State Water Board to include an analysis of environmental justice impacts or racial equity concerns when issuing statewide, regional or otherwise significant waste discharge requirements. Specifically, **this bill:**

- 1) Requires one of the five members of the State Water Board, appointed by the Governor, to, in addition to having the qualifications prescribed in statute, be qualified in the field of water supply and water quality relating to disadvantaged or tribal communities.
- 2) Requires the State Water Board and Regional Water Boards to engage in equitable, culturally relevant community outreach to meaningfully involve potentially impacted communities for major projects and appropriate minor projects in underrepresented or identified vulnerable or disadvantaged communities; provide evidence of how community concerns were addressed; identify potential disproportionate impacts in collaboration with the potentially impacted community; and, take measures through environmental review and permitting processes, within the scope of its authority, to require mitigation for disproportionate adverse project impacts on the identified vulnerable or disadvantaged communities in which the project is proposed.
- 3) Requires the State Water Board and Regional Water Boards to include an analysis of environmental justice impacts or racial equity concerns when issuing statewide, regional or otherwise significant waste discharge requirements or waivers, or national pollutant discharge elimination system (NPDES) permits.
- 4) Requires the State Water Board, to the extent appropriated funds are available, to fund two separate environmental justice and tribal community coordinator positions.
- 5) Requires the State Water Board to use available tools, such as the California Communities Environmental Health Screening (CalEnviroScreen), to identify and prioritize enforcement in disadvantaged communities, low-income areas disproportionately affected by environmental pollution, or other environmental justice considerations.
- 6) Requires the State Water Board to establish an Environmental Justice and Tribal Community Hardship Stipend program to promote community capacity and engagement.
- 7) Requires each Regional Water Board to have at least one of its board members with specialized experience representing disadvantaged or tribal communities.

EXISTING LAW:

- 1) Establishes the federal Clean Water Act (CWA) to regulate discharges of pollutants into the waters of the United States and regulate quality standards for surface waters. (33 United States Code (USC) §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 to prescribe waste discharge requirements which, among other things, regulate the discharge of pollutants in stormwater, including municipal stormwater systems. (33 USC § 1342)
- 3) Creates, within the California Environmental Protection Agency (CalEPA), the State Water Board consisting of five members appointed by the Governor and subject to confirmation by the State Senate. One of the members appointed shall be an attorney admitted to practice law in this state who is qualified in the fields of water supply and water rights, one shall be a registered civil engineer under the laws of this state who is qualified in the fields of water supply and water rights, one shall be a registered professional engineer under the laws of this state who is experienced in sanitary engineering and who is qualified in the field of water quality, and one shall be qualified in the field of water quality. One of the above-appointed persons, in addition to having the specified qualifications, shall be qualified in the field of water supply and water quality relating to irrigated agriculture. One member shall not be required to have specialized experience. (Water Code (WC) § 175)
- 4) Pursuant to the Porter-Cologne Water Quality Control Act, prohibits the discharge of pollutants to surface waters unless the discharger obtains a permit from the State Water Board. (WC § 13000, et seq.)
- 5) Creates a Regional Water Board and each Regional Water Board shall consist of seven members appointed by the Governor, and subject to confirmation by the State Senate. Each member shall be appointed on the basis of his or her demonstrated interest or proven ability in the field of water quality, including water pollution control, water resource management, water use, or water protection. (WC § 13201)
- 6) Delegates to California's Regional Water Boards the ability to adopt water quality standards within their region of jurisdiction. (WC § 13240)
- 7) Requires a Regional Board to prescribe requirements for any proposed discharge, existing discharge, or material change in an existing discharge, except discharges into a community sewer system, with relation to the conditions existing in the disposal area upon or receiving waters into which the discharge is made or proposed. Specifies that requirements that implement any relevant water quality control plans have been adopted, and take into consideration, the beneficial uses to be protected, water quality objectives, other waste discharges and the need to prevent nuisance. (WC § 13269 et seq.)

FISCAL EFFECT: Unknown.

COMMENTS:

Need for the bill: According to the author,

"Environmental justice requires that all communities are actually represented by their government, that decision makers genuinely engage with and consider community interests, and enforcement is equal for all. When communities are deprived of these opportunities, they are unable to advocate for themselves or guard against harmful environmental consequences. As a result, low-income communities of color that have historically been disregarded and excluded from political power bear disproportionately larger environmental burdens. For these reasons, it should come as no surprise that environmental justice and tribal communities are disproportionately impacted by water quality pollution.

Through AB 2108, environmental justice will have a permanent home at the State and Regional Water Boards. This bill will require that at least one member of each Water Board carry environmental justice or tribal expertise, will reduce barriers to community engagement, and will mandate transparent environmental justice considerations at key steps in permitting and planning processes. These changes will ensure that the interests of environmental justice and tribal communities are represented and considered at the State Water Boards. For too long, underserved Californians have disproportionately suffered from polluted waters. This bill will help put California on the path to achieve clean water for all."

Federal Clean Water Act (CWA): The Federal Water Pollution Control Act of 1948 was the first major U.S. law to address water pollution. The law was amended in 1972 and became commonly known as the Clean Water Act (CWA). The federal CWA establishes the basic structure for regulating discharges of pollutants into the waters of the United States and regulating quality standards for surface waters. Under the CWA, the United States Environmental Protection Agency (US EPA) has implemented pollution control programs, including setting wastewater standards for industrial facilities, as well as 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. Industrial, municipal, and other facilities must obtain a permit under the National Pollutant Discharge Elimination System in order to discharge into surface water.

National Pollution Discharge Elimination System (NPDES): As authorized by the CWA, the NPDES Permit Program controls water pollution by regulating point sources that discharge pollutants into waters of the United States. Point sources are discrete conveyances such as pipes or man-made ditches. Examples of pollutants include, but are not limited to, rock, sand, dirt, and agricultural, industrial, and municipal waste discharged into waters of the United States. The NPDES Program is a federal program which has been delegated to the State of California for implementation through the State Water Board and the Regional Water Boards.

State Water Board: Created by the State Legislature in 1967, the five-member Board allocates water rights, adjudicates water right disputes, develops statewide water protection plans, establishes water quality standards, and guides the nine Regional Water Quality Control Boards located in the major watersheds of the state. Each of the five full-time salaried board members fills a different specialized position (representing the public, engineering expertise, water quality expertise, and water supply expertise). The members are appointed to four-year terms by the Governor and confirmed by the Senate.

Regional Water Boards: There are nine regional water quality control boards statewide. The nine Regional Boards are semi-autonomous and are comprised of seven part-time Board members appointed by the Governor and confirmed by the Senate. Regional boundaries are based on watersheds and water quality requirements are based on the unique differences in climate, topography, geology, and hydrology for each watershed. Each Regional Board makes critical water quality decisions for its region, including setting standards, issuing waste discharge requirements, determining compliance with those requirements, and taking appropriate enforcement actions.

CalEnviroScreen: In order to address the cumulative effects of both pollution burden and these additional factors, and to identify which communities might be in need of particular policy, investment, or programmatic interventions, the Office of Environmental Health Hazard Assessment (OEHHA) developed and now maintains and updates the CalEnviroScreen tool on behalf of CalEPA. The tool applies a framework, developed by OEHHA in 2010, for assessing cumulative impacts. According to OEHHA cumulative impacts refer to exposures and public health or environmental effects from all sources of pollution in a geographic area. Cumulative impacts also take into account groups of people that are especially sensitive to the effects of pollution and socioeconomic factors. The CalEnviroScreen tool's framework is based in large part on input from a statewide working group on environmental justice that pointed out the unmet need to assess cumulative burdens and vulnerabilities affecting California communities.

Among the environmental indicators included in CalEnviroScreen is "impaired water bodies". Contamination of California streams, rivers, lakes, and coastal waters by pollutants can compromise the use of the water body for drinking, swimming, fishing, aquatic life protection, and other beneficial uses. When this occurs, such water bodies are considered "impaired". Information on impairments to these water bodies can help determine the extent of environmental degradation within an area. Some communities that rely on resources provided by nearby surface waters have populations of lower socioeconomic status and higher ethnic diversity than the general population. For example, certain fishing communities along California's northern coast have lower educational attainment and median income than California as a whole (Pomeroy et al., 2010). In a study of 500 women in the Sacramento–San Joaquin Delta, it was found that Asian and African American women consumed the highest number of sport-caught fish (Silver et al., 2007). Increased levels of certain surface water pollutants have been associated with lower per capita income, low housing values, and a higher percentage of minorities and people of color (Farzin and Grogan, 2013; Liévanos, 2018).

State Water Board Racial Equity Resolution: On November 16, 2021 the State Water Board adopted resolution number 2021-0050: Condemning racism, xenophobia, bigotry, and racial injustice and strengthening commitment to racial equity, diversity, inclusion, access, and anti-racism. As part of the resolution, the State Water Board noted that it is a member of the Government Alliance on Race and Equity (GARE) and adopted its definition of racial equity: racial equity occurs when race can no longer be used to predict life outcomes, and outcomes for all groups are improved. Because race intersects with many, if not all, other marginalized identities, prioritizing and addressing racial inequities improves outcomes for other marginalized communities. Additionally, the State Water Board stated, "Historically, decision-makers representing government agencies used race to establish structures and systems that continue to deliver disparate outcomes, including wealth, health, educational, and environmental inequities." Resolutions the State Water Board adopted include that the State Water Board:

- 1) Commits to making racial equity, diversity, inclusion, and environmental justice central to our work as we implement our mission so that the access the State Water Board creates, and outcomes we influence, are not determined by a person's race and the benefits are shared equitably by all people.
- 2) Reaffirms the commitment to the protection of public health and beneficial uses of waterbodies in all communities, and particularly Black, Indigenous, and people of color communities disproportionately burdened by environmental pollution through: cleanup of contaminated soil, soil vapor, and groundwater; control of wastes discharged to land and surface water; restoration of impaired surface waters and degraded aquifers; and promotion of multi-benefit water quality projects to increase access to parks, open spaces, greenways, and other green infrastructure.

Acknowledgement of impacts: AB 2108 provides a reminder that there are many communities in California, especially disadvantaged and tribal communities that bear a substantial pollution burden. The information provided within CalEnviroScreen is helpful in identifying communities over burdened with pollution and, in this case, communities impacted by impaired water bodies. Given the recent actions regarding racial equity by the State Water Board, one could ask if some of the provisions of AB 2108 are necessary. This is a fair question and it is important to keep in mind that the actions taken by the State Water Board on racial equity can be changed by a future board. If the Legislature agrees with the goals of the bill, and wants to ensure that these policies of racial equity are carried forward, regardless of the Administration, then enacting these goals and policies into statute is an effective way to accomplish that.

Further clarification: The author may wish to continue working with stakeholders to clarify some of the terms in the bill. For an example, the bill requires the State Water Board and Regional Water Boards to include an analysis of environmental justice impacts or racial equity concerns when issuing statewide, regional, or otherwise significant waste discharge requirements or waivers. It is unclear what is meant by "otherwise significant". Additionally, there may be other terms and phrases in the bill that could benefit from further clarification while working with stakeholders and the Administration.

Arguments in Support: According to a coalition including the California Coastkeeper Alliance, Clean Water Action and Leadership Council for Justice & Accountability,

"The undersigned organizations express their strong support for AB 2108 to ensure that environmental justice and tribal communities are properly represented in water policy issues throughout the state by reclassifying one seat on the State and Regional Water Boards to include a member with experience in these communities. California's low-income communities of color are plagued by ongoing pollution to their waters, making local rivers and lakes unsafe to swim, fish unsafe to eat, and drinking water more expensive to treat. Nearly one million Californians lack access to clean water for domestic use, with millions more affected by poor water quality, limited availability, and affordability. Water systems serving predominantly Latino and low-income communities have disproportionately high occurrences of arsenic and nitrate contamination. AB 2108 will continue to improve environmental justice at California's water boards through three approaches: (1) requiring that one member of the State Water Board and each regional board has environmental justice or tribal expertise, (2) ensuring that waterboards proactively reduce barriers to meaningful community engagement by increasing outreach and reprioritizing enforcement in low-income

areas, and (3) requiring transparency regarding environmental justice considerations at key steps in the planning and permitting processes."

Arguments in Opposition: According to the Valley Ag Water Coalition (VAWC),

"Given the recent resolution by the State Water Board on racial equity, it is unclear why one State Water Board member should be required to be qualified in the field of water supply and water quality relating to environmental justice or tribal communities since the entire 5-member State Water Board and Regional Water Boards and their respective staffs are already committed to the pursuit of environmental justice through all drinking water and water quality programs under their purview. The VAWC respectfully requests an amendment of AB 2108 to delete the provision that should specify that a member of the State Water Board be qualified in the field of water supply and water quality relating to environmental justice or tribal communities. The VAWC does not have any concerns with the remaining provisions of AB 2108."

According to the California Chamber of Commerce,

"We must oppose unless amended AB 2108 until the bill is amended to (1) remove the requirement for an independent analysis of environmental justice impacts associated with permitting decisions, especially with respect to determining consistency with local land use plan; (2) remove vagueness related to the planning processes described in Section 3 in order to understand the scope of the potential impacts; and (3) remove provisions that are ultimately duplicative of existing public participation requirements."

Related Legislation:

- 1) AB 2106 (R. Rivas). Requires, on or before December 2024, the California State Water Board to, modernize its Stormwater Multiple Application and Report Tracking System (SMARTS) database. Additionally, Requires the State Water Board to establish a statewide commercial, industrial, and institutional national pollutant discharge elimination system (NPDES) order. This bill is pending action in the Assembly Environmental Safety and Toxic Materials Committee.
- 2) AB 2113 (R. Rivas). Creates four new accounts in the Waste Discharge Permit Fund and, subject to a future legislative act, transfers up to a total of 50 percent of the annual proceeds from the State Water Pollution Cleanup and Abatement Account to these four new accounts for specified purposes. This bill is pending action in the Assembly Environmental Safety and Toxic Materials Committee.
- 3) AB 377 (R. Rivas, 2021). Would have requires, by January 1, 2025, the State Water Board and the Regional Water Boards to evaluate impaired state surface waters and report to the Legislature a plan to bring all water segments into attainment by January 1, 2050. Would have required, by January 1, 2023, the State Water Board and Regional Water Boards to prioritize enforcement of water quality standard violations that are causing or contributing to an exceedance of a water quality standard in a surface water of the state. This bill was not heard in the Assembly Appropriations Committee.

REGISTERED SUPPORT / OPPOSITION:

Support

7th Generation Advisors
California Coastkeeper Alliance
Clean Water Action
Community Water Center
Humboldt Baykeeper
Inland Empire Waterkeeper
Leadership Counsel for Justice and Accountability
Los Angeles Waterkeeper
Mono Lake Committee
Monterey Baykeeper
Ourwaterla Coalition
Restore the Delta
Russian Riverkeeper
San Diego Coastkeeper
San Francisco Baykeeper
Santa Barbara Channelkeeper
Save California Salmon
Sierra Club California
Social Eco Education (SEE-LA)
Surfrider Foundation
The Otter Project
Water Climate Trust
Winnemem Wintu Tribe
Yuba River Waterkeeper

Opposition

California Chamber of Commerce
Valley Ag Water Coalition

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

Date of Hearing: March 22, 2022

ASSEMBLY COMMITTEE ON ENVIRONMENTAL SAFETY AND TOXIC MATERIALS

Bill Quirk, Chair

AB 2113 (Robert Rivas) – As Amended March 15, 2022

SUBJECT: State Water Pollution Cleanup and Abatement Account: annual proceed transfers

SUMMARY: Creates four new accounts in the Waste Discharge Permit Fund and, subject to a future legislative act, transfers up to a total of 50 percent of the annual proceeds from the State Water Pollution Cleanup and Abatement Account (Account) to these four new accounts for specified purposes. Specifically, **this bill:**

- 1) Creates the Waterway Recovery Account within the Waste Discharge Permit Fund. Transfer, subject to a future legislative act, 30 percent of the annual proceeds of the Account to the Waterway Recovery Account.
- 2) Requires the State Water Resources Control Board (State Water Board) to distribute the funds in the Waterway Recovery Account to each Regional Water Quality Control Board (Regional Water Board) on a pro rata basis based on moneys generated in each Regional Water Board's region. Authorizes each Regional Water Board to expend these funds for the following:
 - a) Restoration projects, including supplemental environmental projects, that improve water quality;
 - b) Source control programs;
 - c) Identifying and enrolling nonfilers into the applicable stormwater national pollutant discharge elimination systems (NPDES) order under the federal Clean Water Act;
 - d) Source identification of unknown sources of impairment; and,
 - e) Competitive grants to fund projects and programs for municipal separate storm sewer system permit compliance requirements that would prevent or remediate pollutants.
- 3) Requires each Regional Water Board, when funding projects from the Waterway Recovery Account, to the best of their ability fund projects with a significant nexus to the community harmed by the original water quality violation.
- 4) Creates the Citizen Monitoring Account within the Waste Discharge Permit Fund. Transfers, subject to a future legislative act, 5 percent of the annual proceeds of the Account to the Citizen Monitoring Account.
- 5) Requires the State Water Board, when expending money from the Citizen Monitoring Account to fund the State Water Board's Surface Water Ambient Monitoring Program (SWAMP) – Clean Water Team Citizen Monitoring Program to increase water quality monitoring to inform the state's integrated report or to establish a priority water-contact recreation site monitoring program that includes posting and notification of water quality hazards at identified water bodies.

- 6) Creates the Community Capacity Building Account within the Waste Discharge Permit Fund. Transfers, subject to a future legislative act, 10 percent of the annual proceeds of the Account to the Community Capacity Building Account.
- 7) Requires the State Water Board, when expending money from the Community Capacity Building Account, to create and fund a community capacity program to increase disadvantaged and tribal community participation in the State Water Board outreach and regulatory processes, including all of the following:
 - a) Increasing disadvantaged and tribal community stakeholder participation;
 - b) Improving language access;
 - c) Improving access to data and information on racial equity;
 - d) Improving communication with communities and partners; and,
 - e) Bridging the digital divide to increase public participation in disadvantaged and tribal communities.
- 8) Creates the Stormwater Innovation Account within the Waste Discharge Permit Fund. Transfers, subject to a future legislative act, 5 percent of the annual proceeds of the Account to the Stormwater Innovation Account.
- 9) Requires the State Water Board, when expending money from the Stormwater Innovation Account, to expend money on the following in relation to stormwater management:
 - a) Funding best management practice research innovation;
 - b) Defining standardized methods to measure stormwater best management practice effectiveness at the site and drainage scale;
 - c) Collecting and analyzing best management practice effectiveness data; and,
 - d) Establishing long-term monitoring sites and defining specifically how the monitoring data will inform site and drainage scale modeling of all unmonitored areas.

EXISTING LAW:

- 1) Establishes the National Pollutant Discharge Elimination System (NPDES) permit program requiring the State Water Board and the nine California Regional Water Boards to prescribe waste discharge requirements which, among other things, regulate the discharge of pollutants in stormwater, including municipal stormwater systems. (33 United States Code § 1342)
- 2) Establishes the Account within the State Water Quality Control Fund, which is administered by the State Water Board. (Water Code (WC) § 13440)
- 3) Provides to the Account, half of all funds collected due to criminal penalties and all funds from civil penalties received under the Porter Cologne Water Quality Control Act. (WC § 13441)

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

FISCAL EFFECT: Unknown.

COMMENTS:

Need for the bill: According to the author, "Assembly Bill 2113 will reform the State Water Board's Cleanup and Abatement Account to ensure that fines and penalties paid by water quality violators are sent back to the impacted community for cleanup, not used to fund state government operations. This legislation will not create or increase any fines or fees; it will simply reallocate existing funds to ensure maximum impact. It will simply ensure that the Water Board is using limited resources where they can have the most "bang for their buck:" cleaning up the most polluted waterways in the state's disadvantaged communities."

State Water Pollution Cleanup and Abatement Account (Account): The Account was created to provide public agencies with grants for the cleanup or abatement of a condition of pollution when there are no viable responsible parties available to undertake the work. The Account is supported by court judgments and administrative civil liabilities assessed by the State Water Board and the Regional Water Boards. Eligible entities that could apply for this funding include public agencies, as well as certain not-for-profit organizations and tribal governments that serve a disadvantaged community and that have the authority to clean up or abate the effects of a waste.

In 2015, the Legislature enacted AB 92 (Budget Committee, Chapter 2, Statutes of 2015) to help provide grant funding to address emergency drinking water issues. Among its provisions, AB 92 expanded the types of projects that can be funded from the Account to include projects to address an urgent drinking water need, without regard to whether the need for drinking water is a result of the discharge of waste; expanded the pool of applicants eligible for funding from the Account to include community water systems that serve a disadvantaged community; exempted projects funded from the Account from state contracting and procurement requirements to the extent necessary to take immediate action to protect public health and safety; and, authorized the State Water Board to adopt guidelines for the allocation and administration of the Account funds.

Stormwater: Stormwater is water from rain or snow melt that runs off surfaces such as rooftops, paved streets, highways, or parking lots and can carry with it pollutants such as oil, pesticides, herbicides, sediment, trash, bacteria, and metals. The runoff can then drain directly into a local stream, lake, or bay. Often, the runoff drains into storm drains, which eventually drain untreated into a local body of water. Pollution often contaminates stormwater runoff, resulting in a toxic soup of runoff entering California's water ways, that includes motor oil, cigarette butts, metals, trash, animal feces, bacteria, and pesticides that lead to exceedances of total maximum daily loads and contamination of the water sources where the runoff flows. Both the United States Environmental Protection Agency 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, water bodies throughout the state are continually contaminated by various pollutants. 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, including the health of humans and aquatic life. For example, high levels of certain types of bacteria in a water body can cause serious illnesses, such as gastrointestinal illnesses, respiratory illnesses, and skin infections in people who come into contact with the water body. As reported in the *National Water Quality Inventory 1996 Report to Congress*, urban runoff was the leading source of pollutants causing water quality impairment related to human activities in ocean shoreline waters and the second leading cause in estuaries across the nation.

Regulation of stormwater pollution: To curb the harmful effects of pollution from stormwater runoff, federal law requires states to set restrictions on the pollutants that can be discharged into water bodies and requires local jurisdictions, including cities, counties, and other public entities, to obtain storm sewer permits. The federal Clean Water Act provides the State and Regional Water Boards with the authority and framework for regulating storm water discharges under the National Pollutant Discharge Elimination System (NPDES) Permitting Program. The US EPA delegates its NPDES Permitting Program to the State of California. Cities and local jurisdictions that operate municipal storm water systems must obtain NPDES permit coverage for discharges of municipal storm water to waters of the United States. Similarly, industry owners must have NPDES permit coverage for storm water from their industrial activity sites, and construction contractors must have NPDES permit coverage for storm water from construction sites that disturb more than an acre of land. Hence, the NPDES stormwater program regulates stormwater discharges from three potential sources: (1) municipal separate storm sewer systems (MS4s), (2) construction activities, and (3) industrial activities.

SWAMP – Clean Water Team Citizen Monitoring Program: The Clean Water Team (CWT) is the citizen monitoring program of the State Water Board. The CWT is a part of the Surface Water Ambient Monitoring Program (SWAMP). The CWT Citizen Monitoring Coordinator(s) work statewide in order to provide technical assistance and guidance documents, training, quality assurance/quality control, support, temporary loans of equipment and communication to citizen monitoring programs and watershed stewardship organizations. Citizen monitoring is any water quality monitoring activity that relies in whole or in part on participation by volunteers, students or non-paid staff. A variety of organizations may be involved in citizen monitoring projects, including but not limited to non-profit groups, Resource Conservation Districts, Coordinated Resource Management and Planning groups, local government agencies, and colleges.

Policy change to consider: AB 2113 proposes to shift approximately half of the proceeds from the Account to four new Accounts for four different purposes: improving water quality, assisting with citizen monitoring programs, building capacity for disadvantaged and tribal communities, and research and innovation for stormwater best management practices. The question is, are these new proposed funding accounts worth reducing half of the funding to the Pollution and Abatement Account, thereby reducing by half the amount that is available for grants to local governments and non-profits for projects eligible under the Account.

Related Legislation:

- 1) AB 339 (Mathis, Chapter 439, Statutes of 2017). Extends the ability of State Water Board to fund projects addressing an urgent drinking water need from the Account by deleting the sunset for this provision.
- 2) AB 91 (Budget Committee, Chapter 1, Statutes of 2015). Appropriated \$15 million from the Cleanup and Abatement Account to the State Water Board to fund actions to address drought-related drinking water emergencies or threatened emergencies. Also, appropriated \$4 million from the Cleanup and Abatement Account to the State Water Board to provide interim emergency drinking water to disadvantaged communities with contaminated drinking water supplies.
- 3) AB 92 (Budget Committee, Chapter 2, Statutes of 2015). Expanded the use of the Cleanup and Abatement Account for uses beyond mitigation of waste and unreasonable use to include urgent drinking water needs. Sunsets these provisions on July 1, 2018.
- 4) SB 826 (Budget Committee, Chapter 23, Statutes of 2016). Appropriated \$15 million from the Cleanup and Abatement Account to the State Water Board to fund actions to address drought-related drinking water emergencies or threatened emergencies.

REGISTERED SUPPORT / OPPOSITION:**Support**

7th Generation Advisors
California Coastkeeper Alliance
California Environmental Voters (formerly CLCV)
Coachella Valley Waterkeeper
Heal the Bay
Humboldt Baykeeper
Inland Empire Waterkeeper
Los Angeles Waterkeeper
Mono Lake Committee
Monterey Coastkeeper
Orange County Coastkeeper
Ourwaterla Coalition
Russian Riverkeeper
San Diego Coastkeeper
Santa Barbara Channelkeeper
Save the Bay
Sierra Club California
Social Eco Education (SEE-LA)
South Yuba River Citizens League
Surfrider Foundation
The Otter Project
Yuba River Waterkeeper

Opposition

None on file.

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

Date of Hearing: March 22, 2022

ASSEMBLY COMMITTEE ON ENVIRONMENTAL SAFETY AND TOXIC MATERIALS

Bill Quirk, Chair

AB 1787 (Quirk) – As Amended February 24, 2022

SUBJECT: Pesticide testing

SUMMARY: Extends the sunset on the data reporting and medical supervisor registration requirements of the agricultural pesticide worker protection program known as the California Medical Supervision Program (Program), and requires laboratories to submit additional information to the State to help identify workers, and medical supervisors of workers, in the Program. Specifically, **this bill:**

- 1) Adds the following information to that which a testing laboratory must report, as part of the Program, to the Department of Pesticide Regulation (DPR):
 - a) The unique identifier of the person tested, including both of the following:
 - i) The health care facility-assigned patient identification number; and,
 - ii) The member identification, group number, and medical group name, or the provider group to which the tested person belongs.
 - b) The National Provider Identifier (NPI).
 - c) The accession number of the specimen.
- 2) Extends the sunset on the data reporting and medical supervisor registration requirements of the Program from January 1, 2023, to January 1, 2027.
- 3) Makes other technical and clarifying changes to statute related to the data reporting and medical supervisor registration requirements of the Program.

EXISTING LAW:

- 1) Requires each employer who has an employee who regularly handles Toxicity Category 1 or 2 organophosphate or carbamate pesticides (OP/CB pesticides) to contract with a physician to provide medical supervision of the employee. (California Code of Regulations (CCR), Title 3, § 6728 (b))
- 2) Delineates the employer's responsibilities for medical supervision for employees who regularly handle OP/CB pesticides, including requiring baseline cholinesterase tests and follow-up tests after the employee has handled OP/CB pesticides, as specified. Requires the employer to follow the recommendations of the medical supervisor concerning matters of occupational health. (CCR, Title 3, § 6728 (c))
- 3) Requires an employer to investigate the work practices and remove an employee from exposure to OP/CB pesticides if the employee's cholinesterase level falls below specified baseline values. (CCR, Title 3, § 6728 (d - e))

- 4) Requires any physician and surgeon who knows, or has reasonable cause to believe, that a patient is suffering from pesticide poisoning or any disease or condition caused by a pesticide to promptly report that fact to the local health officer. (Health and Safety Code (HSC) § 105200)
- 5) Requires an employer, in order to satisfy his or her responsibilities for medical supervision of his or her employees who regularly handle OP/CB pesticides, to contract with a medical supervisor registered with the Office of Environmental Health Hazard Assessment (OEHHA). (HSC § 105206 (a))
- 6) Requires a laboratory that performs tests ordered by a medical supervisor to report specified information, including cholinesterase test results, to DPR, which then shares this information with OEHHA and the State Department of Public Health (DPH). (HSC § 105206 (b))
- 7) Requires OEHHA to establish a procedure for registering and deregistering medical supervisors for the purposes of outreach and training and authorizes OEHHA to establish reasonable requirements for performance. (HSC § 105206 (f))
- 8) Requires OEHHA to review the cholinesterase test results submitted as part of the Program. Authorizes OEHHA to provide an appropriate medical or toxicological consultation to the medical supervisor, and, in consultation with DPR and the local health officer, to provide medical and toxicological consultation, as appropriate, to the county agricultural commissioner to address medical issues related to the investigation of cholinesterase inhibitor-related illness. (HSC § 105206 (f))
- 9) Requires DPR and OEHHA to prepare and publicly post an update on the effectiveness of the Program and the utility of laboratory-based reporting of cholinesterase testing for illness surveillance and prevention by January 1, 2021. (HSC § 105206 (g))
- 10) Sunsets the data reporting and medical supervisor registration provisions of the Program on January 1, 2023. (HSC § 105206 (h))

FISCAL EFFECT: Unknown.

COMMENTS:

Need for the bill: The California Medical Supervision Program (Program) is designed to protect workers who regularly mix, load, or apply Toxicity Category I and 2 organophosphate and carbamate pesticides (OPs/CBs), which are highly toxic pesticides that inhibit the nerve enzyme, cholinesterase. Under the Program, employers must contract with a medical supervisor to monitor their workers for overexposure to OP/CB pesticides by testing workers' blood cholinesterase activity levels. In order for the State to ensure that the Program is effectively protecting workers, agricultural worker cholinesterase test results are transmitted to DPR, and OEHHA registers and provides outreach and consultation to the medical supervisors overseeing the workers' cases. These reporting and registration requirements sunset on January 1, 2023.

AB 1787 extends the sunset on the reporting and registration requirements to January 1, 2027, so that the State can continue to effectively evaluate and manage the Program. Additionally, the bill requires reporting laboratories to submit specific identifying information to DPR on the patient and medical supervisor so the State can better identify, track, and protect the health of workers in the Program.

Organophosphate and carbamate (OP/CB) pesticide exposure: According to DPR, OPs and CBs work as pesticides by inhibiting the nerve enzyme cholinesterase, which breaks down the neurotransmitter acetylcholine, leading to the death of an insect. OPs and CBs can also affect humans by inhibiting cholinesterase. High exposure to OPs/CBs can cause a variety of acute symptoms of neurological poisoning in exposed people, including blurred vision, diarrhea, increased respiratory secretions, tremors, seizures, loss of consciousness, and death. The acute symptoms of OP/CB overexposure can sometimes mimic other illnesses, and people can be sub-clinically affected without showing major acute symptoms. Due to the potential for sub-clinical effects or misdiagnosis of the acute effects, tests for cholinesterase depression are essential for identifying potential overexposure.

Toxicity Category 1 and 2 OP/ CB pesticides: The United States Environmental Protection Agency (U.S. EPA) determines pesticide toxicity categories based on the effects of consumption of, inhalation of, or dermal contact with a pesticide. The degree of toxicity determines which precautions and signal word must appear on the pesticide label. Toxicity Category 1 pesticides are highly toxic and are required to prominently display the signal word "DANGER" on product labels. Toxicity Category 2 pesticides are moderately toxic and are required to prominently display the signal word "WARNING" on product labels.

While the use of Toxicity Category 1 and 2 OP/ CB pesticides in California has declined 89% since 1995, growers still applied an average of 2 million pounds per year of these cholinesterase-inhibiting pesticides from 2011 to 2019. Employers of handlers of Toxicity Category 1 and 2 OP/ CB pesticides are required to monitor their employees' cholinesterase under the Program.

California Medical Supervision Program (Program): Established in 1974, the Program is intended to protect pesticide handlers from excessive exposure to Toxicity Category I and 2 OPs and CBs. Under the Program, employers must contract with a licensed physician as a "medical supervisor" to test the blood cholinesterase level of workers who regularly handle these pesticides. To monitor each employee, the medical supervisor establishes baseline values of cholinesterase during non-exposure periods, and then periodically measures cholinesterase activity levels while the worker handles OPs/CBs. If the employee's cholinesterase is depressed below certain levels, the employer must take immediate specified actions, such as promptly retesting the employee, evaluating the employee's work practices, or immediately removing the employee from further exposure, in order to prevent excessive pesticide exposure and pesticide-related illness.

Reporting requirements: While the Program had been in existence for more than 30 years, prior to 2010 the State had received very little information from the field to determine whether the Program was effective. Assembly Bill (AB) 1963 (Nava, Chapter 369, Statutes of 2010) added HSC § 105206, which requires laboratories that conduct cholinesterase tests as a part of the Program to report test results to DPR. The results are then analyzed by DPR and OEHHA, in consultation with DPH. These provisions were meant to give the State a better idea of whether workers are actually being protected in the field and whether the Program is working as intended.

2015 Program analysis: AB 1963 also required, by December 31, 2015, DPR and OEHHA, in consultation with DPH, to prepare a report on the effectiveness of the medical supervision program and on the utility of laboratory-based reporting of cholinesterase testing for pesticide illness surveillance and prevention. AB 1963 stated that the report may include recommendations to the Legislature that DPR and OEHHA deem necessary.

DPR and OEHHA submitted the resultant report, *"The Report to the California Legislature: California's Cholinesterase Test Results,"* in December 2015, which found that overall the Program appears effective in protecting agricultural workers who handle cholinesterase-inhibiting pesticides. The report did find, however, that based on the data submitted from 2011-2013, the utility of the data analysis is hampered by the inclusion of thousands of records from individuals who are not in the Program, and by missing data on the purpose (i.e. baseline, follow-up, or recovery) of the cholinesterase test. DPR and OEHHA laid out specific "future directions," or actions that the two entities will take to improve the Program and to improve the utility of the data collected. DPR and OEHHA also made two recommendations that required legislation for Program improvement: 1) Cholinesterase reporting should continue at least through December 31, 2018, so that DPR and OEHHA can obtain additional data with clearer information on the purpose of the test and to allow further evaluation of the Program; and, 2) Transferring some cholinesterase reporting responsibilities from the laboratories to the medical supervisors as a more efficient way to implement the Program. The report also recommended enhanced outreach to and training activities for medical supervisors to increase their understanding of the Program.

Program updated: In response to DPR and OEHHA's report, the legislature passed, and the governor signed, AB 2892 (ESTM Committee, Chapter 475, Statutes of 2016), which extended the sunset on the data reporting requirements from January 1, 2017, to January 1, 2021; updated the information that was required to be reported; transferred some of the responsibility of reporting the cholinesterase test results and related information from laboratories to medical supervisors; required OEHHA to establish a procedure for registering and deregistering medical supervisors and to establish requirements for their performance; codified the requirement that an employer of employees who regularly handle pesticides must contract with a medical supervisor registered with OEHHA; and, required DPR and OEHHA to prepare and publicly post an "update" on the effectiveness of the medical supervision program and the utility of laboratory-based reporting of cholinesterase testing for illness surveillance and prevention by January 1, 2021.

The sunset on the data reporting requirements and the medical supervisor registration provisions of the Program were subsequently extended from January 1, 2021, to January 1, 2023, by AB 3220 (ESTM Committee, Chapter 296, Statutes of 2020).

This bill: AB 1787 extends the sunset on the data reporting and medical supervisor registration requirements of the Program from January 1, 2023, to January 1, 2027.

2022 Program analysis: As required by AB 2892, DPR and OEHHA prepared an "update," which was an analysis of the effectiveness of the medical supervision program and the utility of laboratory-based reporting of cholinesterase testing for illness surveillance and prevention, following the programmatic changes required by AB 2892 and recommended in the 2015 report. DPR and OEHHA released that report on January 26, 2022, and subsequently posted it on their websites.

DPR and OEHHA reported in the 2022 update that the Program still appears effective in protecting agricultural workers handling cholinesterase-inhibiting pesticides; however, while data quality has improved since 2014, the utility of the data analysis continues to be hampered by the inclusion of tens of thousands of cholinesterase test records from individuals who are not in the Program (e.g. those who are tested for other medical reasons, such as pre-operative tests, liver disease, etc.). Additionally, an analysis of cholinesterase data received by DPR from 2011

to 2019 showed that a large proportion of the cholinesterase test reports still did not include the purpose of the test, and usually did not include the ordering physician's information or the patient's correct name. DPR needs to be able to identify individual workers and to know the purpose of the test in order to track and compare an individual employee's cholinesterase activity level after handling pesticides to their pre-exposure baseline level to monitor for cholinesterase depression and thus prevent excessive pesticide exposure. Consequently, it is resource intensive for DPR and OEHHA to not only identify workers under the Program, but to subsequently follow up with the reporting laboratory or ordering physician to reconcile data discrepancies. To address these data quality concerns, the report recommended amending HSC § 105206 to request additional data elements from reporting laboratories to better identify workers and ordering physicians. According to DPR and OEHHA, while laboratories already submit other personal information, such as the patient's name, date of birth, and test results, the data submitted is currently not adequate to identify all workers and medical supervisors under the Program, thus rendering DPR unable to fully evaluate whether the program is truly effective at protecting agricultural workers.

This bill: AB 1787, as recommended in the 2022 update, requires reporting laboratories to submit additional identifying information for the patient and medical supervisor so the State can better identify, track, and protect the health of workers in the Program. The bill requires laboratories to also submit the health care facility-assigned patient identification number and the member identification, group number, and medical group name, or the provider group to which the person tested belongs, to help identify the employee tested and to connect the employee to their employer. The bill also requires laboratories to submit the accession number of the specimen, which will help DPR determine the number of tests ordered by the provider. Finally, the bill's requirement for laboratories to submit the National Provider Identifier (NPI), along with the medical group name or the provider group, will help DPR and OEHHA identify the medical supervisor.

DPR and OEHHA report that some laboratories already report all of the information required by the bill, and they argue that requiring this data in statute will lead to more consistent reporting across all laboratories. Further, the NPI, patient identification, and accession number can be verified against national databases, making it easier to determine the actual count of employees under the Program, the count of medical supervisors responsible for monitoring workers' cholinesterase levels in a given period, and the number of tests ordered by a medical supervisor.

Related legislation:

- 1) AB 3220 (ESTM Committee, Chapter 296, Statutes of 2020). Extended the sunset, from January 1, 2021, to January 1, 2023, on the data reporting and medical supervisor registration provisions of the Program.
- 2) AB 2892 (ESTM Committee, Chapter 475, Statutes of 2016). Updated and enhanced the Program by extending the sunset on the requirement for laboratories to transmit cholinesterase test results to the State; requiring OEHHA to register medical supervisors; requiring medical supervisors to report depressions in cholinesterase levels as a pesticide illness; and, requiring DPR and OEHHA to prepare and publicly post an update on the effectiveness of the medical supervision program and the utility of laboratory-based reporting of cholinesterase testing for illness surveillance and prevention.

- 3) AB 1963 (Nava, Chapter 369, Statutes of 2010). Required clinical laboratories that perform cholinesterase testing for the purpose of determining workers' pesticide exposure to electronically report test results to DPR.
- 4) AB 1530 (Lieber, 2007). Would have required clinical laboratories that perform cholinesterase testing for the purpose of determining workers' pesticide exposure to electronically report test results to DPR. This bill was held in the Senate Appropriations Committee.

REGISTERED SUPPORT / OPPOSITION:

Support

Department of Pesticide Regulations (DPR) (Sponsor)
American Federation of State, County and Municipal Employees (AFSCME), AFL-CIO
California Rural Legal Assistance Foundation (CRLA Foundation)
Californians for Pesticide Reform (CPR)
Environmental Working Group (EWG)
Natural Resources Defense Council (NRDC)
Pesticide Action Network (PAN)
Sierra Club California
Sustainable Agriculture Education (SAGE)

Opposition

None on file.

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

Date of Hearing: March 22, 2022

ASSEMBLY COMMITTEE ON ENVIRONMENTAL SAFETY AND TOXIC MATERIALS
Bill Quirk, Chair
AB 1793 (Quirk) – As Amended March 2, 2022

SUBJECT: Hazardous waste: identification: testing

SUMMARY: Requires the Department of Toxic Substances Control (DTSC) to evaluate the existence of alternate test methods or calculation-based method that avoid the use of live vertebrate fish for hazardous and extremely hazardous waste identification, and, if such an alternate method or calculation-based method exists, requires DTSC to include it as an optional test method. Specifically, **this bill:**

- 1) Requires DTSC, upon an appropriation by the Legislature, to review its acute toxicity criteria and guidelines for the identification of hazardous wastes and extremely hazardous wastes.
- 2) Requires DTSC to evaluate the existence of alternate test methods or calculation-based methods that avoid the use of live vertebrate fish for the identification of hazardous wastes and extremely hazardous wastes.
- 3) Requires DTSC to update regulations, provided it finds an adequate alternate test method or calculation-based method, to include the alternate test method or calculation-based method as an optional method for the identification of hazardous wastes and extremely hazardous wastes.

EXISTING LAW:

- 1) Establishes the Resource Conservation and Recovery Act (RCRA) to authorize the United States Environmental Protection Agency (US EPA) to manage hazardous and non-hazardous wastes throughout its life cycle. (42 United States Code (U.S.C.) § 6901 et seq.)
- 2) Establishes the Hazardous Waste Control Law (HWCL) to authorize DTSC to regulate the management of hazardous wastes in California. (Health and Safety Code (HSC) § 25100 et seq.)
- 3) Defines "waste" as any solid, liquid, semisolid, or contained gaseous discarded material. (HSC § 25124)
- 4) Requires DTSC to develop and adopt regulatory criteria and guidelines for the identification of hazardous wastes and extremely hazardous wastes. (HSC § 25141(a))
- 5) Defines a "hazardous waste" as waste, because of its quantity, concentration, or physical, chemical, or infectious characteristics, that:
 - a) Causes, or significantly contributes to an increase in mortality or an increase in serious irreversible, or incapacitating reversible, illness; or,

- b) Poses a substantial present or potential hazard to human health or the environment, due to factors including, but not limited to, carcinogenicity, acute toxicity, chronic toxicity, bio-accumulative properties, or persistence in the environment, when improperly treated, stored, transported, or disposed of, or otherwise managed. (HSC § 25141(b))
- 6) Defines a "toxic hazardous waste" as waste that is identified as toxic by any one (or more) of the following: Toxicity Characteristic Leaching Procedure, Totals and Waste Extraction Test, Acute Oral Toxicity, Acute Dermal Toxicity, Acute Inhalation Toxicity, Acute Aquatic Toxicity, Carcinogenicity, or Experience or Testing. (California Code of Regulation (CCR) Title 22 § 66261.24)

FISCAL EFFECT: Unknown.

COMMENTS:

Need for the bill: According to the author,

"California has over 100,000 generators of hazardous waste, including many businesses and retailers. The state requires these waste generators to separate hazardous from nonhazardous waste and dispose of it in a manner that protects public health and the environment. In determining whether a waste is hazardous, its toxicity in various contexts is measured, including acute toxicity to aquatic life. This test, commonly referred to as the "fish test", was developed in the 1980s and has not been refined since, despite the US EPA, the European Union (EU), and the Organization for Economic Cooperation and Development (OECD) approving alternative methods that do not conduct tests on live vertebrate fish. When waste generators decide not to perform animal testing for their products, including the "fish test", they must treat their waste as hazardous by default. This leads to over-classification of waste as hazardous despite potentially being harmless to aquatic life. Retailers at times also choose not to undergo toxicity testing due to its complexities, over-classifying more waste as hazardous. AB 1793 tackles this problem by requiring DTSC to evaluate alternative test methods or calculation-based methods and to allow such an alternative, if identified, to be used by waste generators."

Hazardous waste management: In California, DTSC is authorized by the US EPA to implement the RCRA requirements and its associated regulations. In addition to implementing RCRA, California implements additional state law hazardous waste requirements that are more stringent than those established under RCRA.

There are more than 100,000 entities that generate hazardous waste in California. Waste generators are responsible for determining whether a waste is hazardous or non-hazardous and disposing of the waste accordingly. In California, a hazardous waste is any waste on a federally maintained RCRA list of hazardous wastes, that is derived from these wastes, or that is ignitable, corrosive, reactive, or toxic. In order to list a waste, as hazardous, US EPA assesses whether the waste:

- 1) Exhibits any of the characteristics, i.e., ignitability, corrosivity, reactivity, or toxicity;
- 2) Is fatal to humans or animals at low doses i.e. is acutely toxic; or,

- 3) Is capable of posing a substantial present or potential hazard to human health or the environment when improperly treated, stored, transported, or disposed of, or otherwise managed.

The listed wastes are categorized into:

- 1) F-list: Wastes common to many manufacturing and industrial processes, such as solvents used for cleaning.
- 2) K-list: Wastes generated by specific industries, including petroleum refining and pesticide manufacturing.
- 3) P-list and U-list: Commercial products, such as industrial chemicals or pharmaceuticals that have not been used and will be discarded.
- 4) M-list: Wastes known to contain mercury, such as fluorescent lamps.

Identification of hazardous waste in California: In California, a waste is classified as hazardous due to toxic properties if it is identified as having one or more of eight types of toxicity, which includes acute oral toxicity, acute dermal toxicity, acute inhalation toxicity, acute aquatic toxicity, or carcinogenicity (CCR Title 22 § 66261.24). All of these types of toxicity can be determined using knowledge about the toxicity of constituent components of the waste, except for acute aquatic toxicity.

A waste is defined as having "acute aquatic toxicity" when less than 500 milligrams (mg) per liter (L) kill 50% of the population (LC₅₀) of fathead minnows (*Pimephales promelas*), rainbow trout (*Salmo gairdneri*) or golden shiners (*Notemigonus crysoleucas*) in 96 hours (CCR Title 22 § 66261.24). This test is most commonly performed on fathead minnows and is colloquially referred to as the "fish test" or "minnow test". Other than Washington State, this committee is not aware of any other states that use acute aquatic toxicity testing as part of hazardous waste determination.

Over-classification of hazardous waste: SB 423 (Bates, Chapter 771, Statutes of 2016) required DTSC to convene a Retail Waste Workgroup (Workgroup) tasked with identifying regulatory and policy directives that need clarification for managing consumer products. Over an eight-month period (October 2016 through May 2017), the Workgroup identified problems faced by the retail industry in applying the hazardous waste management standards in California and worked to identify possible solutions. In the Workgroup's final report to the legislature, the regulated community estimated that, "About 30% of the total hazardous waste generated in California is "California-only" hazardous waste [i.e., waste that is only classified as hazardous because of California's requirements, including the fish test]. The percentages for retail waste can be much higher, with some retailers managing up to 67% of their hazardous waste as "California-only" hazardous waste."

While there is no legal definition of "Cruelty Free" and "Not Tested on Animals," many companies only use these labels if their products' toxicity has not been evaluated using the fish test. Companies that do not test products using the fish test treat their waste as hazardous by default, or risk liability. Violations of the HWCL can lead to penalties up to \$70,000 per day for each violation (HSC §25188). This adds to the over-classification of waste as hazardous in the state.

Fish test protocol: The fish test protocol for hazardous waste identification was developed as a special protocol for "materials that do not readily lend themselves to standard toxicity testing," such as oily samples and samples containing sediment, and draws from previously developed wastewater protocols.

In concept, a waste fails the acute aquatic toxicity test if, in a tank containing the test organism and 500 mg of waste/L, half of the fish in the tank are dead within 96-hours. In order to produce reliable results, this procedure must be performed multiple times at the 500 mg/L concentration, and at concentrations above and below 500 mg/L, each time using a minimum of twenty fish. Along with wastes containing intuitively toxic substances, such as arsenic, based on data from the Draft Retail Waste Aquatic Toxicity Project available on DTSC's website, many household products fail this test as well, including ginkgo, ginger, zinc, and most, if not all, soaps and shampoos tested.

DTSC selection of the fish test: According to DTSC's final statement of reasons justifying its criteria for hazardous waste identification, issued in 1984, the US EPA established the toxicity criteria to define commercial substances which may pose a hazard if spilled or discharged into an aquatic environment (40 Code of Federal Regulations (CFR) 116). As part of those criteria, aquatically toxic substances were defined as those that demonstrate a 96-hour LC₅₀ of less than 500 mg/L. As a result, DTSC used the same standard to define aquatic toxicity of a waste or material as "numerous accidental and intentional discharges of toxic wastes into an aquatic environment have occurred, and the impacts are similar to that caused by commercial substances."

According to the statement of reasons, performing the test on readily available and commonly used fish is preferable because "it is not considered feasible, or necessary, to try to devise a bioassay method, or methods, which will anticipate waste pollution scenarios involving different conditions of water temperature and hardness of the exposure of any of the numerous species of common native fishes." The fathead minnow is not native to California, but is a common test organism that has been used historically in regulatory ecotoxicology for its sensitivity to a wide variety of chemicals and amenability to laboratory environments (The fathead minnow in aquatic toxicology: Past, present and future, Ankley 2006). All three fish species were chosen for their common use in tests and readily available 96-hour LC₅₀ data.

DTSC reasoned that testing on live organisms detects toxic characteristics of wastes that may not be captured in lists either because toxicity of constituent substances is unknown or because of synergistic toxicity of multiple constituent substances. In one example, a printing company dumped waste ink sludge at a municipal landfill not authorized to receive hazardous wastes. Analysis of the waste did not establish the presence of toxic materials; however, the acute aquatic fish toxicity test showed the sludge was highly toxic to fish. It was speculated that the ink contained a fungicide to prevent mildew. In several cases, DTSC noted that accidental or illegal discharge of hazardous waste resulted in fish kills. The statement of reasons also noted that the fish test may serve as an indicator of general toxicity of a waste, including to humans, in the view that fish are generally more sensitive to toxic substances than mammals.

Excessive fish use and animal welfare concerns: Fish have pain receptors (nociceptors), which are a prerequisite for pain sensation. It is unclear if apparent pain responses are unexperienced and reflexive, or a more conscious experience. Notably, at the conclusion of the aquatic toxicity

test, all fish must be euthanized. According to the National Toxicology Program (NTP), administered by the US Department of Health and Human Services, testing of a single chemical can require up to 260 fish, depending on the specific test design. To address the need to reduce or replace animal use for ecotoxicity testing, the NTP's Scientific Advisory Committee on Alternative Toxicological Methods has scheduled a meeting for September 2022.

Shift toward alternative test methods: Alternative test methods are methods that replace, reduce, or refine animal use in research and testing, a concept first described by William Russell and Rex Burch (*The Principles of Humane Experimental Technique*, 1959). California state law prohibits manufacturers and contract testing facilities from using traditional animal testing methods when an appropriate alternative test method has been scientifically validated and recommended by the Interagency Coordinating Center for the Validation of Alternative Methods (ICCVAM) (Civil Code Section 1834.9 (a)). Although this law exempts testing at regulatory agencies, there have been federal efforts to replace, reduce, or refine animal testing at federal agencies. The National Institutes of Health Revitalization Act of 1993, the ICCVAM Authorization Act of 2000, and the Frank R. Lautenberg Chemical Safety for the 21st Century Act require federal agencies to support the development of alternative test methods.

In 1997, US government agencies formed ICCVAM with several objectives, which includes ensuring that new and revised test methods are validated to meet the needs of US federal agencies, and reducing, refining, or replacing the use of animals in testing where feasible. ICCVAM consists of 15 research and regulatory agencies, among which include the US EPA, the Food and Drug Administration (FDA), and the Agency for Toxic Substances and Disease Registry (ATSDR). These organizations provide or use toxicological information for risk assessment processes.

Alternative test methods: Alternative test methods to the fish test have been studied by various entities. The Organization for Economic Cooperation and Development (OECD) maintains the *Guidelines for the Testing of Chemicals*, a collection of about 150 of the most relevant internationally agreed testing methods used by governments, industry, and independent laboratories to identify and characterize potential hazards of chemicals. While the guide does have a fish test similar to the one used in California (OECD TG 203: Fish, Acute Toxicity Test), a fish embryo test is also outlined (OECD TG 236: Fish Embryo Acute Toxicity (FET) Test).

The FET test is performed on embryos of the globally used model organism zebrafish (*Danio rerio*). In this test, newly fertilized zebrafish eggs are exposed to the test chemical for a period of 96 hours and increasing concentrations. Every 24 hours, various indicators of lethality are assessed and an LC₅₀ calculated based on embryo survival. The EU Reference Laboratory for Alternatives to Animal Testing independently validated the FET test and concluded that it should be used for generating information on acute fish toxicity, where appropriate. Notably, the European Chemicals Agency (ECHA) has so far declined to accept the FET test as a stand-alone alternative to OECD TG 203 for regulatory purposes, citing "knowledge gaps that arose during validation of OECD TG 236 and within the current ECHA report" titled *Analysis of the relevance and adequateness of using Fish Embryo Acute Toxicity test (FET) Test Guidelines (OECD TG 236) to fulfill the information requirements and addressing concerns under REACH (Joint Report ECHA and UBA on 'Expert Workshop on the potential regulatory application of the Fish Embryo Acute Toxicity (FET) Test under REACH, CLP and the BPR', 2017)*. There are several limitations that preclude the FET test from serving as a stand-alone alternative to live vertebrate fish, including an incomplete understanding of embryonic metabolism compared to

that of juvenile or adult fish, and evidence that the chorion, the outer membrane of the embryo, is impermeable to high molecular weight compounds.

Another potential alternative is OECD TG 249 which uses a rainbow trout (*Oncorhynchus mykiss*) gill cell line, RTgill-W1, to test acute toxicity. After 24 hours of exposure to a test chemical, cell viability is assessed using fluorescent indicator dyes. The data are expressed as the percent cell viability of unexposed cells (control) values versus the test chemical concentration. The resulting concentration-response curves serve to determine the effective concentrations causing 50% loss in cell viability (EC₅₀).

It is noteworthy that US EPA has approved invertebrate aquatic organisms for acute toxicity testing of whole effluent and receiving waters; these are also used in California. These methods are approved under the federal Clean Water Act (section 304(h)) and specified in 40 Code of Federal Regulations 136.3 Table I A. Besides several vertebrate fish species, water fleas (species: *Ceriodaphnia dubia*; *Daphnia pulex*, and *Daphnia magna*) are approved for acute fresh water toxicity testing. To study acute estuarine and marine toxicity, mysids (*Mysidopsis bahia*), shrimp-like crustaceans, are an approved alternative to fish. Water fleas (*Daphnia* spp.) comprise small planktonic crustaceans, about 0.2 to 6 millimeters in length, and could lend themselves as alternative test organisms in hazardous waste identification.

If used for hazardous waste identification, both the zebrafish embryo test and the daphnid test may need to be adapted to work with the wide range of types of waste, some of which cannot undergo standard toxicity testing. Adopting a daphnid test as an optional alternative would have the advantage of avoiding testing on vertebrate species altogether and building off of methods already widely used in the state. Over-classification of hazardous waste, excess use of animals, and burdens on businesses committed to avoiding animal testing could be avoided with the adoption of the FET or daphnid tests as an optional alternative, if found to be adequate by DTSC.

Lastly, the National Toxicology Program Interagency Center for the Evaluation of Alternative Toxicological Methods (NICEATM) and US EPA are conducting a retrospective evaluation of existing data to explore the potential for relying on fewer fish species tests. The goal is to support a protective ecological risk assessment. Results from the study will be used to determine whether all three fish species currently in use are necessary to assess acute lethal risks to fish, and explore if reduced species testing could be combined with an adjustment factor to meet risk protection goals. This project was presented in March 2021 at the 11th World Congress on Alternatives and Animal Use in the Life Sciences (Ceger et al., *Retrospective Evaluation of the Acute Fish Toxicity Test for Pesticide Regulation*). A peer-reviewed study had not been published as of March 2, 2022.

Calculation-based methods: Computational toxicology is an actively developing area of research that leverages existing toxicity data, applies machine learning models, and attempts to build mathematical models of biological systems *in silico*. The field is progressing rapidly due to an increasing availability of curated public and commercial databases and development of new computational tools (Kleinstreuer et al, 2020). However, the technology has not matured to the point where it can entirely replace toxicity testing of new chemicals or chemical mixtures. However, computational toxicology builds on established calculation-based methods that leverage existing toxicity data for individual chemicals to estimate acute toxicity of mixtures of chemicals.

The European Chemicals Agency (ECHA), in its guidance on classification, labelling and packaging of substances and mixtures, outlines that when data are available for all ingredients, an estimation calculation can be performed and the acute toxicity estimate (ATE) of ingredients shall be considered as follows:

- 1) Include ingredients with a known acute toxicity, which fall into any of the acute toxicity categories, as specified;
- 2) Ignore ingredients that are presumed not acutely toxic (e.g., water, sugar); and,
- 3) Ignore components if the data available are from a limit dose test and do not show acute toxicity.

The ATE of a mixture is determined by calculation from the ATE values for all relevant ingredients according to a given formula for oral, dermal, or inhalation toxicity.

Currently, California allows calculation-based estimates in its classification of dermal and oral toxicity. CCR Title 22 § 66261.24(c) states that, "A waste containing one or more materials which exhibit the characteristic of toxicity [...] may be classified as nonhazardous pursuant to section 66260.200 if the waste does not exhibit any other characteristic of this article [...] and the calculated oral LD₅₀ of the waste mixture is greater than 2,500 milligrams per kilogram and the calculated dermal LD₅₀ is greater than 4,300 milligrams per kilogram by the following equation [...]". Such calculation-based methods have not been expanded to acute aquatic toxicity evaluations.

Washington State also permits toxicity to be determined from available data, in addition to testing on live fish. Under Washington Administrative Code (WAC) 173-303-100 (5)(b)(i): "A person must determine the toxic category for each known constituent. The toxic category for each constituent may be determined from available data, for example, Registry for Toxic Effects of Chemical Substances (RTECS), Hazardous Substances Data Bank (HSDB), and Ecotoxicology database (ECOTOX). The toxic category should then be identified, using the table below. If data are available for more than one test endpoint (that is, fish, oral rat, inhalation rat, or dermal rabbit), the value with the highest toxicity must be used."

Minnesota also allows calculation estimates of LD₅₀ values of a waste. To calculate an estimated LD₅₀ the state requires that appropriate LD₅₀ data are available for all components of the waste that may reasonably produce a toxic effect.

DTSC to review its hazardous waste criteria: As part of the Governor's proposed 2022-2023 budget, DTSC has submitted a Budget Change Proposal (BCP) requesting 8 positions and \$1.5 million annually to evaluate all existing California hazardous waste criteria, recommend modifications to those criteria, assist in the adoption of any approved recommendations, and provide waste classification determination and recycling exclusion interpretations and technical support. As part of the stated need for a review of hazardous waste criteria, in the BCP DTSC states:

"When the hazardous waste control laws were enacted in 1972, the Department of Health Services (the predecessor of DTSC) was mandated to develop criteria and guidelines for the identification of hazardous wastes and extremely hazardous wastes. This mandate

continues to exist in DTSC's authorizing statutes. DTSC's hazardous waste identification criteria and test methods were originally proposed in 1978 and formally adopted into regulation in 1985 [...]. Except for minor modifications, the current hazardous waste identification criteria are nearly identical to those adopted in 1985.

California's hazardous waste identification criteria were considered advanced and groundbreaking at the time they were adopted and continue to be protective and are the most stringent hazardous waste identification criteria in the nation. The criteria application results in more wastes being identified as hazardous waste than the federal hazardous waste identification criteria. The criteria, however, have not been modified or expanded to keep pace with advances in the science of toxicology, in analytical testing methodology or in environmental monitoring efforts. [...]

In addition, newer and more advanced equipment is able to detect the presence of contaminants at lower levels than before. Analytical test methods, once able to reliably measure environmental contaminants in water and soil at parts per million, are now able to measure at concentrations in parts per billion or lower."

Proper identification of hazardous waste: The goal of AB 1793 is to ensure that DTSC uses an acute aquatic toxicity test that accurately captures toxicity, while reducing the burden associated with this testing on waste-generating entities. Any acute toxicity test must ensure that wastes that are harmful to human health and the environment are managed correctly, but also prevent over-classification of waste that is not harmful as hazardous waste. As noted by DTSC's BCP, current hazardous waste identification testing methods are over 30 years old and have not been reviewed or updated. Given that DTSC is undertaking a review of its hazardous waste classification, AB 1793 is consistent with that effort and directs the department to review newer physical test and calculation-based alternatives.

Arguments in Support: The sponsor of the bill, the National Stewardship Action Council, writes, "Regulated state waste identification remains a persistent and costly problem. Retailers must understand both federal and state toxicity regulations to sell and manage consumer products compliantly or are subject to hefty fines and brand risk. When faced with onerous or complicated state hazardous criteria, many retailers will skip the hazardous evaluation process altogether. [...] Brands that do not test their products on animals are automatically deemed hazardous and specific and expensive waste handling procedures are required, mainly hazardous waste incineration. AB 1793 would update California processes to eliminate unnecessary and costly hazardous waste management of non-toxic products."

The Personal Care Products Council writes, "California's use of the aquatic toxicity test is grossly out of alignment with more modernized testing methods, and over classifies as "hazardous waste" products that would not otherwise be captured under more modern tests. [...] The cosmetic and personal care products industry has taken a strong stand against animal testing; consequently, our members do not conduct this test on finished products and we do not believe that a California State Agency should either."

Related legislation:

- 1) AB 733 (Quirk, 2019). Would have required DTSC to evaluate the existence of an alternative test method to the acute toxicity test that avoids the use of live vertebrate fish and,

if such a method were identified, to adopt it as an option for hazardous waste identification.
Vetoed.

- 2) AB 2474 (Quirk, 2018). Would have required DTSC to evaluate, and adopt as optional tests if suitable, the fish embryo test and daphnid test as alternatives to the fish test used in hazardous waste identification. Vetoed.
- 3) SB 1249 (Galgiani, Chapter 899, Statutes of 2018). Prohibits a manufacturer of cosmetic products to import for profit, sell, or offer for sale in this state, any cosmetic, if the cosmetic was developed or manufactured using an animal test that was conducted or contracted by the manufacturer, or any supplier of the manufacturer, on or after January 1, 2020, as specified. Specifically excludes from the prohibition an animal test of any cosmetic that is required by a federal or state regulatory authority, as specified.

REGISTERED SUPPORT / OPPOSITION:

Support

National Stewardship Action Council (Sponsor)
Cruelty Free International North America
Personal Care Products Council

Opposition

None on file.

Analysis Prepared by: Manar Zaghlula / E.S. & T.M. /

Date of Hearing: March 22, 2022

ASSEMBLY COMMITTEE ON ENVIRONMENTAL SAFETY AND TOXIC MATERIALS
Bill Quirk, Chair

AB 2293 (Committee on Environmental Safety and Toxic Materials) – As Amended March 15, 2022

SUBJECT: Carpenter-Presley-Tanner Hazardous Substance Account Act: recodification

SUMMARY: Reorganizes the provisions of the Carpenter-Presley-Tanner Hazardous Substance Account Act (HSAA) without making any substantive changes to the statute.

EXISTING LAW:

- 1) Establishes the HSAA, which is a program to provide for response authority for releases of hazardous substances, including spills and hazardous waste disposal sites that pose a threat to the public health or the environment. (Health and Safety Code § 25300 et seq.)

FISCAL EFFECT: Unknown.

COMMENTS:

Need for the bill: In 2018, the Legislature directed the California Law Revision Commission (Commission) to conduct a strictly nonsubstantive clean-up of Chapter 6.5 (commencing with Section 25100) and Chapter 6.8 (commencing with Section 25300, the HSAA) of Division 20 of the Health and Safety Code, and related provisions, to improve the organization and expression of the law (SCR 91 Roth, Resolution Chapter 158 of 2018). The Commission decided to proceed with this work in phases, first undertaking work on Chapter 6.8. AB 2293 incorporates the Commission's work on the HSAA and reorganizes the provisions to make them more user-friendly, without changing the substance of the law.

Carpenter-Presley-Tanner Hazardous Substances Account Act (HSAA): State law provides the California Department of Toxic Substances Control (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. DTSC utilizes the HSAA for cleanup of contaminated sites. The HSAA provides DTSC with the authority, procedures, and standards to investigate, remove, and remediate contamination at sites; to issue and enforce a removal or remedial action order to any responsible party; and, to impose administrative or civil penalties for noncompliance with an order. Federal and state law also authorizes DTSC to recover costs and expenses it incurs in carrying out these activities.

History of the Commission's work related to DTSC: In 2015, the Legislature passed and the Governor signed SB 83 (Budget Committee, Chapter 24, Statutes of 2015), which established within DTSC a three-member Independent Review Panel (IRP) to review and make recommendations regarding improvements to DTSC's permitting, enforcement, public outreach, and fiscal management. Pursuant to SB 83, the IRP was authorized until January 1, 2018. Over the course of its term, the IRP conducted 24 public meetings and released 11 progress and annual reports. On January 8, 2018 the IRP released its final report and recommendations concluding: "The Department has implemented, or is working on, most of the IRP's recommendations and has achieved, or partially achieved, many of the IRP's suggested performance metrics. However,

there is more work to be done. In the absence of the IRP, the Governor and the Legislature should consider a DTSC governing board or other structural change to enhance transparency and accountability and regularly monitor the status of the IRP-suggested recommendations and performance metrics, as well as DTSC's ongoing initiatives and decision-making." One of issues raised by the IRP was that DTSC's statutes were confusing, not organized very well and difficult to understand.

In response to the IRP's work, the Legislature authorized the Commission via (SCR 91 Roth, Resolution Chapter 158 of 2018) to: study, report on, and prepare recommended legislation to revise Chapter 6.5 (commencing with Section 25100) and Chapter 6.8 (commencing with Section 25300) of Division 20 of the Health and Safety Code, and related provisions, to improve the organization and expression of the law, but not to make any substantive changes to the law. Such revisions may include, but are not limited to, grouping similar provisions together, reducing the length and complexity of sections, eliminating obsolete or redundant provisions, and correcting technical errors.

This bill: AB 2293 incorporates the Commission's work reorganizing the HSAA (Chapter 6.8) and does not make any substantive changes to the law. A companion bill, AB 2327 (Committee on Environmental Safety and Toxic Materials [ESTM]) includes changes to cross-references to code sections within Chapter 6.8 using the new codes sections within AB 2293.

Related legislation:

AB 2327 (ESTM Committee). Enacts conforming changes to AB 2293 by updating sections in the HSAA that are cross-referenced in other code sections. This bill is pending in the Assembly ESTM Committee.

REGISTERED SUPPORT / OPPOSITION:

Support

None on file.

Opposition

None on file.

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

Date of Hearing: March 22, 2022

ASSEMBLY COMMITTEE ON ENVIRONMENTAL SAFETY AND TOXIC MATERIALS
Bill Quirk, Chair

AB 2327 (Committee on Environmental Safety and Toxic Materials) – As Amended March 15, 2022

SUBJECT: Carpenter-Presley-Tanner Hazardous Substance Account Act: conforming revisions

SUMMARY: Updates code sections that cross-reference the Carpenter-Presley-Tanner Hazardous Substance Account Act (HSAA) as proposed to be reorganized by AB 2293 (Committee on Environmental Safety and Toxic Materials[ESTM]).

EXISTING LAW:

- 1) Establishes the HSAA, which is a program to provide for response authority for releases of hazardous substances, including spills and hazardous waste disposal sites that pose a threat to the public health or the environment. (Health and Safety Code § 25300 et seq.)

FISCAL EFFECT: Unknown.

COMMENTS:

Need for the bill: In 2018, the Legislature directed the California Law Revision Commission (Commission) to conduct a strictly nonsubstantive clean-up of Chapter 6.5 (commencing with Section 25100) and Chapter 6.8 (commencing with Section 25300, the HSAA) of Division 20 of the Health and Safety Code, and related provisions, to improve the organization and expression of the law (SCR 91 Roth, Resolution Chapter 158 of 2018). The Commission decided to proceed with this work in phases, first undertaking work on Chapter 6.8. AB 2293 (ESTM Committee), incorporates the Commission's work on the HSAA and reorganizes the provisions to make them more user-friendly without changing the substance of the law, AB 2327 updates code sections that cross-reference the HSAA.

Carpenter-Presley-Tanner Hazardous Substances Account Act (HSAA): State law provides the California Department of Toxic Substances Control (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. DTSC utilizes the HSAA for cleanup of contaminated sites. The HSAA provides DTSC with the authority, procedures, and standards to investigate, remove, and remediate contamination at sites; to issue and enforce a removal or remedial action order to any responsible party; and, to impose administrative or civil penalties for noncompliance with an order. Federal and state law also authorizes DTSC to recover costs and expenses it incurs in carrying out these activities.

History of the Commission's work related to DTSC: In 2015, the Legislature passed and the Governor signed SB 83 (Budget Committee, Chapter 24, Statutes of 2015), which established within DTSC a three-member Independent Review Panel (IRP) to review and make recommendations regarding improvements to DTSC's permitting, enforcement, public outreach, and fiscal management. Pursuant to SB 83, the IRP was authorized until January 1, 2018. Over the course of its term, the IRP conducted 24 public meetings and released 11 progress and annual reports. On January 8, 2018 the IRP released its final report and recommendations concluding:

"The Department has implemented, or is working on, most of the IRP's recommendations and has achieved, or partially achieved, many of the IRP's suggested performance metrics. However, there is more work to be done. In the absence of the IRP, the Governor and the Legislature should consider a DTSC governing board or other structural change to enhance transparency and accountability and regularly monitor the status of the IRP-suggested recommendations and performance metrics, as well as DTSC's ongoing initiatives and decision-making." One of issues raised by the IRP was that DTSC's statutes were confusing, not organized very well and difficult to understand.

In response to the IRP's work, the Legislature authorized the Commission via (SCR 91 Roth, Resolution Chapter 158 of 2018) to: study, report on, and prepare recommended legislation to revise Chapter 6.5 (commencing with Section 25100) and Chapter 6.8 (commencing with Section 25300) of Division 20 of the Health and Safety Code, and related provisions, to improve the organization and expression of the law, but not to make any substantive changes to the law. Such revisions may include, but are not limited to, grouping similar provisions together, reducing the length and complexity of sections, eliminating obsolete or redundant provisions, and correcting technical errors.

This bill: AB 2327 includes changes to cross-references to code sections within Chapter 6.8 using the new codes sections within AB 2293, which incorporates the Commission's work reorganizing the HSAA (Chapter 6.8).

Related legislation:

AB 2293 (ESTM Committee). Reorganizes the provisions of the HSSA without making any substantive changes to the statute. This bill is pending in the ESTM Committee.

REGISTERED SUPPORT / OPPOSITION:

Support

None on file.

Opposition

None on file.

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

Date of Hearing: March 22, 2022

ASSEMBLY COMMITTEE ON ENVIRONMENTAL SAFETY AND TOXIC MATERIALS

Bill Quirk, Chair

AB 2481 (Smith) – As Amended March 16, 2022

SUBJECT: Household hazardous waste: facilities: transportation and acceptance

SUMMARY: Makes various changes to the statutory requirements for the transportation of hazardous waste and the operation of household hazardous waste (HHW) collection facilities. Specifically, **this bill:**

- 1) Authorizes, subject to federal law, the transport of HHW to a HHW collection facility using a bill of lading instead of a hazardous waste manifest, if the transport is from another HHW collection facility, a permanent HHW collection facility, a temporary HHW collection facility, a recycle-only HHW collection facility or a solid waste load checking program under an agreement with a HHW collection facility.
- 2) Clarifies that a permanent HHW collection facility, under certain conditions is not subject to the weight and volume limits on the amount of recyclable latex paint or oil-based paint that may be accepted.
- 3) Specifies that the limits on the amount of waste a HHW collection facility may accept from a very small quantity generator (VSQG) do not apply to universal waste.
- 4) Requires a HHW collection facility to clearly advise a person delivering waste at the acceptance area of the facility to remain in their vehicle. Provides that a HHW collection facility is not in violation if a person exits their vehicle despite that advisement.
- 5) Authorizes a HHW collection facility to accept hazardous waste from a VSQG in the same area and at the same time that the facility accepts residential HHW.
- 6) Authorizes, when a resident of a household that generates hazardous waste is unable or unavailable to transport the waste because of death, illness, or disability, another person to transport the waste to the HHW collection facility provided there is no compensation for transporting the waste.
- 7) Authorizes a public agency or a contractor of a public agency, to carry hazardous waste from a solid waste facility, a solid waste landfill load-check program, or a transfer station load-check program, to a HHW collection facility under an agreement with the HHW collection facility.
- 8) Makes various technical and conforming changes.

EXISTING LAW:

- 1) Establishes the federal Resource Conservation and Recovery Act (RCRA) to authorize the United States Environmental Protection Agency (US EPA) to manage hazardous and non-hazardous wastes throughout the wastes' life cycle. (42 United States Code (U.S.C.) § 6901 et seq.)

- 2) Establishes the Hazardous Waste Control Law (HWCL) to authorize the Department of Toxic Substances Control (DTSC) to regulate the management of hazardous wastes in California. (Health and Safety Code (HSC) § 25100 et seq.)
- 3) Defines "waste" as any solid, liquid, semisolid, or contained gaseous discarded material. (HSC § 25124)
- 4) Defines "hazardous waste" as waste, that, because of its quantity, concentration, or physical, chemical, or infectious characteristics:
 - a. Causes, or significantly contributes to, an increase in mortality or an increase in serious irreversible, or incapacitating reversible, illness; or,
 - b. Poses a substantial present or potential hazard to human health or the environment, due to factors including, but not limited to, carcinogenicity, acute toxicity, chronic toxicity, bio accumulative properties, or persistence in the environment, when improperly treated, stored, transported, disposed of, or otherwise managed. (HSC § 25141(b))
- 5) Defines "household hazardous waste" as hazardous waste generated incidental to owning or maintaining a place of residence, but does not include waste generated in the course of operating a business at a residence. (HSC § 25218.1(e))
- 6) Establishes that counties and cities will provide services for the collection of HHW and that the state will provide an expedited and streamlined regulatory structure to facilitate the collection of HHW. (HSC § 25218)

FISCAL EFFECT: Unknown.

COMMENTS:

Need for the bill: According to the author, "AB 2481 makes a variety of changes to the laws related to the transportation of household hazardous waste and operation of household hazardous waste collection facilities in an effort to clarify ambiguities and inconsistencies in current law, reduce the financial burden on local governments, and provide more flexibility to collection facilities and individuals to ensure that hazardous waste is disposed of properly.

Hazardous wastes, such as paint, cleaners, and batteries, pose a threat to human health and the environment if improperly discarded. The goal of this bill is to ensure that these items are disposed of correctly while reducing some of the burdens on individuals, local governments, and collection facilities."

Hazardous waste management: Hazardous waste is a waste with properties that make it potentially dangerous or harmful to human health or the environment. In regulatory terms, a waste is hazardous if it appears on a RCRA hazardous wastes list or exhibits one of the four characteristics of a hazardous waste: ignitability, corrosivity, reactivity, or toxicity. However, materials can be hazardous wastes even if they are not specifically listed or do not exhibit any characteristic of a hazardous waste. Hazardous wastes are prohibited from being disposed of in

the trash, and must be properly transported and disposed of at permitted treatment, storage, and disposal facilities or at a recycling facility.

Universal waste: Universal waste comes primarily from consumer products containing mercury, lead, cadmium and other substances that are hazardous to human health and the environment. These items cannot be discarded in household trash nor disposed of in landfills. Examples of universal waste are batteries, fluorescent tubes, and many electronic devices. Under both state and federal law and regulation, universal wastes are authorized to be managed in a less stringent manner than hazardous waste.

Hazardous waste manifests: The Uniform Hazardous Waste Manifest is the shipping document that travels with hazardous waste from the point of generation, through transportation, to the final treatment, storage, and disposal facility. Each party in the chain of shipping, including the generator, signs and keeps one of the manifest copies, creating a "cradle-to-grave" tracking of the hazardous waste. Hazardous waste transporters in California must adhere to regulations regarding proper containment and management of the hazardous waste, and hence must be registered with DTSC.

Household hazardous waste collection: Many common household products are also hazardous, and when these products are discarded, they become "household hazardous waste." Common HHW includes, but is not limited to, antifreeze, glue and adhesives, pesticides, used oil, batteries, electronic wastes, and household cleaners. In California, HHW is prohibited from being disposed of in the trash, down the drain, or by abandonment, and must be disposed of through a Household Hazardous Waste Program. Most HHW programs are run by local government agencies such as a city or county. California Hazardous Waste Law provides several management requirements for HHW generators and establishes a streamlined permitting process for HHW collection facilities. The reduced management requirements provided to households include:

- 1) Households are not required to have a US EPA identification number;
- 2) Households may self-transport up to 5 gallons or 50 pounds of HHW to an approved HHW Collection Facility. The local administering agency may elect to increase this quantity, under specified conditions, to 15 gallons or 125 pounds; and,
- 3) Households are not required to use a Hazardous Waste Manifest when they self-transport HHW to an approved HHW Collection Facility.

Additionally, local agencies may offer a number of services to assist in the transportation of HHW to a collection facility, including a curbside collection program, a mobile collection facility, a door-to-door collection program, a HHW residential pickup service, a registered hazardous waste transporter, or a registered hazardous waste transporter operating under a contract with a public agency (i.e. Waste Management). Current law requires registered HHW transporters to comply with the manifest system, but authorizes the use of consolidated manifesting. These "consolidated transporters" are authorized to combine specified wastes from multiple generators on a single manifest, rather than using a separate manifest from each generator. The generators using the consolidated manifesting procedure are exempt from filling out a hazardous waste manifest. The consolidated transporter completes both the generator and the transporter section of the manifest.

This bill: AB 2481 provides some additional flexibility and clarifications for HHW collection facilities. Generally speaking HHW collection facilities, run by local governments are the only place a household or small business can safely take their hazardous waste. When it comes to universal wastes, such as batteries or fluorescent lamps, households are often unsure where to dispose of them and they can often end up in the solid waste stream. It makes sense to continue to look at the requirements for HHW collection facilities, and where appropriate, to further clarify and streamline these requirements to assist with the safe collection of hazardous wastes from households.

Arguments in Support: According to the sponsor of the bill, the Rural County Representatives of California, "AB 2481 makes several changes to laws related to transportation of HHW and operation of household hazardous waste collection facilities (HHWCFs). AB 2481 is intended to clarify and resolve ambiguities in existing law while reducing administrative and financial burdens on local governments that administer HHWCFs; provide flexibility for operation of local HHWCFs; and facilitate proper disposal of hazardous waste."

Related legislation:

- 1) AB 698 (ESTM Committee, Chapter 153, Statutes of 2021). Updates terms within the HWCL to conform to recent changes in federal hazardous waste regulation promulgated by the US EPA under their Generator Improvement Rule.
- 2) SB 552 (Archuleta, Chapter 481, Statutes of 2019). Authorizes the use of consolidated manifests in the transportation of HHW in door-to-door HHW collection programs.
- 3) SB 726 (Caballero, Chapter 485, Statutes of 2019). Authorizes a public agency's contractor to conduct HHW materials exchange programs.
- 4) AB 1597 (ESTM Committee, Chapter 133, Statutes of 2019). Authorizes the state's hazardous waste management manifest requirements to be satisfied through the use of the US EPA's electronic manifest system.

REGISTERED SUPPORT / OPPOSITION:

Support

Rural County Representatives of California (RCRC) (Sponsor)

Opposition

None on file.

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