

Date of Hearing: March 28, 2023

ASSEMBLY COMMITTEE ON ENVIRONMENTAL SAFETY AND TOXIC MATERIALS

Alex Lee, Chair

AB 99 (Connolly) – As Amended March 21, 2023

SUBJECT: Department of Transportation: state roads and highways: integrated pest management

SUMMARY: Requires the Department of Transportation (CalTrans) to develop a statewide policy (Policy) to use integrated pest management (IPM) on state roads and highways. Requires CalTrans to annually report on its website the amount, location and type of pesticides used. Requires CalTrans to provide a 24 hour notice before applying a pesticide. Specifically, **this bill:**

- 1) Defines "integrated pest management" as an ecosystem-based strategy that focuses on long-term prevention of pests or their damage through a combination of techniques, such as biological controls, habitat manipulation, modification of cultural practices, and use of resistant varieties, through which pesticides are used only after monitoring indicates they are needed according to established guidelines, treatments are made with the goal of removing only the target organism, and pest control materials are selected and applied in a manner that minimizes risks to human health, beneficial and nontarget organisms, and the environment.
- 2) Declares it is the policy of the state that effective least harmful pest management practices should be the preferred method of managing pests on state roads and highways and that the state should take the necessary steps to facilitate the adoption of effective least harmful pest management practices on state roads and highways.
- 3) Declares the intent of the Legislature that all CalTrans personnel who apply herbicides or pesticides on state roads and highways be trained in IPM and the safe use of herbicides and pesticides in relation to the unique nature of state roads and highways.
- 4) Requires CalTrans to adopt a Policy to use IPM on state roads and highways.
- 5) Requires CalTrans, when developing the Policy, to consult with the Department of Pesticide Regulation (DPR) and the University of California (UC) Statewide IPM Program.
- 6) Requires the Policy to do all of the following:
 - a) Restrict pesticide use to the least harmful product and application method;
 - b) To the maximum extent feasible, require that any pesticide used be biodegradable, derived from natural sources, and be used for a limited time; and,
 - c) Prohibit the use of pesticides, except in any of the following circumstances:
 - (i) Where no alternative vegetation management method has been proven effective;
 - (ii) During a state of emergency, as defined in Government Code Section 8558, relating to wildfire if the roadside spraying of pesticides is being performed solely for purposes of preventing, combating, or mitigating the risk of wildfire; or,

(iii) For the eradication of invasive plant species or habitat restoration, but only if the use of nonchemical methods for prevention and management, such as physical, mechanical, cultural, and biological controls, are infeasible.

- 7) Requires CalTrans to implement the Policy in counties that have adopted integrated pest management approaches to road-side vegetation management.
- 8) Requires CalTrans, when operating in a county that has a more restrictive approach than the Policy, to, to the extent feasible, operate in a manner consistent with the approach mandated by the county.
- 9) Requires CalTrans, on or before December 31, 2024, and annually thereafter, to make publically available on its internet website the amount, location, and type of pesticides, and the pesticide formulation, by county, used by CalTrans.
- 10) Requires CalTrans, at least 24 hours before applying a pesticide, to provide on its internet website and mobile application information, when and where it plans to apply the pesticide.

EXISTING LAW:

- 1) Provides, under the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA), for federal regulation of pesticide distribution, sale, and use. Requires that all pesticides distributed or sold in the United States be registered (licensed) by the United States Environmental Protection Agency (US EPA). Requires, before US EPA registers a pesticide under FIFRA, the applicant to show, among other things, that using the pesticide according to specifications will not generally cause unreasonable adverse effects on the environment. (7 United States Code (USC) §136 et seq)
- 2) Defines, under FIFRA, "unreasonable adverse effects on the environment" to mean: (1) any unreasonable risk to man or the environment, taking into account the economic, social, and environmental costs and benefits of the use of any pesticide, or (2) a human dietary risk from residues that result from a use of a pesticide in or on any food, as defined. (7 USC §136 (bb))
- 3) Authorizes the state's pesticide regulatory program and mandates DPR to, among other things, provide for the proper, safe, and efficient use of pesticides essential for the production of food and fiber, for the protection of public health and safety, for the protection of the environment from environmentally harmful pesticides, and to assure agricultural and pest control workers safe working conditions where pesticides are present by prohibiting, regulating, or otherwise ensuring proper stewardship of those pesticides. (Food and Agriculture Code (FAC) § 11401 et seq.)
- 4) Regulates the use of pesticides and authorizes the DPR director to adopt regulations to govern the registration, sale, transportation, or use of pesticides, as prescribed. (FAC §11501 et. seq)
- 5) Requires the DPR director to endeavor to eliminate from use in the state any pesticide that endangers the agricultural or nonagricultural environment, is not beneficial for the purposes for which it is sold, or is misrepresented. (FAC § 12824)

- 6) Encourages the development and implementation of pest management systems, stressing application of biological and cultural pest control techniques with selective pesticides when necessary to achieve acceptable levels of control with the least possible harm to nontarget organisms and the environment. (FAC § 11501 (f))
- 7) Requires pesticide applications on public property which take place on school grounds, parks, or other public rights-of-way where public exposure is foreseeable to be posted with warning signs. The warning signs shall be in English and Spanish and contain a warning that the area has been treated with a pesticide and that individuals are not to enter the area. Specifically exempts CalTrans from the requirement to post warning signs when applying pesticides on public highway rights-of-way. (FAC § 12978)
- 8) Requires the use of any pesticide by any person to be in such a manner to prevent substantial drift to nontarget areas. (FAC § 12972)

FISCAL EFFECT: Unknown.

COMMENTS:

Need for the bill: According to the author, "The dangers and health risks caused by pesticides and synthetic herbicides like Roundup are undeniable. Even though North Bay communities like Marin and Sonoma have taken bold steps to protect our sensitive ecosystems along highways, toxic chemicals are still being sprayed in our backyards. AB 99 will prohibit these dangerous chemicals from being deployed along highways in counties that adopt resolutions banning their usage – ensuring that the local environmental protections that our communities have fought for stand strong."

Pesticides: Pesticides are substances that are used to prevent, destroy, or repel damage-causing pests. Pests are living organisms that can cause harm to humans through food competition, destruction of property, and the spread of disease. Pests include insects, rodents, microbes, fungi, and weeds. Pesticides for these organisms include insecticides, rodenticides, bactericides, fungicides, and herbicides. While pesticides are designed to eliminate or mitigate damage from pests, pesticides can also pose risks to people.

Exposure to pesticides: According to *Emerging Contaminants* (Nuro, 2020), people are exposed to pesticides either actively through occupational exposure or passively through non-occupational exposure. Pesticide occupational exposure may occur during the manufacturing, transportation, and sale of pesticides, and when pesticides are applied for agricultural, public health, and structural pest control purposes. Parents working in agricultural settings, especially, may take pesticide-contaminated clothing and equipment home, which has been associated with the development of cancers in their children.

Non-occupational exposure includes pesticide residue ingestion through contaminated food or water, or inhalation of pesticide droplets from the air from pesticide drift from the point of release or fumigation. People are also exposed to pesticides through residual indoor sprays, indoor and outdoor fogging, and structural pest control. Additionally, treatment of ectoparasites in pets (e.g. fleas,) is a source of exposure, especially for children. Children are generally more susceptible to the impacts of pesticides due to their physical makeup, behavior, and physiology,

and exposure to very low levels of pesticides at certain developmental stages can cause adverse health effects.

Health risks due to pesticide exposure: As *Emerging Contaminants* summarizes, pesticide exposure has been linked to the elevated incidence of human diseases such as cancers, Alzheimer's disease, Parkinson's disease, amyotrophic lateral sclerosis, asthma, bronchitis, infertility, birth defects, attention deficit hyperactivity disorder (ADHD), autism, diabetes, obesity, respiratory diseases, organ diseases, and system failures. People who are exposed to pesticides are at greater risk for developing various cancers, including non-Hodgkin lymphoma, leukemia, brain tumors, and cancers of the breast, prostate, lung, stomach, colon, liver, and bladder.

Emerging Contaminants reports that pesticides can also cause genetic and epigenetic changes by impacting various processes at cellular levels. Pesticides may be involved in endocrine disruption and induction of inflammatory signals that result in the production of reactive oxygen species (ROS) causing oxidative stress. ROS disrupt the cellular functions of mitochondria and endoplasmic reticula, which play critical roles in energy and protein production.

Disproportionate burden of pesticide exposure: According to the 2022 *BMC Public Health* article, "Pesticides and environmental injustice in the USA: root causes, current regulatory reinforcement and a path forward", "Many environmental pollutants are known to have disproportionate effects on Black, Indigenous, and People of Color (BIPOC), as well as on communities of low-income and wealth. The reasons for these disproportionate effects are complex and involve hundreds of years of systematic oppression kept in place through structural racism and classism in the United States... Disparities in exposures and harms from pesticides are widespread, impacting BIPOC and low-income communities in both rural and urban settings and occurring throughout the entire lifecycle of the pesticide from production to end-use... This is not simply a pesticides issue, but a broader public health and civil rights issue."

The *BMC Public Health* article describes a 2015 study by the California Environmental Protection Agency (CalEPA) researchers that found that environmental health hazards disproportionately burden communities of color in California, and that pesticide use was the pollution burden that showed the greatest racial, ethnic, and income disparities in the state – disproportionately imposing more of a hazard than multiple air pollutants and other toxic releases. The authors of the study found that more than 95% of all pesticide use in the state occurs in the 60% of California zip codes that have the highest proportion of residents of color. It should be noted that the authors of the study found that no pollution indicators disproportionately burdened people in high percentage white or wealthy zip codes.

The *BMC Public Health* article cites other studies illustrating disproportionate pesticide exposure burden in California. For example, one study found that over half of the glyphosate used in California was applied in the state's eight most impoverished counties, where 53% of residents identified as Hispanic or Latinx compared to the state average of 38%. Another study found that in 2019, more than eight million pounds of pesticides linked to childhood cancers were used in the eleven California counties that had a majority Latinx population (>50%), resulting in 4.2 pounds of these pesticides used per person. This contrasts sharply with the 770,000 pounds of these same pesticides used in the 25 California counties with the fewest Latinx residents (<24%), resulting in 0.35 pounds of these pesticides used per person. Both groups of counties in that study have comparable land area and population sizes.

In addition to agricultural applications of pesticides, where residents can be exposed both at their workplaces and in their homes, BIPOC and people living in low-income communities are disproportionately impacted by pesticides in other ways. For one, it is well-established that the manufacturing, storage, and waste of chemicals such as pesticides affect BIPOC and impoverished communities more than the general population. The *BMC Public Health* article reports that California and many Southern states harbor the highest number of pesticide manufacturing facilities in predominantly BIPOC neighborhoods, averaging a 63% BIPOC population within one mile of a facility compared to a 40% and 38% national and relevant state average, respectively.

Children and disproportional exposure to pesticides: BIPOC children in California are especially at risk of being disproportionately impacted by pesticide exposure. The *BMC Public Health* article describes that in California, almost three out of every four children with the highest potential for exposure to pesticides at school were non-Anglo. An analysis of 15 agricultural counties in California found that children identifying as Hispanic were 46% more likely than white children to go to school within a quarter mile of locations where pesticides of human health concern were used. Hispanic children were also 91% more likely than white children to attend school where the highest amount of pesticides of human health concern were used nearby. Pesticide exposure in children is particularly concerning because children are more susceptible to the effects of pesticides, since they are still developing. With children of color more likely to be exposed to pesticides, they are not only more susceptible, but more vulnerable to pesticidal harm. Children of color are therefore the most vulnerable of any vulnerable population subgroup and will often be the most at-risk population.

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

DPR has six program areas that work to fulfill its responsibilities and goals:

- pesticide registration: responsible for the scientific evaluation and registration of pesticide products;
- pest management and licensing: evaluates pesticide and pest management problems and awards grants to develop and promote new strategies that reduce adverse environmental effects and hazards from pesticide use in agricultural and non-agricultural settings;
- human health assessment: reviews toxicological studies, prepares risk assessments, and evaluates the adequacy of product labels;
- worker health and safety: evaluates exposure and performs risk assessments to develop and implement mitigation measures that reduce the risk of workers and public exposure to pesticides;
- environmental monitoring: monitors the environment to determine the fate of pesticides and analyzes potential hazards in air, soil, and ground and surface water; and,

- enforcement: enforces federal and state laws and regulations pertaining to proper and safe use of pesticides.

Pesticide Use Reporting: The Food Safety Act of 1989 (AB 2161, Chapter 1200) gave DPR clear statutory authority to require full reporting of agricultural pesticide use. Each year, DPR is tasked with collecting and processing all records of agricultural pesticide applications, and, since 2011, does so using the online CalAgPermits tool. Pesticide uses are reported to County Agricultural Commissioners (CACs) who, in turn, report the data to DPR. California's pesticide use reporting program is the most comprehensive of its kind and mandates reporting of the following uses:

- Production of any agricultural commodity (except livestock),
- Treatment of postharvest agricultural commodities,
- Landscape maintenance in parks, golf courses, cemeteries, and similar sites defined in California code as agricultural use,
- Roadside and railroad rights-of-way,
- Poultry and fish production,
- Application of a restricted material,
- Application of a pesticide with known potential to pollute groundwater when used outdoors, including in industrial and institutional settings (non-agricultural), and
- Application by licensed pest control operators, including agricultural and structural applicators and professional landscape gardeners

Consumer home and garden and most industrial and institutional uses are exempt from reporting.

Pesticide use data are leveraged for better risk assessments, to improve worker safety and public health, protect water and air quality and wildlife, for local enforcement efforts, and to inform pest management alternatives.

County Agricultural Commissioners (CACs): While DPR is responsible for the delivery of an effective statewide pesticide regulatory program, the Legislature has delegated local pesticide use enforcement to CACs.

County boards of supervisors appoint CACs, which must be licensed by the state. CACs are tasked with the enforcement of laws and regulations that cover environmental protection, pest prevention, worker and consumer protection, and other special services. CACs investigate reports of illnesses and injuries associated with pesticide use. They are also responsible for the inspection of operations and records of growers, non-agricultural pesticide applicators, pest control businesses (agricultural and structural), farm labor contractors, and government agencies to ensure compliance with safety standards and requirements. They further certify private applicators, issue restricted materials permits, train field workers, and conduct public outreach efforts. CAC staff also conduct inspections to prevent pesticide misapplication and drift, ground and surface water contamination, and to protect endangered species and non-target wildlife. If violations are found, CACs can levy civil penalties.

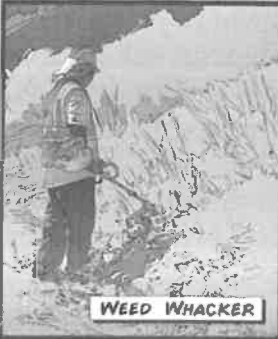
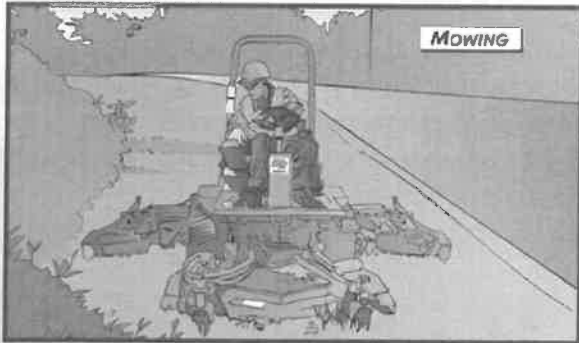
CalTrans: CalTrans controls the vegetation along state highways for the safety of motorists, cyclists, and other users of state roads, and to prevent wildfires that can start if dried grass and brush are allowed to go untended along the road.

To control vegetation, CalTrans implements a plan called the Integrated Vegetation Management Plan composed of assorted methods for keeping vegetation in check, including herbicide spraying, mowing, weed whacking, and hand removal. Even goats have been used along state highways to reduce brush.

During the dry months, vegetation along the shoulders turns dry, becoming an ample fuel for fires. A car bottoming out, a trailer chain dragging on the road, and even the friction of roadway rocks hitting other rocks on the shoulder can send a spark into the dry weeds, igniting the next wildfire. Invasive plants such as stinkwort, star-thistle, and spotted knapweed thrive along highways. CalTrans uses herbicide on these invasive weeds due to the plants' tenacity and because mowing or weed trimming exacerbates the problem by spreading seeds. CalTrans workers are trained to follow federal and state laws pertaining to pesticide use. All herbicides are used in accordance with their respective federal label, California Code of Regulations, as well as CalTrans policy.

CalTrans typically sprays herbicides in areas where the safety of Caltrans workers might be jeopardized by fast moving traffic or lack of visibility. The herbicide most used by CalTrans is glyphosate (Roundup), which is included on the state's list of chemicals known to cause cancer (Proposition 65). When applying herbicides, CalTrans follows strict protocols, including leaving buffer zones adjacent to creeks, wetlands, waterways, and drainage outlets. CalTrans maintains buffer zones around private driveways and mailboxes. CalTrans reviews its policies of herbicide application every year to keep current with best policies of managing vegetation along state highways. Some counties have ordinances against government use of glyphosate, (i.e. Roundup), for weed control. As a state agency, CalTrans is not bound by these ordinances and uses glyphosate when necessary.

CALTRANS INTEGRATED VEGETATION PLAN



UC Statewide IPM Program: According to the UC Statewide IPM Program, "Integrated pest management, or IPM, is a process you can use to solve pest problems while minimizing risks to people and the environment. IPM can be used to manage all kinds of pests anywhere—in urban, agricultural, and wildland or natural areas." They define IPM as an ecosystem-based strategy that focuses on long-term prevention of pests or their damage through a combination of techniques such as biological control, habitat manipulation, modification of cultural practices, and use of resistant varieties. Pesticides are used only after monitoring indicates they are needed according to established guidelines, and treatments are made with the goal of removing only the target organism. Pest control materials are selected and applied in a manner that minimizes risks to human health, beneficial and nontarget organisms, and the environment.

IPM focuses on long-term prevention of pests or their damage by managing the ecosystem. IPM focuses on actions to keep pests from becoming a problem, such as by growing a healthy crop that can withstand pest attacks, using disease-resistant plants, or caulking cracks to keep insects or rodents from entering a building. Rather than simply eliminating current pests IPM involves examining environmental factors that affect the pest and its ability to thrive. Through these strategies, IPM can create conditions that are unfavorable for the pest.

The most effective, long-term way to manage pests is by using a combination of methods that work better together than separately. Approaches for managing pests are often grouped in the following categories: biological control is the use of natural enemies—predators, parasites, pathogens, and competitors—to control pests and their damage; cultural controls are practices that reduce pest establishment, reproduction, dispersal, and survival; mechanical and physical controls kill a pest directly, block pests out, or make the environment unsuitable for it; and, chemical control is the use of pesticides. In IPM, pesticides are used only when needed and in combination with other approaches for more effective, long-term control. Pesticides are selected and applied in a way that minimizes their possible harm to people, nontarget organisms, and the environment.

These IPM principles and practices are combined to create IPM programs. While each situation is different, six major components are common to all IPM programs: pest identification; monitoring and assessing pest numbers and damage; guidelines for when management action is needed; preventing pest problems; using a combination of biological; cultural; physical/mechanical and chemical management tools; and, after action is taken, assessing the effect of pest management.

Sustainable Pest Management: While much progress has been made in recent decades by a wide range of entities to transition to safer and more sustainable pest management practices, more work is clearly needed. Despite California's strict regulatory system and robust risk assessment process, there are still chemical tools in use that can cause harm to humans and the environment. In 2021, DPR, the CalEPA, and California Department of Food and Agriculture launched the Sustainable Pest Management (SPM) Work Group, as part of the state of California's commitment to accelerating the transition away from high-risk pesticides toward adoption of safer, sustainable pest control practices. Twenty-nine leaders representing diverse interests were charged with aligning on a pathway to minimize reliance on the use of toxic pesticides and promote solutions that protect health and safety; are agronomically and economically sound; eliminate racial and other disparities; and, engage, educate, and promote collaboration toward safe, sustainable pest management practices in production agriculture.

SPM is a holistic, whole-system approach applicable in agricultural and other managed ecosystems and urban and rural communities that builds on the concept of IPM to include the wider context of the three sustainability pillars. Like IPM, SPM guides pest management decisions, and includes a wide range of tools and approaches. SPM goes beyond a checklist of practices or products to address impacts on communities and equity; linkages to broader environmental issues such as water conservation, biodiversity conservation, soil health, and climate impact; and, a broader consideration of economic benefits and impacts.

Two of the major goals that came from the SPM workgroup are that by 2050, California will have eliminated the use of Priority Pesticides (the most harmful) by transitioning to sustainable pest management practices and that by 2050, SPM will have been adopted as the de facto pest management system in California.

Other road-side vegetation options: According to the document, "Pollinators and Roadsides: Best Management Practices for Managers and Decision Makers", published in 2016 by the United States Department of Transportation (US DOT):

"Key steps that State Departments of Transportation (DOTs) and other transportation agencies can take to improve the quality of roadside habitat for pollinators include 1) adjusting roadside vegetation management techniques to accommodate pollinator resource needs, and 2) enhancing and restoring native roadside vegetation to include plant materials that improve pollinator habitat.

Pollinator-friendly roadside management practices such as reduced mowing and targeted herbicide use can reduce roadside maintenance costs. Roadsides with pollinator habitat features such as abundant flowering plants can draw tourists, resulting in positive economic benefits to States and local communities. Additionally, farmers and ranchers nearby may benefit economically from roadside habitat because of the ecosystem services such as pollination and pest control the habitat supports. Roadsides managed with pollinators in mind can achieve multiple goals of stabilizing roadsides, reducing storm water pollution, supporting wildlife, and building public exposure and appreciation for the local landscape."

Challenges for CalTrans: Managing the statewide highway system is an enormous undertaking. Specifically when it comes to road-side vegetation management, CalTrans must weigh many factors, including the likelihood of a wildfire; the presence of invasive weeds; exposure to pesticides by CalTrans workers and the public; and, protecting CalTrans workers, given that working on the side of a state highway is very dangerous work. While CalTrans has a vegetation management plan, it is unclear if they have asked for outside expertise (DPR or the UC IPM Program, for example) to observe their road-side vegetation operations and see what, if any, changes could be made to reduce pesticide use and better protect its workers, human health and safety, and the environment. It is unclear if CalTrans has evaluated the US DOT's best practices for using pollinator-friendly roadside management practices. The question is not: "Is CalTrans following their vegetation management plan?"; the question is, "Can CalTrans do better?". AB 99 strives to make CalTrans better, when it comes to reducing pesticide use.

This bill: AB 99 requires CalTrans to develop IPM strategies with the goal of reducing pesticide use. This is consistent with the Administration's goals to reduce statewide pesticide use of harmful pesticides by 2050 as outlined by the SPM workgroup. When it comes to public health

and safety and environmental protection, California has been a leader. California can continue to be leader in reducing the use of pesticides along state highways by working with entities such as DPR and the University of California, as well as looking at best practices released by the US DOT. The unfortunate reality is that pesticides are harmful, and were designed to kill target plants, insects, and animals. Requiring one of our state agencies to review its practices and see if it can reduce its pesticide use and maintain state roads and highways seems like a very reasonable endeavor.

Issues to consider: As the bill moves through the process, the author may want to consider providing a date that CalTrans must complete the Policy by. Additionally, the author may wish to continue working with stakeholders and consider some type of mechanism where counties report to CalTrans on whether or not they have adopted integrated pest management approaches to road-side vegetation management.

Double-referral: Should this bill pass out of the Assembly Environmental Safety and Toxic Materials Committee, it will be re-referred to the Assembly Transportation Committee.

Arguments in support: According to a coalition writing in support, "The environmental and human health consequences of synthetic pesticides are well researched and documented. RoundUp™/glyphosate is a probable human carcinogen and other synthetic pesticides that Caltrans uses are not readily biodegradable, highly toxic to fish, water pollutants, and inhalation hazards. As a state agency Caltrans is exempt from Proposition 65 notifications and operates with far less environmental oversight than local municipal entities. Caltrans' pesticide use has resulted in documented and preventable human exposure to known carcinogens. Many state highways flow directly through rural and urban residential communities, directly past the doorsteps of businesses, homes, and schools, and along bicycle lanes and bus stops where there is high potential for accidental exposure. Spraying occurs during the daytime and on weekends, and Caltrans provides no advanced notification. Chemical drift from roadside spraying has a disproportionate impact on marginalized and disadvantaged communities, and in particular homeless communities which are often located adjacent to state highways. These vulnerable communities need our protection.

There is a huge potential for roadsides to become wildlife corridors and provide valuable habitat. For example, "pollinator highways" have been shown by the University of Florida to crowd out invasive species and decrease maintenance costs while increasing ecosystem services by millions of dollars. Ecosystem services include crop pollination, which could be a boon for California farmers. Pollinator highways have been shown to improve wildlife habitat, reduce water pollution, sequester carbon, increase farm yields, and reduce road maintenance costs."

Arguments in opposition: According to a coalition writing in opposition, "Firstly, the bill proposes to establish a definition of integrated pest management that is inconsistent with that which is established by academia and commonly accepted by vegetation management professionals. The University of California defines integrated pest management (IPM) as a combination of techniques that does include the use of chemical control (i.e., pesticides) "only after monitoring indicates they are needed according to established guidelines." Within the conventional IPM approach and sustainable pest management definition marketed by the Department of Pesticide Regulation, other control mechanisms, such as hand weeding, mowing, etc. are to be considered or used first, but chemical control is not excluded, as proposed in AB 99. Therefore, by extension, requiring Cal Trans to contract with an outside entity, such as the

University of California's Statewide Integrated Pest Management, to develop a policy, as suggested in AB 99, would only exacerbate the incongruity between statute and an academically supported and readily adopted definition.

Cal Trans manages approximately 15,000 miles of highway and 230,000 acres of right-of-way throughout California. The management, maintenance, and control of vegetation on the roadsides is paramount to protect traveler and worker safety, the environment, highway infrastructure, and transportation system reliability. AB 99 is contrary to these aims."

Related legislation:

- 1) AB 652 (Lee). Establishes a DPR Environmental Justice Advisory Committee to integrate environmental justice considerations into DPR's programs, policies, decision making, and activities. This bill is pending action in the Assembly Appropriations Committee.
- 2) AB 363 (Bauer-Kahan). Requires the DPR to issue a determination with respect to a reevaluation of neonicotinoid pesticides when used on outdoor ornamental plants, trees, and turf, and to adopt control measures for those uses that are necessary to protect pollinating insects, aquatic ecosystems, and human health. This bill is pending action in the Assembly Appropriations Committee.

REGISTERED SUPPORT / OPPOSITION:

Support

350 South Bay Los Angeles
350 Southland Legislative Alliance
A Voice for Choice Advocacy
American Bird Conservancy
As You Sow
Ban SUP (Single Use Plastic)
Brighter Beginnings
California Alliance of Nurses for Healthy Environments
California Coastal Trail Association
California Coastkeeper Alliance
California Health Coalition Advocacy
California Nurses for Environmental Health and Justice
California Rural Legal Assistance Foundation (CRLAF)
Californians Against Waste
Californians for Alternatives to Toxics
Californians for Pesticide Reform
Center for Biological Diversity
Center for Community Action & Environmental Justice
Center for Democratic and Environmental Rights
Clean Air Coalition of North Whittier and Avocado Heights
Clean Earth 4 Kids
Clean Water Action
Conscious Kitchen
Conservation Action Fund for Education

Daily Acts
Defend Them All Foundation
Dietrick Institute for Applied Insect Ecology
Educate. Advocate.
Environmental Working Group
Eon – the Ecological Options Network
Facts: Families Advocating for Chemical & Toxics Safety
Friends of the Earth U.S.
Go Organic Napa County
Healthy Highways Coalition
Humboldt; County of
Indivisible Marin
Jonas Philanthropies
Long Beach Gray Panthers
Madrone Audubon Society, Sonoma County
Moms Advocating Sustainability
Neighbors to Preserve Rural Sonoma County
Non-toxic Neighborhoods
Nontoxic Schools
North Bay Jobs With Justice
OFA Marin - All on The Line
Parents for A Safer Environment
Paula Lane Action Network (PLAN), Sonoma County, CA
Pesticide Action Network
Pesticide Free Rohnert Park
Pesticide Free Zone
Poison Free Malibu
Protect Our Watershed San Mateo County
Public Health Advocates
Re:wild Your Campus
Resource Renewal Institute
Rincon-Vitova Insectaries
Russian Riverkeeper
San Francisco Forest Alliance
Save the Sonoma Coast
Sierra Club California
Slow Food Russian River
Socal 350 Climate Action
Sonoma County Beekeepers Association
Sonoma County Climate Activist Network (SOCOCAN!)
Sonoma County Conservation Action
Sonoma County Tomorrow, INC
Sonoma Safe Agriculture Safe Schools (Sonoma Sass)
Sunflower Alliance
Topanga Association for a Scenic Community
Topanga Creek Watershed Committee
Tree Spirit Project
Turning Green
Watershed Alliance of Marin

Wild Oat Hollow
Woodland Associates

Opposition

American Chemistry Council
American Pistachio Growers
California Agricultural Aircraft Association
California Alfalfa & Forage Association
California Apple Commission
California Association of Pest Control Advisers
California Association of Wheat Growers
California Blueberry Association
California Blueberry Commission
California Cattlemen's Association
California Cotton Ginners and Growers Association
California Farm Bureau Federation
California Fresh Fruit Association
California Grain & Feed Association
California Rice Commission
California Seed Association
California Strawberry Commission
California Tomato Growers Association
California Walnut Commission
Olive Growers Council of California
Pacific Egg & Poultry Association
Pacific Seed Association
Western Agricultural Processors Association
Western Growers Association
Western Plant Health Association

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

Date of Hearing: March 28, 2023

ASSEMBLY COMMITTEE ON ENVIRONMENTAL SAFETY AND TOXIC MATERIALS
Alex Lee, Chair
AB 2 (Ward) – As Amended March 16, 2023

SUBJECT: Recycling: solar photovoltaic modules

SUMMARY: Requires manufacturers of solar photovoltaic (PV) panels to develop and implement an end-of-life management plan (Plan) for the safe, convenient, and environmentally sound management and recycling of solar PV modules. Specifically, **this bill:**

- 1) Requires a manufacturer of solar PV panels sold or offered for sale in this state to develop a Plan for the safe, convenient, and environmentally sound management and recycling of the solar PV panels it manufactured and their component materials.
- 2) Authorizes a manufacturer of solar PV panels to designate an agent to act on its behalf to develop a Plan for solar panels.
- 3) Requires the Plan for solar PV panels to include, but is not limited to, the following:
 - a) A plan to minimize the release of hazardous substances into the environment;
 - b) A plan to maximize recovery of components, including rare earth metals and other commercially valuable materials;
 - c) A plan to disseminate to relevant stakeholders information necessary for the proper dismantling, transportation, and treatment of solar PV panels; and,
 - d) Performance goals, including but not limited to, a goal for the rate of combined reuse and recycling of collected solar PV panels.
- 4) Requires the Department of Resources, Recycling, and Recovery (CalRecycle) to develop guidelines for the development of the Plan.
- 5) Requires a manufacturer or its agent to submit to CalRecycle a Plan by July 1, 2026, for solar PV panels to be sold after July 1, 2026.
- 6) Requires a manufacturer of solar PV panels to implement a Plan that is approved by CalRecycle.
- 7) Requires a manufacturer or its agent, beginning on January 1, 2027, and by January 1, of each year thereafter, to provide CalRecycle with a written report for the prior calendar year documenting the implementation of its Plan and assessing the achievement of the performance goals contained in the Plan.
- 8) Requires, by January 1, 2026, CalRecycle to adopt regulations for the development and implementation of Plans.

EXISTING LAW:

- 1) Creates the Hazardous Waste Control Law (HWCL) and provides the Department of Toxic Substances Control (DTSC) with responsibility for overseeing the management of hazardous waste in California. (Health and Safety Code § 25100 et seq).
- 2) Defines hazardous wastes as those identified in regulation by DTSC; wastes categorized as hazardous under the federal Resource Conservation and Recovery Act (RCRA); and, extremely hazardous waste and acutely hazardous waste. (Health & Safety Code § 25117)
- 3) Regulates seven categories of hazardous wastes that can be managed as universal wastes. (California Code of Regulations, Title 22, Division 4.5, Ch. 22)
- 4) Requires the California Department of Resources Recycling and Recovery (CalRecycle) to coordinate with DTSC to develop and implement a public information program to provide uniform and consistent information on the proper disposal of hazardous substances found in and around homes, and to assist the efforts of counties required to provide household hazardous waste collection, recycling, and disposal programs. (Public Resources Code § 47050 - 47051)
- 5) Requires, by December 31, 2030, 50% of total retail sales of electricity in California to be generated from eligible renewable energy resources, including from solar energy. (Public Utilities Code (PUC) § 399.11-399.32)
- 6) Defines "solar energy system" as a solar energy device that has the primary purpose of providing for the collection and distribution of solar energy for the generation of electricity, that produces at least one kilowatt, and produces not more than five megawatts, alternating current rated peak electricity, and that meets or exceeds the eligibility criteria established by the Public Utilities Commission or the California Energy Commission. (PUC § 2852)

FISCAL EFFECT: Unknown.

COMMENTS:

Need for the bill: According to the author, "In 2006, California launched the Million Solar Roofs Initiative to incentivize consumers and businesses to invest in solar. As of 2022, California has the largest solar market in the United States, supplying over 20% of its electricity. Unfortunately, given a 20-30 year life span, many of these panels are beginning to reach the end of their lifecycle. Assembly Bill (AB) 2 will establish the foundation for a convenient, safe, and environmentally sustainable system for the end-of-life management of solar photovoltaic (PV) panels. With the right conditions in place, end-of-life industries for PV panels can thrive as an important pillar of a sustainable solar industry in California."

Life expectancy of a solar panel: According to the Solar Energy Industries Association, "[Solar panels] are designed to last more than 25 years, and many manufacturers back their products with performance guarantees backed by warranties. The lifespan of a [solar panel] is approximately 20-30 years, while the lifetime of an inverter is approximately 10 years. Therefore, many solar products have not yet reached end-of-life, and in fact, panels installed in the early 1980s are still performing at levels nearly equal to the installation performance level. Thus, even accounting for the dramatic growth of the industry, annual [solar panel] waste will not exceed 10,000 tons until after 2014, and will not exceed 100,000 tons until after 2017."

Right now, solar panel recycling suffers from a chicken-or-egg problem: there currently are not many places to recycle old solar panels, and there are not enough defunct solar panels to make recycling them economically attractive.

Solar energy is ever-growing: Under California law, SB 350 (De León, Chapter 547, Statutes of 2015), the renewable portfolio standard (RPS) requires 50% of all of California's energy to be generated from eligible renewable energy resources, including solar energy, by 2030. Solar power will be an integral part in reaching the RPS requirements for 2030.

Are solar panels hazardous? End-of-life disposal of solar products in the United States is governed by RCRA, and state policies that govern waste. To be governed by RCRA, solar panels must be classified as hazardous waste. To be classified as hazardous, panels must fail to pass the Toxicity Characteristics Leach Procedure (TCLP) test. Most solar panels pass the TCLP test, and thus are classified as non-hazardous and are not federally regulated. However, the production of solar panels involves toxic heavy metals, such as cadmium, copper, lead, and selenium; therefore, some solar panels are likely to exhibit the characteristic of toxicity that have adverse environmental and public health effects.

On October 1, 2015, SB 489 (Monning, Chapter 419, Statutes of 2015) was enacted to add Section 25259 to Health and Safety Code, which authorizes DTSC to adopt regulations to designate end-of-life photovoltaic modules that are identified as hazardous waste as a universal waste and subject those modules to universal waste management.

Universal waste: Universal wastes are hazardous wastes that are widely produced by households and many different types of businesses. Universal wastes include televisions, computers, other electronic devices, batteries, fluorescent lamps, mercury thermostats, and other mercury containing equipment, among others.

The hazardous waste regulations (CCR, Title 22, Division 4.5, Chapter 11 Section 66261.9) identify seven categories of hazardous wastes that can be managed as universal wastes. Any unwanted item that falls within one of these waste streams can be handled, transported, and recycled following the simple requirements set forth in the universal waste regulations (CCR, Title 22, Division 4.5, Chapter 23) versus the more stringent requirements for hazardous waste.

California's Universal Waste Rule (CCR, Title 22, Division 4.5, Chapter 11 Section 66261.9) allows individuals and businesses to transport, handle, and recycle certain common hazardous wastes, termed universal wastes, in a manner that differs from the requirements for most hazardous wastes. The more relaxed requirements for managing universal wastes were adopted to ensure that they are managed safely and are not disposed of in the trash. The universal waste requirements are also less complex and easier to comply with, thereby increasing compliance.

Product stewardship (stewardship): Product stewardship, also known as Extended Producer Responsibility (EPR), is a strategy to place a shared responsibility for end-of-life product management on the producers, and all entities involved in the product chain, instead of the general public. Product stewardship encourages product design changes that minimize a negative impact on human health and the environment at every stage of the product's lifecycle. This allows the costs of treatment and disposal to be incorporated into the total cost of a product. It places primary responsibility on the producer, or brand owner, who makes design and

marketing decisions. It also creates a setting for markets to emerge that truly reflect the environmental impacts of a product, and to which producers and consumers respond.

Current state stewardship programs: There are several statewide EPR programs in California, all of which are overseen by CalRecycle. They include: carpet materials management, paint product management, household batteries, mattress product management, and home-generated pharmaceutical waste and sharps waste.

This bill: It is important to note that this bill does not enact an EPR program for solar panels; however, AB 2, does enact one element of a solar panel EPR program by requiring manufacturers of solar panels to develop and implement an end-of-life management plan for solar panels. This bill is designed to work in tandem with AB 1238 (Ward) that is being heard in the Assembly Environmental Safety and Toxic Materials Committee the same day as this bill. AB 1238 requires DTSC to develop alternative management standards that are both protective of human health and the environment and that create flexibility for the solar panel recycling industry to recycle solar panels in California. While AB 2 does have a clear policy goal, it is still a work in progress. The author is working with stakeholders on a number of issues including how to best define "manufacturer" and what the elements of the end-of-life management plan should include.

Double-referral: Should this bill pass out of the Assembly Environmental Safety and Toxic Materials Committee, it will be re-referred to the Assembly Natural Resources Committee.

Arguments in support:

None on file.

Arguments in opposition:

None on file.

Related legislation:

- 1) AB 1238 (Ward). Requires DTSC to adopt, by January 1, 2026, alternative management standards for the management of solar panels. This bill is pending action before the Assembly Environmental Safety and Toxic Materials Committee.
- 2) AB 2440 (Irwin, Chapter 351, Statutes of 2022). Creates the Responsible Battery Recycling Act (Act) of 2022, which requires producers of covered batteries, as defined, to establish a stewardship program for the collection and recycling of covered batteries and covered battery-embedded products.
- 3) SB 289 (Newman, 2021). Would have enacted the Battery and Battery-Embedded Product Recycling and Fire Risk Reduction Act of 2021, which would have required the producers of batteries and battery-embedded products to establish a stewardship program for those products, with full implementation on or before June 30, 2025. This bill held on the suspense file in the Senate Appropriations Committee.
- 4) SB 212 (Jackson, Chapter 1004, Statutes of 2018). Requires entities that sell drugs or sharps in the state to individually, or with other entities, develop and implement a statewide home-

generated drug stewardship plan, or a home-generated sharps waste stewardship plan, or both, for the collection and proper disposal of home-generated drug and sharps waste. Requires CalRecycle to oversee and enforce each stewardship plan.

REGISTERED SUPPORT / OPPOSITION:

Support

None on file.

Opposition

None on file.

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

Date of Hearing: March 28, 2023

ASSEMBLY COMMITTEE ON ENVIRONMENTAL SAFETY AND TOXIC MATERIALS

Alex Lee, Chair

AB 1238 (Ward) – As Amended March 21, 2023

SUBJECT: Hazardous waste: solar panels

SUMMARY: Requires the Department of Toxic Substances Control (DTSC) to develop alternative management standards (AMS) for the management of photovoltaic (PV) modules. Specifically, **this bill:**

- 1) Requires, by January 1, 2026, DTSC to develop AMS for the management of PV modules and specifies that the AMS shall do all of the following:
 - a) Promote the safe collection, reuse, and recycling of PV modules;
 - b) Ensure that the AMS do not pose a significant potential hazard to human health and safety or the environment;
 - c) Provide flexibility and administrative convenience for persons collecting and recycling PV modules;
 - d) Seek to streamline the process for person collecting and recycling PV modules;
 - e) Allow for the safe landfilling of PV modules, if there are no recycling or reuse options; and,
 - f) Allow a person, when following the AMS, to collect, reuse, or recycle PV modules without a hazardous waste permit.
- 2) Requires DTSC, prior to initiating a rulemaking on the AMS, to hold a public workshop to discuss concepts with and hear from stakeholders on the AMS for PV modules.

EXISTING LAW:

- 1) Creates the Hazardous Waste Control Law (HWCL) and provides the DTSC with responsibility for overseeing the management of hazardous waste in California. (Health and Safety Code (HSC) § 25100 et seq).
- 2) Defines hazardous wastes as those identified in regulation by DTSC; wastes categorized as hazardous under the federal Resource Conservation and Recovery Act (RCRA); and, extremely hazardous waste and acutely hazardous waste. (HSC § 25117)
- 3) Prohibits the disposal of any hazardous waste when the disposal is at a facility that does not have a permit from DTSC. (HSC § 25189.5)
- 4) Prohibits the owner or operator of a storage facility, treatment facility, transfer facility, resource recovery facility, or disposal site from accepting, treating, storing, or disposing of hazardous waste at the facility, area, or site, unless the owner or operator holds a hazardous waste facility permit or other grant of authorization from DTSC. (HSC § 25201)

- 5) Regulates seven categories of hazardous wastes that can be managed as universal wastes. (22 California Code of Regulations CCR § 66261.9)
- 6) Requires, by December 31, 2030, 50% of total retail sales of electricity in California to be generated from eligible renewable energy resources, including from solar energy. (Public Utilities Code (PUC) § 399.11 et. seq.)
- 7) Defines "solar energy system" as a solar energy device that has the primary purpose of providing for the collection and distribution of solar energy for the generation of electricity, that produces at least one kilowatt, and produces not more than five megawatts, alternating current rated peak electricity, and that meets or exceeds the eligibility criteria established by the Public Utilities Commission or the California Energy Commission. (PUC § 2852)

FISCAL EFFECT: Unknown.

COMMENTS:

Need for the bill: According to the author: "In 2006, California launched the Million Solar Roofs Initiative to incentivize consumers and businesses to invest in solar. As of 2022, California has the largest solar market in the United States, supplying over 20% of its electricity. Unfortunately, given a 20-30 year life span, many of these panels are beginning to reach the end of their lifecycle.

While most panels contain up to 80% easily recyclable materials, restrictive hazardous waste regulations make it prohibitively expensive to do business in the State. As a result, recyclers that serve the California market often set up facilities in neighboring states, where regulations are far less intensive.

AB 1238 will greatly reduce the financial burden linked to the existing hazardous waste regulations, incentivize more panels to be recycled in California, and keep valuable, potentially toxic materials from ending in landfills."

Life expectancy of a solar panel: According to the Solar Energy Industries Association, "[Solar panels] are designed to last more than 25 years, and many manufacturers back their products with performance guarantees backed by warranties. The lifespan of a [solar panel] is approximately 20-30 years, while the lifetime of an inverter is approximately 10 years. Therefore, many solar products have not yet reached end-of-life, and in fact, panels installed in the early 1980s are still performing at levels nearly equal to the installation performance level. Thus, even accounting for the dramatic growth of the industry, annual [solar panel] waste will not exceed 10,000 tons until after 2014, and will not exceed 100,000 tons until after 2017." Right now, solar panel recycling suffers from a chicken-or-egg problem: there currently are not many places to recycle old solar panels, and there are not enough defunct solar panels to make recycling them economically attractive.

Solar energy is ever-growing: Under California law, the renewable portfolio standard (RPS) requires 50% of all of California's energy to be generated from eligible renewable energy resources, including solar energy, by 2030. Solar power will be an integral part in reaching the RPS requirements for 2030.

End-of-life solar PV recycling: According to the article, published in Energy Strategy Reviews 2020, "*An overview of solar photovoltaic panels' end-of-life material recycling*":

"End-of-life (EOL) solar panels may become a source of hazardous waste although there are enormous benefits globally from the growth in solar power generation. Global installed PV capacity reached around 400 GW at the end of 2017 and is expected to rise further to 4500 GW by 2050. Considering an average panel lifetime of 25 years, the worldwide solar PV waste is anticipated to reach between 4%-14% of total generation capacity by 2030 and rise to over 80% (around 78 million tons) by 2050. Therefore, the disposal of PV panels will become a pertinent environmental issue in the next decades. The EU has pioneered PV electronic waste regulations including PV-specific collection, recovery and recycling targets. The EU Waste of Electrical and Electronic Equipment Directive requires all producers supplying PV panels to the EU market to finance the costs of collecting and recycling EOL PV panels in Europe. Lessons can be learned from the involvement of the EU in forming its regulatory framework, to assist other countries develop locally apposite approaches.

Solar panels contain lead, cadmium and many other harmful chemicals that could not be removed if the entire panel is cracked. China with a larger number of solar plants, currently operates around two times as many solar panels as the United States and has no proposals for the dumping of the whole old panels. Despite the presence of environmental awareness, California, another world leader in solar panels, also has no waste disposal plan. CO₂ emissions could also be reduced by recycling solar PV waste which will consequently pose substantial positive impact on the environment. We recommend that recycling should be made commercially necessary by making manufacturers responsible for recovering materials from solar PV panels EOL."

Are solar panels hazardous? End-of-life disposal of solar products in the United States is governed by the RCRA, and state policies that govern waste. To be governed by the RCRA, solar panels must be classified as hazardous waste. To be classified as hazardous, panels must fail to pass the Toxicity Characteristics Leach Procedure (TCLP) test. Most solar panels pass the TCLP test, and thus are classified as non-hazardous and are not federally regulated. However, the production of solar panels involves toxic heavy metals, such as cadmium, copper, lead, and selenium; therefore, some solar panels are likely to exhibit the characteristic of toxicity that have adverse environmental and public health effects.

On October 1, 2015, SB 489 (Monning, Chapter 419) was enacted to add section 25259 to Health and Safety Code, Division 20, Chapter 6.5, Article 17, which authorizes DTSC to adopt regulations to designate end-of-life photovoltaic modules that are identified as hazardous waste as a universal waste and subject those modules to universal waste management.

Universal waste: Universal wastes are hazardous wastes that are widely produced by households and many different types of businesses. Universal wastes include televisions, computers, other electronic devices, batteries, fluorescent lamps, mercury thermostats, and other mercury containing equipment, among others.

The hazardous waste regulations (22 CCR § 66261.9) identify seven categories of hazardous wastes that can be managed as universal wastes. Any unwanted item that falls within one of these waste streams can be handled, transported, and recycled following the simple requirements

set forth in the universal waste regulations (22 CCR § 66261.9) versus the more stringent requirements for hazardous waste.

California's Universal Waste Rule allows individuals and businesses to transport, handle, and recycle certain common hazardous wastes, termed universal wastes, in a manner that differs from the requirements for most hazardous wastes. The more relaxed requirements for managing universal wastes were adopted to ensure that they are managed safely and are not disposed of in the trash. The universal waste requirements are also less complex and structured to increase compliance.

Alternative management standards (AMS): California created AMS for treated wood waste (TWW) pursuant to AB 1353 (Matthews, Chapter 597, Statutes of 2004). This bill required DTSC to adopt regulations establishing AMS for TWW, which it did in July 2008. In addition, it authorized the disposal of TWW in either a class I hazardous waste landfill, or in a composite-lined portion of a solid waste landfill unit approved to accept TWW by the appropriate Regional Water Quality Control Board. AB 1353 provided DTSC with the statutory authority to develop, through regulations, AMS for TWW that were based upon hazardous waste requirements, but were adjusted for the unique circumstances associated with TWW. The AMS for TWW lessen storage requirements, extend accumulation periods, allow shipments without a hazardous waste manifest and a hazardous waste hauler, and allow disposal at specific non-hazardous waste landfills. According to DTSC, the AMS simplify and facilitate the safe and economical disposal of TWW.

This bill: AB 1238 follows the same path as TWW and requires DTSC to develop AMS for solar PV modules with the goal to enhance the ability for entities to safely reuse or recycle solar PV modules in California. This bill is designed to work in tandem with AB 2 (Ward) that is being heard the same day as this bill. AB 2 requires manufacturers of solar PV modules to develop and implement an end-of-life management plan for solar PV modules.

Work-in-progress: While AB 1238 has a substantial policy direction, the author is continuing discussions with stakeholders on how to best shape these alternative management standards. One item in particular the author may want to consider is requiring DTSC to post on its website any solar panels that a manufacturer has demonstrated to DTSC that will not become hazardous waste when discarded and therefore do not have to be managed as a hazardous waste or universal waste. This could act as an incentive for manufacturers to look at their solar panels and see if they can make them in a manner that does not result in a hazardous waste.

Arguments in support: According to A Voice for Choice Advocacy, "We support this measure to require the Department of Toxic Substances Control to develop alternate management standards for recycling photovoltaic modules that would reduce the regulatory burden on managing certain resources used for recycling the modules, while not compromising worker safety or environmental protection."

Arguments in opposition:

None on file.

Related legislation:

- 1) AB 2 (Ward). Requires DTSC manufacturers of solar PV modules to develop and implement an end-of-life management plan for the safe, convenient, and environmentally sound management and recycling of solar PV modules. This bill is pending action before the Assembly Environmental Safety and Toxic Materials Committee.
- 2) AB 332 (ESTM Committee, Chapter 147, Statutes of 2021). Authorizes TWW to be managed under AMS instead of as a hazardous waste.

REGISTERED SUPPORT / OPPOSITION:

Support

A Voice for Choice Advocacy

Opposition

None on file.

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

Date of Hearing: March 28, 2023

ASSEMBLY COMMITTEE ON ENVIRONMENTAL SAFETY AND TOXIC MATERIALS

Alex Lee, Chair

AB 753 (Papan) – As Introduced February 13, 2023

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

SUMMARY: Creates the Waterway Recovery Account (Waterway Account) within the Waste Discharge Permit Fund, and transfers fifty percent of the funds from the State Water Pollution Cleanup and Abatement Account (Abatement Account) to the Waterway Account for projects and programs to address water quality issues. Specifically, **this bill:**

- 1) Creates the Waterway Recovery Account in the Waste Discharge Permit Fund.
- 2) Transfers fifty percent of the annual proceeds of the Abatement Account to the Waterway Account.
- 3) Appropriates funds in the Waterway Account to the State Water Resources Control Board (State Water Board) for the following:
 - (a) Restoration projects, including supplemental environmental projects, that improve water quality;
 - (b) A community capacity program to increase disadvantaged and tribal community participation in State Water Board and Regional Water Quality Control Board (Regional Water Board) outreach and regulatory processes, including, but not limited to, all of the following:
 - (i) Increasing disadvantaged and tribal community stakeholder participation;
 - (ii) Improving language access;
 - (iii) Improving access to data and information on racial equity;
 - (iv) Improving communication with communities and partners; and,
 - (v) Bridging the digital divide to increase public participation in underserved communities; and,
 - (c) The 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.
- 4) Requires the State Water Board to allocate at a minimum of 30 percent of the Waterway Account moneys to each Regional Water Board on an equitable basis based on moneys generated in each region. Requires the Regional Water Boards to allocate those moneys to third parties, and give priority to projects with multiple benefits that provide greenspace within disadvantaged communities.

- 5) Requires Regional Water Boards to use moneys from the Waterway Account to fund, to the best of their ability, projects with a significant nexus to the community harmed by the original water quality violation.

EXISTING LAW:

- 1) Establishes the federal Clean Water Act (CWA) to regulate discharges of pollutants into the waters of the United States and to regulate quality standards for surface waters. (33 United States Code (U.S.C.) §1251 et seq.)
- 2) Establishes the Porter-Cologne Water Quality Control Act (Water Quality 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.)
- 3) Establishes the Abatement Account within the State Water Quality Control Fund, which is administered by the State Water Board. (WC § 13440)
- 4) Provides to the Abatement 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)
- 5) Authorizes the State Water Board to approve grants from the Abatement Account, to any eligible entity to assist in cleaning up a waste, abating the effects of a waste on waters of the state, or addressing an urgent drinking water need. Eligible entities include: a public agency, 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,

"AB 753 will make several important changes to how money in the Abatement Account is spent, without increasing fines or fees. Specifically, this legislation will require that 50% of the Abatement Account funding be sent back to the Regional Water Boards. When a water quality violation occurs from pollution, the violator can remedy the action monetarily. Fines collected from polluters are then deposited into the Abatement Account.

Historically, the State Water Board has returned much of the money from the Abatement Account to the Regional Water Boards in order to clean up waterways in the communities most impacted by pollution. However, the State Water Board no longer sends that money back to local communities at the same rate. Many disadvantaged communities around the state have seen water quality issues persist or worsen. Until these communities receive more funding from the Abatement Account, they will continue to lack the resources to clean up their local waterways.

AB 753 will simply reallocate existing funds to ensure that Regional Water Boards have the ability, as they have in the past, to be adaptable to the most pressing water quality issues within that region."

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 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.

State regulation of water pollution: The State Water Board is responsible for administering the federal CWA and California's Water Quality Act, enacted in 1969, which set up the statewide structure for water quality control. The Water Quality Act designates the State Water Board as the water pollution control agency for all purposes stated in the CWA, and it authorizes the State Water Board to exercise any powers that the federal CWA delegates to the State. The State Water Board and the Regional Water Boards are charged with preventing and reducing water pollution in rivers, streams, lakes, beaches, bays, and groundwater.

State Water Pollution Cleanup and Abatement Account (Abatement Account): The Abatement 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 Abatement 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 Abatement 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 Abatement Account to include community water systems that serve a disadvantaged community; exempted projects funded from the Abatement 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 Abatement Account funds.

Abatement Account Funding: According to the detailed budget information released as part of the Governor's proposed 2023-2024 budget, appropriations to the Abatement Account averaged approximately \$34 million over the past couple of fiscal years. If this is indicative of the future, AB 753 would divert about \$17 million to the Waterway Account, leaving approximately \$17 million in the Abatement Account.

Clean Water Team Citizen Monitoring Program: The Clean Water Team (CWT) is the citizen monitoring program of the State Water Board. 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. AB 753 specifically authorizes funds from the Waterway Account to be expended for the CWT Monitoring Program.

Policy change to consider: AB 753 proposes to shift approximately half of the proceeds from the Abatement Account to the Waterway Account for programs and projects to improve water quality. The question is, is this new proposed Waterway Account worth reducing half of the funding to the Abatement Account, thereby reducing by half the amount that is available for grants to local governments and non-profits for projects eligible under the Cleanup Account?

Arguments in Support: According to a coalition of groups in support including the California Coastkeeper Alliance, "The undersigned organizations are advocates for healthy water quality for all Californians. We recognize that, to achieve this goal, degraded waterways must be restored and vigilantly monitored, communities must be able to participate in the regulatory processes that impact their watersheds, and scientifically valid methods must be used to prevent water quality from degrading further. The State Water Pollution Cleanup and Abatement Account (CAA) was designed as a safety net, intended to make sure that even when polluters could not be found, there was adequate financing to clean contaminated sites. However, nothing mandates that the funds polluters pay into the CAA must be used to remediate the damage caused by the violation, or even that the State Water Board needs to repay a regional board for its restorative work. Instead, CAA funds can be used for projects anywhere in the state. For these reasons, we support Assembly Bill 753 because it will ensure that communities harmed by water quality violations are made whole by requiring enforcement fines to go back to the community to restore their watershed and open spaces."

Arguments in Opposition: According to the El Dorado Irrigation District, "AB 753 would reallocate existing funds that are expended to address priority cleanup actions. AB 753 would reduce state investments in water quality improvement projects. Further, the Board previously estimated ongoing annual costs of \$7.5 million in staff and contracting costs from the General Fund to administer the new accounts to be created by the bill and to implement the corresponding requirements associated with each of the accounts."

Related legislation:

- 1) AB 2113 (Robert Rivas, 2022). Would have created 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 Abatement Account to these four new accounts for specified purposes. This bill was held on the suspense file of the Assembly Appropriations Committee.
- 2) 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 Abatement Account by deleting the sunset for this provision.

- 3) AB 91 (Budget Committee, Chapter 1, Statutes of 2015). Appropriated \$15 million from the 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 Abatement Account to the State Water Board to provide interim emergency drinking water to disadvantaged communities with contaminated drinking water supplies.
- 4) 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.
- 5) SB 826 (Budget Committee, Chapter 23, Statutes of 2016). Appropriated \$15 million from the Abatement Account to the State Water Board to fund actions to address drought-related drinking water emergencies or threatened emergencies.

REGISTERED SUPPORT / OPPOSITION:

Support

California Coastkeeper Alliance
California Environmental Voters
Coachella Valley Waterkeeper
Heal the Bay
Humboldt Baykeeper
Inland Empire Waterkeeper
LAANE (Los Angeles Alliance for A New Economy)
Los Angeles Waterkeeper
Monterey Waterkeeper
Orange County Coastkeeper
Russian Riverkeeper
San Diego Coastkeeper
Santa Barbara Channelkeeper
Sierra Club California
South Yuba River Citizens League
Surfrider Foundation
The Otter Project
Yuba River Waterkeeper

Opposition

El Dorado Irrigation District

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

Date of Hearing: March 28, 2023

ASSEMBLY COMMITTEE ON ENVIRONMENTAL SAFETY AND TOXIC MATERIALS

Alex Lee, Chair

AB 1115 (Papan) – As Introduced February 15, 2023

SUBJECT: Barry Keene Underground Storage Tank Cleanup Trust Fund Act of 1989: brownfields remediation and redevelopment

SUMMARY: Extends the provisions of the Barry Keene Underground Storage Tank Cleanup Trust Fund Act (UST Act) and Underground Storage Tank Cleanup Trust Fund (USTCTF) to January 1, 2036.

EXISTING LAW:

- 1) Requires, by December 31, 2025, the owner or operator of an underground storage tank (UST) to permanently close that UST if the UST does not meet certain requirements in state law and regulation. (Health and Safety Code (HSC) § 25292.05)
- 2) Creates, under the authority of the State Water Resources Control Board (State Water Board) the UST Act and the USTCTF, until January 1, 2026, to help owners and operators of petroleum USTs satisfy federal and state financial responsibility requirements. (HSC § 25299.10)
- 3) Requires every owner and operator of a UST to establish and maintain evidence of financial responsibility for taking corrective action and compensating third parties for bodily injury and property damage arising from operating an underground storage tank. (HSC § 25299.31)
- 4) Authorizes a claimant under the USTCTF, who meets specified requirements, to use the USTCTF to establish and maintain evidence of financial responsibility. (HSC § 25299.32)

FISCAL EFFECT: Unknown.

COMMENTS:

Need for the bill: According to the author, "AB 1115 will extend the Underground Storage Tank Fund and continue to help owners and operators of petroleum USTs satisfy federal and state financial responsibility requirements. As self-insuring is massive burden on small operators, California is among many other states that provide a UST fund as an option for operators to meet their FR responsibility. Furthermore, as California transitions to green infrastructure and is burdened with an increasing amount of orphan tanks, we must ensure the resources are available to address this issue. AB 1115 is a commonsense measure that both assists small business owners and supports the state's goals for a cleaner California."

UST Act: The UST Act created the USTCTF to help owners and operators of petroleum USTs satisfy federal and state financial responsibility requirements. A UST is defined by law (HSC § 25299.32) as "any one or combination of tanks, including pipes connected thereto, that is used for the storage of hazardous substances and that is substantially or totally beneath the surface of the ground" (certain exceptions apply). The USTCTF is available to assist petroleum UST

owners and operators with the costs of cleaning up contaminated soil and groundwater caused by leakage from petroleum USTs.

The USTCTF has been a critical resource for both cleaning up immediate impacts of UST releases, and preventing significant migration of petroleum products in groundwater and soil. The USTCTF benefits numerous small, medium, and large businesses, and individuals by providing reimbursement for expenses associated with the cleanup of leakage from petroleum USTs. The USTCTF not only helps increase leaking UST site cleanup rates, but encourages current owners and operators to comply with necessary UST leak-prevention requirements to qualify for reimbursement. Existing law requires single-walled USTs to be removed by December 31, 2025.

The USTCF requires every owner of a petroleum UST that is subject to regulation under the Health and Safety Code to pay a per gallon fee to the USTCF. This fee, which began on January 1, 1991, has increased over time, and recently has generated approximately \$300 million annually at a fee of \$0.02 per gallon stored. The USTCF has approximately 4,200 active claims generating reimbursement requests for cleanup costs. The projected amount of these remaining reimbursement costs averages \$400,000 per claim. As the statutory requirement approaches to remove or replace single wall USTs (2,373 still remaining) and new contamination is found, the USTCF program anticipates the rate of new applications to increase.

Closure of Single-Walled Tanks: A single-walled UST is either the tank and/or the connected piping that do not have secondary containment and a continuous leak detection system. Senate Bill (SB) 445 (Hill, Chapter 547, Statutes of 2014) changed the UST regulatory program regarding design and construction of USTs by requiring the owner or operator to permanently close the single-walled UST on or before December 31, 2025.

Site Cleanup Subaccount Program (SCAP): The SCAP is a subset of the USTCTF and was established by SB 445. The SCAP provides a bridge between USTCTF-eligible UST sites and under-funded nonpetroleum contaminated sites by allowing the State Water Board to distribute grants to any cleanup site (including non-petroleum sites) that poses an immediate risk to a community. The funding for the SCAP comes from the USTCTF and is about \$34 million per year.

Protecting groundwater: The overall goal of AB 1115 is to protect groundwater by cleaning up contamination from leaking USTs. The UST Act is currently set to sunset on December 31, 2025 and this bill extends the UST Act and USTCTF until January 1, 2036. The goal of the UST Act is one of source control: reduce the potential for contamination at the source (the UST) before it reaches groundwater. As this program continues to clean-up USTs, there will likely be fewer and fewer USTs to clean-up. However, it is important to continue this program for a couple of reasons: 1) federal law requires UST owners and operators to maintain financial responsibility for the USTs and any potential contamination from those USTs; state law allows UST owners and operators to use the USTCTF as their financial responsibility; 2) California is looking to reduce emissions from transportation, including looking at a potential zero emission transportation systems by 2045; however, if this is accomplished without the use of petroleum powered vehicles then many of the USTs will likely need to be removed and could lack the resources to properly remove them. The USTCTF could play a vital role in removing and cleaning up USTs in the future.

Arguments in Support: According to the Coalition for Adequate School Housing, "The USTCTF has served as a resource for K-12 schools to mitigate existing school sites when a UST is found and must be remediated. In light of California's priorities and movement toward sustainable and energy efficient schools, we believe the continuance of the USTCTF has been and should continue to preserve an important resource for schools. Extending the USTCTF would allow additional time to complete any current cleanups, as well as initiate and complete cleanups on sites that may discover a release as tanks are pulled in the near future. If the USTCTF is allowed to expire now, K-12 schools will have few, if any, options to secure other acceptable mechanisms due to age of tanks in the ground today."

Arguments in Opposition:

None on file.

Related legislation:

- 1) AB 753 (Grayson, 2021). Would have extended the USTCTF to January 1, 2031. Would have required the State Water Board to, on or before January 1, 2024, report to the Legislature, at the conclusion of a stakeholder study, with recommendations for revising the eligibility criteria and funding priorities of the USTCTF in order to clean-up contaminated properties that could be used for affordable housing. This bill was held on the suspense file in the Senate Appropriations Committee.
- 2) SB 445 (Hill, Chapter 547, Statutes of 2014). Extended the State Water Board program for the clean-up of USTs from 2016 to 2020.
- 3) AB 282 (Wieckowski, 2014). Would have extended the sunset date of the UST Cleanup Program from 2016 until 2018, and would have extended the sunset of a \$0.006 surcharge on petroleum stored in an UST from 2014 until 2016. This bill was held in the Senate Appropriations Committee.
- 4) AB 120 (Committee on Environmental Safety and Toxic Materials, Chapter 635, Statutes of 2013). Required the State Water Board to waive a provision in existing law that requires a school district to have continuously maintained a permit for their underground storage tanks in order to qualify for funding from the Underground Storage Tank Cleanup Fund School District Account, if the school district meets certain conditions.
- 5) AB 291 (Wieckowski, Chapter 569, Statutes of 2011). Extended for two years a temporary fee paid per gallon on motor vehicle fuel that the owner of an underground storage tank must pay, from 1.4 mils to 2 mils per gallon through January 1, 2014.
- 6) AB 358 (Smyth, Chapter 571, Statutes of 2011). Streamlined the State Water Board process for completing the clean-up of USTs by establishing authority for the State Water Board to close sites overseen by local government as part of the State Water Board's existing five-year review process.

REGISTERED SUPPORT / OPPOSITION:

Support

California Coalition for Adequate School Housing (CASH)
California Council for Environmental & Economic Balance (CCEEB)
California Fuels and Convenience Alliance
City of Santa Barbara
County of Santa Clara
County of Sonoma
Crescent Truck Lines, Inc.
Goleta West Sanitary District
Innovex Environmental Management, Inc.
Professional Engineers in California Government (PECG)
1 individual

Opposition

None on file.

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

Date of Hearing: March 28, 2023

ASSEMBLY COMMITTEE ON ENVIRONMENTAL SAFETY AND TOXIC MATERIALS

Alex Lee, Chair

AB 1045 (Hart) – As Amended March 22, 2023

SUBJECT: Hazardous materials: public notices

SUMMARY: Requires the Department of Toxic Substances Control (DTSC), a local agency, or a Regional Water Quality Control Board (Regional Water Board), when providing required notices regarding the cleanup of a contaminated site to, in addition to publishing a notice in a newspaper of general circulation, as specified, to use any other reasonable means to publicize the notices, including, but not limited to, the online versions of newspapers, community bulletin boards, civic engagement platforms, app-based platforms, or other digital platforms, if DTSC, a local agency, or a Regional Water Board determines, based on research about the affected community, as described, that the targeted community receives information primarily through media other than print form.

EXISTING LAW:

- 1) Creates, under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), a Federal "Superfund" to clean up uncontrolled or abandoned hazardous waste sites, as well as accidents, spills, and other emergency releases of pollutants and contaminants into the environment. Authorizes the United States Environmental Protection Agency (US EPA) to seek out those parties responsible for any release and assure their cooperation in the cleanup. (42 United States Code (U.S.C.) § 9601 et seq.)
- 2) Establishes, pursuant to the Carpenter-Presley-Tanner Hazardous Substance Account Act (HSAA), a program to respond to 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 (HSC) § 25300 et seq.)
- 3) Authorizes a responsible party, whenever a release of waste occurs and remedial action is required, to request a local officer to supervise the remedial action. Authorizes the local officer to supervise the remedial action if the local officer determines that adequate staff resources and the requisite technical expertise and capabilities are available to supervise the remedial action. (HSC § 101480 (b))
- 4) Requires a local officer to provide written notice with specified information to DTSC and the appropriate Regional Water Board at least 10 working days prior to entering into an agreement with a responsible party. (HSC § 101487)
- 5) Authorizes the State Water Board to certify local agencies as qualified to clean up or oversee a responsible party to clean up soil and groundwater contamination from leaking underground storage tanks. Prohibits local agencies from overseeing the cleanup of leaking underground storage tank sites unless they have been certified by the State Water Board. (HSC § 25297.01)

FISCAL EFFECT: Unknown.

COMMENTS:

Need for the bill: According to the author, "With the passing of AB 1045, local agencies will have the authority to post public notifications in other platforms, including online newspapers, community bulletin boards, and civic engagement platforms. AB 1045 strives to increase transparency and equity for all Californians."

Remedial actions for waste releases: There are currently thousands of contaminated sites across the state, and the unauthorized releases of pollutants from those sites pose a risk to public health and the environment. These sites are complex and vary widely. They can include pesticide manufacturing facilities, rail yards, ports, dry cleaners, and refineries where pollutants were released to the soil, groundwater, surface water, and/or sediment. The types of pollutants encountered at these sites are plentiful and diverse and can include solvents, heavy metals, and petroleum. Some of these pollutants can persist in the environment, meaning that today's contaminated sites may be due to historical or recent unauthorized releases of pollutants.

The State Water Board and DTSC both have authority to remediate these sites, but have different jurisdictions. The State Water Board oversees remediation where contamination impacts surface or ground waters of the state, as well as underground storage tank contamination. DTSC oversees other contaminated cleanup sites, including contaminated soil and groundwater sites. Local agencies have varying authority to cleanup or oversee the cleanup of contaminated sites.

The federal Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA): CERCLA, or Superfund, provides a Federal "Superfund" to clean up uncontrolled or abandoned hazardous waste sites as well as accidents, spills, and other emergency releases of pollutants and contaminants into the environment. Through CERCLA, the US EPA was given authority to seek out those parties responsible for any contamination and assure their cooperation in the cleanup. The US EPA cleans up orphan sites when potentially responsible parties cannot be identified or located, or when they fail to act. DTSC has authority to cleanup sites under CERCLA or under state law.

Carpenter-Presley-Tanner Hazardous Substances Account Act (HSAA): State law provides DTSC with general administrative responsibility for overseeing the state's responses to spills or releases of hazardous substances, and to oversee the cleanup of hazardous waste disposal sites that pose a threat to public health or the environment. The HSAA provides DTSC with the authority to investigate, remove, and remediate contamination at contaminated sites. Federal and state laws also authorize DTSC to recover the costs and expenses it incurs in carrying out these activities.

Site Cleanup Program (SCP): The SCP, under the State Water Board, regulates and oversees the investigation and cleanup of non-federally owned sites where recent or historical unauthorized releases of pollutants to the environment, including soil, groundwater, surface water, and sediment, have occurred. Sites in the SCP are varied and include, but are not limited to, pesticide and fertilizer facilities, rail yards, ports, equipment supply facilities, metals facilities, industrial manufacturing and maintenance sites, dry cleaners, bulk transfer facilities, refineries, and some brownfields.

Local oversight of hazardous waste cleanup: Historically, the California legislature has acknowledged that local agencies, when provided sufficient resources and information, can help the state address, through oversight or abatement efforts, contaminated sites that require cleanup. DTSC may authorize the certified unified program agencies (CUPAs) to oversee the cleanup of contaminated sites, if DTSC determines they are qualified to do so. Under this authorization, CUPAs are certified to do corrective action on a limited number of tiered permitted hazardous waste facility sites.

The Site Designation Process, enacted by AB 2061 (Umberg, Chapter 1184, Statutes of 1993), allows a responsible party to request the California Environmental Protection Agency (CalEPA) to designate a local agency to oversee the cleanup action. AB 1248 (O'Connell, Chapter 671, Statutes of 1995) authorizes a responsible party, whenever a release of waste occurs and remedial action is required, to request the local health officer to supervise the remedial action. The law authorizes the local health officer to supervise the remedial action if the officer determines adequate staff resources and the requisite technical expertise and capabilities are available to supervise the remedial action.

AB 440 (Gatto, Chapter 588, Statutes of 2013) authorizes a local agency (a county, city, or housing authority) to take any action to remedy or remove a release of hazardous material on or under a "blighted property" within a "blighted area." AB 440 also provides immunity from further liability to the local agency, any person who enters into an agreement with that local agency to develop the property, and any future property owners.

Changing to digital media: Currently, many people get their news from digital media versus in-print newspapers. According to the Pew Research Center, "More than eight-in-ten U.S. adults (86%) say they get news from a smartphone, computer or tablet "often" or "sometimes," including 60% who say they do so often. This is higher than the portion who get news from television, though 68% get news from TV at least sometimes and 40% do so often. Americans turn to radio and print publications for news far less frequently, with half saying they turn to radio at least sometimes (16% do so often) and about a third (32%) saying the same of print (10% get news from print publications often). When asked which of these platforms they *prefer* to get news on, roughly half (52%) of Americans say they prefer a digital platform – whether it is a news website (26%), search (12%), social media (11%) or podcasts (3%). About a third say they prefer television (35%), and just 7% and 5% respectively say they prefer to get their news on the radio or via print."

This bill: AB 1045 helps adapt to the changing needs of California residents by requiring DTSC, the Regional Water Boards, and a local agency to research the needs of a particular community before providing notice of an action to cleanup a contaminated site. Current law requires DTSC, the Regional Water Boards, and a local agency to place a notice of a removal or remedial action in a print newspaper. However, many people get their news from online sources and those notices in the print newspapers may be missed. AB 1045 requires these agencies to use other media, in addition to print newspaper, to reach the communities where cleanup of contamination is taking place.

Arguments in Support: According to the Center on Race, Poverty, and the Environment, "AB 1045 specifically expands the ability of the DTSC to notify a community by using online versions of newspapers, community bulletin boards, civic engagement platforms or other outreach methods that are in line with the community's preferences and needs. AB 1045 will

allow for responsible parties to perform community surveys and research to determine the best digital medium for the affected locale. Impacted residents have long complained of insufficient public outreach and engagement by DTSC and responsible parties. In an effort to ensure that vulnerable communities are engaged during hazardous waste processes and decisions that most impact them, I urge your support of AB 1045."

Arguments in Opposition:

None on file.

Related legislation:

- 1) AB 304 (Quirk, Chapter 698, Statutes of 2021). Provides state oversight and sets requirements for local officers overseeing remedial action at sites with released hazardous waste.
- 2) AB 2333 (Quirk, 2020). Would have required local health officers who oversee contaminated sites to provide DTSC and the State Water Board with written notice detailing the technical and fiscal resources available for the cleanup. This bill was held in the Senate Environmental Quality Committee due to the COVID-19 pandemic.
- 3) AB 432 (Quirk, 2019). Would have required the State Water Board and DTSC to develop and implement a certification program for local health officers who enter into remedial action agreements. This bill was held on suspense in the Assembly Appropriations Committee.
- 4) AB 440 (Gatto, Chapter 588, Statutes of 2013). Authorizes a local agency to take any action, similar to that under the Polanco Redevelopment Act, to remedy or remove a release of hazardous material on or under a "blighted property" within a "blighted area."

REGISTERED SUPPORT / OPPOSITION:

Support

California News Publishers Association
Center on Race, Poverty, & the Environment
Rural County Representatives of California (RCRC)

Opposition

None on file.

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

Date of Hearing: March 28, 2023

ASSEMBLY COMMITTEE ON ENVIRONMENTAL SAFETY AND TOXIC MATERIALS

Alex Lee, Chair

AB 1322 (Friedman) – As Amended March 16, 2023

SUBJECT: Pesticides: diphacinone.

SUMMARY: Prohibits the use of the rodenticide diphacinone, as specified, until the director of the Department of Pesticide Regulation (DPR) takes specified actions. Specifically, **this bill:**

- 1) Makes legislative findings about the importance of wildlife to California and the impacts of rodenticides on non-target wildlife.
- 2) Defines "diphacinone" as any pesticide product containing diphacinone.
- 3) Adds diphacinone, a first generation anticoagulant rodenticide (FGAR), to existing statutory restrictions on second generation anticoagulant pesticides (SGARs), including:
 - a) Prohibiting, except as specified, the use of diphacinone in a wildlife habitat area, as defined; and,
 - b) Prohibiting, except as specified, the use of diphacinone in the state until the director of DPR makes a certification that DPR has completed its reevaluation of SGARs and adopted any additional specified restrictions to protect wildlife, as described below.
- 4) Exempts the following activities from the prohibition on the use of diphacinone:
 - a) The use of diphacinone by any governmental agency employee for mosquito or vector control or for public health activities;
 - b) The use of diphacinone by any governmental agency employee to protect water supply infrastructure and facilities;
 - c) The use of diphacinone for the eradication of nonnative invasive species inhabiting or found to be present on offshore islands;
 - d) The use of diphacinone to control an actual or potential rodent infestation associated with a public health need, as defined, as determined by a supporting declaration from the State Public Health Officer or a local public health officer; and,
 - e) The use, following a specified authorization process, of diphacinone for research purposes related to the reevaluation of SGARs.
- 5) Exempts the following locations from the prohibition on the use of diphacinone:
 - a) A medical waste generator;
 - b) A facility for producing drugs or medical devices; and,
 - c) Agricultural activities, as defined.
- 6) Deletes the existing statutory requirement that states that in order for the prohibition on the use of SGARs to be lifted, the director of DPR must certify to the Secretary of State that DPR has adopted any additional restrictions necessary to ensure that continued use of SGARs is not reasonably expected to result in significant adverse effects to nontarget wildlife and those restrictions are operative.
- 7) Requires, instead of the above provision, that in order for the prohibition on the use of SGARs and diphacinone to be lifted, the director of DPR must certify to the Secretary of

State that DPR has adopted any additional restrictions necessary to ensure that fewer than 10 percent of individuals of rare, sensitive, special status, threatened, or endangered species, which are scientifically representative of the diversity of the statewide population of each respective species, have a detectable level of any SGARs, diphacinone, or any of their metabolites in blood samples.

- 8) Specifies that substantial evidence supporting the restrictions above includes analysis regarding alternatives to anticoagulant rodenticides, exposure pathways, sublethal effects, species sensitivity, and the cumulative and synergistic effects of exposures to registered rodenticides.
- 9) Requires that any restrictions developed in accordance with the provisions above be developed in consultation with the Department of Fish and Wildlife (DFW).

EXISTING LAW:

- 1) Authorizes the state's pesticide regulatory program and mandates DPR to, among other things, provide for the proper, safe, and efficient use of pesticides essential for the production of food and fiber; for the protection of public health and safety; and, for the protection of the environment from environmentally harmful pesticides by prohibiting, regulating, or ensuring proper stewardship of those pesticides. (Food and Agriculture Code (FAC) § 11401 et seq.)
- 2) Defines "second generation anticoagulant rodenticide" (SGAR) as any pesticide product containing any of the following active ingredients: brodifacoum, bromadiolone, difenacoum, or difethialone. (FAC § 12978.7(a))
- 3) Prohibits, except as specified, the use of a SGAR in a wildlife habitat area, as defined. (FAC § 12978.7 (b))
- 4) Prohibits, except as specified, the use of a SGAR in the state until the director of DPR makes a certification that DPR has completed a reevaluation of SGARs and has adopted restrictions to protect wildlife, as specified. (FAC § 12978.7 (c))
- 5) Lists exemptions to the prohibition of the use of SGARs, including for public health activities; to protect water supply infrastructure; for mosquito and vector control; to eradicate nonnative invasive species; for research purposes related to the reevaluation of SGARs; for medical waste generators; for facilities for producing drugs or medical devices; and, for agricultural activities. (FAC § 12978.7 (e - f))
- 6) Defines, for the purposes of the SGAR prohibitions, a "public health need" as an urgent, nonroutine situation posing a significant risk to human health in which it is documented that other rodent control alternatives, including nonchemical alternatives, are inadequate to control the rodent infestation. (FAC § 12978.7 (e))
- 7) Provides that after the director of DPR determines that all of the following conditions have occurred, the director shall certify to the Secretary of State of that determination that:
 - a) DPR has completed the reevaluation of SGARs, as commenced by DPR on March 12, 2019; and,

- b) DPR has adopted any additional restrictions necessary to ensure that continued use of SGARs is not reasonably expected to result in significant adverse effects to nontarget wildlife and those restrictions are operative. (FAC § 12978.7 (g))
- 8) Requires that any restrictions developed in accordance with the provisions above be developed in consultation with DFW. (FAC § 12978.7 (g))
- 9) Designates as restricted materials pesticides containing brodifacoum, bromadiolone, difenacoum, and difethialone. (Title 3 California Code of Regulations, § 6400)

FISCAL EFFECT: Unknown.

COMMENTS:

Need for the bill: According to the author, "California needs common-sense restrictions on some of the most dangerous rat poisons to better protect our wildlife and families. There are a range of cost-effective alternatives to the most dangerous rat poisons for sale today that don't threaten some of California's most iconic wildlife like mountain lions and eagles."

Rodents: Many species of rodents inhabit California, including squirrels, chipmunks, beavers, gophers, rats, and mice. Rodents native to California play an important ecological role, and are a major food source for predators and scavengers, including hawks, eagles, foxes, coyotes, and bobcats. Rodents, however, are pests when they infest houses, threaten public health, and destroy property. According to the Centers for Disease Control and Prevention, rats and mice spread more than 35 diseases to humans worldwide. In North America, diseases that spread from rats and mice to humans include hantavirus and salmonellosis. Rodent infestations can also damage or destroy critical habitat, native plants and animals, crops, property, and food supplies.

Rodent control: According to the United States Environmental Protection (US EPA), the most important and effective steps in eliminating and preventing rodent infestations are keeping living spaces clean; preventing rodent access; and, eliminating potential nesting areas (sanitation and exclusion). Other options to control rodent infestations include lethal traps, live traps, and chemical control (rodenticides).

Rodenticides: Rodenticides are pesticides designed to kill rodents, but the ingestion of, or sometimes contact with, rodenticides can have the same type of effect on any mammal. Contact with rodenticides can also affect birds and fish. Rodenticides are usually formulated as baits that are designed to attract animals. Flavorings may include fish oil, molasses, or peanut butter. Baits used in agriculture and natural areas may contain ground meat, vegetables, grains, or fruits, which may be attractive to non-target wildlife, children, and pets. Additionally, many rodenticides cause secondary poisoning risks to predators.

According to the US EPA, most of the rodenticides used today in the United States are anticoagulant compounds, either first or second generation, that interfere with blood clotting and cause death from excessive bleeding. Deaths typically occur between four days and two weeks after rodents begin to feed on the bait.

First-generation anticoagulants (FGARs) include the anticoagulants that were developed as rodenticides before 1970. These compounds are much more toxic when feeding occurs on several successive days rather than on one day only. Chlorpophacinone, diphacinone, and warfarin are FGARs that are registered to control rats and mice in the United States.

Second-generation anticoagulants (SGARs) were developed beginning in the 1970s to control rodents that were resistant to FGARs. SGARs are more likely than FGARs to kill after a single night's feeding, and tend to remain in animal tissues longer than do first-generation compounds. Because of this, SGARs pose greater risks to non-target species that might feed on bait only once or that might feed upon animals that have eaten the bait. Due to these risks, SGARs are no longer nationally registered for use in products geared toward consumers and are registered only for the commercial pest control and structural pest control markets. SGARs registered in the United States include brodifacoum, bromadiolone, difenacoum, and difethialone. These four SGARs have been prohibited for most uses in California since January 1, 2021.

The third category of rodenticides consists of those considered acute toxicants. Acute toxicant rodenticides have differing ways of affecting rodents, including affecting the nervous system, causing heart and kidney failure, and reacting to stomach acid to cause rapid death. In this category, bromethalin, zinc phosphide, and strychnine kill rodents after one feeding, often within a few hours. Formulated as baits, they are highly toxic to people, pets, and wildlife. Cholecalciferol, another acute toxicant, usually requires multiple feedings to kill rodents.

Dangers of rodenticides: According to the DFW, the use of poison baits to control rodents has injured and killed hundreds or thousands of wild animals and pets throughout California. Predatory and scavenging birds and mammals that eat dead or dying rodents that have consumed these baits will also be poisoned. Large predators, such as mountain lions, can be impacted by consuming smaller predators that have preyed upon poisoned rodents. Pets will also eat dead or dying rodents and unprotected bait.

Request for California-restricted materials designation for SGARs: In July 2011, DFW requested that DPR designate all SGARs as California-restricted materials in order to mitigate non-target wildlife exposure in California. DFW reported that dozens of species are impacted by anticoagulant pesticides, including the golden eagle, great-horned owl, Cooper's hawk, American kestrel, black bear, fisher, red fox, gray fox, San Joaquin kit fox (federally endangered), coyote, mountain lion, bobcat, and badger.

Restricted materials are pesticides deemed to have a higher potential to cause harm to public health, farm workers, domestic animals, honeybees, the environment, wildlife, or crops compared to other pesticides. With certain exceptions, restricted materials may be purchased and used only by, or under the supervision of, a certified commercial or private applicator under a permit issued by the County Agricultural Commissioner (CAC).

Analysis of anticoagulant rodenticides on wildlife in California: In response to DFW's 2011 request, DPR obtained wildlife incident and mortality data from between 1995 and 2011, which it analyzed together with land use data and rodenticide use and sales data between 2006 and 2010. DPR considered data from multiple sources, including DFW, private agencies, individuals, available journal articles, and other resources. Of the 492 non-target mammals and bird necropsies included in DPR's analysis, 368 (74.8 percent) had residues of one or more anticoagulant rodenticide (FGARs and SGARs). Of the 368 animals that tested positive for at

least one anticoagulant rodenticide, 359 (97.6 percent) had residues of at least one SGAR while 65 (17.7 percent) had residues of at least one FGAR.

After reviewing the data obtained from both urban and rural areas, DPR found that SGAR exposure and toxicity to non-target wildlife is a statewide problem, regardless of the setting.

State regulatory and legislative action on SGARs: While certain mitigation efforts had previously been in effect for some SGARS, following its findings on the impacts of SGARs on wildlife throughout the state, on March 18, 2014, DPR designated the active ingredients brodifacoum, bromadiolone, difenacoum, and difethialone as California-restricted materials with specified use restrictions.

In 2014, the Legislature passed, and Governor Edmund G. Brown Jr. signed, AB 2657 (Bloom, Chapter 475, Statutes of 2014), which prohibits the use of SGARs in wildlife habitat areas, defined as any state park, state wildlife refuge, or state conservancy. The provisions of this bill went into effect on January 1, 2015.

On September 29, 2020, Governor Gavin Newsom signed AB 1788 (Bloom, Chapter 250, Statutes of 2020) to prohibit the use of four SGARs—brodifacoum, bromadiolone, difenacoum, and difethialone—throughout the state, with some exemptions, until DPR completes its SGAR reevaluation and adopts any additional necessary restrictions to minimize impacts on nontarget wildlife. Until DPR certifies that all of the conditions in the law are met, most uses of SGARs will be prohibited in California. The provisions of this bill went into effect on January 1, 2021.

Were the regulations and 2014 legislation effective? According to DPR, after designating SGARs as restricted materials in 2014, and after AB 2657 went into effect (but before AB 1788 went into effect), DPR continued to receive reports claiming that SGARs may have caused, or are likely to have caused, significant adverse impacts to non-target wildlife. Under 3 CCR § 6220, the Director of DPR is required to investigate such reports. The Director then has the authority to begin a reevaluation if the investigation finds that the pesticide caused or is likely to cause significant adverse impacts.

In response to the reports on continued impacts of SGARs, DPR prepared an investigatory report on potential significant adverse impacts reportedly caused by anticoagulant rodenticides. The investigation found that while the 2014 regulations changed SGAR use patterns, reported rates of non-target wildlife exposure to SGARs had not decreased. Based on the investigation, the Director found that a significant adverse impact has occurred or is likely to occur from the use of SGARs and proposed to begin reevaluation of SGARs.

DPR's current reevaluation of SGARs: On November 16, 2018, DPR issued a notice of its proposed decision to begin the reevaluation of pesticide products containing the SGAR active ingredients brodifacoum, bromadiolone, difenacoum, and difethialone. DPR accepted comments on the proposed decision and, after completing its review of the public comments, DPR noticed, on March 12, 2019, its final decision to begin reevaluation of these SGAR pesticide products.

The SGAR reevaluation involves 74 pesticide products and 15 registrants, from whom DPR required submission of existing data related to nontarget wildlife exposure. DPR's scientists completed their review of registrant identified data, data on file, and public literature late last

year, and are currently meeting with stakeholders to refine a mitigation strategy. DPR indicates that there is no set time frame for completion of the reevaluation.

According to DPR, reevaluations end in several ways. If the data show that use of the pesticide presents no significant adverse effects, DPR closes the reevaluation without added mitigation measures. If new restrictions are necessary, DPR places controls on the use of the pesticide to mitigate the potential adverse effect. DPR may also work with registrants and US EPA to revise labels to mitigate hazards. If the adverse effect cannot be mitigated, DPR suspends or cancels the product registration.

It should be noted that, in response to the reevaluation, registrants submitted voluntary cancellations for all three previously registered difenacoum (a SGAR) products. As of May 2019, DPR no longer had any difenacoum products registered for use in California.

This bill: This bill prohibits, except as specified, the use of diphacinone in the state until the director of DPR certifies that DPR has completed the reevaluation of SGARs, as commenced by DPR on March 12, 2019.

Diphacinone: Diphacinone is a first generation anticoagulant (FGAR), which, like all anticoagulant pesticides, works by preventing blood clotting. Animals that eat anticoagulant rodenticides die from internal hemorrhaging (bleeding) within a few days. Diphacinone lethality generally requires that an animal consumes multiple doses of the bait over several days. This is known as a multiple-dose anticoagulant.

According to the National Pesticide Information Center, diphacinone is one of the rodenticides that pose the greatest secondary poisoning risks for wild mammals, dogs, and cats. Secondary poisoning can occur if an animal consumes another animal that has been poisoned by a pesticide, and the predator is weakened or dies as a result of exposure to the poisoned prey.

Pesticides do not have to kill an animal to do harm. Instead, a pesticide may have sublethal effects such as making the animal sick, changing its behavior, or changing its ability to reproduce or survive stress. If enough individuals die without leaving behind enough offspring to take their places, the population gets smaller. Pesticides can affect a population through direct or indirect, as well as lethal or sublethal, effects. There is evidence of sublethal effects of diphacinone exposure in several species of predatory animals, including raptors, coyotes, bobcats, and mountain lions.

While trends of rodenticide use and exposure are evolving since AB 1788 prohibited many uses of SGARs in January 2021, the sponsors of the bill point to numerous studies indicating continued anticoagulant rodenticide exposure and exposure to diphacinone prior to the enactment of AB 1788 as illustrations of the necessity of the bill. Examples include:

- 1) DFW's "2021 Summary of Pesticide Exposures & Mortalities in Non-Target Wildlife," which documents necropsies on wildlife remains, indicates that 70 percent of wildlife tested in 2021 (post enactment of AB 1788) were exposed to anticoagulant rodenticides. The study showed that diphacinone was one of the three most common analytes detected in liver samples in birds, small game mammals, and non-game mammals submitted to the Wildlife Health Laboratory for postmortem examination in 2021.

- 2) DPR's November 2018 paper, "An Investigation of Anticoagulant Rodenticide Data Submitted to the Department of Pesticide Regulation" analyzed the data and exhibits submitted to DPR by Raptors Are the Solution (RATS) and Project Coyote, as well as all information and data submitted to DPR by DFW (2014-2018) and found that 59% of mountain lions tested were exposed to diphacinone; diphacinone was detected in approximately 40% of the bobcat liver samples tested; and, diphacinone was detected in approximately 30% of bobcat blood samples.
- 3) Studies on bobcats in California have shown that anticoagulants, including diphacinone, can cause inflammatory response and immune suppression that can weaken bobcats and increase susceptibility to opportunistic infections, with possible population-level impacts in bobcats.
- 4) Numerous other studies showing sublethal impacts of anticoagulant rodenticides, and in some cases, diphacinone specifically, such as internal hemorrhaging; notoedric mange; increased vulnerability to other causes of death, such as vehicular accidents; chronic anemia; increased parasite and pathogen burden; etc, to different non-target wildlife, including owls, kestrels, coyotes, mountain lions, and bobcats.

Recent legal action on diphacinone: In December 2017, RATS requested that DPR initiate reevaluation of three FGARs, including diphacinone, and four SGARs and provided evidence of the ongoing harms of anticoagulant rodenticides. On April 18, 2018, DPR announced its decision to renew the subject rodenticides without reevaluation.

In response, RATS filed several petitions against DPR in 2018 for violation of the California Environmental Quality Act (CEQA) and violation of the DPR's own regulations, based on its decision to renew the subject rodenticides without reevaluation. On November 16, 2018, DPR wrote that it had completed its investigation of the subject rodenticides in response to RATS' request and that it would begin reevaluation of SGARs, but not FGARs. DPR reasoned that its "investigation of the reported impacts found that the rate of FGAR exposure among non-target wildlife is generally decreasing and is lower than for SGARS."

On May 24, 2019, RATS filed a second amended petition that narrowed its challenge to DPR's decision to renew the registration of diphacinone (one of the three FGARs) without reevaluation. A trial court heard and denied this petition, and RATS filed an appeal.

In October 2022, California's First District Court of Appeals found, according to the San Francisco Chronicle, that DPR "had failed to examine the effects of diphacinone when used over long periods or in combination with other rodent-killing chemicals and had wrongly classified it as one of a group of older chemicals that needed less scrutiny." The court ruled that DPR should reconsider its 2018 decision not to place diphacinone into reevaluation. DPR is currently reconsidering the 2018 decision in light of the court's opinion and available data and expects a public decision on a reevaluation of diphacinone in the next few months.

Alternatives to rodenticides: According to DFW and DPR, the most effective and safest ways to address rodent issues are through exclusion and sanitation—by eliminating factors that allow rodents to reproduce and thrive. DPR notes that rodenticides do not eradicate rodents and may not reduce their numbers for long. If there is an area-wide population of rodents, rodents from the edges move into the available space vacated by the poisoned rodents. Rodent numbers surge

when people leave unpicked fruit on trees and pet food outside. Rodents find shelter when people ignore clutter and overgrown vines and allow access inside houses and garages.

To address these issues, DPR and DFW suggest that people who have identified a rodent population should eliminate rodent entrances to the structure (seal holes, fill cracks, and install door sweeps); remove brush piles and debris near the structure; and, remove other food sources, such as pet food, wild bird seed, and fruit from trees. In addition to exclusion and sanitation, traps and electrocution devices can also be employed to address rodent pests.

Unintended consequences? While sanitation and exclusion are the most effective methods for long-term rodent control, should the prohibition on diphacinone be enacted through this bill, other FGARs and acute toxicant rodenticides would still be allowed. Under the provisions of the bill, consumers could still purchase and use the FGARs warfarin and chlorophacinone and acute rodenticide toxicants (active ingredients bromethalin, zinc phosphide, and strychnine, cholecalciferol), with some restrictions based on container size and specific uses. These rodenticides all carry risks. For example, bromethalin, which is designed to kill in a single feeding, affects the nervous system and causes symptoms such as lack of coordination, tremors, seizures, paralysis, and often death. Antidotes to bromethalin do not exist. Zinc phosphide kills rodents quickly because their stomach acid reacts with phosphide to produce toxic phosphine gas. Predators and scavengers can be poisoned if they eat enough of the gut content of animals recently killed with zinc phosphide. Strychnine causes nerve cells to fire rapidly, which causes severe muscle spasms and leads to death. Several recent deaths of non-target wildlife have been caused by improper use of strychnine. Finally, high doses of cholecalciferol raise blood calcium levels and cause heart and kidney failure in rodents. Secondary poisoning cases related to cholecalciferol are less frequent than for other rodenticides, but it is not a very effective tool for rodent control.

Policy consideration- Integrated Pest Management: The March 26, 2019, Assembly Environmental Safety and Toxic Materials Committee analysis for AB 1788 (Bloom, Chapter 250, Statutes of 2020) stated, "Should the prohibition on SGARs in this bill be enacted, without corresponding requirements for or support of an integrated pest management approach to rodent management, it is likely that the use of FGARs and acute toxicants to control rodents would increase. Additionally, cholecalciferol is not very effective, raising the concern that should it be used widely, resistance could occur. Instituting stronger state support of, or requirements for, integrated pesticide management approaches to rodent control would likely reduce the use of rodenticides overall."

According to the University of California Statewide Integrated Pest Management Program, integrated pest management, or IPM, is a process used to solve pest problems while minimizing risks to people and the environment. IPM is an ecosystem-based strategy that focuses on long-term prevention of pests or their damage through a combination of techniques such as biological control, habitat manipulation, modification of cultural practices, and use of resistant varieties. Pesticides are used only after monitoring indicates they are needed, according to established guidelines, and treatments are made with the goal of removing only the target organism. Pest control materials are selected and applied in a manner that minimizes risks to human health, beneficial and nontarget organisms, and the environment.

While it is too soon to determine new trends in uses of, and exposures to, the rodenticides post-AB 1788, it appears that rodenticide exposure in nontarget wildlife is continuing at alarming

rates. Unless the state institutes comprehensive IPM strategies for controlling rodent pests, it remains likely that consumers and pesticide applicators will simply turn to other chemical rodent controls when specific rodenticides are prohibited. To significantly reduce primary and secondary rodenticide poisoning of non-target wildlife, the state should adopt stringent and comprehensive IPM policies.

Technical considerations: AB 1322 changes current law by deleting the existing statutory requirement that provides that in order for the current prohibition on the use of SGARs to be lifted, the director of DPR must certify that it has adopted any additional restrictions necessary to ensure that continued use of SGARs is not reasonably expected to result in significant adverse effects to nontarget wildlife and those restrictions are operative. The bill instead requires that in order for the prohibition on the use of SGARs and diphacinone to be lifted, the director of DPR must certify that it has adopted any additional restrictions necessary to ensure that fewer than 10 percent of individuals of rare, sensitive, special status, threatened, or endangered species, which are scientifically representative of the diversity of the statewide population of each respective species, have a detectable level of any SGARs, diphacinone, or any of their metabolites in blood samples.

The sponsors argue that these changes are necessary because, "AB 1322 borrows from the precautionary principle that the burden is on industry and regulators to ensure that products are not entering the environment at a level that causes harm. The evidence and science clearly demonstrate that SGARs and diphacinone are leading to direct mortality and sublethal impacts on a wide range of species. The current threshold of "significant adverse effects" is a term of art in the law that can allow for the ongoing lethal and sublethal impacts to a range of wildlife, even wildlife that are state and federally protected, if regulators determine those effects are not significant. With ongoing impacts to imperiled species that are being pushed towards extinction, such as mountain lions, spotted owls, Pacific fishers, and San Joaquin kit foxes, the loss of individual animals should be considered per se significant, but DPR has demonstrated an unwillingness to enact restrictions that prevent harm to imperiled species or even reevaluate the use of diphacinone even though it is undisputed that the rodenticide is found in a significant percentage of wildlife species."

This change to existing statute is significant, and how these provisions would be implemented should be explored as this bill moves through the legislative process.

Additionally, as currently drafted, the bill lifts the prohibition on the uses of diphacinone in the state once the director of DPR certifies that DPR has adopted additional use restrictions and completed the reevaluation of SGARs. Diphacinone is a FGAR. As the bill moves through the process, the author may wish to consider uncoupling the prohibition on diphacinone from the reevaluation of SGARs, and instead instate the prohibition on diphacinone until DPR completes a reevaluation of diphacinone or takes other related regulatory action.

Double referral: Should the Assembly Committee on Environmental Safety and Toxic Materials approve this bill, it will be referred to the Assembly Water, Parks, and Wildlife Committee.

Recent related legislation:

- 1) AB 1298 (Bloom, Chapter 479, Statutes of 2021). Corrects a drafting error in AB 1788 (Bloom, Chapter 250, Statutes of 2020) related to the prohibition of the use of SGARs.

- 2) AB 1788 (Bloom, Chapter 250, Statutes of 2020). Prohibits the use SGARs until the director of DPR certifies a completed reevaluation of SGARs.
- 3) AB 2422 (Bloom, 2018). Would have prohibited the use, except as specified, of any pesticide that contains an anticoagulant. The Assembly Water, Parks, and Wildlife Committee hearing on this bill was cancelled at the request of the author and the bill subsequently died on file.
- 4) AB 1687 (Bloom, 2017). Would have prohibited the use of any pesticide that contains one or more of nine specified active ingredients (including all first and second generation anticoagulant rodenticides and some acute toxicants). The Assembly Committee on Environmental Safety and Toxic Materials hearing on this bill was cancelled at the request of the author and the bill subsequently died on file.
- 5) AB 2596 (Bloom, 2016). Would have prohibited the use of second generation anticoagulant rodenticides. The Assembly Committee on Environmental Safety and Toxic Materials hearing on this bill was cancelled at the request of the author and the bill subsequently died on file.
- 6) AB 2657 (Bloom, Chapter 475, Statutes of 2014). Prohibits the use of second generation anticoagulant rodenticides in wildlife habitat areas, as defined.

REGISTERED SUPPORT / OPPOSITION:

Support

Amah Mutsun Tribal Band
Animal Legal Defense Fund
Brentwood Alliance of Canyons & Hillsides
California Chaparral Institute
California Environmental Health Initiative
California Urban Streams Partnership
California Wildlife Center
California Wildlife Foundation/California Oaks
Center for Biological Diversity
Channel Islands Restoration
Citizens for Los Angeles Wildlife (CLAW)
Coastal Ranches Conservancy
Conservation Society of California, Oakland Zoo
Ecologistics
Endangered Habitats League
Felidae Conservation Fund
Friends of Griffith Park
Golden Gate Raptor Observatory
Hills for Everyone
Humane Wildlife Control
Klamath Siskiyou Connectivity Project
Kyotousa

Morro Coast Audubon Society
Mountain Lion Foundation
Panthera
People for The Ethical Treatment of Animals (PETA)
Poison Free Agoura
Poison Free Conejo Valley
Poison Free Malibu
Preserve Wild Santee
Project Coyote
Protect San Benito County
Raptors are The Solution
San Bernardino Valley Audubon Society
Santa Barbara Audubon Society
Santa Susana Mountain Park Association
Social Compassion in Legislation
The Cougar Fund
The River Otter Ecology Project
Urban Wildlife Research Project
Ventana Wilderness Alliance
Voters for Animal Rights
Wildcare
Wildfutures
Wildlands Network
Wildlife Emergency Services
Wisdom Good Works

Opposition

None on file.

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

Date of Hearing: March 28, 2023

ASSEMBLY COMMITTEE ON ENVIRONMENTAL SAFETY AND TOXIC MATERIALS

Alex Lee, Chair

AB 805 (Arambula) – As Amended March 9, 2023

SUBJECT: Drinking water consolidation: sewer service

SUMMARY: Authorizes the State Water Resources Control Board (State Water Board) to order consolidation of sewer service along with an order for the consolidation of drinking water systems. Specifically, **this bill:**

- 1) Authorizes the State Water Board, if sufficient funding is available, to order consolidation of sewer service along with an order for drinking water consolidation, when the subsumed and receiving drinking water systems both provide sewer service, after doing all of the following:
 - a) Consulting with, and fully considering input from, the relevant Regional Water Quality Control Board (Regional Water Board);
 - b) Consulting with, and fully considering input from, the receiving water system; and,
 - c) Conducting outreach to ratepayers and residents served by the receiving and subsumed water systems, including identifiable local community groups. Requires outreach efforts to gauge community support for consolidation of the subsumed water system, and requires the State Water Board to consider the results of community outreach when deciding whether to order consolidation of the subsumed water system's sewer services.
- 2) Clarifies that, before ordering consolidation or extension of service for drinking water systems, the State Water Board must find reasonable efforts were made to negotiate voluntary (instead of mandated) consolidation or extension of service.
- 3) Authorizes the State Water Board, when contracting with, or ordering a designated water system to accept, an administrator pursuant to Health and Safety Code (HSC) § 116686(a)(1), to require the administrator to provide administrative, technical, legal, or managerial services for any sewer service provided by the designated water system.
- 4) Adds sewer service to an existing provision, to prohibit a designated water system from being responsible for administrator costs that exceed the costs necessary to provide sewer service, in addition to maintaining the designated water system and providing an adequate supply of affordable, safe drinking water.

EXISTING LAW:

- 1) Declares that it is the established policy of the state that every human being has the right to safe, clean, affordable, and accessible water adequate for human consumption, cooking, and sanitary purposes. (Water Code (WC) § 106.3)
- 2) Pursuant to the federal Safe Drinking Water Act (SDWA), authorizes the United States Environmental Protection Agency (US EPA) to set standards for drinking water quality and to oversee the states, localities, and water suppliers who implement those standards. (42 United States Code (USC) § 300(f) et seq.)

- 3) Requires, pursuant to the California SDWA, the State Water Board to regulate drinking water and to enforce the federal SDWA and other regulations. (Health and Safety Code (HSC) § 116275 et seq.)
- 4) Authorizes the State Water Board to order consolidation with a receiving drinking water system in the following circumstances (HSC § 116682(a)):
 - a) A public water system or a state small water system serving a disadvantaged community consistently fails to provide an adequate supply of safe drinking water, or is an at-risk water system; or,
 - b) A disadvantaged community, in whole or in part, is substantially reliant on domestic wells that consistently fail to provide an adequate supply of safe drinking water, or are at-risk domestic wells.
- 5) Requires the State Water Board, before ordering consolidation or extension of service, to perform a series of activities, including encouraging voluntary consolidation or extension of service; considering other enforcement remedies; considering the affordability of anticipated monthly rates for drinking water service to residential customers of the potentially subsumed water system; providing technical assistance and working with the potentially receiving and subsumed water systems to develop a financing package that benefits them both; and, providing the opportunity for public comment, with advance notice for public meetings provided to multiple stakeholders. (HSC § 116682(b))
- 6) Requires the State Water Board, before ordering consolidation or extension of service, to make seven findings, including that the potentially subsumed water system has consistently failed to provide an adequate supply of safe drinking water or is at risk of doing so; that reasonable efforts to negotiate consolidation or extension of service were made; and, that consolidation or extension of service is appropriate and technically and economically feasible. (HSC § 116682(d))
- 7) Authorizes the State Water Board, in order to provide an adequate supply of affordable, safe drinking water to disadvantaged communities, voluntary participants, and public water systems that have demonstrated difficulty in maintaining technical, managerial, and financial capacity and to prevent fraud, waste, and abuse, to (HSC § 116686(a)):
 - a) Contract with, or provide a grant to, an administrator to provide administrative, technical, operational, legal or managerial services, or any combination of those services, to a designated public water system to assist the designated public water system with the provision of an adequate supply of affordable, safe drinking water; and,
 - b) Order the designated water system to accept administrative, technical, operational, legal, or managerial services, including full management and control of all aspects of the designated water system, from an administrator selected by the State Water Board.
- 8) Establishes, under the federal Clean Water Act, the structure for regulating discharges of pollutants into the waters of the United States and regulating quality standards for surface waters. (33 USC § 1251 et seq.)

- 9) Declares, under the Porter-Cologne Water Quality Control Act (Porter-Cologne Act), that the health, safety, and welfare of people require there to be a statewide program for water quality control and that the statewide program for water quality control can be most effectively administered regionally, within a framework of statewide coordination and policy. (WC § 13000)
- 10) Requires each Regional Water Board to formulate and adopt water quality control plans for all areas within the region, with specified plan elements, including (WC § 13240 et seq.):
 - a) A requirement for water quality control plans to include water quality objectives, to ensure the reasonable protection of beneficial uses and the prevention of nuisance; and,
 - b) An authorization for water quality control plans to specify certain conditions or areas where the discharge of waste, or certain types of waste, will not be permitted.
- 11) Authorizes a Regional Water Board, in establishing or reviewing any water quality control plan or waste discharge requirements, or in connection with any action relating to any plan or requirement authorized by law, to investigate the quality of any waters of the state within its region. (WC § 13267)
- 12) Authorizes a Regional Water Board to order the provision of sewer service by a receiving sewer system to a disadvantaged community, when a disadvantaged community or residents of a disadvantaged community are served by one or more inadequate onsite sewage treatment systems; establishes a process for the ordered provision of sewer service, including activities relating to community outreach, paying for the costs of providing sewer service pursuant to WC § 13289, and allowable charges for existing and new sewer service customers. (WC § 13289)
- 13) Specifies—for the purpose of providing sewer service to a disadvantaged community that is served by an inadequate onsite sewage treatment system—that "onsite sewage treatment system" includes, but is not limited to, a septic tank, cesspool, leach field, and seepage pit; defines "provision of sewer service" to mean the provision of sanitary sewer service, including the collection and treatment of sewage, to a disadvantaged community by any one of several specified processes; and defines "inadequate onsite sewage treatment system" to mean an onsite sewage treatment system that has the reasonable potential to cause a violation of water quality objectives, to impair present or future beneficial uses of water, or to cause pollution, nuisance, or contamination of waters of the state. (WC § 13288)

FISCAL EFFECT: Unknown.

COMMENTS:

Need for the bill: According to the author:

"The small town of East Orosi is like many small and disadvantaged communities across California. The residents rely on residential wells for drinking water and have septic systems or failing municipal sanitation infrastructure.

Failing sanitation systems often leak contaminants into the local underground aquifers that residents rely on to replenish their wells. As overdrafted underground aquifers dry up, the concentration of contaminants in drinking water wells increases. If drinking water pulled from contaminated wells contains unsafe levels of contaminants, it can cause health effects such as gastrointestinal illnesses, nervous system or reproductive effects, and chronic diseases such as cancer.

In 2018, East Oroshi was identified by the State Water Resources Control Board (SWRCB) as a candidate for drinking water consolidation because of longstanding groundwater contamination issues. While their drinking water consolidation process is expected to be completed by 2024, sewer service consolidation was not ordered because SWRCB currently lacks the authority. Residents of East Oroshi will be left with failing sanitation systems that are partly responsible for the polluted groundwater beneath their homes.

Unfortunately, this same situation occurs in hundreds of small and disadvantaged communities across the state. Because failing sewer systems are most likely to be in disadvantaged communities, these populations experience negative health impacts at much greater rates than well-resourced communities with modern, well-managed infrastructure."

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

Drinking water contamination: While most drinking water in California meets requirements for health and safety, surface waters and aquifers used for drinking water can be contaminated by various chemicals, microbes, and radionuclides. According to the US EPA, drinking water contaminants can originate from multiple sources, including human waste from sewage and septic systems, which can carry harmful microbes into drinking water sources. Major contaminants resulting from waste include *Giardia*, *Cryptosporidium*, and *E. coli*.

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

Threats to public health from sewer spills: On December 6, 2022, the State Water Board adopted an updated "General Order for Sanitary Sewer Systems" (General Order), which regulates sanitary sewer systems designed to convey sewage. Sewage is defined as "untreated or partially treated domestic, municipal, commercial, and/or industrial waste, and any mixture of these wastes with inflow or infiltration of stormwater or groundwater, conveyed in a sanitary sewer system." According to the State Water Board, sanitary sewer system spills—or a discharge of sewage from any portion of a sewer system due to an overflow, operational failure, and/or infrastructure failure—can threaten public health, beneficial uses of state waters, and the

environment. Sewage contains high levels of suspended solids, pathogenic organisms, toxic pollutants, nutrients, oxygen-demanding organic compounds, oil, grease, and other pollutants. Sewage spills may cause a public nuisance, particularly when sewage is discharged to areas with high public exposure such as streets and surface waters used for drinking, irrigation, fishing, recreation, or other public consumption or contact uses.

Drinking water system consolidation: State law under the California SDWA allows the State Water Board to order drinking water system consolidation or extension of service when water systems fail or are at risk of failing to provide an adequate supply of safe drinking water. Consolidation is the physical or managerial joining of two or more water systems, which often consists of a smaller water system that is failing or at risk of failing (referred to as the "subsumed water system") being absorbed into a larger, compliant water system (referred to as the "receiving water system"). Physical consolidation involves the merging or sharing of physical infrastructure, such as distribution pipelines or water treatment facilities. Managerial or operational consolidation involves sharing financial, managerial, or technical capacity.

According to the US EPA, water system partnerships, forged through strategies such as consolidation, can be an effective means of helping small water systems achieve and maintain technical, managerial, and financial capacity, and reducing the oversight and resources that states need to devote to these systems. The State Water Board maintains that consolidation and extension of service to disadvantaged communities that currently rely on under-performing or failing small water systems or domestic wells can reduce costs and improve reliability.

State law requires the State Water Board to perform a series of actions before ordering drinking water consolidation or extension of service. These include encouraging voluntary consolidation or extension of service; considering other enforcement remedies; considering the affordability of anticipated monthly rates for drinking water service to residential customers of the potentially subsumed water system; providing technical assistance and working with the potentially receiving and subsumed water systems to develop a financing package that benefits them both; and, providing the opportunity for public comment, with advance notice for public meetings provided to multiple stakeholders. The State Water Board must also make several findings, including that the potentially subsumed water system has consistently failed to provide an adequate supply of safe drinking water or is at risk of doing so; that reasonable efforts to negotiate consolidation or extension of service were made; and, that consolidation or extension of service is appropriate, and technically and economically feasible.

Upon ordering consolidation or extension of service, the State Water Board must also complete specified tasks, such as providing financial assistance to pay for the water infrastructure needed for consolidation or extension of service to take place, and compensating the owners of a privately owned subsumed water system for the fair market value of the system.

In its 2022 Drinking Water Needs Assessment, the State Water Board reported that in 2021, 27 water systems, serving 13,641 people, were consolidated, and that there were about 170 active consolidations that were either in the early stages of development or in process for funding.

Appointed water system administrators: SB 552 (Wolk, Chapter 773, Statutes of 2016) gave the State Water Board an additional restructuring tool. The bill authorizes the State Water Board, in order "to provide affordable, safe drinking water to disadvantaged communities and to prevent fraud, waste, and abuse," to contract with an administrator to provide administrative and

managerial services to a public water system (referred to as the "designated water system") that serves a disadvantaged community and consistently fails to provide an adequate and affordable supply of safe drinking water. SB 552 also authorizes the State Water Board to order the failing water system to accept administrative and managerial services, including full management and control, from an administrator selected by the State Water Board. The State Water Board describes an administrator as a person or entity that the State Water Board has determined is qualified to operate and manage a water system. Potential administrators include individual people; businesses, such as engineering firms; non-profits; local agencies; and, other entities. AB 805 adds to the State Water Board's authority regarding the administrator program, by authorizing the State Water Board to require an administrator to provide administrative, technical, legal, or managerial services for sewer service provided by a drinking water system.

Federal and state regulation of sewer systems: While the federal and state SDWAs govern drinking water systems in California, waste discharges and sewer systems are governed by the federal Clean Water Act and the state's Porter-Cologne Act. The objective of the Clean Water Act is to restore and maintain the chemical, physical, and biological integrity of the waters of the United States. The Porter-Cologne Act authorizes the State Water Board to implement the Clean Water Act and to protect the quality of all waters of the State.

According to its 2022 General Order, the State Water Board regulates over 1,100 publicly owned sanitary sewer systems. California also has a large unknown number of unregulated privately owned sanitary sewer systems. Under authority granted pursuant to the Clean Water Act and the Porter-Cologne Act, the State Water Board's General Order regulates sewer service providers, which can include state agencies, federal agencies, municipalities, special districts, private companies, or other non-governmental entities that own and/or operate a sewer system. The General Order regulates multiple aspects of sewer systems, including the discharge of sewage and monitoring and reporting requirements. The General Order also requires entities that own or operate a sewer system to develop and implement a "Sewer System Management Plan," which must reflect the size, scale, and complexity of the sewer system and include procedures for the management, operation, and maintenance of the sewer system. The procedures must address the prioritization of system repairs and maintenance to proactively prevent spills, and the implementation of current standard industry practices through available equipment, technologies, and strategies. State law provides the State and Regional Water Boards the authority to pursue formal enforcement actions, including imposing administrative liability and civil monetary penalties, for non-compliance with the requirements of the General Order and violations of the Clean Water Act.

Prior legislative action relating to sewer service: In 2019, SB 1215 (Hertzberg, Chapter 982, Statutes of 2018) authorized Regional Water Boards to order the provision of sewer service to disadvantaged communities that have inadequate onsite sewage treatment systems, which are defined as septic tanks, cesspools, leach fields, or seepage pits. The bill established a process for ordering this "septic-to-sewer" conversion using the model set forth in SB 88 (Committee on Budget and Fiscal Review, Chapter 27, Statutes of 2015), which authorized the State Water Board to order consolidation of water systems in disadvantaged communities that lack access to adequate, safe, and reliable drinking water. Similar to drinking water consolidation, SB 1215 requires:

- The Regional Water Board to, before ordering the provision of sewer service, encourage the voluntary provision of sewer service; engage in specified community outreach activities; and,

make six findings, including that the provision of sewer service is an effective and cost-effective means of addressing inadequate onsite sewage treatment systems.

- The State Water Board to, as necessary and appropriate, make funds available, upon appropriation by the Legislature, to a receiving sewer system for the costs of completing the provision of sewer service.

This bill: AB 805 authorizes the State Water Board, under the California SDWA, to order the consolidation of sewer service along with an order for drinking water consolidation, if both the subsumed and receiving water systems also provide sewer service. This approach may be useful for addressing the specific situation in which the same entity operates both a failing drinking water system and an inadequate sewer system. AB 805 does not specify a process for sewer system consolidation, although the bill does take some initial steps in this direction and may be useful for advancing further conversations relating to the need for and structure of sewer system consolidations.

Policy considerations: State laws governing drinking water consolidation are complex and contain provisions that, among other things, define the types of water systems that can be consolidated and establish parameters for defining failing or at-risk water systems. Consolidation statute for drinking water systems also contains numerous requirements relating to transparency, community outreach, implementation timelines, the use of an administrator, allowable uses for funding, and customer water rates after consolidation. California does not currently have a similar statutory process for consolidating sewer systems, aside from laws established by SB 1215 (Hertzberg, Chapter 982, Statutes of 2018), which more narrowly authorized Regional Water Boards to order the provision of sewer service to a disadvantaged community with an inadequate onsite sewage treatment system.

AB 805 highlights an important issue for this Committee to consider: the potential exposure of disadvantaged communities to the dual challenges of unsafe drinking water and inadequate sewer services. In combination, these issues can lead to further degradation of drinking water sources and compound negative human health impacts in disadvantaged communities. AB 805 proposes to address this issue by authorizing the State Water Board to order sewer service consolidation, but does not establish a process for this consolidation, aside from some provisions relating to community outreach and the role of an administrator. This leaves several questions that the **author may wish to consider** as this bill moves forward:

- **Should California establish broader authority for consolidating sewer systems?** AB 805 authorizes the State Water Board to order sewer service consolidation only when receiving and subsumed drinking water systems both also provide sewer service; in other words, AB 805 authorizes sewer service consolidation only in conjunction with drinking water consolidation. As written, the bill does not otherwise define conditions—such as the provision of inadequate sewer service, or chronic infrastructure, capacity, or managerial issues—that would make a sewer system eligible for consolidation. The bill also does not authorize the State Water Board to order consolidation of sewer service providers outside of a drinking water consolidation, even when the provision of sewer service is inadequate, threatens human health, or impairs water quality.
- **Under which body of law should sewer service consolidation be placed?** Drinking water is regulated under the federal and state SDWAs; in contrast, sewer systems are regulated under the federal Clean Water Act and state Porter-Cologne Act. These different bodies of

law establish separate regulatory frameworks, objectives, and authorities for drinking water and sewer systems. If broader authority for sewer system consolidation were to be placed under the Porter-Cologne Act, statute authorizing sewer system consolidation along with drinking water consolidation would likely need to include language connecting the two bodies of law.

- **How would requirements in AB 805 interact with existing drinking water consolidation requirements?** It is unclear how this bill's requirements would interact with existing statute for drinking water consolidation, and whether "sewer service" needs to be explicitly added elsewhere in the drinking water consolidation statute to ensure that the State Water Board has the authority to execute sewer and drinking water system consolidations at the same time. For example, it is not clear whether AB 805's requirements for community outreach would be integrated into community outreach that is already mandated as part of drinking water consolidation. It is also unclear how or if existing funding streams for drinking water consolidation could be used to support sewer system consolidation, since the California SDWA contains a provision that prohibits the State Water Board from funding public works or upgrades that are unrelated to the delivery of an adequate supply of affordable, safe drinking water (HSC § 116682(h)). Finally, it is unclear how the use of an administrator for providing sewer service would work, since the bill authorizes the State Water Board to *require an administrator to provide* administrative, technical, legal, or managerial services for sewer service, but does not grant the State Water Board the authority to *appoint* an administrator for this purpose.

Arguments in support: A coalition of supporting organizations comprised of the Community Water Center, Leadership Counsel for Justice and Accountability, California Environmental Voters, Clean Water Action, California Coastkeeper Alliance, and Union of Concerned Scientists writes:

"In 2018, the rural community of East Oroshi was identified as a candidate for drinking water consolidation with the neighboring town of Oroshi due to decades-long groundwater contamination issues and a lack of capacity by the system's operator. Until this process is expected to be completed in 2024, the [State Water Board] took action to appoint Tulare County as administrator of the drinking water system. However, the ongoing drinking water consolidation project has been delayed by legal challenges, and residents of East Oroshi are still facing numerous issues due to the East Oroshi Community Services District (CSD) retaining billing and management of the community's sewer service. These include unserviced septic tanks, raw sewage leaks, backed up plumbing, a lack of paper billing, and intimidation/threats from the sewer system operator.

AB 805 (Arambula) builds on past legislation by granting the [State Water Board] permissive authority to appoint an administrator and order a wastewater consolidation if a mandatory consolidation order has already been issued by the [State Water Board] for a community's drinking water system. For East Oroshi, AB 805 would have allowed for relief for residents whose human rights are being violated daily.

To fully realize the promise of the Human Right to Water, California must ensure that its most vulnerable populations—including residents living in disadvantaged communities—have access to safe drinking water and sanitation services. It is unconscionable to leave residents with such a mismanaged sewer system after recognizing that a district cannot manage the drinking water

system effectively. It is imperative that the Legislature take action to address these issues, and we are proud to sponsor this legislation."

Arguments in opposition: None on file.

Related legislation:

- 1) SB 403 (Gonzalez, Chapter 242, Statutes of 2021). Authorizes the State Water Board to order the consolidation of at-risk domestic wells and at-risk water systems.
- 2) SB 200 (Monning, Chapter 120, Statutes of 2019). Establishes the Safe and Affordable Drinking Water Fund (Fund) to help water systems provide an adequate and affordable supply of safe drinking water in both the near and the long terms. Transfers to the Fund annually, until June 30, 2030, five percent of the proceeds of the Greenhouse Gas Reduction Fund, up to \$130 million.
- 3) SB 1215 (Hertzberg, Chapter 982, Statutes of 2018). Authorizes Regional Water Boards to order the provision of sewer service to a disadvantaged community that has inadequate onsite sewage treatment systems.
- 4) SB 966 (Wiener, Chapter 890, Statutes of 2018). Requires the State Water Board to develop standards for onsite nonpotable water treatment and reuse and authorizes local jurisdictions to adopt programs to permit onsite nonpotable water treatment and reuse using those standards.
- 5) SB 552 (Wolk, Chapter 773, Statutes of 2016). Authorizes the State Water Board to contract with an administrator to provide administrative and managerial services to a designated public water system to assist with the provision of an adequate and affordable supply of safe drinking water. Authorizes the State Water Board to order the failing water system to accept administrative and managerial services, including full management and control, from an administrator selected by the State Water Board.
- 6) SB 88 (Budget Committee, Chapter 27, Statutes of 2015). Authorizes the State Water Board to require water systems that are serving disadvantaged communities with unreliable and unsafe drinking water to consolidate with, or receive service from, public water systems with safe, reliable, and adequate drinking water.
- 7) AB 685 (Eng, Chapter 524, Statutes of 2012). Declares that it is the established policy of the state that every human being has the right to clean, affordable, and accessible water adequate for human consumption, cooking, and sanitary purposes and requires that relevant state agencies, including the Department of Water Resources, the State Water Board, and the State Department of Public Health consider this policy when revising, adopting, or establishing policies, regulations, and grant criteria pertinent to the human uses of water.

REGISTERED SUPPORT / OPPOSITION:

Support

Community Water Center (Sponsor)
California Coastkeeper Alliance

California Environmental Voters (formerly CLCV)
Clean Water Action
Leadership Counsel for Justice & Accountability
Union of Concerned Scientists

Opposition

None on file.

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

Date of Hearing: March 28, 2023

ASSEMBLY COMMITTEE ON ENVIRONMENTAL SAFETY AND TOXIC MATERIALS

Alex Lee, Chair

AB 838 (Connolly) – As Amended March 21, 2023

SUBJECT: California Water Affordability and Infrastructure Transparency Act of 2023

SUMMARY: Requires, beginning January 1, 2025, and thereafter at intervals determined by the State Water Resources Control Board (State Water Board), a public water system to provide to the State Water Board specified information and data related to the average water bill paid by customers and the public water system's completed and planned efforts to replace aging infrastructure. Specifically, **this bill**:

- 1) Requires, beginning January 1, 2025, and thereafter at intervals determined by the State Water Board, a public water system to provide to the State Water Board both of the following:
 - a) Information and data related to the average water bill paid by customers, including, but not limited to, all of the following:
 - i) The median dollar amount billed to customer accounts in the prior calendar year;
 - ii) The total dollar amount billed to customer accounts in the prior calendar year; and,
 - iii) If the public water system differentiates between customer classifications, separate information and data may be provided for each customer classification.
 - b) Information and data related to the public water system's completed and planned efforts to replace aging infrastructure, including, but not limited to, both of the following:
 - i) The total cost of all infrastructure improvements completed in the prior calendar year; and,
 - ii) The percentage of water main replaced in the prior calendar year.
- 2) Requires that "median dollar amount billed" is calculated by identifying the middle value of all of the water bills presented to customers.
- 3) Defines "water main" as any pipeline, except for user service lines, within the distribution system.
- 4) Provides that a water corporation may submit the data required by this bill for each ratemaking area, as identified by the Public Utilities Commission, as opposed to at the public water system level.

EXISTING LAW:

- 1) Authorizes, pursuant to the federal Safe Drinking Water Act (SDWA), the United States Environmental Protection Agency (US EPA) to set standards for drinking water quality and to oversee the states, localities, and water suppliers who implement those standards. (42 United States Code § 300 (f) et seq.)
- 2) Declares that it is the established policy of the state that every human being has the right to safe, clean, affordable, and accessible water adequate for human consumption, cooking, and sanitary purposes. (Water Code § 106.3(a))
- 3) Requires all relevant state agencies to consider the human right to water state policy when revising, adopting, or establishing policies, regulations, and grant criteria when those policies, regulations, and criteria are pertinent to the uses of water. (Water Code § 106.3 (b))
- 4) Defines a "public water system" as a system for the provision of water for human consumption through pipes or other constructed conveyances that has 15 or more service connections or regularly serves at least 25 individuals daily at least 60 days out of the year. A public water system includes the following:
 - a) Any collection, treatment, storage, and distribution facilities under control of the operator of the system that are used primarily in connection with the system;
 - b) Any collection or pretreatment storage facilities not under the control of the operator that are used primarily in connection with the system; and,
 - c) Any water system that treats water on behalf of one or more public water systems for the purpose of rendering it safe for human consumption. (Health and Safety Code (HSC) § 116275)
- 5) Requires, once every five years, the State Water Board to submit to the Legislature a comprehensive Safe Drinking Water Plan for California. Requires the Safe Drinking Water Plan to include, but not be limited to, the following information:
 - a) Estimated costs of requiring public drinking water systems that have less than 10,000 service connections to meet primary drinking water standards and public health goals;
 - b) A discussion of alternative methods of financing the construction, installation, and operation of new treatment technologies, including, but not limited to user charges, state or local taxes, state planning and construction grants, loans, and loan guarantees;
 - c) A discussion of sources of revenue presently available, and projected to be available, to public water systems to meet current and future expenses; and,
 - d) An analysis of the current cost of drinking water paid by residential, business, and industrial consumers based on a statewide survey of large, medium, and small public water systems. (HSC § 116355)
- 6) Requires a public water system to submit a technical report to the State Water Board as part of the permit application or when otherwise required by the State Water Board. Authorizes this report to include, but does not limit it to, detailed plans and specifications; water quality information; physical descriptions of the existing or proposed system; information related to technical, managerial, and financial capacity and sustainability; and, information related to achieving the goals of the state's human right to water policy, including affordability and accessibility. (HSC § 116530(a))
- 7) Requires a public water system to submit the report in the form and format and at intervals specified by the State Water Board. (HSC § 116530(b))

- 8) Requires, by July 1, 2018, a community water system to compile an inventory of known lead user service lines in use in its distribution system and identify areas that may have lead user service lines in use in its distribution system. (HSC § 116885 (a))
- 9) Requires, by July 1, 2020, a community water system that has identified known lead user service lines in use in its distribution system as provided in subdivision (a) to provide a timeline for replacement of known lead user service lines in use in its distribution system to the State Water Board. (HSC § 116885 (b))
- 10) Requires an urban and community water system to report the number of annual discontinuations of residential service for inability to pay on the urban and community water system's Internet Web site, if an Internet Web site exists, and to the State Water Board. Requires the State Water Board to post on its Internet Web site the information reported. (HSC § 116918)
- 11) Requires a small water supplier and a nontransient noncommunity water system that is a school to each report annually specified water supply condition information to the State Water Board through the state board's Electronic Annual Reporting (eAR) System or other reporting tool, as directed by the State Water Board. (Water Code § 10609.61)

FISCAL EFFECT: Unknown.

COMMENTS:

Need for the bill: According to the author, "Many California families are struggling and falling behind on their water bills, and more transparency is needed to ensure that water rates are equitable and affordable for those who need our help the most. We must also be attentive to the needs of our aging water infrastructure to stay ahead of a crisis that could leave hundreds of thousands of families throughout the state without a secure source of clean drinking water. AB 838 is a common sense solution to improve accountability for our ratepayers and state agencies."

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

Drinking water systems in California: According to a July 2022 report by the California State Auditor, "California is one of the most prosperous states in the country, and yet, fundamental inequities still exist, including access to safe drinking water. In fact, nearly a million Californians lack access to safe drinking water because they receive water from systems that do not meet water quality standards. The [State Water Board] regulates the operation of roughly 7,400 drinking water systems throughout the State and disburses federal and state assistance to help them improve their water quality. As of December 2021, the State Water Board reported that more than 370 water systems were classified as failing water systems because they exceeded the maximum contaminant levels for safe drinking water. These failing water systems provide

water to more than 920,000 people. Nearly 240 of these water systems have been failing for at least three years, and more than 150 have been failing for five years. Further, for 2022, the State Water Board's data show that an additional 432 water systems serving more than 1 million people are at risk of failing."

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

Electronic Annual Report: The electronic Annual Report (eAR) is a survey of public water systems, currently required annually, which is used by the State Water Board to collect critical water system information intended to assess the status of compliance with specific regulatory requirements (such as source water capacity); to provide updated contact and inventory information (such as population and number of service connections); and, to provide information that is used to assess the financial capacity of water systems.

History of the annual report: According to the State Water Board, the "Annual Report to the Drinking Water Program" began in the mid-1980's as a hard copy report submitted to the Division of Drinking Water (DDW) district offices. (The DDW was previously called the Drinking Water Program and was housed at the Department of Public Health and its predecessor agencies. The administration of this program was transferred to the State Water Board in July, 2014). The DDW field staff and local primacy agencies (LPAs) require the annual report per Section 116530 of the Health & Safety Code, and they have used this information in the conduct of sanitary surveys of public water systems. In 2009, the Annual Report moved online where it was dubbed the electronic Annual Report (eAR). There was a Large Water System and Small Water System survey, based on system size at the cutoff of 1,000 service connections or a population of 3,300. Over the following 11 years, eARs were developed for release to public water systems and field office staff tasked with review. In 2020, the State Water Board redeveloped the eAR onto a new reporting platform offering advancements in customization and performance.

Current uses of the eAR: In addition to DDW field staff and county LPA representatives, the eAR serves as a platform for information gathering from public water systems to the State Water Board. Current drivers of eAR data collection, as listed by the State Water Board, include, among others:

- Recommendations for the Implementation of a Statewide Low-Income Water Rate Assistance Program, as required by AB 401 (Dodd, Chapter 662, Statutes of 2015)
- The Needs Assessment, as required under the Safe and Affordable Funding for Equity and Resilience (SAFER) program established by SB 200 (Monning, Chapter 120, Statutes of 2019)
- Other data requirements for the SAFER program, including data for drinking water risk indicators
- Water shutoff reporting under SB 998 (Dodd, Chapter 891, Statutes of 2018)
- The development of the Safe Drinking Water Plan

- Drought planning for small water suppliers and rural communities under SB 552 (Hertzberg, Chapter 552, Statutes of 2021)
- Division of Administrative Services utilizes eAR information for fee billing
- Division of Financial Assistance uses the information in the Operator Certification Unit
- Office of Research, Performance, and Planning uses the eAR information for implementation of urban water use efficiency requirements under AB 1668 (Friedman, Chapter 15, Statutes of 2018) and SB 606 (Hertzberg, Chapter 14, Statutes of 2018)

The State Water Board reports that other users of eAR data include people tasked with managing and developing the following programs and activities:

- California Water Plan
- Urban Water Management Plan
- The Truckee River Operating Agreement (TROA)
- Sustainable Groundwater Management Act (SGMA) Groundwater Management
- Drought Risk Index- County Drought Advisory Group
- Department of Water Resources Public Water Systems Statistics Surveys

Current data gathered by the eAR: The eAR system is used to collect critical information that public water systems are required to annually report to the State Water Board's DDW. This includes information about the population served, service connections, water sources, amount of water supplied and delivered, recycled water, customer charges, income, water affordability, water quality, backflow assemblies, operator certification, system improvements, customer complaints, emergency plans, conservation plans, and climate change impacts and measures.

In more detail, water systems are required to report on, in addition to other things, information, if any, on customer assistance programs designed to address customer affordability challenges; residential and non-residential customer charges, rate structures, and other service fees borne by customers to support the water system; and, annual revenues and incurred expenses. The latter information is used to assess the financial resiliency of water systems.

In addition, public water systems are required to report on updated service connection counts by types and metering status, and on improvements and modifications to the treatment or distribution system completed in the reporting year or planned for the future.

This bill: This bill requires public water systems to report additional information through the eAR to the State Water Board. Specifically, AB 838 will require, beginning January 1, 2025, and thereafter at intervals determined by the State Water Board, a public water system to provide to the State Water Board, specified information and data related to the average water bill paid by customers and the public water system's completed and planned efforts to replace aging infrastructure.

The author's office argues that these changes are needed because, "customers have the right to know what infrastructure investments their water utilities are making and to be able to easily compare that information to other communities in the state... Just as residents have a right to know how well water suppliers are maintaining the infrastructure in their communities, the public also has a right to know how their actual water bills compare to those in other communities. Here too, transparency regarding water affordability provides valuable information to the public and gives policy makers the information they need to craft solutions to the state's water affordability challenges."

Arguments in support:

The sponsor of the bill, California Water Service (Cal Water), writes in support, "Current law requires water utilities in California to submit various information to the State Water Resources Control Board (Water Board). This information is collected through the Water Board's Electronic Annual Report. While the current data is incredibly useful, it is insufficient in several important regards.

First, because the Water Board does not currently collect information on actual water bills paid by customers, the only means by which affordability can be measured is by comparing theoretical monthly water bills based on hypothetical amounts of monthly water use. AB 838 closes this gap by asking water utilities to report median monthly water bills. This information will allow for a more thorough and in-depth analysis of water affordability in California.

Second, because the Water Board does not currently collect information on the types of infrastructure improvements water utilities are completing, the state is left with an incomplete picture of where additional assistance – be it technical or financial – may be needed to ensure customers are receiving safe, reliable water utility service. AB 838 addresses this challenge by asking water utilities to report on the percentage of water mains that it has replaced. Main replacement rates are generally a good barometer of how proactive a utility is in maintaining, upgrading, and replacing its infrastructure. Additionally, proactive main replacements programs are a central component of water conservation efforts as they help to minimize water lost due to leaks.

Finally, as the Water Board has updated the Electronic Annual Report over the last several years, some have questioned whether it has the statutory authority to collect financial, including data on water rates, or infrastructure investment information from water utilities. AB 838 addresses this by plainly providing the Water Board with statutory authority to collect these types of information from water utilities."

The California Water Association (CWA) argues, "Disclosure of bill payments and infrastructure costs are vital to for a comprehensive and accurate analysis of the state's water needs. AB 838 provides greater transparency and provides valuable information to the public and gives policy makers the information they need to craft solutions to the state's water affordability challenges."

Arguments in opposition:

The California Municipal Utilities Association (CMUA) writes in opposition, "... the State Board requires the submittal of information from public water systems through the Electronic Annual Report. Section 116530 of the Health and Safety Code gives the Board broad authority to ask for data through this process for a variety of purposes that they feel is appropriate... The EAR already requires a robust amount of information, including details related to customer charges and financial data. And the language already gives the State Board authority to ask for data related to infrastructure and affordability... CMUA's members support transparency and actively engage with the public through their local governing boards and other means. That includes disclosures on rate structures and infrastructure needs. However, data collection to just collect it without a stated specific purpose or benefit, is not appropriate. Notwithstanding the fact the Board can, and in many instances, already collects this data, requiring information on infrastructure is not going to result in additional investment and comparing bills in different

communities will not improve affordability given the unique needs of each water system. In addition, carving out specific data requirements in statute opens up the door to the Board having to adjust statute every year for changes in the EAR. Further, while the author's desire is to ensure the public has more access to this data, submitting it through the EAR is unlikely to achieve that goal."

The El Dorado Irrigation District (EID) argues, "The [State Water] Board directly enforces the California Safe Drinking Water Act for all public water systems but does not exercise authority for rate setting or capital expenditures. The [State Water] Board does not have jurisdiction over public water system rate setting. And the [State Water] Board does not have the staff capacity or resources to interpret data and information that would be submitted by 750 public water systems. Further, the information gathered would have little meaning as each system is different, including source of supply, level of treatment, elevational differences in service area, miles of distribution line per customer, age of system, et cetera.... The burden imposed on public water systems to calculate the average water bill paid by customers on an annual basis and submit data on infrastructure investments regarding replacement would be wasted effort. Spending on new infrastructure in anticipation of population growth as well as expenditures on infrastructure; e.g., drinking water and wastewater treatment facilities, to comply with new regulations also is important. This legislation would not address either of the latter expenditures."

Previous related legislation:

- 1) SB 200 (Monning, Chapter 120, Statutes of 2019). Establishes the Safe and Affordable Drinking Water Fund to provide \$130 million per year that will be used to develop and implement sustainable solutions for small systems with violations of drinking water standards. Requires the State Water Board to create an annual expenditure plan for the fund. Requires the expenditure plan to be based on a needs assessment, which the State Water Board annually conducts to identify the overall resources needed to bring failing water systems.
- 2) AB 685 (Eng, Chapter 524, Statutes of 2012). Declares that it is the established policy of the state that every human being has the right to clean, affordable, and accessible water adequate for human consumption, cooking, and sanitary purposes and requires relevant state agencies, including the Department of Water Resources, the State Water Board, and the State Department of Public Health, to consider this state policy when revising, adopting, or establishing policies, regulations, and grant criteria pertinent to the human uses of water.

REGISTERED SUPPORT / OPPOSITION:

Support

California Water Service Company (Sponsor)
 CA African American Chamber of Commerce
 California American Water, a Wholly Owned Subsidiary of American Water Works
 California Hispanic Chamber of Commerce
 California Senior Advocates League
 California Water Association
 Kern County Taxpayers Association
 League of United Latin America Citizens
 Sustainable Silicon Valley

Opposition

California Municipal Utilities Association
El Dorado Irrigation District

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

Date of Hearing: March 28, 2023

ASSEMBLY COMMITTEE ON ENVIRONMENTAL SAFETY AND TOXIC MATERIALS

Alex Lee, Chair

AB 1628 (McKinnor) – As Amended March 22, 2023

SUBJECT: Microfiber filtration

SUMMARY: Requires, on and after January 1, 2029, a new washing machine offered for sale in the state to contain a microfiber filtration system with a mesh size not greater than 100 micrometers (μm). Specifically, **this bill:**

- 1) Makes findings and declarations relating to the health and environmental implications of microplastic pollution; the contributions of microfibers, shed from fabric during washing in clothes washers, to microplastic pollution; and, the utility of washing machine filtration systems for capturing microfibers.
- 2) Requires, on and after January 1, 2029, a new washing machine offered for sale in the state for residential, commercial, or state use to contain a microfiber filtration system with a mesh size not greater than 100 μm .
- 3) Defines "microfiber filtration system" to mean a filtration unit that is active across all washing cycles and meets either of the following criteria:
 - a) The unit is integrated into the washing machine design as a built-in filter; or,
 - b) The unit is included as an in-line filter and is packaged, sold, and installed with the washing machine.

EXISTING LAW:

- 1) Prohibits, under the federal Marine Plastic Pollution Research and Control Act of 1987, the at-sea disposal of plastic and other solid materials for all navigable waters within the United States. (33 United States Code (USC) § 1901 et seq.)
- 2) Prohibits—under the Federal Food, Drug, and Cosmetic Act, as amended by the Microbead-Free Waters Act of 2015—the manufacturing, packaging, and distribution of rinse-off cosmetics containing plastic microbeads. (21 USC § 331)
- 3) Requires, under the Porter-Cologne Water Quality Control Act, the State Water Resources Control Board (State Water Board) and Regional Water Quality Control Boards to implement a program to control discharges of preproduction plastic (including plastic resin pellets and powdered coloring for plastics) from point and nonpoint sources. Requires the State Water Board to determine the appropriate regulatory methods to address the discharges from these point and nonpoint sources. (WC § 13367)
- 4) Declares that littered plastic products have caused and continue to cause significant environmental harm and have burdened local governments with significant environmental cleanup costs. (Public Resources Code (PRC) § 42355)

- 5) Enacts the Plastic Microbeads Nuisance Prevention Law and makes several related findings and declarations, including that (PRC § 42360):
- a) Plastic does not biodegrade into elements or compounds commonly found in nature, but instead, upon exposure to the elements, photodegrades into smaller pieces of plastic, causing land and water pollution that is virtually impossible to remediate;
 - b) Plastic pollution is the dominant type of anthropogenic debris found throughout the marine environment;
 - c) Plastic pollution is an environmental and human health hazard and a public nuisance; and,
 - d) Microplastics are persistent organic compounds that attract other pollutants commonly present in the environment, many of which are recognized to have serious deleterious impacts on human health or the environment, including DDT, DDE, PCBs, and flame retardants.
- e) Prohibits the sale of personal care products that contain plastic microbeads on and after January 1, 2020. (PRC § 42360 et seq.)
- f) Requires, on or before December 31, 2024, the California Ocean Protection Council (OPC) to adopt and implement a Statewide Microplastics Strategy (Strategy) related to microplastic materials that pose an emerging concern for ocean health; specifies that the goal of the Statewide Microplastics Strategy is to increase understanding of the scale and risks of microplastics on the marine environment and to identify proposed solutions to address the impacts of microplastics. (PRC § 35635(b))
- g) Requires the State Water Board to adopt a definition of microplastics in drinking water by July 1, 2020; adopt a standard methodology to test drinking water for microplastics; and, adopt testing and reporting requirements. (Health & Safety Code § 116376)

FISCAL EFFECT: Unknown.

COMMENTS:

Need for the bill: According to the author, "AB 1628 is an important step in helping to reduce the amount of microfibers from ending up in our freshwater systems, oceans, and agricultural lands. California has always led in reducing plastic pollution and must continue to lead by requiring microfiber filters on all new washing machines by 2029."

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

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

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

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

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

The approach proposed in AB 1628—using washing machine filtration systems, with a mesh size no larger than 100 μm , to capture microfibers—is aligned with one of the Strategy's suggested early actions, which recommends that California "promote, or otherwise require, the sale and use of ENERGY STAR condenser dryers and washing machines with filtration rates of 100 microns or smaller and develop a program to incentivize post-market retrofits or purchases through rebates and other mechanisms by 2024."

Synthetic microfibers, a type of microplastic: According to the United States Environmental Protection Agency (US EPA), clothes made from synthetic material constitute a major source of plastic pollution. The US EPA maintains that the majority of clothing on the planet is made from plastic-based materials like polyester, rayon, nylon, and acrylic and that, when washed, synthetic clothing sheds tiny plastic fragments known as microfibers. The US EPA states, as do multiple

peer-reviewed research studies, that microfibers are the most prevalent type of microplastic found in the environment. A systematic literature review by Athey and Erdle (2021), published in *Environmental Toxicology and Chemistry*, examined research on microfibers published from 2011 to 2020. Based on their review, the authors state that:

"The widespread contamination of microfibers in the environment is well documented...Many studies, across environmental compartments, have reported microfibers as the most common anthropogenic microparticles in samples, including wastewater, stormwater runoff, rivers, lakes, estuaries, marine waters, and wildlife...Because of their prevalence in the environment and documented ingestion by a variety of biota, microfibers are a growing concern globally."

One study of microfiber emissions by Geyer et al. (2022), published in *Environmental Pollution*, estimates that in 2019, as much as 2.2 kilotons of synthetic microfibers were generated from apparel washing in California, a 26% increase since 2008. California's wastewater treatment agencies are estimated to divert 95% of microfibers from the state's waterbodies, but these microfibers can then end up on land when biosolids, a product of the wastewater treatment process, are applied to land to improve soil structure and nutrient content, as well as water conservation. Based on their modeling, Geyer et al. conclude that without interventions, annual synthetic microfiber emissions to California's natural environments are expected to increase to 2.6 kilotons by 2026. They also conclude that "removing microfibers from washing machine effluent before they enter wastewater systems is crucial for reducing overall emissions to natural environments."

Another study by Zhu et al. (2021), published in *Environmental Safety and Technology: Water*, compared sources of microplastic pollution in the San Francisco Bay. The authors found that the concentration of microparticles in stormwater runoff was roughly 140 times that of wastewater effluent. However, the authors also found that microfibers comprised a larger percentage of the microparticles in wastewater, when compared to stormwater. In wastewater, microfibers were the predominant type of microplastic, constituting 49% of particles. This suggests that efforts to reduce microplastic pollution in wastewater should include a focus on microfibers; the authors suggest the use of washing machine filters to reduce microfibers in laundry effluent.

In 2011, an international team of scientists published a study of microplastic contamination of shorelines on six continents in the journal *Environmental Science and Technology* (Browne et al.). Using forensic evaluation of microplastic from sediments, the authors found that the proportions of synthetic microfibers used in clothing resembled those found in habitats receiving sewage discharges. After sampling wastewater from domestic washing machines, the authors also found that a single garment can produce more than 1,900 fibers per wash; in combination, these findings led the authors to conclude that a "large proportion of microplastic fibers found in the marine environment may be derived from sewage as a consequence of washing clothes."

Possible underestimates of microfiber pollution: According to Athey and Erdle (2021), current reports of microfiber contamination levels in the environment may be an underestimate. Most studies have focused on synthetic microfibers, but natural microfibers and semi-synthetic microfibers—which are derived from natural materials, but have undergone chemical processing—are also present in the environment. Even natural microfibers can pose a health risk, since they can contain a suite of chemical additives, dyes, and finishing agents. Chemical

additives can include toxic compounds such as bisphenols, azo dyes, polyfluorinated alkyl compounds (PFAS), and formaldehyde.

Research on microfiber filtration in washing machines as a strategy for reducing microfiber pollution: The OPC and US EPA both recommend washing machine filters as an effective strategy for capturing microfibers before they enter wastewater effluent and the environment. With a lack of filtration on current washing machines, there have been multiple first-to-market products offered to consumers. There are three different types of filters that can be used during laundering to capture microfibers:

- **In-drum filters:** these filters are separate devices that consumers can use in the wash drum with each load of laundry. Some garment manufacturers, such as Patagonia and Reformation, have sold their products with a washing bag developed to capture microfiber fragments during each load.
- **In-line filters:** these filters are separate devices from the machine, typically sold after-market and affixed to the drain line. Several in-line filtration systems are currently available for purchase, including the Filtrol and LUV-R.
- **Built-in filters:** these filters are built into the washing machine during manufacturing. These are not yet widely available in the United States.

Peer-reviewed studies have examined the efficacy of washing machine filtration systems. In a study published in *Science of the Total Environment*, Napper et al. (2020) compared six different devices, ranging from prototypes to commercially available products, that were designed to be placed either inside the drum during the washing cycle or fitted externally to filter laundry effluent (an in-line filter). The XFiltra filter was the most successful device, reducing microfiber release into wastewater by about 78 percent when compared to washing without any device. Another study by McIlwraith et al. (2019), published in the *Marine Pollution Bulletin*, compared the efficacy of the LUV-R and Cora Ball (an in-drum device). The authors were able to quantify microfibers in laundry effluent by count, weight, and length, and found that the LUV-R captured an average of 87 percent of microfibers, when measured by count.

Researchers have also examined the efficacy of washing machine microfiber filters in the field. In a study published in *Frontiers in Marine Science*, Erdle et al. (2021) reported the results of a pilot study in Ontario, Canada, in which the researchers installed Filtrol in-line filters in 97 homes in a small town, representing 10% of households connected to the local municipal wastewater treatment plant. Participating households agreed to collect the lint captured in their filter for 2 years and were instructed to collect material from the filter bags every 1-2 weeks. Researchers chose the Filtrol system because "the filter is easy to clean, and...the filter contains a bypass, meaning if the filter is full the water will bypass the filter and prevent flooding." Although the authors acknowledge that activation of the bypass function would stop the system from collecting microfibers, they state that there were no bypasses reported in their experiment. Erdle et al. tested effluent at the wastewater treatment plant both before and after installation of the filtration systems, and found that the filters were associated with a statistically significant reduction in microfibers. Notably, the Filtrol system used in this study contains a 100 μm mesh, the same mesh size required by AB 1628 and recommended by the OPC in the Statewide Microplastics Strategy.

The Association of Home Appliance Manufacturers (AHAM)—which represents manufacturers of major, portable, and floor care home appliances, as well as suppliers to the industry—also initiated its own examination of in-line microfiber filtration systems. AHAM hired the National Sanitation Foundation (NSF) International (an independent, not-for-profit organization that develops consensus national standards, and provides product inspection, testing, and certification) to test the efficacy of a Filtrol system with a 200 μm mesh, as well as a pool filter with a 100 μm mesh. The test design involved installation of the filtration system on to a washing machine drain line, with an additional, much smaller-mesh filter (5 μm) installed downstream from the filtration system. The smaller filter was used to assess the filtration system's efficacy, by catching material that passed through the filtration system.

NSF International found that fabric softener collected on the inside of the filtration system, which AHAM states contributed to clogging and dripping issues. NSF International also reported that the Filtrol only caught an average of 26 percent of the total material captured, which AHAM states is a sign of the system's ineffectiveness. However, it is important to note that NSF International did not measure the actual microfiber content of material captured by the filters, so it is unknown how much of the material that passed through the filtration system was made up of microfibers, versus other materials such as fabric softener.

Based on the results of NSF International's testing, AHAM states that it could take 13 years to recover, through microfiber capture, the amount of plastic used to make the filter itself. The Committee may wish to weigh possible concerns about using plastic microfiber filters against the public health and water quality costs of inaction, when it comes to reducing the volume of microfibers entering the environment.

This bill: AB 1628 requires, on and after January 1, 2029, new washing machines offered for sale in California to contain a microfiber filtration system with a mesh size of 100 μm or smaller. This requirement is consistent with recommended action in the Statewide Microplastics Strategy, produced by the OPC pursuant to SB 1263 (Portantino, Chapter 609, Statutes of 2018).

Arguments in support: According to the bill's co-sponsors (the Nature Conservancy, Ocean Conservancy, and 5 Gyres):

"Despite perceptions that the plastic pollution problem is worse outside the U.S., there is a significant and growing body of evidence that microplastics like microfibers pose a serious threat to Californians. Microfibers are the most prevalent microplastic found in the San Francisco Bay. And up to 4.85 million pounds of microfibers enter California's lands and waters each year from washing machines, and the problem is only getting worse (anticipated increase of 17% by 2026)...

While we must simultaneously explore textile redesign and infrastructure solutions to reduce the generation and loss of microfibers during production, mandating filtration technology in washing machines provides a near term solution to effectively capture microfibers before they enter the environment.

Filters have already proven to be an effective solution. A number of studies have evaluated the efficacy of in-line filter solutions, which vary in effectiveness from nearly 70% to almost 90%. These solutions can also be effective at the community scale. Policy mandating their

incorporation in washing machines is also an aligned pollution prevention strategy based on the Ocean Protection Council's Statewide Microplastics Strategy.

Asia and Europe are already farther ahead of the U.S. in implementing filtration solutions to tackle post-consumer microfiber pollution. Microfiber filtration technology is currently built into washing machines from major brands like Panasonic, Hitachi, Sharp, and Toshiba. And in 2020, France passed 2020-105-Article 79 to require built-in washing machine filters by 2025. AB 1628 follows a similar approach, providing manufacturers five years to scale already-existing filtration technologies across their new product lines sold into the state.

California has the opportunity with AB 1628 to lead the nation on addressing microfiber pollution and incentivize innovation among washing machine manufacturers. With filtration solutions in hand, we can no longer afford to wait to address the threats of microfiber pollution. California can act now to catalyze both state and national efforts to mitigate the threats that plastics pose to our communities, lands, and waters."

Arguments in opposition: According to AHAM:

"There are a number of technical challenges to placing a filter on a washing machine. Filters that capture particles of this size (100 microns) will inevitably clog, creating the need for bypass that will render them useless. AHAM commissioned a study by NSF, an independent technical organization, on filtration products for clothes washers. The study's goal was to determine the effectiveness of external filters in capturing microfibers and their impacts on clothes washer performance. NSF found that the filters captured, at best, less than 25% of all material shed during a wash and microfibers are just a small subset of what was captured. The super-majority of microfibers released during the laundry process escape the filters, either because they clog and run in bypass or because they are incapable of capturing such fine particles.

Filters also can have a negative impact in washing machine energy and water efficiency. Some models in the NSF test used almost twice the energy and water when washing with the filter installed. That equates to running the clothes washer twice for a load, which completely and utterly undercuts the gains made over the years in clothes washer minimum energy efficiency standards. Of note, this additional time also creates more shedding – the very problem that is trying to be reduced. Today's clothes washers are 70% more efficient than decades ago and this bill would virtually eliminate all those gains. Energy and water consumption during consumer use leaves a bigger environmental mark than any other point during a washing machine's lifecycle.

Another problem this bill would create is that in-line filters are ineffective and require an unrealistic level of maintenance from the consumer, including regular cleaning and possibly replacement. The NSF tests showed that it would take longer (more than 13 years) than the useful life of the clothes washer to capture more plastic than the plastic in the filter and this does not even take into account the plastic in all the replacement filters needed throughout the 13 years. Another problem is that if a filter clogs or leaks, flooding can occur in a laundry room...

Additionally, microfibers shed from textiles represents a very small percentage of microplastics that ultimately end up in waterways. A study by 5 Gyres Institute and the San Francisco Estuary Institute (SFEI) shows that storm water runoff carries up to 300 times more microplastics (from

tires and other sources) than wastewater, which includes water from all sources, commercial and residential with clothes washers being only a small part of that subset...

Lastly, appliance manufacturers have been researching and trying to develop solutions in this area. In Europe, they have been evaluating how to develop a standardized test procedure as innovative solutions develop across the industry."

Related legislation:

- 1) AB 1724 (Stone, 2022). Would have required all state-owned washing machines to contain a microfiber filtration system with a mesh size of 100 microns or smaller. This bill was held on the suspense file in the Assembly Appropriations Committee.
- 2) AB 622 (Friedman, 2021). Would have required, on or before January 1, 2024, that all washing machines sold as new in California contain a microfiber filtration system with a mesh size of 100 microns or smaller. This bill was held in the Assembly Environmental Safety and Toxic Materials Committee.
- 3) AB 802 (Bloom, 2021). Would have required the State Water Board to identify the best available control technology for filtering microfibers from an industrial, institutional, or commercial laundry facility. This bill was held in the Assembly Environmental Safety and Toxic Materials Committee.
- 4) AB 1952 (Stone, 2020). Would have required the Department of General Services, in coordination with CalEPA, to implement a one-year pilot program to assess the efficacy of microfiber filtration systems for 10 state-owned laundry facilities and report the results to the Legislature on or before January 1, 2023. This bill was held in the Assembly Accountability and Administrative Review Committee.
- 5) AB 2297 (Bloom, 2020). Would have required the State Water Board to identify the best available control technology for filtering microfibers from an industrial, institutional, or commercial laundry facility. This bill was held in the Assembly Environmental Safety and Toxic Materials Committee due to the COVID-19 pandemic.
- 6) AB 3232 (Friedman, 2020). Would have required, on or before January 1, 2023, that all washing machines sold commercially in California contain a microfiber filtration system with a 90% or greater filtration rate. This bill was held in the Assembly Environmental Safety and Toxic Materials Committee.
- 7) AB 129 (Bloom, 2019). Would have required the State Water Board to take specified actions relating to microfiber pollution on or before July 1, 2020, and would have required the State Water Board to identify best practices for clothing manufacturers to reduce the amount of microfibers released into the environment. This bill was held in the Assembly Environmental Safety and Toxic Materials Committee due to the COVID-19 pandemic.
- 8) SB 1263 (Portantino, Chapter 609, Statutes of 2018). Requires the Ocean Protection Council to adopt and implement a Statewide Microplastics Strategy that increases understanding of the scale and risks of microplastics pollution in the marine environment and identifies proposed solutions.

REGISTERED SUPPORT / OPPOSITION:**Support**

5 Gyres Institute (Co-Sponsor)
Ocean Conservancy (Co-Sponsor)
The Nature Conservancy (Co-Sponsor)
Active San Gabriel Valley
American Circular Textiles Group (ACT)
Audubon California
Azul
Blue Ocean Warriors
Breast Cancer Prevention Partners
California Coastkeeper Alliance
California Environmental Voters
California Product Stewardship Council
Californians Against Waste
CALPIRG, California Public Interest Research Group
Environmental Working Group
Friends Committee on Legislation of California
Friends of The Earth
Habits of Waste
Heal the Bay
LA Waterkeeper
Mikearens.com
Monterey Bay Aquarium
National Stewardship Action Council
Northern California Recycling Association
Oceana
Pacific Marine Mammal Center
Paddle Out Plastic
Patagonia Inc.
Plastic Free Future
Plastic Free Restaurants
Plastic Pollution Coalition
Resource Conservation District of Greater San Diego County
San Diego Audubon Society
San Francisco Bay Physicians for Social Responsibility
Save Our Shores
Seangle Indonesia
Shark Stewards
Sierra Club California
Sierra Club Loma Prieta Chapter
Social Compassion in Legislation
Supercircle
Surfrider Foundation
Sustainable Ocean Alliance
Team Marine, Climate Action Santa Monica, Human Rights Watch Student Task Force
The Center for Oceanic Awareness, Research, and Education

Turtle Island Restoration Network
Wildcoast
Wishtoyo Chumash Foundation
27 Scientists

Opposition

Association of Home Appliance Manufacturers

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

Date of Hearing: March 28, 2023

ASSEMBLY COMMITTEE ON ENVIRONMENTAL SAFETY AND TOXIC MATERIALS

Alex Lee, Chair

AB 565 (Lee) – As Amended March 16, 2023

SUBJECT: Water quality: pollution prevention plans

SUMMARY: Repeals an obsolete provision of law relating to pollution prevention plans (Plans) that are required to be submitted by an entity, when that entity is required to submit a Plan by the State Water Resources Control Board (State Water Board), a Regional Water Quality Control Board (Regional Water Board) or a publicly owned treatment works (POTW); also makes conforming, non-substantive changes.

EXISTING LAW:

- 1) Establishes the federal Clean Water Act (CWA) to regulate discharges of pollutants into the waters of the United States and to regulate quality standards for surface waters. (33 United States Code (USC) §1251 et seq.)
- 2) Establishes the National Pollutant Discharge Elimination System (NPDES) permit program which requires the State Water Board and the nine Regional Water Boards to prescribe waste discharge requirements that, among other things, regulate the discharge of pollutants into stormwater, including municipal stormwater systems. (33 USC § 1342)
- 3) Establishes the Porter-Cologne Water Quality Control Act (Water Quality 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.)

FISCAL EFFECT: Unknown.

COMMENTS:

Need for the bill: According to the author, "This is a clean-up bill to repeal an obsolete provision of law relating to pollution prevention plans."

Federal Clean Water Act (CWA): The Federal Water Pollution Control Act of 1948 was the first major United States 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 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.

State regulation of water pollution: The State Water Board is responsible for administering the federal CWA and California's Water Quality Act, enacted in 1969, which set up the statewide structure for water quality control. The Water Quality Act designates the State Water Board as

the water pollution control agency for all purposes stated in the CWA, and it authorizes the State Water Board to exercise any powers that the federal CWA delegates to the State. The State Water Board and Regional Water Boards are charged with preventing and reducing water pollution in rivers, streams, lakes, beaches, bays, and groundwater.

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 Regional Water Boards.

This bill: AB 565 repeals an obsolete provision of law relating to Plans that are required to be submitted by an entity, when that entity is subject to a requirement to submit a Plan under the State Water Board, a Regional Water Board, or a POTW. The code section the bill is repealing is actually in the codes twice; therefore, this bill resolves an unnecessary duplication in current law.

Arguments in support: None on file.

Arguments in opposition: None on file.

REGISTERED SUPPORT / OPPOSITION:

Support

None on file.

Opposition

None on file.

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

Date of Hearing: March 28, 2023

ASSEMBLY COMMITTEE ON ENVIRONMENTAL SAFETY AND TOXIC MATERIALS

Alex Lee, Chair

AB 682 (Mathis) – As Amended March 20, 2023

SUBJECT: State Water Resources Control Board: online search tool: funding applications

SUMMARY: Requires the State Water Resources Control Board (State Water Board) to, by January 1, 2025, update its online search tool for funding applications to include, at a minimum, specified information relating to the status of water systems' funding applications. Specifically, **this bill:**

- 1) Requires the State Water Board to, by January 1, 2025, update its online search tool for funding applications to include, at a minimum, all of the following information:
 - a) A description of the additional information the State Water Board requires from a water system to continue processing the water system's application;
 - b) The date the State Water Board requested the water system to provide additional information;
 - c) The cause of any prolonged delays in the process; and,
 - d) A description of the typical steps that must be completed before a funding agreement can be executed after receipt of a complete application.

EXISTING LAW:

- 1) Authorizes, pursuant to the federal Safe Drinking Water Act (SDWA), the United States Environmental Protection Agency (US EPA) to set standards for drinking water quality and to oversee the states, localities, and water suppliers who implement those standards. (42 United States Code (USC) § 300 (f) et seq.)
- 2) Provides, under federal Drinking Water State Revolving Fund (DWSRF) statute, financial assistance to help water systems and states achieve the health protection objectives of the SDWA. Requires states to establish a drinking water revolving loan fund to be eligible for a federal DWSRF capitalization grant. (42 USC § 300j-12, et seq.)
- 3) Establishes as policy of the state that every human being has the right to safe, clean, affordable, and accessible water adequate for human consumption, cooking, and sanitary purposes. Requires all relevant state agencies to consider the human right to water state policy when revising, adopting, or establishing policies, regulations, and grant criteria when those policies, regulations, and criteria are pertinent to the uses of water. (Water Code § 106.3)
- 4) Establishes the California SDWA and requires the State Water Board to maintain a drinking water program. (Health and Safety Code (HSC) § 116270, et seq.)

- 5) Defines a "public water system" as a system for the provision of water for human consumption through pipes or other constructed conveyances that has 15 or more service connections or regularly serves at least 25 individuals daily at least 60 days out of the year. (HSC § 116275)
- 6) Establishes the state DWSRF to provide financial assistance for the design and construction of projects for public water systems to meet safe drinking water standards. (HSC §116760, et seq.)
- 7) Creates the Safe and Affordable Drinking Water Fund in the State Treasury to help water systems provide an adequate and affordable supply of safe drinking water in both the near and long terms. (HSC § 116766.)

FISCAL EFFECT: Unknown.

COMMENTS:

Need for the bill: According to the author, "AB 682 is a necessary and common-sense measure to modernize and improve the transparency of the water application process. Access to clean and safe water is not a partisan issue, but a human right, and this bill will help infrastructure developments within the state to ensure that every Californian has access to water."

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

Drinking water systems in California: According to a July 2022 report by the Auditor of the State of California, *State Water Resources Control Board: It Lacks the Urgency Necessary to Ensure That Failing Water Systems Receive Needed Assistance in a Timely Manner*, "California is one of the most prosperous states in the country, and yet, fundamental inequities still exist, including access to safe drinking water. In fact, nearly a million Californians lack access to safe drinking water because they receive water from systems that do not meet water quality standards. The [State Water Board] regulates the operation of roughly 7,400 drinking water systems throughout the State and disburses federal and state assistance to help them improve their water quality. As of December 2021, the State Water Board reported that more than 370 water systems were classified as failing water systems because they exceeded the maximum contaminant levels for safe drinking water. These failing water systems provide water to more than 920,000 people. Nearly 240 of these water systems have been failing for at least three years, and more than 150 have been failing for five years. Further, for 2022, the State Water Board's data show that an additional 432 water systems serving more than 1 million people are at risk of failing."

Health effects of drinking water contaminants: The US EPA reports that there is a broad range of health effects associated with exposure to drinking water contaminants. Ingestion or exposure to pathogens at sufficient doses can result in gastrointestinal illness with symptoms such as

diarrhea, nausea, stomach cramps, and vomiting. Exposure to higher doses of chemicals, metals, or radionuclides through drinking water can produce biological responses, toxicological effects, and more severe health impacts including cancer, developmental or reproductive effects, neurological effects, and organ damage.

California's drinking water program: As outlined in the California State Auditor's July 2022, report, the State Water Board's Division of Drinking Water (DDW) implements and enforces the federal and state Safe Drinking Water Acts, monitors drinking water quality, and issues permits to public water systems throughout the state. The State Water Board establishes maximum contaminant levels (drinking water quality standards, also known as MCLs) for more than 100 substances that are harmful to human health. The DDW's 25 district offices monitor public water systems' compliance with drinking water standards by reviewing and evaluating analytical results of the water samples collected by the water systems. When a water system exceeds MCL standards, the DDW may take enforcement actions, including fines if necessary.

Funding sources for safe drinking water projects: The State Water Board provides funding and other assistance to water systems for drinking water projects that address or prevent public health risks. The State Auditor's report notes that from July 2016 through December 2021, the State Water Board's Division of Financial Assistance awarded about \$1.7 billion in loan and grant funding for water infrastructure projects—such as constructing water sources, distribution systems, and treatment facilities—and for technical assistance to water systems. The State Water Board relies on funding from several sources to make these awards to water systems and support its safe drinking water programs. For fiscal year 2021–22, federal and state funding available for drinking water programs totaled \$1.4 billion. Of that amount, \$650 million, or 46 percent, came from a State General Fund appropriation for water system infrastructure. Another \$330 million, or 23 percent, came from the DWSRF, and \$240 million, or 17 percent, was from state bonds and other special funds. The remainder of its funding is from the Safe and Affordable Drinking Water Fund, established by SB 200 (Monning, Chapter 120, Statutes of 2019), and additional appropriations from the State General Fund.

The State Water Board's loan and grant application process: As described by the State Auditor's report, water systems are often eligible for funding from several sources and for different aspects of projects. They may apply for funding to assist in the planning and design or construction of new infrastructure projects, or for the operation and maintenance of existing infrastructure. Water systems may apply for financial assistance for both the design and the construction phases of their projects.

Applications for funding require water systems to provide the State Water Board with general project information, as well as information about the project's technical and environmental aspects. The application must also include information about the water system's ability to repay the loan for the project.

The State Water Board also provides support and technical assistance to water systems that need assistance with the application process. Once a water system submits an application, a Division of Financial Assistance project manager reviews it for completeness and contacts the applicants to obtain any missing information. Following its reviews of the project submittals, the State Water Board determines the amount and source of funding to award the water system. It then drafts a financing agreement for the projects.

State Auditor's findings: In its July 2022 report, the State Auditor stated that, "Over the last five years, the average amount of time it took for water systems to complete their applications for these funds, and then for the State Water Board to review them and award funding, has nearly doubled from an average of 17 months in 2017 to 33 months in 2021. A key reason for this trend is that in recent years, because of a change in state law, the State Water Board's focus has shifted to helping smaller, potentially less sophisticated, water systems. According to State Water Board staff, working with a greater number of smaller water systems has increased its application processing times. Even so, our survey of water systems and observations from our review of a selection of applications indicate that the State Water Board's cumbersome application process, and its lack of sufficient communication and follow-up with water systems, are also contributing factors to funding delays... The longer the State Water Board takes to fund projects, the more expensive the projects become and, more importantly, the greater the likelihood of negative health outcomes for Californians served by failing water systems."

Recommendations from the State Auditor's report: To increase transparency in the funding process and make its online search tool more useful to water systems applying for funding, the State Auditor's report recommended that by January 2023, the State Water Board update its online search tool for funding applications to include the following:

- 1) A description of the additional information the State Water Board needs from the water system to continue processing its application;
- 2) Any deadlines the State Water Board has issued to the water system to provide additional information;
- 3) The cause of any prolonged delays in the process, including the need for reviews by external parties; and,
- 4) The date the State Water Board expects to complete its reviews and award funding to the water system.

The State Water Board's online funding application search tool: The Division of Financial Assistance at the State Water Board, which assists communities in financing the cost of water infrastructure projects, hosts an online, public-facing funding application search tool. The tool allows users to search the status of drinking water and clean water applications that have been submitted for funding consideration and are under review. Applicants who have received a funding agreement are not included in the search tool.

Through the search tool, a person can search the status of a funding application by applicant, project title, project number, county, district, or region. The search tool denotes whether an application package is incomplete; if a complete application has been received but not reviewed; and, whether complete application packages have been reviewed by staff.

This bill: The goal of AB 682 is to implement the recommendations proposed in the July 2022, State Auditor's report. AB 682 does this by requiring the State Water Board to, by January 1, 2025, update its online search tool for funding applications to include, at a minimum, a description of the additional information the State Water Board requires from a water system to continue processing the water system's application; the date the State Water Board requested the water system to provide additional information; the cause of any prolonged delays in the process; and, a description of the typical steps that must be completed before a funding agreement can be executed after receipt of a complete application.

The State Water Board relays that it is currently working, through its Division of Information Technology staff and their contractors, to update the public-facing funding application search tool to incorporate the features recommended by the State Auditor's Office in their July 2022 report. The State Water Board expects to have its online tool in place by summer 2023.

Related legislation:

AB 1211 (Mathis). Requires the State Water Board to post at least once annually, instead of biennially, information regarding implementation and expenditures from the DWSRF on its internet website and to send a link for the website to the Legislature. This bill is pending before the Assembly Environmental Safety and Toxic Materials Committee.

REGISTERED SUPPORT / OPPOSITION:

Support

California Municipal Utilities Association

Opposition

None on file.

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

Date of Hearing: March 28, 2023

ASSEMBLY COMMITTEE ON ENVIRONMENTAL SAFETY AND TOXIC MATERIALS

Alex Lee, Chair

AB 777 (Cervantes) – As Amended March 14, 2023

SUBJECT: Hazardous waste: Stringfellow Quarry Class I Hazardous Waste Disposal Site

SUMMARY: Prohibits any waste generated from a site other than the Stringfellow Quarry Class I Hazardous Waste Disposal Site (Stringfellow) from being treated, stored, transferred to, or disposed at Stringfellow. Requires the Department of Toxic Substances Control (DTSC) to notify the City of Jurupa Valley and the Riverside County Board of Supervisors within three days if any material or substance is treated, stored, transferred to, or disposed of at Stringfellow, if the material or substance did not originate from Stringfellow.

EXISTING LAW:

- 1) Creates, under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), a Federal "Superfund" to clean up uncontrolled or abandoned hazardous waste sites, as well as accidents, spills, and other emergency releases of pollutants and contaminants into the environment. Provides the United States Environmental Protection Agency (US EPA) with the authority to seek out those parties responsible for any release and assure their cooperation in the cleanup. (42 United States Code (USC) § 9601 et seq.)
- 2) Establishes, pursuant to the Carpenter-Presley-Tanner Hazardous Substance Account Act (HSAA), a program to provide for response authority for releases of hazardous substances, including spills and hazardous waste disposal sites that pose a threat to public health or the environment. (HSC § 78000 et seq.)
- 3) Authorizes a treatment, storage, transfer, or disposal facility built on the Stringfellow site, that was built for the purpose of a remedial or removal action at Stringfellow, to only be used to treat, store, transfer, or dispose of hazardous substances removed from Stringfellow. (HSC § 79490)
- 4) Defines "hazardous substance" to include, among other specified toxic chemicals or pollutants, a hazardous waste. (HSC § 78075)
- 5) Excludes from the definition of a "waste" a sample of a waste or a sample of water, soil, or air, which is collected for the sole purpose of testing to determine its characteristics or composition and when the sample is being transported to a laboratory for the purpose of testing; the sample is being transported back to the sample collector after testing; or, the sample is being stored temporarily in the laboratory after testing for a specific purpose (for example, until conclusion of a court case or enforcement action where further testing of the sample may be necessary). (22 California Code of Regulations § 66261.4 (d))

FISCAL EFFECT: Unknown.

COMMENTS:

Need for the bill: According to the author, "It is outrageous that the Department of Toxic Substances Control would use our Inland Empire communities, many of which are predominantly Latino, as a dumping ground for toxic substances from other parts of the state. The residents of Jurupa Valley are justifiably outraged at the Department's continued violation of the community's trust exhibited by the transfer of these soil samples to the Stringfellow Acid Pits site. Assembly Bill 777 will uplift the voices of the Jurupa Valley community by strengthening the statutory prohibitions against DTSC transferring potentially toxic materials from other toxic waste sites to Stringfellow."

The Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA): CERCLA, or Superfund, provides a Federal "Superfund" to clean up uncontrolled or abandoned hazardous waste sites as well as accidents, spills, and other emergency releases of pollutants and contaminants into the environment. Through CERCLA, the US EPA was given authority to seek out those parties responsible for any release and assure their cooperation in the cleanup. The US EPA cleans up orphan sites when potentially responsible parties cannot be identified or located, or when they fail to act.

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

Stringfellow: Stringfellow is a former Class I (hazardous waste) industrial liquid waste disposal facility located at the northern edge of Riverside County in the City of Jurupa Valley. During its operation from 1956 to 1972, the disposal area contained as many as 20 evaporation ponds. About 34 million gallons of liquid industrial process wastes containing spent acids and caustics, solvents, pesticide by-products, metals, and other inorganic and organic constituents were discharged into the evaporation ponds. The primary constituents of concern in groundwater are perchlorate, trichloroethene (TCE), and chloroform. The site was closed in 1972 and interim abatements solutions were enacted including removal of liquid waste from the evaporation ponds, construction of a subsurface barrier wall, installation of a surface and other drainage control features to control rainfall infiltration, and installation of several on-site groundwater monitoring wells. Approximately 100 extraction wells and over 500 groundwater monitoring wells have been installed.

Stringfellow was placed on the federal Superfund National Priority List in 1982. In 1983, the California Department of Health Services (the predecessor to DTSC for cleaning up contamination) declared the site an imminent and substantial endangerment to public health and the environment. The US EPA has issued a series of orders requiring the responsible parties to initiate remedial actions to monitor and control the migration of site constituents to protect public health and the environment.

Currently, DTSC is operating a groundwater pump-and-treat system that extracts metals and organics from impacted groundwater. This groundwater treatment will continue for the foreseeable future. There are additional remedial actions occurring under the oversight of the US EPA, which will add more components to the current cleanup actions.

Samples from Exide stored at Stringfellow: In the summer of 2022, at a DTSC public meeting regarding Stringfellow, it became known that DTSC was storing hazardous materials (at least six forty-foot containers of lead-contaminated soil samples weighing 500,000 pounds or more) taken from properties near the former Exide battery recycling facility in Vernon, California. At the time, the community and the City of Jurupa Valley were not aware of the presence of these hazardous materials at Stringfellow. In June 2022, Senator Richard Roth and Assemblymember Sabrina Cervantes wrote a letter to the Secretary of the California Environmental Protection Agency asking for an investigation into the storage of hazardous materials at Stringfellow.

US EPA investigation of materials stored at Stringfellow: On June 14, 2022, the US EPA conducted a compliance evaluation inspection (CEI) of the Stringfellow Superfund Site located at 3450 Pyrite Road, Riverside, California. The purpose of the CEI was to evaluate compliance with the applicable federal environmental statutes and regulations, and in particular, the Resource Conservation and Recovery Act (RCRA), for the container storage of environmental samples from the Exide Preliminary Investigation Area (PIA). The US EPA determined that the management of the Exide PIA samples at the Stringfellow Superfund Site did not violate applicable RCRA hazardous waste regulations. The samples held on site were not considered waste. In addition, the sample containers were managed in a responsible matter and in accordance with the procedures specified in the standard operating procedures. In addition, US EPA did not observe any release of the contaminants in these samples based on visual inspection and records review. US EPA has consistently taken the position that if the materials are continued to be needed as part of investigation or litigation, the materials would generally not be considered waste.

Exide: Exide Technologies, headquartered in Georgia, is a worldwide producer, distributor, and recycler of lead-acid batteries. In 2000, Exide purchased a facility—first opened in 1922—in an industrialized area in the City of Vernon, a few miles southeast of downtown Los Angeles, and operated the facility until its closure in 2015. Facility operations included recycling lead-bearing scrap materials obtained from spent lead-acid batteries. The facility processed about 25,000 batteries a day, providing a source of lead for new batteries. Activities conducted at the former Exide facility that may have contributed to contamination of offsite properties include battery breaking, smelting, refining lead, and storage, handling, and transportation of batteries, finished lead product, and other materials associated with lead recycling operations. Many of these activities occurred for decades before environmental statutes or regulations existed and before lead was recognized as a toxic air contaminant that without proper environmental control measures, may have contributed to releases of lead in the residential area near the facility. In March 2015, DTSC informed Exide that its hazardous waste permit application would be denied, and Exide permanently closed the facility.

Residential Cleanup near Exide: The Exide residential cleanup project constitutes the largest cleanup effort undertaken by California. DTSC is the lead agency overseeing the investigation and cleanup of residential properties, schools, parks, daycare, and childcare centers within the approximately 1.7-mile radius of the former Exide facility. To date, approximately 9,088 parcels have been sampled and approximately 4,491 parcels have been cleaned up.

This bill: AB 777 prohibits any waste from being transferred, stored, treated, or disposed of at Stringfellow unless it was generated at Stringfellow. It has been determined by the US EPA that DTSC's storage of sample from Exide did not constitute a waste and therefore did not violate the current prohibition of storing hazardous substances at Stringfellow. However, given the historic

nature of the cleanup at Stringfellow, it would have likely been wiser for DTSC to inform the City of Jurupa Valley and the community before it brought the Exide samples to the site. Additionally, AB 777 requires DTSC to provide notice to the County of Riverside and the City of Jurupa Valley if it stores, transfers, treats, or disposes of any material or substance at Stringfellow that did not originate from Stringfellow.

Arguments in Support:

None on file.

Arguments in Opposition:

None on file.

REGISTERED SUPPORT / OPPOSITION:

Support

None on file.

Opposition

None on file.

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

Date of Hearing: March 28, 2023

ASSEMBLY COMMITTEE ON ENVIRONMENTAL SAFETY AND TOXIC MATERIALS

Alex Lee, Chair

AB 1211 (Mathis) – As Introduced February 16, 2023

SUBJECT: Safe Drinking Water State Revolving Fund: internet website information: updates

SUMMARY: Requires the State Water Resources Control Board (State Water Board) to post at least once annually, instead of biennially, information regarding implementation and expenditures from the Drinking Water State Revolving Fund (DWSRF) on its internet website and to send a link for the website to the Legislature.

EXISTING LAW:

- 1) Provides, under federal DWSRF statute, financial assistance to help water systems and states achieve the health protection objectives of the Safe Drinking Water Act (SDWA). (42 United States Code (USC) § 300j-12 et seq.)
- 2) Requires states to establish a drinking water treatment revolving loan fund to be eligible for a federal DWSRF capitalization grant. (42 USC § 300j-12(a)(1)(B))
- 3) Requires states to deposit into the state loan fund, using state dollars, an amount equal to at least 20 percent of the total amount of the federal grant to be made to the state. (42 USC § 300j-12(e))
- 4) Requires the state to prepare annual intended use plans for DWSRF funds, which are subject to public review and comment and submitted to the United States Environmental Protection Agency (US EPA). (42 USC § 300j-12(b))
- 5) Requires the state to annually submit information to the US EPA on the amount of funds available and assistance provided by the DWSRF program. (40 Code of Federal Regulations § 35.3570(d)(2))
- 6) Establishes the California SDWA and requires the State Water Board to maintain a drinking water program. (HSC § 116270 et seq.)
- 7) Establishes the state DWSRF to provide financial assistance for the design and construction of projects for public water systems to meet safe drinking water standards. (HSC § 116760 et seq.)
- 8) Requires the State Water Board, at least once every two years, to post information regarding implementation and expenditures of the DWSRF on its internet website and to send the website link to the policy and budget committees of the Legislature. (HSC § 116760.30)
- 9) Requires the information posted on the State Water Board's website to include the (HSC § 116760.30):
 - a) Numbers and types of projects funded;

- b) Reduction of risks to public health from drinking water contaminants, provided through project funding;
- c) Criteria used by the State Water Board to determine funding priorities;
- d) Results of the US EPA's most recent survey of the infrastructure needs of California's public water systems, and the amount of money available through the DWSRF to finance those needs;
- e) Total dollar amount of all funding agreements executed under the DWSRF since the date of the previous report or website post;
- f) Fund utilization rate;
- g) Amount of unliquidated obligations; and,
- h) Total dollar amount paid to funding recipients since the previous report or website post.

FISCAL EFFECT: Unknown.

COMMENTS:

Need for the bill: According to the author, "AB 1211 is a common-sense and important measure to improve transparency and accountability within the Safe Drinking Water State Revolving Fund."

Drinking Water State Revolving Fund: The DWSRF program is governed by applicable federal and state statutes as well as a DWSRF Policy Handbook adopted by the State Water Board. At the federal level, the DWSRF was created as part of the 1996 Amendments to the federal SDWA, administered by the US EPA, with the principal aim of facilitating compliance with national primary drinking water regulations and advancing the public health objectives of the SDWA. According to the US EPA, the most common use of DWSRF capital funds is financing the construction of water infrastructure projects, which may support the repair, replacement, or rehabilitation of existing infrastructure or the construction of new infrastructure. Loans may be issued to fund the entire project or phases of a project, including planning and design.

The DWSRF is structured as a federal-state partnership in which the federal government provides capitalization grants to states and states provide a 20 percent match. In California, federal funds flow into a state DWSRF that is administered by the State Water Board. For each year from 2018 through 2021, the US EPA appropriated capitalization grants of about \$97 million to California for the state's DWSRF.

Current reporting on the Drinking Water State Revolving Fund by the State Water Board: The state's Drinking Water Program, including the DWSRF, was transferred to the State Water Board from the California Department of Public Health on July 1, 2014. This transfer of regulatory authority also brought state and federal reporting requirements for the DWSRF to the State Water Board, including a federal requirement for annual submission of an Intended Use Plan—which describes the State Water Board's plan for implementing the DWSRF—to the US EPA.

State law also requires the State Water Board to post on its website, every two years, certain types of information regarding implementation and expenditures of the DWSRF, and to send a link to this website to the Legislature. Required information for posting includes, among other things, the number and types of projects funded under the DWSRF, the impacts of funding on public health, criteria used to determine funding priorities, and the amount of funding allocated to recipients.

As of March 20, 2023, the State Water Board had posted on its internet website the following types of reporting materials on the DWSRF:

- **Intended Use Plans**, which describe the State Water Board's plan for implementing the DWSRF. Plans are available for each fiscal year, beginning with 2022-23 and going back to 2013-14.
- **Annual Reports**, which describe how the State Water Board met objectives identified in the Intended Use Plan. Annual reports are available by fiscal year, beginning with 2020-21 and going back to 2013-14.
- **Biennial Reports to the Legislature**, which reflect the activities of the State Water Board and its administration of the DWSRF. Each of these reports consist of two volumes that also serve as annual DWSRF reports to the US EPA. Biennial reports are available for each two-year period beginning with 2018-19/2019-20 and going back to 2012-13/2013-14.
- **Program Evaluation Reports**, which summarize findings from US EPA's annual review of California's implementation of the DWSRF, including cumulative program effectiveness, fiscal health, and compliance with federal statutes and regulations. Reports are available for each fiscal year beginning with 2020 and going back to 2014.

California State Auditor's report on State Water Board activities: In July 2022, the California State Auditor issued a report examining the State Water Board's efforts to provide technical and financial assistance to help water systems improve their drinking water quality. The report contained recommendations for the State Water Board to improve transparency, communication with water systems, and application processes. The cadence with which the State Water Board submits information to the Legislature was not addressed in the California State Auditor's report.

This bill: AB 1211 requires the State Water Board to annually, instead of biennially, post information about DWSRF implementation and expenditures on its website and to send the website link to the Legislature. This requirement is consistent with the State Water Board's current reporting practices.

Arguments in support: None on file.

Arguments in opposition: None on file.

Related legislation

- 1) AB 682 (Mathis) of this Session requires the State Water Board to, by January 1, 2025, update its online search tool for funding applications to include, at a minimum, specified information relating to the status of water systems' funding applications. The bill is pending before the Assembly Environmental Safety and Toxic Materials Committee.

- 2) AB 736 (Mathis, 2021). Would have required the State Water Board to annually, instead of biennially, post information regarding implementation and expenditures from the DWSRF on its internet website and to send a link for the website to the Legislature. This bill was held in the Assembly Environmental Safety and Toxic Materials Committee.
- 3) AB 1991 (Mathis, 2018). Would have required the State Water Board to annually, instead of biennially, post information regarding implementation and expenditures from the DWSRF on its internet website and to send a link for the website to the Legislature. This bill was held in the Assembly Environmental Safety and Toxic Materials Committee.
- 4) SB 861 (Budget Committee, Chapter 35, Statutes of 2014). Transferred the state's Drinking Water Program, including the DWSRF and its associated reporting requirements, from the California Department of Public Health to the State Water Board.

REGISTERED SUPPORT / OPPOSITION:

Support

None on file.

Opposition

None on file.

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

Date of Hearing: March 28, 2023

ASSEMBLY COMMITTEE ON ENVIRONMENTAL SAFETY AND TOXIC MATERIALS

Alex Lee, Chair

AB 1627 (Lee) – As Introduced February 17, 2023

SUBJECT: California Safe Drinking Water Act: food facility

SUMMARY: Aligns state law with federal requirements by deleting a provision within the California Safe Drinking Water Act (California SDWA) that applies to food facilities that are regulated under the California Retail Food Code.

EXISTING LAW:

- 1) Authorizes, pursuant to the federal SDWA, the United States Environmental Protection Agency (US EPA) to set standards for drinking water quality and to oversee the states, localities, and water suppliers that implement those standards. (42 United States Code § 300 (f), et seq.)
- 2) Establishes the SDWA and requires the State Water Resources Control Board (State Water Board) to maintain a drinking water program to regulate drinking water and to enforce the federal SDWA and other regulations. (Health and Safety Code (HSC) § 116270, et seq.)
- 3) Applies the California SDWA to a food facility regulated pursuant to the California Retail Food Code only if the human consumption includes the drinking of water. (HSC § 116283)
- 4) Creates the California Retail Food Code, which established uniform statewide health and sanitation standards for retail food facilities and is administered by the California Department of Public Health (CDPH). (HSC § 113700, et. seq.)

FISCAL EFFECT: Unknown.

COMMENTS:

Need for the bill: According to the author, "AB 1627 preserves the state's authority to implement the federal SDWA in California by repealing a provision in the California SDWA that may be construed to exempt food facilities that operate public water systems from regulation under the California SDWA. By aligning the California SDWA and the federal SDWA, AB 1627 ensures that state law is no less stringent than the federal law. This protects the state's primacy authority to enforce the federal SDWA in California."

The federal SDWA: The federal SDWA was enacted in 1974 to protect public health by regulating drinking water. The US EPA enforces the federal SDWA at the national level. California has enacted its own safe drinking water act to implement the federal law and establish state standards under the state SDWA. Most states, including California, have been granted "primacy" by the US EPA, giving them the authority to implement and enforce the federal SDWA at the state level.

California's drinking water program: Through its Division of Drinking Water (DDW), the State Water Board is responsible for enforcing federal and state drinking water statutes and regulating

public water systems. The State Water Board directly enforces the federal SDWA for all water systems with 200 or more service connections. For water systems with less than 200 connections, regulatory authority can be delegated to local health departments. The State Water Board adopts regulations for drinking water standards, monitoring requirements, cross-connections, design and operational standards, and operator certification. For the State Water Board to maintain this approved primacy authority, California must have statutes, regulations, and an implementation program for public water system supervision that are no less stringent than the federal SDWA and US EPA's regulations.

CDPH's Food Safety Program: CDPH's Food Safety Program, as authorized by the Retail Food Code, is designed to protect and improve the health of consumers by assuring foods are safe, and are not adulterated, misbranded, or falsely advertised. CDPH conducts investigations and enforcement based upon scientific principles and its legal authority.

The California Retail Food Code applies to retail food facilities, some of which may also be public water systems. For example, a restaurant in a rural location might operate its own drinking water well, in which case the restaurant would be regulated as a public water system under the California SDWA and as a retail food facility under the California Retail Food Code. The California Retail Food Code is primarily enforced by local health departments.

In 1996, the Legislature amended both the California SDWA and the California Retail Food Code (AB 2727 House, Chapter 875, Statutes of 1996) to define potable water in the California Retail Food Code to mean water that meets the requirements for transient noncommunity water systems under the California SDWA. Transient noncommunity water systems are noncommunity water systems that do not regularly serve at least 25 of the same persons over six months per year, and they are subject to fewer requirements under the California SDWA than non-transient noncommunity water systems and community water systems. Assembly Bill 2727 also amended the California Retail Food Code to provide that the local "enforcement agency may monitor and enforce the potable drinking water standards in the California Safe Drinking Water Act for purposes of enforcing this chapter and compliance with any requirements with regard to potable water."

Assembly Bill 2727 also created the exception in the California SDWA that currently threatens the State of California's federal SDWA primacy enforcement authority. The bill added section 116283 to the Health and Safety Code, which stipulates that the California SDWA "shall apply to a food facility that is regulated pursuant to the [California Retail Food Code] only if the human consumption includes drinking of water." The legislative history of AB 2727 indicates that it was intended to reduce the fees on businesses that operate public water systems but do not provide drinking water to the public. For example, the analysis from the Senate Health and Human Services Committee stated: "The author's office introduced this bill on behalf of a number of constituents who own businesses, are not a small water system, are not providing drinking water to the public, but do use the water for coffee or soft drinks;" and that "[s]upporters stipulate that in addition to AB 2727's definition of "potable water" it provides an appropriate level of protection for water being used for non-human consumption purposes. This measure will eliminate the double regulation in which food facilities are currently regulated as small water systems and as transient noncommunity water systems. Water provided under the authority of AB 2727 may not be offered to the public as drinking water."

At the time of AB 2727's enactment, the drinking water program was administered by the Department of Health Services, which was the predecessor to CDPH, and did not oppose AB 2727 (in fact, the Department was listed as a supporter of the bill). Unfortunately, by exempting some public water systems from regulation under the California SDWA, AB 2727 created a threat to the State's primacy enforcement authority under the federal SDWA. In 2014, the Legislature transferred the drinking water program from the Department of Public Health (to which it had previously been transferred from the Department of Health Services) to the State Water Board.

The California SDWA currently applies to retail food facilities regulated under the California Retail Food Code only if the food facility serves water for drinking. This could be interpreted to exclude food facilities from regulation under the California SDWA even if those facilities are required to be regulated as public water systems under the federal SDWA. The US EPA interprets the federal SDWA to apply to public water systems that serve water for human consumption other than drinking, such as bathing and cooking. If the exclusion in the California SDWA for food facilities that do not serve water for drinking were interpreted to exclude public water systems that serve water for other forms of human consumption, it would be inconsistent with state primacy requirements for enforcing the federal SDWA. For purposes of federal primacy requirements, regulation under the California Retail Food Code cannot substitute for regulation under the California SDWA because the California Retail Food Code does not include the state law authority, including enforcement authority, necessary for primacy. The US EPA is threatening to revoke California's drinking water primacy if the state does not correct the apparent inconsistency of the food facility exemption with federal SDWA requirements.

This bill: AB 1627 preserves the State's authority to implement the federal SDWA in California by repealing a provision in the California SDWA that may be construed as exempting certain food facilities that operate public water systems from regulation under the California SDWA. The US EPA has indicated to the State Water Board that a repeal of HSC § 116283 would satisfy their concerns. By aligning the California SDWA and the federal SDWA, AB 1627 ensures that state law is no less stringent than federal law. This protects the state's primacy authority to enforce the federal SDWA in California.

Arguments in Support: None on file.

Arguments in Opposition: None on file.

REGISTERED SUPPORT / OPPOSITION:

Support

None on file.

Opposition

None on file.

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

