California State Assembly

ENVIRONMENTAL SAFETY AND TOXIC MATERIALS

BILL QUIRK
CHAIR

AGENDA

Tuesday, April 24, 2018
1:30 p.m. -- State Capitol, Room 444

FOR TESTIMONY ONLY

1.	AB 2919	Frazier	Transportation: permits.

HEARD IN SIGN-IN ORDER

2.	AB 2379	Bloom	Waste management: polyester microfiber.
3.	AB 2407	Ting	Recycling: lithium-ion vehicle batteries: advisory group.
4.	AB 2447	Reyes	California Environmental Quality Act: land use: environmental justice.
5.	AB 2474	Quirk	Hazardous waste: identification: testing.
6.	AB 2501	Chu	Drinking water: consolidation and extension of service.
7.	AB 2538	Rubio	Municipal separate storm sewer systems: financial capability analysis: pilot project.
8.	AB 2787	Quirk	Lead fishing weights and sinkers.
9.	AB 2816	Muratsuchi	Pesticides: schoolsites.
10.	AB 2934	Mark Stone	Residential lead-based paint hazard reduction program: local health departments: certification.

Date of Hearing: April 24, 2018

ASSEMBLY COMMITTEE ON ENVIRONMENTAL SAFETY AND TOXIC MATERIALS
Bill Quirk, Chair
AB 2919 (Frazier) – As Amended March 19, 2018

SUBJECT: Transportation: permits

SUMMARY: Provides that a permit for a transportation project submitted by the Department of Transportation (Caltrans) to a "resource agency" as defined, shall be deemed approved within two years if the resources agency has not completed its review of the permit. Specifically, **this bill**:

1) Defines a "resource agency" as the Department of Fish and Wildlife (DFW), the State Water Resources Control Board (State Water Board), or the California Coastal Commission (Commission).

2) Requires a resource agency to complete its review of a permit for a project submitted by Caltrans within two years of receiving the request to review the permit.

3) Provides that if the resource agency does not complete the review of the request for a permit from Caltrans within two years, that the permit is deemed approved.

EXISTING LAW:

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

2) Establishes the National Pollutant Discharge Elimination System (NPDES) permit program to regulate the discharge of pollutants in storm water, including municipal storm water systems. (33 U.S.C. § 1251 et seq.)

3) Establishes the Porter-Cologne Water Quality Control Act, which prohibits the discharge of pollutants to surface waters unless the discharger obtains a permit from the State Water Board. (Water Code § 1300 et seq.)

4) Requires the Secretary of the California State Transportation Agency (CalSTA), in consultation with the Secretary of the Natural Resources Agency, to create a Transportation Permitting Task Force by April 1, 2018, and submit a report to the Legislature by December 1, 2019 with recommendations for improving the permitting process. (Streets and Highways § Code 155.7)

5) Establishes the California Coastal Act and authorizes the California Coastal Commission to plan and regulate the use of land and water in the coastal zone. (Public Resources Code § 30000 et. al)

6) Requires any entity to notify DFW before beginning any activity that may substantially divert or obstruct the natural flow of, or substantially change or use any material from the bed, channel, or bank of any river, stream, or lake. Requires DFW, if it determines that the

activity may substantially adversely affect fish and wildlife resources, to prepare a Lake or Streambed Alteration Agreement. (Fish and Game Code (FGC) § 1602)

7) Authorizes DFW to, through a permit or memorandum of understanding, authorize an individual, public agency, university, zoological garden, and scientific or educational institution to import, export, take, or possess any endangered species, threatened species, or candidate species, under certain conditions. (FGC § 2081)

FISCAL EFFECT: Unknown.

COMMENTS:

Need for the bill: According to the author,

"In order to deliver transportation projects in a timely, efficient and predictable manner, AB 2919 requires the Department of Fish and Wildlife, the State Water Resources Control Board, and the California Coastal Commission (resource agencies) to complete their reviews of environmental permits within two years of receiving a completed request from the Department of Transportation (Caltrans). If these resource agencies do not complete their review within two years, AB 2919 requires the permit to be deemed approved.

Recognizing the need to reduce inefficiencies, prevent project delays, and expedite environmental review and permitting of transportation projects, the California Transportation Commission (CTC) recommended in its 2016 Legislative Report that the Legislature create a task force comprised of state environmental permitting agencies and transportation entities in order to establish a process for early engagement of all parties in project development to reduce permit processing time, establish reasonable deadlines for permit approvals, and provide greater certainty of permit approval requirements.

The CTC noted in its report that, "early engagement of permitting agencies, and a commitment to reasonable deadlines for permit approvals, would improve the predictability and management of the project development process, and in turn, reduce the cost of delivering critical infrastructure."

In response to CTC's recommendation, the Legislature passed AB 2812 (Mullin), Chapter 643, Statutes of 2017, which directs the Secretary of the California State Transportation Agency (CalSTA), by April 1, 2018, in consultation with the Secretary of the Natural Resources Agency, to create a Transportation Permitting Task Force. By December 1, 2019, the Secretary of CalSTA is required to prepare and submit a report of the task force's findings to the appropriate legislative policy and fiscal committees.

Additionally, SB 1 (Beall), Chapter 5, Statutes of 2017, directs Caltrans to generate up to $100 million annually in department efficiencies.

Under existing law, transportation projects can take many years to be completed due to the multi-stage development and review process that includes environmental impact review and mitigation, design and engineering, right-of-way acquisition, financing, construction and other related requirements. In fact, Caltrans needs to comply with over 100 different state

and federal environmental laws and potentially interacts with over 30 local, state and federal agencies depending on the project.

AB 2919 builds on the momentum already made by the legislature and allows transportation projects to be delivered effectively, efficiently and with certainty by requiring a due sure date for all environmental permits."

Federal Clean Water Act (CWA): The federal CWA establishes the basic structure for regulating discharges of pollutants into the waters of the United States and regulating quality standards for surface waters. Under the CWA, the United States Environmental Protection Agency (US EPA) has implemented pollution control programs, including setting wastewater standards for industrial facilities, as well as setting water quality standards for all contaminants in surface waters. The CWA made it unlawful to discharge any pollutant from a point source into navigable waters without a permit. Industrial, municipal, and other facilities must obtain a permit under the National Pollutant Discharge Elimination System (NPDES) in order to discharge into surface water.

State regulation of federal water discharge requirements: 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. The NPDES Program is a federal program which has been delegated to the State of California for implementation through the State Water Board and the nine Regional Water Quality Control Boards. In California, NPDES permits are also referred to as waste discharge requirements that regulate discharges to waters of the United States. Since its introduction in 1972, the NPDES Program has been responsible for significant improvements to our nation's and state's water quality.

The California Coastal Commission (Commission): The California Coastal Commission was established by voter initiative in 1972 (Proposition 20) and later made permanent by the Legislature through adoption of the California Coastal Act of 1976. The Commission is an independent, quasi-judicial state agency. The Commission is composed of twelve voting members, appointed equally (four each) by the Governor, the Senate Rules Committee, and the Speaker of the Assembly. Six of the voting commissioners are locally elected officials and six are appointed from the public at large. Three ex-officio (non-voting) members represent the Resources Agency, the CalSTA, and the State Lands Commission.

In partnership with coastal cities and counties, the Commission plans and regulates the use of land and water in the coastal zone. Development activities, which are broadly defined by the Coastal Act to include (among others) construction of buildings, divisions of land, and activities that change the intensity of use of land or public access to coastal waters, generally require a coastal permit from either the Coastal Commission or the local government.

The Coastal Act includes specific policies that address issues such as shoreline public access and recreation, lower cost visitor accommodations, terrestrial and marine habitat protection, visual resources, landform alteration, agricultural lands, commercial fisheries, industrial uses, water quality, offshore oil and gas development, transportation, development design, power plants, ports, and public works. The coastal zone, which was specifically mapped by the Legislature, covers an area larger than the State of Rhode Island. On land, the coastal zone varies in width from only several hundred feet, in highly urbanized areas; to up to five miles, in certain rural areas; and offshore, the coastal zone includes a three-mile-wide band of ocean. The coastal zone

established by the Coastal Act does not include San Francisco Bay, where development is regulated by the Bay Conservation and Development Commission.

Examples of transportation projects before the Commission: The realignment of Highway 1 in Northern San Luis Obispo County was a collaborative planning process, 20 years in the making, to relocate a three-mile stretch of ocean-front roadway approximately 500 feet inland where it is projected to be safe from hazards into the next century. The permit issued by the Commission in 2014 was the result of a long-term strategy, which included the Commission and Caltrans, as well as California Department of Parks and Recreation (State Parks), San Luis Obispo County, and other stakeholders. The project included bridges, culverts, wetland restoration at Arroyo de la Cruz, and conversion of the old alignment into a new segment of the California Coastal Trail. As part of this development package, State Parks also took over the management of all of the land west of the new alignment for public access and recreation in a 73-acre expansion to the Hearst San Simeon State Park.

Another project was the Caltrans North Coast Corridor Public Works Plan and Resource Enhancement Plan for Highway 5 and the Los Angeles-San Diego-San Luis Obispo (LOSSAN) rail corridors in San Diego County. This was an extremely complex, multi-faceted project involving the expansion of Highway 5, double tracking for passenger rail service, bridge replacements, signal improvements, pedestrian/bicycle access and coastal wetland enhancements, spanning multiple jurisdictions to be completed in multiple phases. Approved in 2015 by the Commission, it included Caltrans, San Diego Association of Governments, and the Army Corps of Engineers working together on the project for more a decade.

Collaborative partnership between the Commission and Caltrans: Over the years, Caltrans and the Commission have developed a successful working relationship. A representative from Caltrans sits as an *ex-officio* member on the Commission, and the two agencies have signed a Memorandum of Understanding (MOU) designed to facilitate early, effective coordination throughout project development. In 2000, Caltrans and the Commission solidified their working relationship by entering into an interagency agreement, the Caltrans Coastal Program. In 2015, Caltrans and Commission management designated an Integrated Planning Team to work with Sacramento State's Center for Collaborative Policy. The effort was designed to focus on ways to improve communication and coordination during the earliest phases of the agencies' respective planning processes so that subsequent transportation/access projects reflect Local Coastal Program and Coastal Act policies in ways that streamline their regulatory reviews and advance the shared goals of both agencies' Strategic Plans.

The resulting *Plan for Improved Agency Partnering* and *Partnership Agreement between Caltrans and the Coastal Commission* (Plan) were finalized in early 2017. A presentation outlining the many features and commitments of the Plan was presented at the Coastal Commission's July hearing. Implementation of the Plan continues on many fronts, giving special attention to the Coastal Trail and sea level rise. The interagency agreement provides a level of predictability that helps Caltrans and Commission staff identify projects, workload, and potential issues early in the Caltrans project delivery process. The agreement allows for closer coordination and communication of Caltrans and Commission staff throughout the project delivery process. Ongoing collaboration assists both agencies in meeting their statutory responsibilities through mutually beneficial practices and timelines, and also fosters the creation of a modern multimodal transportation network that complements the spectacular resources—natural, cultural, and visual—of the state.

Lake and Streambed alterations: Existing law requires any entity to notify DFW before beginning any activity that may substantially divert or obstruct the natural flow of, or substantially change or use any material from the bed, channel, or bank of any river, stream, or lake. If DFW determines that the activity may substantially adversely affect fish and wildlife resources, a Lake or Streambed Alteration Agreement (LSA Agreement) will be prepared. Additionally, "any river, stream or lake" includes those that are episodic (they are dry for periods of time) as well as those that are perennial (they flow year round). This includes ephemeral streams, desert washes, and watercourses with a subsurface flow. It may also apply to work undertaken within the flood plain of a body of water. An LSA Agreement includes measures necessary to protect existing fish and wildlife resources. DFW may suggest ways to modify the project that would eliminate or reduce harmful impacts to fish and wildlife resources. Before issuing an LSA Agreement, DFW must comply with the California Environmental Quality Act (CEQA).

California Endangered Species Act (CESA): CESA authorizes DFW to permit project proponents to take state-listed threatened, endangered or candidate species if certain conditions are met. The CESA Program administers the incidental take provisions of CESA, including Incidental Take Permits, Consistency Determinations, and Safe Harbor Agreements to ensure regulatory compliance and statewide consistency.

The CESA states that all native species of fish, amphibians, reptiles, birds, mammals, invertebrates, plants, and their habitats, threatened with extinction and those experiencing a significant decline which, if not halted, would lead to a threatened or endangered designation, will be protected or preserved. DFW works with all interested persons, agencies, and organizations to protect and preserve such sensitive resources and their habitats.

CESA prohibits the take of any species of wildlife designated by the California Fish and Game Commission as endangered, threatened, or candidate species. DFW may authorize the take of any such species if certain conditions are met.

Transportation permitting task force: In its 2016 annual report, the CTC recommended that the Legislature create a transportation permitting task force. Specifically, that report recommended that the Legislature create a task force comprised of state environmental permitting agencies and transportation entities to establish a process for early engagement of all parties in project development to reduce permit processing time, establish reasonable deadlines for permit approvals, and provide greater certainty of permit approval requirements.

As a result of the CTC recommendation, AB 1282 (Mullin, Chapter 643, Statutes of 2017) was passed by the Legislature and signed into law in 2017 that established a Transportation Permitting Task Force (Task Force).

According to the Secretary of Transportation, as of this hearing, the Task Force has been established with 16 members of whom 15 have been named. The Task Force has not had any meetings as of the writing of this analysis; however, it is scheduled to have an initial meeting on April 24th.

How Caltrans builds projects: According to a document by Caltrans titled, "*How Caltrans Builds Projects*" it lays out, at a high level, a multi-step process Caltrans uses when planning and

building a transportation project. In this document, Caltrans identifies about twelve steps, from identifying a project need, to closing out a project. According to this document, Caltrans begins to obtain needed environmental permits from state and local governments at about the eighth step, more than halfway through its planning phase. According to this Caltrans document, there are multiple federal, state, and local permitting agencies that Caltrans seeks permits from during construction of a transportation project. These agencies include the Commission, or a local agency that implements the Coastal Act through a local coastal plan, the San Francisco Bay Conservation and Development Commission, the Tahoe Regional Planning Agency, the Reclamation Board, air pollution control or air quality management districts, DFW, the U.S. Fish and Wildlife Agency, national Marine Fisheries Agency, the State Lands Commission, the U.S. Army Corps of Engineers, the State Water Board, the Regional Water Boards, and the State Historic Preservation Office. AB 2919 only applies to the Commission, DFW and the State Water Board, leaving the vast majority of state and local agencies outside of this expedited approach.

Another permitting option: In 2018, Senator Jim Beall introduced SB 1301 which requires the Office of Planning and Research to develop a joint multiagency pre-application and a model fee-for-service agreement, in consultation with a state agency with the power to issue a permit that would authorize a dam safety project or authorize a flood risk reduction project and any interested potential project applicants. The bill authorizes a project applicant to complete a joint multiagency pre-application and submit the pre-application to each state agency named in the pre-application at any time. The bill requires the submission to cause, as appropriate for the proposed project and as specified in the pre-application, a state agency to appoint a member of the interagency team to work on the proposed project and to meet at least once per quarter, except that an interagency team is prohibited from commencing until a written fee-for-service agreement is entered. The bill authorizes and encourages certain federal agencies to participate in the pre-application process and any interagency team developed. SB 1301 passed the Senate Natural Resources and Water Committee and is set for hearing April 18th in the Senate Environmental Quality Committee.

Given the importance of state transportation projects, it is a good goal to process environmental permits as expeditiously as possible. However, deeming a permit approved could have adverse consequences for Caltrans projects. These permits may need to comply with federal law and, if the two year period in AB 2919 is not enough time, the environmental agency may be forced to deny the Caltrans permit. Additionally, it is likely that some of the time, it takes to process a permit includes a back and forth with Caltrans to potentially address shortcomings within Caltrans' permit; however, with a hard and fast two year requirement in AB 2919, it is possible that instead of a back and forth to address a permits shortcomings, the resource agency will be forced to deny the Caltrans permit.

Related legislation:

1) SB 1301 (Beall). Requires the Office of Planning and Research to develop a joint multiagency preapplication and a model fee-for-service agreement, in consultation with a state agency with the power to issue a permit that would authorize a dam safety project or authorize a flood risk reduction project and any interested potential project applicants. This bill is set for hearing in the Senate Environmental Quality Committee on April 18th.

2) AB 1282 (Mullin, Chapter 643, Statutes of 2017). Requires the Secretary of the California State Transportation Agency (CalSTA), in consultation with the Secretary of the Natural Resources Agency, to create a Transportation Permitting Task Force by April 1, 2018 and submit a report to the Legislature by December 1, 2019 with recommendations for improving the permitting process.

Double referral: This bill passed out of the Assembly Committee on Transportation on April 16, 2018.

REGISTERED SUPPORT / OPPOSITION:

Support

California Council for Environmental and Economic Balance
California State Association of Counties
United Contractors

Opposition

Audubon California
California Coastal Protection Network
California Coastkeeper Alliance
California Environmental Justice Alliance
Clean Water Action
Defenders of Wildlife
Friends Committee on Legislation of California
Friends of the River
National Parks Conservation Association
NRDC
Planning and Conservation League
ReLeaf
Sierra Club California
The Nature Conservancy
The Trust for Public Land
TransForm
Wholly H2O

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Date of Hearing: April 24, 2018

ASSEMBLY COMMITTEE ON ENVIRONMENTAL SAFETY AND TOXIC MATERIALS
Bill Quirk, Chair
AB 2379 (Bloom) – As Amended April 18, 2018

SUBJECT: Waste management: polyester microfiber

SUMMARY: Requires, on or before January 1, 2020, all clothing composed of more than 50 percent synthetic material (e.g. polyester) to bear a care label and a conspicuously visible label at the point of sale that states, "This garment sheds plastic microfibers when washed, which contributes to marine plastic pollution," or a similar statement as specified. Specifically, **this bill**:

1) Defines "clothing" as an article or apparel intended to be worn by a person, not including hats or shoes.

2) Defines "plastic microfiber" as a small synthetic particle that is fibrous in shape, less than 5 millimeters in length, and is released into water through the regular washing of textiles made from synthetic material.

3) Requires clothing composed of more than 50 percent synthetic material to bear, in addition to the care information and instructions required by federal law, a care label including the statement, "This garment sheds plastic microfibers when washed."

4) Requires, at the point of sale to a customer, clothing composed of more than 50 percent synthetic material to bear a conspicuous label that includes one of the following statements, as applicable:

    a. "This garment sheds plastic microfibers when washed, which contributes to marine plastic pollution. Dry clean only." for clothing requiring dry cleaning.

    b. "This garment sheds plastic microfiber when washed, which contributes to marine plastic pollution." for all other clothing.

5) Makes uncodified findings and declarations related to microfiber pollution.

EXISTING LAW:

Under federal 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) Under the Microbead-Free Waters Act of 2015, the Federal Food, Drug, and Cosmetic Act bans rinse-off cosmetics that contain intentionally-added plastic microbeads and bans manufacturing of these cosmetics. (21 USC § 331)

3) Requires clothing to be labeled with their constituent fiber names and percentages by weight. (15 USC § 70 et seq.)

4) Requires manufacturers and importers to attach care labels providing washing, drying, ironing, bleaching, and warning instructions to clothing. (§ 423.1 et seq. of Title 16 of the Code of Federal Regulations)

Under state law:

5) Regulates, under the Porter-Cologne Water Quality Control Act, discharges of pollutants in storm water and urban runoff by regulating, through the National Pollution Discharge Elimination System (NPDES), industrial discharges and discharges through the municipal storm drain systems. (Water Code (WC) § 13000 et seq.)

6) Requires the State Water Resources Control Board (SWRCB) and the regional water boards to implement a program to control discharges of preproduction plastic (nurdles) from point and nonpoint sources. Requires the SWRCB to determine the appropriate regulatory methods to address the discharges from these point and nonpoint sources. (WC § 13367)

7) 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)

8) Prohibits the sale of personal care products that contain plastic microbeads on and after January 1, 2020. (PRC §42360 et seq.)

FISCAL EFFECT: Unknown.

COMMENTS:

Need for the bill: According to the author,

> "Clothing made from synthetic fabrics dominates the clothing industry, and as a result millions of people regularly wash clothes made of synthetic material. In fact, 60% of fabric produced in the textile industry in 2014 contained polyester. The consumption of clothing made from synthetic fabrics that release microfibers are on the rise.
>
> Right now, it's estimated that synthetic fibers are, by count, the single largest contributor to watershed plastic pollution in developed countries and account for a significant portion of plastic waste entering the ocean. We don't know yet the extent to which microplastic pollution might affect humans. We do, however, know that many animals within the aquatic food chain ingest these plastics and the toxics they absorb from the water around them. This can transfer to their tissue and cause gut impaction, hormone disruption, and liver damage.
>
> This raises an important question about the human health consequences of unintended consumption of plastic microfibers. University of California, Davis (UC Davis) sampled fish and shellfish sold at local California fish markets and found one-quarter of fish and one-third of shellfish contained plastic debris. A majority of the plastic debris found in the fish samples were microfibers. Similarly, a survey compared 150 tap water samples from locations in five continents; microplastic fibers were found in nearly every sample. The survey also found 94% of the United States water samples contained plastic microfibers."

Natural and synthetic fibers: Natural fibers, such as wool and cotton, are formed through biological processes that are part of an organism's life processes. These fibers are spun together into yarn, which can be knit into textiles. Synthetic fibers are manufactured by reacting simple, petroleum-based chemical precursors into polymer plastics. This plastic is melted and spun into yarn. Many types of synthetic fabrics can be formed by combining different chemical precursors and varying process conditions. Polyester, nylon, microfiber, acrylic, and spandex, are all examples of common synthetic fabrics. Natural materials can also be chemically modified to form semisynthetic fibers. For example, rayon, also known as viscose, is a semisynthetic fiber formed by modifying the plant material cellulose. Multiple fiber types can be blended and spun together into single yarn. From 1950 to 2010, synthetic material use in textiles increased from 2.1 million tons to almost 50 million tons, accounting for almost 60% of total global fiber production. The bulk of synthetic fibers produced are either polyester or nylon. According to Tecnon OrbiChem, a company that provides data and analysis to the petrochemical industry, fiber production growth has been driven almost exclusively by increased polyester production in China, and they project that this trend will continue.

Microfibers: Over time, textiles shed small fibers through the normal process of wear, tear, and washing. These fibers are typically classified as microfibers when they are shorter than five millimeters. While all textiles seem to shed, studies conducted at academic laboratories and by the outdoor clothing and gear company, Patagonia, in collaboration with the University of California at Santa Barbara (Patagonia Study), indicate that many factors determine how much a textile sheds when washed. Textile age, washing machine type, detergent use, and textile weave can all play a role. For example, microfleece is a polyester fabric that is mechanically cut to create its velvety appearance. The Patagonia Study found that, on average, microfleece jackets release almost 2 grams of microfiber per wash. Currently, washing machines are not equipped to filter out microfibers and up to 40% of microfibers pass through wastewater treatment plants. Therefore, large quantities (about 4 billion microfibers, an estimated 81 kilograms, per day at one treatment plant studied) are discharged into the environment. One of the first studies to identify microfibers as a significant component of microplastic pollution back in 2011 noted that the proportion of polyester and acrylic fibers found in habitats receiving sewage discharge matched those in clothing.

Microfiber, mega-pollution: Plastic microfibers and other microplastics are not biodegradable and can absorb toxic pollutants such as PCBs, DDT, and PDBEs. Broken down by ultraviolet radiation and wave action, all plastic in the ocean eventually becomes microplastic, and plastics are estimated to comprise 60-80% of all marine debris. A 2017 study by the International Union for Conservation of Nature (IUCN) found that, of the 9.5 million tons of plastic waste flowing into the ocean each year, an estimated 15-30 percent comprises fibers shed from clothing.

A harder problem to solve than plastic microbeads: Plastic microbeads were previously added to personal care products, such as face washes, as exfoliates. Like microfibers, these beads would pass through the sewage system and into natural waters where they were a pervasive marine pollutant. However, in 2015, California and the US government both signed laws phasing out their use (AB 888 Bloom, Chapter 594, Statutes of 2015) and HR 1321 (Pallone, Public Law No: 114-114)). Though microfibers may pose a bigger problem than plastic microbeads (in a 2015 study published in *Scientific Reports* by UC Davis researchers, microfibers comprised 80% of the debris found in fish and shellfish sampled in local markets in Half Moon Bay, CA) a ban is not feasible and therefore, stakeholders must pursue mitigation strategies. AB 2379 implements one of those strategies by requiring disclosure of the problem on products contributing to it.

Ecological significance of microplastics: While it is intuitive that tons of microplastic pollution cannot be a good thing for aquatic life, there is evidence supporting a number of specific impacts these particles have or may have. These plastics are eaten by marine life from coral to remote deep-sea fish and from mollusks to whales. In multiple species, including crabs, ingesting microplastics reduces food consumption, decreasing the overall energy budget available for growth. In fish, microplastics can cut the intestinal track and cause tissue death and inflammation. Fish fed microplastic fragments which had absorbed these chemicals sustained liver damage. The impacts of ingesting micro plastics on individual organisms and on whole ecosystems are current areas of scientific research.

Harmful to humans? People are exposed to microfibers, and microplastics more broadly, through a number of routes including seafood consumption, tap water, bottled water, and inhalation of airborne microfibers. Bioaccumulation of toxins from microplastics in seafood has raised concerns that consumption may be a route of exposure to toxins as well as plastic. In March, the World Health Organization announced a review of the potential risks of plastic in drinking water after a new analysis of bottled drinking water carried out by scientists based at the State University of New York in Fredonia commissioned by Orb Media. The analysis found microplastics, including plastic microfibers, in more than 90% of the 259 bottles tested and spanned 11 different international brands, including Aquafina and Dasani. On average, there were 325 microplastic particles per liter of water. A previous study also found microplastics in tap water. Legislation currently under consideration in the California Senate would require the State Water Board to monitor microplastics in drinking water [SB 1422 (Portantino)] and require the Ocean Protection Council to assess the risks of microplastics and what can be done to mitigate these risks [SB 1263 (Portantino)]. While there is cause for concern, so far there is no direct evidence that this escalating problem directly impacts human health.

One component of a solution to pollution: There does not seem to be any debate over whether microfiber pollution is a problem nor around whether washing clothing made from synthetic textiles contributes to the problem. AB 2379 could be one step towards stemming the tide of plastic flowing into the ocean every year, and there are many other possible points of intervention that are currently being explored:

1) *Additional origins of microfibers*: The majority of study and discussion has focused around microfiber shedding in the wash. However, the process of garment manufacture and disposal could also shed microfibers, and other textile products, including bedding and carpets, likely shed significantly as well.
2) *Preventing microfiber shedding*: Identifying washing conditions that minimize shedding and developing shed-resistant fabrics may mitigate microfiber pollution.
3) *Catching fibers at home*: Two consumer products, the Cora Ball and Patagonia's Guppyfriend claim to catch microfibers in the washing machine and washing machine manufacturers are developing filters that can conveniently capture fibers before they enter the waste stream.
4) *Wastewater treatment*: As discussed above, up to 40% of microfibers pass through wastewater treatment plants. Most microfibers that are filtered out appear to be removed during primary sedimentation and mechanical removal. However, a portion of sewage sludge is applied to farmland as fertilizer, so even if wastewater treatment plants could filter out all microfibers, they may still make their way into the environment.

AB 2379's intervention in the microfiber pollution problem is a public education strategy requiring disclosure of this problem on clothing. Labeling synthetic clothes may effectively raise awareness around the problem of synthetic microfiber pollution, and like price, brand, and care instructions, consumers can take into account the information on the "microfiber" label while shopping.

Arguments in support: According to Heal the Bay, Surfrider Foundation, Plastic Pollution Coalition, Seventh Generation Advisors, UPSTREATM Policy, Zero Waste USA, WILDCOAST, The Center for Oceanic Awareness, Research, and Education (CAORE), Wishtoyo Chumash Foundation, The 5 Gyres Institute, GAIA, Marin County Hazardous and Solid Waste Management Joint Powers Authority, Clean River Alliance Russian River, StopWaste, and Ecology Action:

> "Washing machines and wastewater treatment plants aren't designed to filter out microfibers, and as a result the vast majority of microfibers are being released into waterways. Unlike natural fibers, synthetic fibers don't biodegrade and persist in the environment for long periods of time. Researchers continue to find evidence that microfibers are present in marine environments and even within marine species. A study from UC Santa Barbara found that a synthetic fleece jacket releases an average of 1.7 grams of microfibers per wash, and that the amount of microfibers released increases as the jacket ages. A study on the presence of microfibers in seafood found that 25% of fish and 30% of shellfish purchased at a fish market in California contained microfibers within their gut contents. A survey of water samples from around the world found that 94% of water samples from the United States contained plastic microfibers. Microfibers are making their way from synthetic clothing to the seafood and water that we consume. AB 2379 is an important first step in approaching the complicated issue of microfiber pollution."

Arguments in opposition: According to California Retailers Association, American Apparel & Footwear Association, American Chemistry Council, California Chamber of Commerce, California Fashion Association California Manufacturers & Technology Association, National Retail Foundation, Plastics Industry Association, Retail Industry Leaders Association, this bill,

> "...imposes a premature conclusion on an issue that is still being researched academically... according to the Ocean Conservancy, the current major knowledge 'gaps in scientific understanding' are: 1) the total amount of annual microfiber emissions to the environment, and the relative contributions of various sources (e.g. the percentage of microfiber emissions stemming from apparel vs. other sources like carpet and upholstery); 2) potential geographic variations in microfiber emissions; 3) the shed rates of different materials in different applications, and how shed rates vary as materials age; and 4) how washing methods and conditions (e.g., front-loading, top-loading, hand washing, temperature and detergents) may affect shed rates. Until we know these answers, what value does AB 2379 provide by targeting an unproven solution?" Furthermore, "The bill mandates a premature recommended solution that is not supported by emerging technology... Washing machine manufacturers are investigating new filters that can capture fibers before being released into the waste stream. Lint LUV-R and Wexco's Filtrol 160 are both filters that attach to a laundry water discharge hose." Furthermore, "The bill penalizes low and middle income families who purchase synthetic fabrics because they are generally less expensive than natural fibers like silk, wool, cashmere, linen and cotton...and increases liability on California retailers."

Proposed amendments: As currently drafted, the bill's provisions would be enforced under the Unfair Competition Law (UCL). The author and committee may wish to consider whether it is appropriate for this law to apply to these provisions.

In addition, dry cleaning typically involves washing clothes in a washing machine, except that organic solvents are used instead of water. The current language implies that dry cleaning releases fewer microfibers than other methods; however, it is not clear whether this is the case and may depend on how the dry clean solvents are disposed of. Therefore, the author and committee may which to consider amendments that would require, at the point of sale, a "sticker, hang tag, or any other label type, that includes the following statement: 'This garment sheds plastic microfibers when washed, which contributes to marine plastic pollution.'" on all garments regardless of whether they are Dry Clean Only or not.

Related legislation:

1) SB 1422 (Portantino). Requires the State Water Resources Control Board to adopt regulations requiring annual testing for, and reporting of, the amount of microplastics in drinking water, including public disclosure of those results. This bill passed out of the Senate Committee on Environmental Quality on April 18, 2018 and was re-referred to the senate Committee on Appropriations.

2) SB 1263 (Portantino). Requires, to the extent funds are available, the California Ocean Protection Council to adopt and implement a Statewide Microplastics Strategy by December 31, 2024. The goal of the Statewide Microplastics Strategy would be to increase the understanding of the scale and risks of microplastic materials and microfibers on the marine environment and identify proposed solutions to address the impacts of microplastic materials and microfibers, to the extent feasible. This bill was double referred to the Senate Committee on Natural Resources and Water and the Senate Committee on Environmental Quality. It is set for hearing in the Senate Committee on Natural Resources and Water on April 24, 2018.

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

Double referral: This bill passed out of the Assembly Committee on Natural Resources on April 9, 2018.

REGISTERED SUPPORT / OPPOSITION:

Support

Californians Against Waste (Sponsor)
Azul
Consumer Watchdog
Clean Water Action
East Bay Municipal Utility District
GAIA
Marin County Hazardous and Solid Waste Management Joint Powers Authority
5 Gyres Institute
California Association of Local Conservation Corps

California Association of Sanitation Agencies
California League of Conservation Voters
Castro Valley Sanitary District
Center for Oceanic Awareness, Research, and Education
Central Valley Sanitation District
Clean River Alliance
Clean Water Action
Consumer Watchdog
Ecology Action
Environment California
Environmental Working Group
Friends of the Earth - US
Heal the Bay
Northern California Recycling Association
Plastic Pollution Coalition
Rethink Waste
Seventh Generation Advisors
Sierra Club California
Stopwaste
Surfrider Foundation
Tri-CED Community Recycling
UPSTREAM Policy
WILDCOAST
Wishtoyo Chumash Foundation
Zanker Recycling
Zero Waste USA
1 Individual

Opposition

American Apparel & Footwear Association
American Chemistry Council
California Chamber of Commerce
California Fashion Association
California Manufacturers & Technology Association
California Retailers Association
National Retail Foundation
Plastics Industry Association
Retail Industry Leaders Association
Textile Rental Services Association
National Council of Textile Organizations

Analysis Prepared by: Amy Gilson / E.S. & T.M. /

Date of Hearing: April 24, 2018

ASSEMBLY COMMITTEE ON ENVIRONMENTAL SAFETY AND TOXIC MATERIALS
Bill Quirk, Chair
AB 2407 (Ting) – As Amended April 17, 2018

SUBJECT: Recycling: lithium-ion vehicle batteries: advisory group

SUMMARY: Requires the Secretary for the Environmental Protection Agency (CalEPA) to convene a research group to review, and advise the Legislature on, policies pertaining to the recovery and recycling of lithium-ion (Li-ion) vehicle batteries sold with motor vehicles in the state. Specifically, **this bill**:

1) Requires, on or before April 1, 2019, the Secretary for CalEPA to convene the Lithium-Ion Car Battery Recycling Advisory Group (Advisory Group) to review, and advise the Legislature on, policies pertaining to the recovery and recycling of Li-ion vehicle batteries sold with motor vehicles in the state.

2) Requires, until April 1, 2020, the Advisory group:

   a) To meet at least quarterly; and,

   b) Consult with universities and research institutions that have conducted research in the area of battery recycling; manufacturers of electric and hybrid vehicles; and, the recycling industry.

3) Requires the Secretary of CalEPA to appoint at least one member to the Advisory Group from each of the following: the Department of Resources Recycling and Recovery (CalRecycle); the Department of Toxic Substances Control (DTSC), a vehicle manufacturer or an organization that represents one or more vehicle manufacturers; an electronic waste recycler or an organization that represents one or more electronic waste recyclers; an automobile dismantler or an organization that represents one or more motor vehicle dismantlers; an automotive repair dealer or an organization that represents one or more automotive repair dealers; a representative of the energy storage industry; and, an environmental organization that specializes in waste reduction and recycling.

4) Requires, on or before April 1, 2020, the Advisory Group to submit policy recommendations to the Legislature aimed at ensuring that 90 percent of end-of-life Li-ion vehicle batteries discarded in the state are recycled in a safe and cost-effective manner in the state.

5) Sunsets the provisions of the bill on January 1, 2022.

EXISTING LAW:

1) Prohibits the disposal of a lead-acid battery at a solid waste facility, or on or in any land, surface waters, watercourses, or marine waters. (Health and Safety Code (HSC) § 25215.2)

2) Establishes the Lead-Acid Battery Recycling Act of 2016 (Act) to impose fees on lead-acid batteries to fund lead contamination cleanup. (HSC § 25215)

3) Establishes the California Rechargeable Battery Recycling Act to require retailers to have a mechanism to accept all non-vehicular rechargeable batteries from consumers for recycling. (Public Resources Code § 42451)

FISCAL EFFECT: Unknown.

COMMENTS:

Need for the bill: According to the author:

> "Current law does not provide for coordinated [recycling] or reuse of vehicular lithium-ion batteries, and the rapid increase of electric vehicles presents a future challenge that California needs to start examining now. [...] With new models expected by nearly all major automobile manufacturers, the expansion of lithium-ion battery powered electric vehicles is coming, and with the benefits of cleaner air and reduced greenhouse gas emissions, the state also needs to meet the challenges of battery life-cycles."

Zero emission vehicles (ZEVs): Zero emission vehicles, or ZEVs, is an umbrella term for hydrogen fuel cell electric vehicles, battery electric vehicles (EVs) and plug-in hybrid electric vehicles (PHEVs). ZEVs are vehicles that emit no exhaust gas from the onboard source of power, hence the term 'zero emission.'

Value of ZEVs to California goals: California has some of the most ambitious climate emission reduction goals in the nation, which include goals to reduce petroleum use in California by up to 50% from 2015 levels by 2030, and to reduce greenhouse gas emissions 40% below 1990 levels by 2030. The transportation sector represents about 40% of California's total greenhouse gas emissions portfolio, so promoting ZEVs, and replacing traditional gas-powered cars with ZEVs, is a very big part of California's mission to reduce those climate emissions.

Encouraging ZEV sales is a state priority: In 2012, Governor Jerry Brown issued Executive Order (EO) B-16-12 directing state government to help accelerate the market for ZEVs in California. This EO calls for 1.5 million ZEVs in California by 2025 and establishes several milestones to achieve this goal.

In 2014, the State Legislature passed and Governor Brown signed the California Charge Ahead Initiative (SB 1275, Chapter 530, Statutes of 2014) to support consumer incentives and rebates to help achieve one million ZEVs on California's roads by January 1, 2023.

In 2015, the State Legislature passed and Governor Brown signed into law the Clean Energy and Pollution Reduction Act of 2015 (SB 350, Chapter 547, Statutes of 2015), which established a statewide policy to effectuate widespread electrification of the transportation sector.

Most recently, on January 26, 2018, Governor Jerry Brown signed EO B-48-18 to call for a new target of 5 million ZEVs in California by 2030. The Governor is also proposing a new eight-year initiative to continue the state's clean vehicle rebates and spur more electric vehicle charging station infrastructure investments. This $2.5 billion initiative is aimed to bring 250,000 vehicle charging stations to California by 2025.

State policies supporting ZEVs: Supporting those lofty goals are various state policies that have been enacted or promulgated by state agencies to expand the fleet of ZEVs on California roads. The State of California continues to provide monetary rebates up to $2,500 for the purchase or long-term (30 months or more) lease of ZEVs. (There are also federal rebates for ZEVs consumers can take advantage of in addition to the state's rebates.)

The state also provides high occupancy vehicle (HOV) lane access to ZEV drivers, regardless of being a single passenger or HOV, as a benefit to driving a ZEV.

The California Air Resources Board also has the ZEV mandate, which requires auto manufacturers to produce an increasing number of pure ZEVs (battery electric as well as fuel cell electric vehicles).

How many ZEVs and Li-ion batteries are on the road today: California increased the number of ZEVs in the state by 1300% in six years—growing from 25,000 in 2012 to more than 450,000 today—and ZEVs now account for approximately 4.5-5 percent of all new car sales in California. All ZEVs contain a Li-ion battery to provide their electric power.

Li-ion batteries: Li-ion batteries, widely used in portable electronics like laptops, smart phones, digital cameras, game consoles, and cordless power tools, are also widely used as vehicle batteries in ZEVs.

The traditional Li-ion chemistry involves a lithium cobalt oxide cathode and a graphite anode. Li-ion batteries are efficient at holding charges and recharging to power a car, and traditional Li-ion batteries can have hundreds to a few thousand charge cycles through their lives. The life-span of Li-ion battery is anywhere between 10-20 years.

Li-ion batteries are hazardous waste: All batteries are considered hazardous waste in California when they are discarded. Batteries are considered hazardous because of the metals and/or other toxic or corrosive materials contain within. Batteries are potentially a valuable source of recyclable metal.

All batteries in California that are intended for disposal must be recycled, or taken to a household hazardous waste disposal facility, a universal waste handler (e.g. storage facility or broker), or an authorized recycling facility.

Hazardous waste regulations designate a category of hazardous wastes called "universal waste" (u-waste). DTSC regulation recognizes all batteries that exhibit a characteristic of a hazardous waste as a u-waste.

Li-ion battery waste: According to CalRecycle's 2014 Waste Characterization Study, batteries, which include car, flashlight, small appliance, watch, and hearing aid batteries, represented 11,887 tons (0.003%) of California's overall disposed waste stream. However, this figure does not distinguish between single-use and automotive batteries, but it is also likely that automotive Li-ion batteries represent a "de minimis" amount of this total.

According to a presentation to DTSC from Occupational Knowledge International, by 2028, roughly 8 million kilotons of waste Li-ion batteries from ZEVs are expected to be generated; by 2038, the estimate is 55 million kilotons.

Collection rates today: It is unknown how many Li-ion batteries are being collected for end of life management.

There are currently about 35 million total cars on the road in California. Of those, about 450,000-500,000 are ZEVs. ZEV car sales started to pick up in 2011, when they still represented less than 0.5% of total sales. The life span of those cars' batteries have not yet maxed out, so ZEV car owners have not yet, en masse, needed replacement Li-ion car batteries. There simply is no data from new car dealers or auto body shops on spent Li-ion batteries being collected.

While current end-of-life management for automotive Li-ion batteries is completely unknown, there is no doubt that there is a need for infrastructure to manage the inevitable and exponential waste of ZEV Li-ion batteries.

Current Li-ion battery management: According to the U.S. Geological Survey, historically, lithium recycling has been insignificant, but has increased over time owing to the growth in consumption of lithium batteries. One U.S. company has recycled lithium metal and lithium-ion batteries since 1992 at its facility in British Columbia, Canada. In 2009, the U.S. Department of Energy awarded the company $9.5 million to construct the first U.S. recycling facility for lithium-ion batteries, which was still under construction in 2014.

In California, because Li-ion batteries are considered a hazardous or universal waste, any facility that accepts them for collection, storage, waste management, or recycling would have to be permitted by DTSC for managing hazardous waste.

It is unknown how many facilities are permitted by DTSC to accept Li-ion batteries from hybrids and electric vehicles for management or recycling.

Market for Li-ion batteries: End-of-life management of Li-ion automotive batteries is still nascent, but, theoretically, they could be collected for end-of-life management as hazardous waste, recycling, reuse, or potentially even refurbishment.

If there is a market for reusing Li-ion and cobalt, recycling these automotive batteries could prove to be lucrative.

There is also potential for repurposing Li-ion batteries for alternative (non-vehicular) energy storage. According to the report by the Lawrence Livermore Laboratory prepared for the California Energy Commission, *Plug-In Electric Vehicle Battery Recycling Scale-Up Strategies for California (2015-2050): Logistics, Life-Cycle Environmental Implications, and Second-Life Potential*, batteries used in ZEVs "have a lifetime of 8-10 years, and they have significant capacity left for less demanding, second-life stationary energy storage applications after their capacity fades below acceptable levels [for a car]. This second-life battery can be used in California's electricity grid for demand response and frequency regulation to help stabilize the network, or to support residential customers using off-grid solar arrays. At this time, the late-stage degradation pattern of batteries is not yet quantified."

California has battery recycling programs, but not for automotive Li-ion batteries: The California Rechargeable Battery Recycling Act (Act) (AB 1125, Chapter 572, Statutes of 2005) banned all household batteries from solid waste landfill disposal and required retailers to take back rechargeable batteries for recycling at no cost to consumers. Rechargeable batteries covered under the Act include small, non-vehicular, rechargeable nickel-cadmium, nickel metal

hydride, lithium ion, or sealed lead-acid battery, or a battery pack containing these types of batteries.

According to DTSC's data for 2012, nearly 22.2 million pounds of rechargeable batteries were collected from consumers for recycling, which include approximately 700,000 pounds of Li-ion batteries (non-vehicular) batteries. It is difficult to say how well this program has worked for collecting household lithium-ion batteries because batteries contained within electronic devices that are recycled (e.g. cell phones and laptop computers) are not counted separately but may represent a significant portion of the total quantity, and California law does not require battery handlers or recyclers to report the number or weight of batteries collected for recycling, but the increase in battery collection since the Act was enacted has steadily increased over the years.

Under the Lead-Acid Battery Recycling Act of 2016 (AB 2153, Chapter 666, Statutes of 2016), consumers are charged a $1 fee per lead-acid car battery at the point of sale. Manufacturers also pay a $1 fee on each battery sold in the state. The money from the fee revenues are used to clean up areas of the state that have been contaminated by the production and recycling of lead acid batteries.

According to a 2007 contracted report to the California Integrated Waste Management Board (CIWMB, which is now CalRecycle), *Framework for Evaluating End-of-Life Product Management Systems in California*, the need to have disposal options for lead-acid batteries lead to an industry response by BCI Inc. to promote model legislation for states to enact. That resulted in a model that included a landfill ban, a mandatory retailer-take back system, and mandatory collection of deposit on the purchase of a new battery if an old battery is not returned. California adopted a modified version of the model legislation in 1989. According to the auto care industry, 99.6% of all lead-acid core batteries are currently recycled in California.

Management of end-of-life Li-ion batteries could follow a comparable path of industry-led initiative. Preliminary thinking by CalRecycle is that Li-ion batteries may be managed similarly to lead-acid batteries. CalRecycle administers the Future of Electronic Waste Management in California project to examine current conditions and future options for electronic waste (e-waste) management in California and engage stakeholders in exploring how various approaches could address future challenges. That project currently considers ZEV "low" priority for e-waste management, noting that they are "likely managed by industry."

Notably, when a ZEV on the road today is in an auto collision, the car may be brought to the car dealer for repair. Those dealers are equipped to remove, repair, and/or replace the Li-ion battery in a damaged or totaled ZEV. While the specifics of the processes for removing and/or replacing the battery in ZEVs are unknown to this Committee, car dealers are permitted, mechanically-capable facilities to manage those batteries. Car dealers can continue to service ZEVs and their end-of-life Li-ion batteries until a statewide system or statewide rules for end-of-life Li-ion battery management can be developed and uniformly implemented by non-dealer auto body shops.

Infrastructure, as well as understanding, is lacking: Little research has been devoted to understanding the challenges and tradeoffs associated with end-of-life management strategies for ZEV batteries, and the pace at which new collection, second life, and recycling infrastructure must be scaled up.

Developing a roadmap for building the infrastructure necessary to process used batteries and divert them to appropriate uses requires much research.

The bill requires the Secretary for CalEPA to convene an Advisory Group to review policies pertaining to the recovery and recycling of lithium-ion vehicle batteries sold with motor vehicles in the state. The Advisory Group is required to include at least one member from CalRecycle, DTSC, a vehicle manufacturer or an organization that represents one or more vehicle manufacturers, an electronic waste recycler or an organization that represents one or more electronic waste recyclers, an auto body shop representative, an automobile dismantler or an organization that represents one or more motor vehicle dismantlers, a representative of the energy storage industry, and an environmental organization that specializes in waste reduction and recycling.

Given the growing number of ZEVs on the road, the fact Li-ion batteries are considered hazardous, and the need to have systems in place to collect these products when they are done with their useful life, studying the possibilities now is prudent. With the appropriate variety of representation of auto manufacturers, battery management professionals, and state agencies in the Advisory Group, it can be well-quipped to advise the Legislature on policies pertaining to the recovery and recycling of Li-ion vehicle batteries sold with motor vehicles in the state.

Related legislation:

1) AB 2832 (Dahle). Requires the Department of Toxic Substances Control (DTSC) to identify recycling opportunities for lithium-ion batteries and develop a grant program for lithium-ion (Li-ion) battery recycling. This bill was approved by this Committee on April 10 and is now pending in the Assembly Appropriations Committee.

2) AB 193 (Cevantes). Provides rebates for electric vehicles and rebates for the replacement or refurbishment of electric vehicle batteries. This bill was held on the Inactive file in the Senate.

REGISTERED SUPPORT / OPPOSITION:

Support

Californians Against Waste (Sponsor)
Plug In America
Rural County Representatives of California

Opposition

None on file

Analysis Prepared by: Paige Brokaw / E.S. & T.M. /

Date of Hearing: April 24, 2018

ASSEMBLY COMMITTEE ON ENVIRONMENTAL SAFETY AND TOXIC MATERIALS
Bill Quirk, Chair
AB 2447 (Reyes) – As Amended April 10, 2018

SUBJECT: California Environmental Quality Act: land use: environmental justice

SUMMARY: Requires lead agencies that are preparing the environmental review of a project to provide a notice about the project to owners and occupants of property within a half mile of the project, if that project is within a half mile of a disadvantaged community. Requires the Office of Environmental Health Hazard Assessment (OEHHA) to compile a list of land uses that could pose an environmental threat and publish a map that identifies disadvantaged communities and areas within one half mile of those disadvantaged communities. Specifically, **this bill**:

1) Requires a lead agency that is preparing an environmental review of a project, as defined, to give notice to all organizations and individuals who have previously requested notice and notice to other entities as specified. Requires the lead agency to give notice by direct mailing to the owners and occupants of property within one-half mile of any parcel of a project.

2) Applies the notice requirements of the lead agency only for projects for which an environmental review is started on or after July 1, 2019.

3) Defines "disadvantaged community (DAC)" as a community identified by the California Environmental Protection Agency (CalEPA) for investment opportunities related to the reduction of greenhouse gases.

4) Defines a "project" as the siting, expansion, or intensification of a subject land use; the construction or expansion of a structure that is intended or designed for use as or to facilitate a subject land use; or, the adoption of municipal regulations, zoning, or land use designations that authorize a subject land use.

5) Defines "subject land use" as a land use identified by the Office of Environmental Health Hazard Assessment (OEHHA) and that is located within one-half mile of a disadvantaged community.

6) Defines "threshold language" as a language that has been identified as the primary language, as indicated on the medications of 3,000 beneficiaries or five percent of the beneficiary population, whichever is lower, in an identified geographic area.

7) Requires OEHHA, no later than June 30, 2019, to do both of the following:

   a) Publish a map that identifies DACs and areas within one-half mile radius surrounding the DAC and shall update the map concurrently with any revisions of the identification of DACs by CalEPA; and,

   b) Publish a list of land uses that contain or produce onsite and offsite criteria air pollutants or toxic air contaminants, odors, water contamination, hazardous materials, or other environmental pollution or impacts that are associated with negative public health effects or adversely affect the quality of life or the use and enjoyment of housing in the vicinity

of the land use. In determining the land uses, prohibits OEHHA from considering impacts of the land use on aesthetics, biological resources, agriculture and forestry resources, or mineral resources.

8) Requires a lead agency, in addition to any other required notices, within 30 days of receipt of an application for a project and prior to making any determination regarding the level of environmental review for the project, or the eligibility of the project for an exemption, to provide a notice of application to the last known name and address of all organizations and individuals who have previously requested notice and provide a notice of application, by direct mail, to the owners and occupants of property located within one-half mile of any parcel or parcels, and to any schools located within one mile of any parcel or parcels, on which is located a project.

9) Requires the notice sent by a lead agency notifying people of the project that the notice shall include a brief description of the project and its location; a description of any opportunities to provide oral or written comments on the project; a description of how oral and written comments on the project may be provided to the lead agency; a description of how additional information or materials relating to the project may be obtained; and, requires the notice to be provided in English and in all threshold languages.

10) Requires a lead agency to call at least one scoping meeting for a project.

11) Requires the lead agency to mail or deliver notice of the scoping meeting to a county or city that borders the project; a responsible agency; a public agency that has jurisdiction by law with respect to the project; a transportation planning agency; a public agency, organization, or individual who has filed a written request for the notice; all owners and occupants of properties located within one-half mile of the project site; and, all schools located within one mile of the project site.

12) Requires the lead agency to include in the scoping meeting notice a brief description of the proposed project and its location; the date, time and location of the scoping meeting for the project; a brief description of the purpose of the scoping meeting; any other opportunities for the public to provide written and oral comments on the project; provide the notice in English and all threshold languages; and, conduct a scoping meeting at a location within one mile of the project site.

13) Requires the lead agency, at the scoping meeting, to provide a description of the project and any information known about the project's potential environmental impacts, and take public comments regarding potential project impacts, project alternatives, and mitigation measures that would avoid or reduce any project impacts.

14) Requires a lead agency to make an audio or audio-visual recording of the scoping meeting and deem oral and written comments obtained at the scoping meeting part of the record of proceedings and requires those comments to be considered by the lead agency prior to approval of the project.

15) Prohibits a lead agency from certifying an environmental impact report (EIR) or adopting a negative declaration unless the lead agency finds, in light of the whole record before the lead agency, that the approval or carrying out of the project does not constitute intentional discrimination, or result in a discriminatory effect.

16) Provides that the notice requirements and new scoping meeting requirements only apply to projects for which the environmental review commences on or after July 1, 2019.

EXISTING LAW:

1) Requires the CalEPA to develop a methodology that identifies priority disadvantaged community areas for investment opportunities related to the Greenhouse Gas Reduction Fund (GGRF). Requires that these "priority community investment areas" be identified and updated at least every two years based on specified geographic, socioeconomic, and environmental hazard criteria. To meet this requirement OEHHA has developed CalEnviroScreen. (Health and Safety Code § 39711)

2) Requires OEHHA to develop and maintain a system of environmental indicators to provide policymakers and the public with information to evaluate the effectiveness of CalEPA's programs in improving environmental quality and protecting public health throughout the state, including environmental quality and public health in low-income communities and communities of color, and to assist CalEPA in making budget decisions that address the most significant environmental concerns, among other objectives for the system. (Public Resources Code (PRC) § 71080 (a))

3) Requires OEHHA to update its CalEnviroScreen 2.0 tool by using any relevant environmental data relating to known impacts of air pollution, water pollution, and toxic sites on the environmental quality of the communities in the California-Mexico border region. (PRC § 71090 (b)(1))

4) Establishes the California Environmental Quality Act (CEQA) which provides a process for evaluating the environmental effects of applicable projects undertaken or approved by public agencies. (PRC § 21000 et al)

FISCAL EFFECT: Unknown.

COMMENTS:

Need for the bill: According to the author,

> "Except where a person has previously requested written notice in writing, existing law does not require local jurisdictions to provide direct notice to residents of disadvantaged communities of proposals to locate or expand land uses in or near those communities which are likely to result in adverse impacts on the environment, neighborhood quality, or public health. Existing law also does not require jurisdictions to hold any public meetings to provide information about or take input on the potential impacts of and available alternatives and mitigation for such proposed projects, except in certain circumstances where those projects are deemed of "statewide, regional, or areawide significance" and does not require any such meetings to be held in the neighborhoods or communities where those projects are proposed to be located.
>
> As a result, projects which result in adverse impacts on the environment, neighborhood quality and public health are routinely located in and around disadvantaged communities without any direct notice to residents prior to project approval and without any input by residents about the project's potential local and cumulative impacts and available project

alternatives and mitigation measures. Projects therefore often receive approval and inflict significant adverse impacts to overburdened disadvantaged communities, exacerbating existing environmental, neighborhood, and public health conditions and failing to incorporate available mitigation measures that are required by law.

This bill aims to rectify these problems by establishing meaningful public notice, public meeting, and findings requirements that apply to projects involving land uses that are likely to result in adverse impacts ("Subject Land Use") on public health, quality of life, or the use and enjoyment of housing in one or more disadvantaged communities."

Identifying disadvantaged communities: Pursuant to the authorities provided in AB 32 (Nuñez, Chapter 488, Statutes of 2006), the California Air Resources Board (ARB) implemented the cap-and-trade program as one of several strategies to reduce greenhouse gas emissions. Funds received from the program are deposited into the GGRF and appropriated by the Legislature. They must be used for programs that further reduce emissions of greenhouse gases.
In 2012, the Legislature passed SB 535 (De Léon, Chapter 830, Statutes of 2012), directing at least 25% of the funds from the GGRF to go to projects that provide a benefit DACs, and requiring a minimum of 10% of the funds to be directed to projects located within those communities.

SB 535 directed CalEPA to identify DACs based on geographic, socioeconomic, public health, and environmental hazard criteria, including:

1) Areas disproportionately affected by environmental pollution and other hazards that can lead to negative public health effects, exposure, or environmental degradation; and,

2) Areas with concentrations of people that are of low income, high unemployment, low levels of homeownership, high rent burden, sensitive populations, or low levels of educational attainment.

AB 2447 requires a lead agency to notify residents and property owners within a half mile of a DAC as defined in SB 535.

CalEnviroScreen: To comply with the requirements set forth in SB 535, OEHHA developed CalEnviroScreen, which uses existing environmental, health, and socioeconomic data to determine the extent to which communities across the state are burdened by, and vulnerable to, pollution and to calculate a quantitative score for each of the state's 8,000 census tracts based on their overall pollution burdens and vulnerabilities. The scores are mapped so that different communities can be compared. An area with a high score is one that experiences a much higher pollution burden than areas with low scores.

CalEnviroScreen uses the following statewide data to identify the 25% most disadvantaged census tracts:

1) Pollution burden indicators: ozone, PM2.5 (particulate matter <2.5 microns), diesel particulate matter, drinking water contaminants, pesticide use, toxic releases from facilities, traffic density, cleanup sites, groundwater threats, hazardous waste generators and facilities, impaired water bodies, and solid waste sites and facilities; and,

2) Population characteristics: asthma, cardiovascular disease, educational attainment, housing burdened low income households, low birth weight infants, linguistic isolation, poverty, and unemployment.

Uses for CalEnviroScreen: According to CalEPA, "During the initial consideration and adoption of CalEnviroScreen, concerns were raised about its potential for misuse. To ensure proper use and understanding we explained that the tool is not a substitute for a cumulative impacts analysis under the California Environmental Quality Act (CEQA). Nor is the intent to restrict the authority of government agencies in permit and land-use decisions. Furthermore, CalEnviroScreen may not be the appropriate tool to guide all public policy decisions. Other tools – or individual data layers – might be more useful for different purposes, such as for identifying communities facing socioeconomic disadvantage or health disadvantage. Over the past three years, CalEnviroScreen has been successfully used to inform the implementation of many policies, programs and activities throughout the state. For example, CalEPA and its boards, departments and office continue to use the tool to administer environmental justice grants, promote greater compliance with environmental laws, prioritize site-cleanup activities and identify opportunities for sustainable economic development in heavily impacted neighborhoods."

Examples of uses of CalEnviroScreen: One of the most notable uses of CalEnviroScreen has been to inform CalEPA's identification of DACs pursuant to SB 535. The CalEPA Environmental Justice Task Force uses CalEnviroScreen in its effort to integrate environmental justice considerations into cross-media enforcement of environmental laws. CalEnviroScreen results and underlying data guided recent enforcement initiatives by the CalEPA Environmental Justice Task Force in West Fresno, Boyle Heights, and Pacoima. This effort resulted in a multi-media, multi-agency investigation of businesses in these communities in order to ensure compliance and take appropriate enforcement action as necessary.

The boards and departments within CalEPA also use CalEnviroScreen to prioritize supplemental environmental projects (SEPs) in DACs. These projects use money paid in lieu of penalties by violators of environmental laws to fund projects benefitting the communities that bore the harm or burden created by these violations.

The Department of Toxic Substances Control uses CalEnviroScreen to prioritize inspections, investigations, and enforcement actions.

California Environmental Quality Act (CEQA): CEQA provides a process for evaluating the environmental effects of applicable projects undertaken or approved by public agencies. If a project is not exempt from CEQA, an initial study is prepared to determine whether the project may have a significant effect on the environment. If the initial study shows that there would not be a significant effect on the environment, the lead agency must prepare a negative declaration. If the initial study shows that the project may have a significant effect on the environment, the lead agency must prepare an EIR.

Generally, an EIR must accurately describe the proposed project, identify, and analyze each significant environmental impact expected to result from the proposed project, identify mitigation measures to reduce those impacts to the extent feasible, and evaluate a range of reasonable alternatives to the proposed project. If mitigation measures are required or

incorporated into a project, the agency must adopt a reporting or monitoring program to ensure compliance with those measures.

Once a lead agency has approved a project, the agency must file a notice of determination. State agencies are required to file notice with the Governor's Office of Planning and Research (OPR), which is then posted on OPR's CEQAnet website. Local agencies are required to file notice within five working days with the county clerk of each county in which the project will be located. These notices may be posted on the county's website, but this is not required. Depending on the county's practices, the notice may simply be posted on a bulletin board in the clerk's office. CEQA also requires notices to be sent upon request to any interested person.

Generally, CEQA actions taken by local public agencies can be challenged in Superior Court once the agency approves or determines to carry out the project. CEQA appeals are subject to unusually short statutes of limitations, which are tied to the date the notice was filed. Under current law, court challenges of CEQA decisions generally must be filed within 30-35 days, depending on the type of decision. Failure to file a notice in time may increase the statute of limitations to 180 days.

AB 2447 is designed to provide early notice of a project that could have negative environmental affects to DACs. As identified in CalEnviroScreen, there are many communities throughout the state that are already heavily impacted by pollution. The result is that these communities often face additional health impacts from these sources of pollution such as asthma, cardiovascular disease, and other illnesses and decreased quality of life. Providing early notice could have a positive outcome for both the community and the developer. A project could be improved at an early stage to address community concerns thereby expediting a project's trajectory avoiding a stand-still, as well as not further impacting the communities overall health. However, by increasing the notices sent under the CEQA process, it could provide more opportunity for lawsuits designed to impede progress.

Double referral and issues for the committee to consider: This bill was heard on April 16, 2018 in the Assembly Committee on Natural Resources. During that hearing the author of AB 2447 said that the bill would not apply to residential development. Therefore, the author and Committee may wish to consider an amendment to the bill specifically exempting residential development from the land uses and/or projects under the bill's provisions. Additionally, during that committee hearing there were concerns raised around the provisions of the bill that deal with requiring a lead agency to certify that a project does not cause discrimination or a discriminatory effect. The author and Committee may wish to consider striking that section of the bill. Lastly, as drafted the bill's provisions could apply to a wide range of land uses, given that many of the facilities that have contributed to pollution in communities are more industrial in nature, the author and Committee may wish to further clarify this point.

REGISTERED SUPPORT / OPPOSITION:

Support
American Lung Association - California
Asian Pacific Environmental Network
CalBike
California Environmental Justice Alliance
California Walks

Center Community Action and Environmental Justice
Center on Race and Poverty
Central California Asthma Collaborative
Central California Environmental Justice Alliance
Central Coast Alliance United for a Sustainable Economy
Central Valley Air Quality Coalition
ClimatePlan
Coalition for Clean Air
Communities for a New California
Community Water Center Community Legal Services in East Palo Alto
Dream Alliance
East Bay Youth Coalition
Envision Transform Build East Palo Alto
Faith in the Valley
Fresno Interdenominational Refugee Ministries
Greenling Institute
Housing Rights Center
Law Students for Community Advancement
Matheny Tract Committee
National Housing Law Project
Natural Resources Defense Council
Patterson Progressive Alliance
Physicians for Social Responsibility – Los Angeles
PODER
Policy Link
Public Interest Law Project
Public Law Center
Roman Catholic Diocese of Fresno Office of Social Justice Ministry
Sierra Club
Western Center on Law & Poverty

Opposition
American Council of Engineering Companies, California
California Chamber of Commerce
California Construction and Industrial Materials Association
California Apartment Association
California Association of Realtors
California Building Industry Association
California Farm Bureau Federation
California Independent Petroleum Association
West Coast Lumber & Building Material Association
Western Independent Refiners Association
Western Mining Alliance
Western Plant Health Association
Western States Petroleum Association
Wine Institute

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

Date of Hearing: April 24, 2018

ASSEMBLY COMMITTEE ON ENVIRONMENTAL SAFETY AND TOXIC MATERIALS
Bill Quirk, Chair
AB 2474 (Quirk) – As Amended April 17, 2018

SUBJECT: Hazardous waste: identification: testing

SUMMARY: Requires the Department of Toxic Substance Control (DTSC) to adopt as an option, a humane version of the acute aquatic toxicity test used in hazardous waste identification, should a test be found suitable for this purpose after evaluation by DTSC. Specifically, **this bill**:

1) Requires DTSC to evaluate the suitability of two acute aquatic toxicity test protocols, one testing for toxicity to fish embryos (fish embryo test) and the other for toxicity to daphnids (daphnid test), for hazardous waste identification.

2) Requires DTSC, should it find that one or both tests is suitable and after making any necessary adjustments to the test methods, to provide one or both of the tests as optional alternatives to the acute aquatic toxicity test currently in its regulations, which is performed on fish (fish test).

EXISTING LAW:

Under Federal Law:

1) Creates the framework for management of hazardous and non-hazardous solid waste under The Resource Conservation and Recovery Act (RCRA). (42 U.S.C. §6901)

Under State Law:

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

2) Defines "waste" as any solid, liquid, semisolid, or contained gaseous discarded material. (HSC § 25124)

3) Requires DTSC to develop and adopt regulatory criteria and guidelines for the identification of hazardous wastes and extremely hazardous wastes. Specifies that a waste may be hazardous because of its quantity, concentration, physical, chemical, or infectious characteristics, if it:

    a. Causes, or significantly contributes to an increase in mortality or an increase in serious irreversible, or incapacitating reversible, illness; or

    b. Poses a substantial present or potential hazard to human health or the environment, due to factors including, but not limited to, carcinogenicity, acute toxicity, chronic toxicity, bio accumulative properties, or persistence in the environment, when

improperly treated, stored, transported, or disposed of, or otherwise managed. (HSC § 25141)

4) Specifies that a waste is a toxic hazardous waste if it meets one or more of several criteria, including if it is characterized as having a high acutely aquatic toxicity as measured by the prescribed test. (22 California Code of Regulation (CCR) § 66261.24)

5) Authorizes DTSC to conduct inspections, conduct sampling activities, inspect and copy documents, and take photographs at sites or establishments where hazardous wastes are stored, handled, processed, treated, or disposed. (HSC § 25185)

FISCAL EFFECT: Unknown.

COMMENTS:

Need for the bill: According to the author,

> "Waste generators are responsible for determining whether a waste is hazardous or non-hazardous. DTSC has a list of requirements generators must meet in order to handle waste as non-hazardous. One component of this determination is commonly referred to as the 'minnow test,' which proceeds by measuring the lethal dose of a waste to fish. The goal of the minnow test is to protect California's environment by making sure wastes that are toxic to aquatic life are handled appropriately. If a product passes this, and the other hazardous waste requirements, a company can avoid onerous handling of the product but cannot label it 'cruelty free' or 'not tested on animals.' Companies that share the concern regarding animal testing must treat their waste as hazardous by default. This allows companies to label their products 'cruelty free' or 'not tested on animals' but now must treat their product differently for purposes of waste. Consequently, the lack of a humane option for hazardous waste identification leads to over-identification of hazardous waste. My bill would provide a humane and optional alternative to the minnow test, and as a result, lead to more accurate hazardous waste determinations."

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

1) Exhibits any of the characteristics, i.e., ignitability, corrosivity, reactivity, or toxicity;
2) Is fatal to humans or animals at low doses i.e. is acutely toxic; or,
3) Is capable of posing a substantial present or potential hazard to human health or the environment when improperly treated, stored, transported, or disposed of, or otherwise managed.

The listed wastes are named in the following:

1) *F-list:* Wastes common to many manufacturing and industrial processes, such as solvent used for cleaning.

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

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

Under current state regulations, acute aquatic toxicity is determined via the fish test by measuring a waste's toxicity to one of three types of fish- minnows, shiners, or trout. It is most commonly performed on minnows (*pimephales promelas*) and colloquially referred to as the "minnow test." This species of minnow is native to North America, but not to California. However, according to DTSC's final statement of reasons justifying its criteria for hazardous waste identification (statement of reasons), issued in 1984, "none of the acute toxicity criteria is to be interpreted as predictive possible hazards of wastes only to specific organisms or in specific environments." Other than Washington State, the committee is not aware of any other states that use acute aquatic toxicity testing as part of hazardous waste determination.

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

Fish test protocol: The fish test seems to be based on methods for examining wastewater and special protocols were developed for "materials that do not readily lend themselves to standard toxicity testing" including oily samples, samples containing sediment. In concept, a waste fails the acute aquatic fish toxicity test if, in a tank containing fish and 500 mg of waste/L, 50% of the fish in the tank are dead after 96-hours. In order to produce reliable results, this procedure must be performed multiple times at the 500 mg/L concentration, and at concentrations above and below 500 mg/L, each time using a minimum of twenty fish. Along with wastes containing intuitively toxic substances, such as arsenic, based on data from the Draft Retail Waste Aquatic Toxicity Project available on DTSC's Internet Website, many household products fail this test as well. Based on a retail waste aquatic toxicity testing project, these include ginko, ginger, zinc, and most if not all soaps and shampoos tested.

Welfare concerns and fish: Fish have pain receptors (nociceptors), which are a prerequisite for pain sensation but do not rule out that apparent pain responses are essentially unexperienced and mechanical. When injected with an irritating, but not injurious, acid, fish eat less and do not flee objects they normally avoid. However, when also injected with morphine, their behavior remains closer to normal. Fish learn, however in laboratory experiments, fish that naturally live in groups learn more slowly after having been kept in isolation.

The American Veterinary Medical Association's (AVMA) 2013 "Guidelines for the Euthanasia of Animals" state that, "Suggestions that finfish responses to pain merely represent simple reflexes have been refuted by studies demonstrating forebrain and midbrain electrical activity in response to stimulation and differing with type of nociceptor stimulation. Learning and memory consolidation in trials where finfish are taught to avoid noxious stimuli have moved the issue of finfish cognition and sentience forward to the point where the preponderance of accumulated evidence supports the position that finfish should be accorded the same considerations as terrestrial vertebrates in regard to relief from pain."

Consumer concern and over-classification of hazardous waste: Many people oppose animal testing. While there is no legal definition of "Cruelty Free" and "Not Tested on Animals," many companies only use these labels if their products, when discarded, are not assessed using the fish test. Companies that do not test discarded products using the fish test treat their waste as hazardous by default, or risk liability. Violations of the Hazardous Waste Control Law can lead to penalties up to $70,000 per day for each violation (HSC § 25188). Consequently, the lack of a humane option for hazardous waste identification leads to over-identification of hazardous waste.

SB 423 (Bates, Chapter 771, Statutes of 2016) required DTSC to convene a Retail Waste Workgroup (Workgroup) tasked with identifying regulatory and policy directives that need clarification for managing consumer products. Over an eight-month period (October 2016 through May 2017), the Workgroup identified problems faced by the retail industry in applying the hazardous waste management standards in California and worked to identify possible solutions. In the Workgroup's final report to the legislature, the regulated community estimated that, "About 30% of the total hazardous waste generated in California is 'California-only' hazardous waste [i.e. waste that is only classified as hazardous because of the fish test] that could fail the [fish test]. The percentages for retailer waste can be much higher, with some retailers managing up to 67% of their hazardous waste as 'California-only' hazardous waste." The Personal Care Products Council estimates that 25% of their products are hazardous waste when discarded under RCRA, but 100% of their products are considered hazardous under California law. The regulated community noted that managing this waste as hazardous is costly and reduces opportunities for recycling and identified the fish embryo test as a humane and modern alternative to the fish test. AB 2474 seeks to continue and build off the efforts of the Workgroup by providing a humane alternative to the fish test.

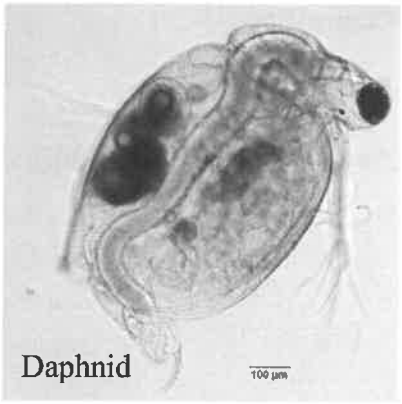
Development of the fish embryo test: The fish embryo test measures toxicity to fish embryos (fertilized fish eggs) instead of adult fish. It was developed by the European Union (EU) to alleviate the need for the fish test because EU policy requires avoiding unnecessary animal testing where the same results can be obtained by other scientifically satisfactory methods. The method was officially adopted in 2013 as the "Organization for Economic Co-operation and Development (OECD) test guideline (236) for fish embryo acute toxicity (FET)" (OECD 236 Guidelines). OECD 236 is being incorporated into the EU regulatory framework as part of a weight of evidence approach to evaluating the toxicity of substances sold in the EU.

Fish embryo test protocol: The fish embryo test is based on the same principle as the fish test. Newly fertilized eggs are exposed to a test substance for a period of 96 hours and the concentration of substance sufficient for killing half the embryos by the end of this period is determined. However, the procedure for determining when the fish embryo has died involves examining the fish embryos every 24 hours for up to four signs of lethality, including lack of heartbeat.

Comparing the California fish test and OECD fish embryo tests: In Europe, the fish test is performed on zebra fish, a species native to the Himalaya region that is ubiquitous in scientific research, including in California, but does not seem to be used at the federal or state level for toxicity testing. The embryo fish test described in the OECD 236 test was developed for zebra fish embryos and likely cannot be applied directly to minnows. However, given the fact that the results of any aquatic toxicity test are not intended to be predictive of toxicity only of a single species, as described in DTSC's statement of reasons, this does not seem to be a fatal flaw.

Next, consider the difference between testing on fish embryos as opposed to mature fish. Over the course of an organism's lifetime, its susceptibility to various toxins may increase or decrease. Lead provides a well-known example of this in humans; children are more adversely affected by lead than adults. However, studies have found a good correlation and similar sensitivity between the results of the fish embryo and adult fish tests, though, at least in zebrafish, the fish embryo may be slightly less sensitive.

The daphnid test: Daphnids are tiny invertebrate animals less than 5 millimeters long that are commonly called "water fleas" because of their bug-like appearance under magnification. They are an essential part of the food web in freshwater environments. Acute aquatic toxicity can be measured for species other than fish, and the US EPA acute toxicity whole effluent testing methods, adopted in 2002 and used in California, provide test methods for several daphnid species along with those for minnow, shiners, and trout. If used for hazardous waste identification, both the fish embryo test and the daphnid test may need to be adapted to work with the wide range of types of waste, some of which do not lend themselves for standard toxicity testing. Adopting a daphnid test as an optional alternative would have the advantage of avoiding testing on vertebrate species all together and building off of methods already widely used in the State. Animal deaths, burdens on businesses committed to avoiding animal testing, and over-classification of hazardous waste could be avoided with the adoption of the fish embryo test or daphnid test as an optional alternative to the fish test.



Daphnid

Considerations: It is unclear to the Committee how conflicting acute aquatic toxicity test results would be handled under current regulation, for example, if a waste passes when tested on minnows but fails when tested on trout. As the bill moves forward, the author may wish to investigate this point, and, if there is not a clear procedure for resolving potential differences, consider clarifying this point.

The author may also consider further clarifying what it means for DTSC to "adapt as appropriate" for hazardous waste identification, clarifying the tests DTSC should consider within the US EPA whole effluent testing methods "*Methods for Measuring the Acute Toxicity of*

Effluents and Receiving Waters to Freshwater and Marine Organisms Fifth Edition," published in October 2002, and ensuring DTSC has the flexibility to keep its methods current as the OECD and EPA may be updated over time.

Related legislation:

SB 1249 (Galgiani). This bill would make it unlawful, after January 1, 2020, for a manufacturer to knowingly import for profit, sell at retail, or offer for promotional purposes at retail, any cosmetic if the final product or any component thereof was tested on animals for any purpose. This bill is set for hearing in Senate Judiciary Committee on April 24, 2018.

REGISTERED SUPPORT / OPPOSITION:

Support

Social Compassion in Legislation (Sponsor)
Physicians Committee for Responsible Medicine (Sponsor)
California Chamber of Commerce
The Humane Society of the United States
Personal Care Products Council
PETA International Science Consortium
1 Individual

Opposition

None on record

Analysis Prepared by: Amy Gilson / E.S. & T.M. /

Date of Hearing: April 24, 2018

ASSEMBLY COMMITTEE ON ENVIRONMENTAL SAFETY AND TOXIC MATERIALS
Bill Quirk, Chair
AB 2501 (Chu) – As Amended April 17, 2018

SUBJECT: Drinking water: consolidation and extension of service

SUMMARY: Authorizes the State Water Resources Control Board (State Water Board) to order consolidation with a receiving water system when a disadvantaged community is reliant on a domestic well that consistently fails to provide an adequate supply of safe drinking water; authorizes the State Water Board to develop a process by which members of a disadvantaged community may petition the State Water Board to consider ordering consolidation; prohibits, for an ordered consolidation, the receiving water system from charging specified fees or imposing specified conditions on customers of the subsumed water system that it would not otherwise charge or impose; and makes other changes to ordered consolidation law. Specifically, **this bill**:

1) Redefines "disadvantaged community," for the purposes of ordered consolidation, to include a disadvantaged community that is served by a state small water system or a domestic well.

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

3) Defines "infill site" as a site within the area served by a subsumed water system that, as of the date of consolidation, is adjacent on at least two sides to any of the following, or any combination of the following:

   a) A parcel that is developed for qualified urban uses;
   b) A navigable body of water;
   c) A park; or,
   d) A street or highway or other public right of way.

4) Defines "qualified urban use" as any residential, commercial, public institutional, industrial, transit or transportation facility, or retail use, or any combination of those uses.

5) Authorizes the State Water Board to order consolidation with a receiving water system when a disadvantaged community is reliant on a domestic well that consistently fails to provide an adequate supply of safe drinking water.

6) Requires a consolidation of water systems ordered by the State Water Board to occur within six months of the initiation of the extension of service.

7) Authorizes the State Water Board to develop and adopt a policy that provides a process by which members of a disadvantaged community may petition the State Water Board to consider ordering consolidation.

8) Deletes existing statute that provides that, before the State Water Board orders consolidation or the extension of service for a potentially subsumed area that is served only by a domestic well, an initial public meeting shall not be required.

9) Expands the finding of the capacity of the proposed interconnection needed to accomplish the consolidation, to also include infill sites within the community served by the subsumed water system and residents of a disadvantaged community in existence as of the date of consolidation that are along the service line connecting the subsumed water system and the receiving water system.

10) Deletes existing statute that provides that, for an ordered consolidation, fees or charges imposed on a customer of a subsumed water system shall not exceed the cost of consolidating the water system with a receiving system or the extension of service to the area and instead provides that, for an ordered consolidation, ongoing service fees or charges imposed on a customer of a subsumed water system shall not exceed the cost of providing the drinking water service.

11) Prohibits, for an ordered consolidation, the receiving water system from charging any fees, including, but not limited to, connection fees, capacity fees, or impact fees, to customers of the subsumed water system that it does not otherwise charge to other new customers not subject to the consolidation.

12) Prohibits, for an ordered consolidation, the receiving water system from imposing any conditions on a subsumed water system or customer of a subsumed water system that it does not otherwise impose on other water systems or new customers not subject to the consolidation.

EXISTING LAW:

1) 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 § 300f 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)

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) Requires the State Water Board, in administering SDWA programs to fund improvements and expansions of small community water systems, to encourage the consolidation of small community water systems that serve disadvantaged communities and to prioritize funding for construction projects that involve the physical restructuring of two or more community water systems, at least one of which is a small community water system that serves a disadvantaged community, into a single, consolidated system. (HSC § 116326)

5) Defines "disadvantaged community," for the purposes of ordered consolidation, as a community with an annual median household income that is less than 80 percent of the statewide annual median household income and that is in an unincorporated area, is in a mobile home park, or is served by a mutual water company or a small public water system. (HSC § 116681(f))

6) Authorizes the State Water Board, where 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, to order consolidation with a receiving water system. Provides that the consolidation may be physical or operational. (HSC § 116682 (a))

7) Authorizes the State Water Board to order the extension of service to an area within a disadvantaged community that does not have access to an adequate supply of safe drinking water so long as the extension of service is an interim extension of service in preparation for consolidation. (HSC § 116682 (a))

8) 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; and, consulting with, and fully considering input from, the relevant local agency formation commission regarding the provision of water service in the affected area, the recommendations for improving service in a municipal service review, and any other relevant information. (HSC § 116682 (b)(1)-(3))

9) Requires the State Water Board, before ordering consolidation or extension of service, to notify the potentially receiving water system and the potentially subsumed water system and establish a reasonable deadline of no less than six months for the water systems to negotiate consolidation or another means of providing an adequate supply of safe drinking water. Requires, during this period, the State Water Board to provide technical assistance and to work with the potentially receiving water system and the potentially subsumed water system to develop a financing package that benefits both water systems. (HSC § 116682 (b)(7) (A) & (B))

10) 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; that all reasonable efforts to negotiate consolidation or extension of service were made; and, that consolidation of the receiving water system and subsumed water system or extension of service is appropriate and technically and economically feasible. (HSC §116682 (d))

11) Requires the State Water Board, before ordering consolidation or extension of service, to as necessary and appropriate, make funds available to the receiving water system for the costs of completing the consolidation or extension of service, including, but not limited to, replacing any capacity lost as a result of the consolidation or extension of service; providing additional capacity needed as a result of the consolidation or extension of service; and, legal fees. Requires the State Water Board to provide appropriate financial assistance for the infrastructure needed for the consolidation or extension of service. (HSC § 116682 (e))

12) Prohibits, in the case of an ordered consolidation, the consolidated water system from increasing charges on existing customers of the receiving water system solely as a consequence of the consolidation or extension of service unless the customers receive a corresponding benefit. Provides, in the case of an ordered consolidation, fees or charges imposed on a customer of a subsumed water system shall not exceed the cost of consolidating the water system with a receiving system or the extension of service to the area. (HSC § 116682 (f))

13) Limits the liability of a consolidated water system, wholesaler, or any other agency in the chain of distribution that delivers water to a consolidated water system, as specified. (HSC § 116684)

14) Makes legislative findings that regional solutions to water contamination problems are often more effective, efficient, and economical than solutions designed to address solely the problems of a single small public water system, and that it is in the interest of the people of the State of California to encourage the consolidation of the management and the facilities of small water systems to enable those systems to better address their water contamination problems. (HSC § 116760.10 (h))

FISCAL EFFECT: Unknown.

COMMENTS:

Need for the bill: According to the author,

> "Hundreds of communities in California lack access to safe drinking water. Their drinking water is contaminated with nitrates, arsenic, perchlorate, chrom 6, coliform, and other contaminants. Many households have lost access to water altogether as their wells have failed and groundwater sources have depleted. Many of these communities are within a mile – or less – of community water systems that provide safe and reliable water service to their customers. In these circumstances the best solution to secure safe drinking water to these communities is through a service extension from a nearby community water system; however the state lacks tools to facilitate such projects when a community is reliant on private wells or "state small" water systems, which are often the most vulnerable communities to drinking water contamination and depletion.
>
> SB 88, passed in 2015, provided the state with tools to require drinking water consolidations under certain circumstances. However, the legislation was not clear as to whether those tools applied to communities reliant on domestic wells or state small water systems. Implementation of the bill has surfaced other gaps in the law, such as providing impacted communities with the ability to ask the state board to consider mandating consolidations. This bill seeks to further the intent and address the gaps in SB 88."

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.

Drinking water contamination in disadvantaged communities: The February 2018, University of California (UC) Davis report, "*The Struggle for Water Justice in California's San Joaquin Valley: A Focus on Disadvantaged Unincorporated Communities*," summarizes drinking water issues facing disadvantaged communities as follows.

"In California, lack of access to clean, safe, and affordable water is a threat to public health and well-being, and violates the state's newly codified Human Right to Water. In low-income communities located outside city boundaries (known as disadvantaged unincorporated communities or DUCs), drinking water is often unsafe to drink. In many such localities, drinking water is contaminated by industrial by-products (usually associated with agriculture, oil and gas production, transportation, and manufacturing) and compromised by inadequate wastewater treatment and disposal systems, as well as naturally occurring toxic substances like arsenic and uranium. Many DUC residents in the San Joaquin Valley pay a triple penalty to obtain safe water: they bear the health costs of unsafe drinking water; they purchase that unsafe water at high costs; and they must also purchase "substitute" water—typically expensive bottled water—for drinking and cooking.

Lack of access to clean, safe and affordable drinking water has a racial and ethnic component: the vast majority of DUC residents are people of color who also face cumulative impacts from environmental contamination brought on by proximity to air pollution, pesticides, toxic facilities and waste disposal. Without city governments to directly represent their interests and provide essential services, residents of DUCs have been systematically deprived of access to important means of democratic governance."

While the 2018 UC Davis report focuses on DUCs in the San Joaquin Valley, the findings are consistent with a more expansive 2013 State Water Board report and 2012 UC Davis report that found that drinking water contamination in California disproportionally affects small, rural, and low-income communities that depend mostly on groundwater as their drinking water source. The 2013 State Water Board report found that 682 community public water systems in California, which serve nearly 21 million people, rely on contaminated groundwater as a primary source of drinking water. It also found that 265 community public water systems, which serve a little more than two million people, had received at least one drinking water quality violation within the last compliance cycle. The report points out that an additional two million Californians rely on groundwater from a private domestic well or a smaller groundwater-reliant system that is not regulated by the state. While these statistics may have changed a bit over the past several years, the State Water Board notes that currently approximately 282 drinking water systems are not in compliance with drinking water standards.

The 2018 UC Davis report also found that a significant number of DUC residents live close to an existing and water-quality compliant community water system that could provide clean drinking water.

The 2018 UC Davis report included policy recommendations to better enable DUCs to secure access to safe and affordable drinking water. These recommendations included, "State law should clarify that the board may use its authority to extend services to DUC residents who receive residential water from [state small water systems] and private wells. Another potential mechanism for expanding the reach and effectiveness of the law would be to allow communities without safe drinking water to petition the state to consider ordering consolidations."

The intent of AB 2501 is to enact these, and other, recommendations from the UC Davis report.

Providing safe, affordable drinking water to disadvantaged communities: According to the State Water Board, for common sources of drinking water contamination, such as arsenic and nitrates, expensive systems must be installed and operated to treat the water to meet drinking water

standards. In many cases, technological advances have not yet been sufficient to make such treatment systems affordable, especially to small, disadvantaged communities. In addition, many small disadvantaged communities do not have the technical, managerial, or financial capability to operate what are sometimes complex drinking water systems.

Consolidation of water systems: According to the US EPA, restructuring can be an effective means to help small water systems achieve and maintain technical, managerial, and financial capacity, and to reduce the oversight and resources that states need to devote to these systems. The State Water Board maintains that consolidating public water systems and extending service from existing public water systems to communities and areas that currently rely on under-performing or failing small water systems, as well as private wells, reduces costs and improves reliability. Consolidation does this by extending costs to a larger pool of ratepayers.

History of consolidation in California: California has recognized the benefits of consolidation for decades. SB 1307 (Costa and Thompson, Chapter 734, Statutes of 1997), instituted the state's Drinking Water State Revolving Fund (DWSRF)), and declared that, "It is in the interest of the people of the State of California to encourage the consolidation of the management and the facilities of small water systems to enable those systems to better address their water contamination problems."

After the enactment of SB 1307, and in order to promote consolidation, the California Department of Public Health (CDPH), which managed that state's drinking water program at the time, established the Consolidation Incentive Program, which provided an incentive for larger, compliant water systems to consolidate with nearby noncompliant systems. Previously, CDPH only invited drinking water systems that were out of compliance with drinking water standards to submit applications for DWSRF funding. However, through this new program, compliant systems that agreed to consolidate with a neighboring noncompliant system became eligible for DWSRF funding.

In order to provide further support and direction for the state's consolidation efforts, AB 783 (Arambula, Chapter 614, Statutes of 2007) directed CDPH to encourage; provide funds for and studies on; and, prioritize funding for projects that consolidate small public water systems in certain situations.

In 2014, SB 861 (Committee on Budget and Fiscal Review, Chapter 35, Statutes of 2014) transferred the Drinking Water Program from CDPH to the State Water Board effective July 1, 2014, creating the new Division of Drinking Water within the State Water Board. Since the transfer, the consolidation of failing drinking water systems in order to supply safe, affordable, and reliable drinking water has been a priority for the State Water Board.

Consolidation and the Governor's safe drinking water framework: In May 2015, Governor Jerry Brown released his "Resilient, Affordable, Safe Drinking Water for Disadvantaged Communities Framework," the goal of which is to, "ensure that every Californian has access to an adequate supply of safe water for daily human needs." The framework lays out steps that the Administration plans to take to achieve this goal, one of which is to, "improve technical, managerial, and financial capacity where possible, consolidating as a second option, and if neither of those work, contracting with a third party to manage the system with a commitment to transitioning the system to a sustainable condition."

Authority to require consolidation: SB 88 (Senate Committee on Budget and Fiscal Review, Chapter 27, Statutes of 2015) enacted the Brown Administration's public water system consolidation proposal. Effective June 24, 2015, SB 88 authorized the State Water Board, when a public water system or state small water system serving a disadvantaged community consistently fails to provide an adequate supply of safe drinking water, to order that system (referred to as a subsumed water system) to consolidate with, or receive an extension of service from, a compliant public water system (referred to as the receiving system). The bill provided that the receiving system is not liable for claims resulting from the subsumed system's actions prior to the consolidation or extension of service. SB 88 requires the State Water Board, before ordering consolidation or extension of service, to notify the systems, consult with various entities, and allow time to negotiate another means of providing an adequate supply of safe drinking water. It also requires the State Water Board to make certain findings prior to mandating consolidation or extension of service and to make funds available for the costs of the consolidation or extension of service.

While for many years the state's drinking water program had encouraged voluntary consolidation of public water systems, the authority granted by SB 88 allows the state to mandate the consolidation of water systems where appropriate.

Additional consolidation authority: SB 552 (Wolk, Chapter 773, Statutes of 2016) expanded the State Water Board's authority to consolidate by enabling it to identify public water systems that are consistently unable to provide an adequate and affordable supply of safe drinking water and, once funding is available, to then contract with a competent administrator to provide managerial and technical expertise to that system.

This bill additionally authorizes the State Water Board to order consolidation with a receiving water system when a disadvantaged community is reliant on a domestic well that consistently fails to provide an adequate supply of safe drinking water.

Consolidations to date: The State Water Board reports that since it received authority over the state's drinking water program in July 2014, it has completed one consolidation under order; has completed another consolidation that was about to be ordered, but settled prior to issuance; has 13 consolidations in the process of being ordered; has assisted with the completion of 52 voluntary consolidations; and, has submitted 230 letters to water system candidates for ordered consolidation urging them to begin negotiations for voluntary consolidation. Prior to the State Water Board receiving jurisdiction over the program, CDPH assisted with an average of 4 consolidations per year.

Costs of consolidation: The cost of physical consolidation of two or more water systems can be significant. According to the Association of California Water Agencies (ACWA), the cost of connecting systems can reach $150/foot.

Existing law includes several provisions dealing with the financing of ordered consolidation. HSC § 116682 (b) requires the State Water Board, before ordering consolidation or extension of service, to work with the receiving and the subsumed water systems to develop a financing package that benefits both systems. HSC § 116682 (d) requires the State Water Board, before ordering consolidation or extension of service, to find that consolidation or extension of service is appropriate and technically and economically feasible. HSC § 116682 (e) requires the State Water Board, before ordering consolidation or extension of service, to, as necessary and

appropriate, make funds available to the receiving water system for the costs of completing the consolidation or extension of service. This provision also requires the State Water Board to provide appropriate financial assistance for the infrastructure needed for the consolidation or extension of service.

Argument in support: A coalition of supporters, including the sponsor, the Leadership Counsel for Justice and Accountability, argues, "Upwards of one million Californians lack safe drinking water… Families dependent on private domestic wells are often the most vulnerable to contaminated water and even total well-failure, as wells continue to run dry… Existing law allows the state board to require consolidation with water systems that can't provide safe drinking water to customers; this bill improves upon that law and clarifies the state's authority to require service extension to communities that rely on private wells and state small water systems for their drinking water. Hundreds of thousands of households in California receive water from domestic wells and state small[s water systems] which are often the most vulnerable to source water contamination and depletion. Moreover, according to a recent study, many of these same Californians live within a mile or much less of a drinking water service provider that has capacity to extend its service to the underserved communities. This bill enhances existing law and is necessary tool to eliminate the disheartening but solvable phenomenon of communities living within sight, but beyond reach of safe drinking water supplies."

Arguments in opposition: ACWA argues, "ACWA recognizes that a number of small water systems in California simply do not have the capacity to address their infrastructure needs and deliver safe affordable drinking water. In addition, there are many individual domestic wells that serve a very small number of customers that are located within close geographic proximity to these small water systems. While ACWA agrees that these wells and systems should be allowed to consolidate to more efficiently provide safe and affordable drinking water, the fee prohibition provisions in the bill would pose a hardship to the receiving water system as consolidation of systems can be a costly process…

Specifically, AB 2501 would amend existing law to prohibit a receiving water system from imposing any charge or fee that would exceed the cost of service. Current law allows a receiving water system to impose charges and fees that cover the costs of consolidation. As previously stated, the costs of consolidation can be significant. Often the cost of connecting systems can reach $150/foot. For systems that would require several miles of pipeline this could quickly become cost prohibitive to absorb, as AB 2501 would mandate."

Related legislation:

1) SB 623 (Monning, 2017). Creates the Safe and Affordable Drinking Water Fund, administered by the State Water Board, to assist communities and individual domestic well users to address contaminants in drinking water that exceed safe drinking water standards. This bill is pending action in the Assembly Rules Committee.

2) SB 778 (Hertzberg, 2017). Would have required the State Water Board to report on public water system consolidations to date, and their success or failure. This bill was held in the Assembly Appropriations Committee.

3) 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.

4) SB 1263 (Wieckowski, Chapter 843, Statutes of 2016). Requires a person submitting an application for a permit for a proposed new public water system to first submit a preliminary technical report to the State Water Board. Authorizes the State Water Board to deny a permit for a new public water system if it determines that it is reasonably foreseeable that the proposed new public water system will be unable to provide affordable, safe drinking water.

5) 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.

6) AB 685 (Eng, Chapter 524, Statutes of 2012). Declares that it is the established policy of the state that every human being has the right to clean, affordable, and accessible water adequate for human consumption, cooking, and sanitary purposes and that relevant state agencies, including the Department of Water Resources, the State Water Board, and the State Department of Public Health shall 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

Leadership Counsel for Justice and Accountability (Sponsor)
California Coastkeeper Alliance
California Environmental Justice Alliance
California Food Policy Advocates
California Institute for Rural Studies
CALPIRG
Center for Climate Change and Health
Sierra Club California
Center for Community Action and Environmental Justice
Center for Sustainable Neighborhoods
Center on Race, Poverty and the Environment
Central California Asthma Collaborative; Medical Advocates for Healthy Air
Clean Water Action
Community Water Center
Diocese of Fresno
Environmental Health Coalition
Environmental Working Group
Friends Committee on Legislation in California
Plastic Pollution Coalition
PolicyLink
RCAC
Self Help Enterprises
The 5 Gyres Institute
The Trust for Public Land

Opposition

Association of California Water Agencies (ACWA)

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

Date of Hearing: April 24, 2018

ASSEMBLY COMMITTEE ON ENVIRONMENTAL SAFETY AND TOXIC MATERIALS
Bill Quirk, Chair
AB 2538 (Rubio) – As Amended March 23, 2018

SUBJECT: Municipal separate storm sewer systems: financial capability analysis: pilot project

SUMMARY: Requires the State Water Resources Control Board (State Water Board) to establish financial capability assessment (FCA) guidelines for municipal separate storm sewer system (MS4) permittees that are adequate and consistent when considering the costs to local jurisdictions. Specifically, **this bill**:

1) Requires, by an unspecified time frame, the State Water Board to establish FCA guidelines for MS4 permittees that are adequate and consistent when considering the costs to local jurisdictions, including costs incurred in previous years.

2) Requires the State Water Board, in developing the guidelines, to document any source it uses to develop an estimate of local costs and the overall cost of stormwater management.

3) Requires the State Water Board to consider both of the following, but not limited to, United States Environmental Protection Agency (UE EPA) policies in drafting the FCA guidelines:

   a) *Combined Sewer Overflows—Guidance for FCA and Schedule Development*, dated February 1997; and,

   b) *Affordability Criteria for Small Drinking Water Systems: An EPA Science Advisory Board Report*, dated December 2002.

4) Requires the Los Angeles Regional Water Quality Control Board (LA Regional Water Board) to use the guidelines developed by the State Water Board in a pilot project conducted to assess if a financial capability analysis can be effectively used to help municipalities implement a MS4 permit.

5) Requires the State Water Board to oversee the use of the guidelines and, upon completion of the pilot project, to make statewide recommendations or site-specific recommendations based on feasibility and the need to address the most prominent pollutants.

EXISTING LAW:

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

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

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

4) Delegates to California's Regional Water Quality Control Boards (Regional Water Boards) the ability to adopt water quality standards within their region of jurisdiction. (WC § 13240)

5) Requires the State Water Board to establish an online resource center that addresses measures available for municipalities to comply municipal stormwater permit requirements. (WC § 13383.9)

FISCAL EFFECT: Unknown.

COMMENTS:

Author's statement: According to the author,

> "The Clean Water Act (CWA) requires local agencies to obtain permits to operate their stormwater systems. Permits serve as licenses for permittees to discharge stormwater into rivers, lakes, ocean or streams (known as receiving waters). Many local governments are also required to implement waste load allocations for pollutants, in accordance with strict compliance schedules. Cities and counties must also comply with the Safe Drinking Water Act and ongoing operations and maintenance costs for drinking water and waste water systems. The totality of these stormwater, wastewater, and drinking water regulations, places a heavy, sometimes impossible, liability on local governments, and in the case of stormwater, there is no dedicated funding for compliance. Instead, communities are forced to make tradeoffs between funding permit requirements and funding other local services paid for out of the general fund.
>
> California's own State Auditor released a report on March 1, 2018, stating that Regional Water Boards do not adequately consider the costs that local jurisdictions face in compliance, and that the State Water Board lacks expertise in municipal finance and accounting. Without closing these gaps, local communities will continue to be faced with ever-increasing unfunded regulations and no defined process for prioritizing compliance."

Stormwater: Stormwater is water from rain or snow melt that runs off surfaces such as rooftops, paved streets, highways, or parking lots and can carry with it pollutants such as oil, pesticides, herbicides, sediment, trash, bacteria, and metals. The runoff can then drain directly into a local stream, lake, or bay. Often, the runoff drains into storm drains which eventually drain untreated water into a local body of water. Both the US EPA and the Regional Water Boards have determined that stormwater and urban runoff are significant sources of water pollution that can threaten aquatic life and public health. However, stormwater may also act as a resource and recharge to groundwater when properly managed.

Why regulating stormwater is important: Pollution often contaminates stormwater runoff, resulting in a toxic soup of runoff entering California's water ways. Motor oil, cigarette butts, metals, trash, animal feces, bacteria, and pesticides get swept up in stormwater drains and runoff

and lead to exceedances of total maximum daily loads and contamination of the water sources where the runoff flows.

Water bodies throughout the state are continually contaminated by various pollutants. According to the State Water Board, 1,357 of the 2,623 segments of water bodies in California contain harmful levels of one or more types of pollutants, such as bacteria, metals, and pesticides. Excessive amounts of these pollutants can detrimentally affect the environment, including the health of humans and aquatic life. For example, high levels of certain types of bacteria in a water body can cause serious illnesses, such as gastrointestinal illnesses, respiratory illnesses, and skin infections in people who come into contact with the water body. In Los Angeles County, approximately 100 million gallons of contaminated water and debris drain through the storm drain system each dry day.

How stormwater is regulated: To curb the harmful effects of pollution from stormwater runoff, federal law requires states to set restrictions on the pollutants that can be discharged into water bodies and requires local jurisdictions, including cities, counties, and other public entities, to obtain storm sewer permits.

Specifically, the federal CWA defines stormwater discharges from industrial activities and municipal systems as point sources subject to the NPDES Permit Program. The CWA directed the US EPA to publish regulations to define the discharges subject to NPDES permits and to establish a framework for regulating these discharges. The stormwater regulations promulgated by US EPA established a two-phase approach for municipal systems. The first phase began in 1990 and addressed discharges from MS4s that serve populations greater than 100,000 people. The second phase began in 1999 and addressed discharges from MS4s that serve populations fewer than 100,000 and are located in urban areas. The State Water Board and the Regional Water Boards can apply the Phase I or Phase II rules to areas with smaller populations as needed to protect water quality. Local jurisdictions that operate municipal stormwater systems must obtain NPDES permit coverage for discharges of municipal stormwater to waters of the United States.

The CWA and federal stormwater regulations require MS4s subject to NPDES permits to reduce the pollutants in stormwater discharges to the maximum extent practicable (MEP). The regulations require the implementation of best management practices (BMPs) to meet the MEP discharge standard. BMPs include both source controls and treatment measures. MS4s are to implement an effective combination of these BMPs to reduce pollutants in stormwater discharges.

In California, MS4 permits also require permittees to reduce the discharge of pollutants so that water quality standards are met. However, the permits do not specify strict compliance with numeric water quality standards. Rather, the MS4 permits require the compliance with standards through an iterative approach. Permittees implement BMPs according to storm water management plans. If the current level of effort does not achieve water quality standards, additional BMPs are implemented until compliance has been achieved.

Cost of MS4 compliance: According to the most recent estimate by the US EPA, the nation's wastewater treatment facilities will need $271 billion over the next 20 years to meet the water quality objectives of the CWA.

In 2012, the LA Regional Water Board issued a new MS4 stormwater permit in accordance with the NPDES permit pursuant to the CWA. That MS4 permit enacted some of the strictest permit standards with more than 30 pollutants being monitored. The total cost of compliance with the MS4 permit for the County of Los Angeles exceeds $20 billion.

Southern California cities have some of the most expensive MS4 compliance costs nation-wide. The City of Industry cites its annual costs at $476,261,000. The City of Monrovia has estimated its cost to address stormwater would result in an annual parcel cost of $1,334 for 30 years. The City of Carson estimates its cost of addressing stormwater will consume an amount equivalent to more than 13% of its operating budget for the first ten years.

Compliance is critical for protecting public health and the environment, but fines for non-compliance can add up, making compliance even more costly. Federal and state law allows Regional Water Boards to levy fines for non-compliance.

According to the LA Regional Water Board, failure to comply with the MS4 Permit conditions could result in the following non-compliant fines: mandatory minimum $3,000/day per violation, and can go up to a maximum of $10,000/day; and, maximum $25,000/day per violation if imposed by state court.

Furthermore, violations of federal CWA can be enforced by US EPA, and federal penalties could reach $37,500/day.

Existing efforts to make resources available: Over the last decade, the Legislature has recognized that assistance to local governments to fund stormwater projects was warranted. The state has provided funding through grants to local governments through bond funding and other programs. Funds through loan programs would also have been available, but as most local governments do not have designated fees for stormwater to repay loans, no loans have been made. Stormwater projects were eligible for funds from bonds as follows:

- The Clean Water, Clean Air, Safe Neighborhood Parks, and Coastal Protection Act of 2002 (Proposition 40) provided the State Water Board with $15 million for Urban Storm Water grants;

- The Safe Drinking Water, Water Quality and Supply, Flood Control, River and Coastal Protection Bond Act of 2006 (Proposition 84) made $90 million available to the State Water Board for matching grants to local public agencies for the reduction and prevention of stormwater contamination of rivers, lakes, and streams; and,

- The Water Quality, Supply, and Infrastructure Improvement Act of 2014 (Proposition 1) authorized $200 million to the State Water Board for providing matching grants to public agencies, nonprofit organizations, public utilities, state and federally recognized Indian tribes, and mutual water companies for multi-benefit stormwater projects.

Despite these funding opportunities, the State Auditor has found that because of the significant costs to address stormwater pollution, the demand for grants from the state for stormwater projects has far exceeded the funding available. In 2016, the State Water Board received grant applications requesting $322 million, and it awarded $105 million for 27 projects.

Why additional resources are needed: In spite of the aforementioned funding sources, local governments need more assistance to comply with stormwater requirements. Many jurisdictions in Southern California are struggling to comply with new standards and upcoming enforcement of MS4 permits. While Proposition 1 most recently offered funds to help, the cost remains prohibitive for some municipalities.

Financial Capability Assessments (FCA): An FCA is an analysis of a community's ability to pay for/deliver water services, with a focus on stormwater and wastewater requirements. FCAs consider a wide range of financial capacity factors, including residential capability (e.g. median household income or MHI) and the financial strength of permittee organization. Financial strength considers bond ratings, debt, MHI, unemployment rate, tax revenue, and property tax rates.

Determining compliance affordability: AB 2538 requires the State Water Board to establish FCA guidelines for MS4 permittees that are adequate and consistent when considering the costs to local jurisdictions, and specifies US EPA policies to consider when drafting the FCA guidelines.

A long-standing concern for local governments is the US EPA's process for evaluating how much communities can afford for CWA-mandated and other water infrastructure improvements. For communities to meet CWA requirements, affordability considerations can influence schedules established by US EPA and states. In assessing municipalities' capability to finance infrastructure upgrades, the US EPA relies significantly on guidance issued in 1997.

That guidance, *Combined Sewer Overflows—Guidance for FCA and Schedule Development,* is intended to provide general boundaries to aid the US EPA, states, and cities in negotiating reasonable and effective schedules for implementing infrastructure upgrades.

It uses a two-phase approach to assess financial capability. First, the US EPA identified the combined impact of wastewater and control costs on individual households, calculating average costs per household as a percentage of the local MHI. This phase analyzes the residential share of current and planned controls needed to meet CWA requirements using a value range of whether the costs impose a "low" (less than 1% of MHI), "mid-range" (1%-2% of MHI), or "high" (more than 2% of MHI) financial impact on residential users, yielding a Residential Indicator. Second, the US EPA develops Financial Indicators to evaluate the debt, socioeconomic, and financial conditions that affect the community's financial capability as "weak," "mid-range," or "strong." The combined indicators measure a community's ability to afford compliance with CWA regulations.

For several years, municipalities have urged the US EPA to revise the guidance, arguing that it should take into consideration a larger set of factors and that MHI is a misleading indicator of a community's ability to pay. In some cases, local governments have argued cost impacts for an entire community may be in the US EPA's "mid-range," although impacts in portions of the community (e.g., low-income neighborhoods) are more than 2% of MHI. Alternative household affordability metrics could include average water rates as a percentage of income for potentially vulnerable populations, or expected future water rate increases, or using other indicators of economic need such as the unemployment rate or poverty rate, or percentage of households

receiving public assistance. Further, they say that affordability should be tailored to each local government.

Permit requirements have changed since 1997, as well as compliance technologies and wherewithal, making this report from over twenty-years ago seem dated to include in the citations the State Water Board is required to consider under this bill; yet, the US EPA has repeatedly insisted that it is not necessary to revise this guidance, stating that it already provides flexibility for financially disadvantaged municipalities.

According to the March 2017 report prepared by the Congressional Research Service, [*US EPA*] *Policies Concerning Integrated Planning and Affordability of Water Infrastructure,* pressed by state and local municipalities about the financial challenges that they face in addressing needs for wastewater and stormwater control projects, in 2012 the US EPA issued an integrated permitting and planning policy. The intention of the policy is to provide communities with flexibility to prioritize and sequence needed water infrastructure investments so that limited public dollars can be invested in ways that each municipality finds most valuable.

That report notes that, in determining affordability, municipalities can factor in the costs to manage stormwater flows, along with combined sewer overflows and wastewater treatment. The 1997 guidance, however, did not include specific consideration of stormwater.

State Audit on costs of stormwater regulation: On March 1, 2018, the California State Auditor released Report 2017-118, *State and Regional Water Boards: They Must Do More to Ensure That Local Jurisdictions' Costs to Reduce Storm Water Pollution Are Necessary and Appropriate*, and found the following:

- When imposing stormwater requirements, the State Water Board and the Regional Water Boards lack consistent information on the costs that local jurisdictions incur in complying with storm water requirements, and have not adequately considered the costs that local jurisdictions would incur to comply with these requirements.

- Federal regulation requires local jurisdictions to annually report their actual and projected costs for meeting storm water requirements to the regional boards. However, the State Water Board has not provided guidance to local jurisdictions on how to track or report their storm water management expenditures, and as a result, the costs that local jurisdictions reported have been inconsistent.

- The Regional Water Boards did not always consider the overall cost of storm water management that local jurisdictions paid.

- The Regional Water Boards did not obtain all relevant information on some water bodies before imposing storm water requirements, potentially resulting in local jurisdictions incurring excessive costs or failing to meet water quality goals. Obtaining this information is important, as it can have a substantial effect on the pollutant control plans the regional board ultimately develops.

Need for the bill: AB 2538 is responsive to the findings of the aforementioned State Audit report.

The bill finds and declares that, "A FCA is necessary to set achievable schedules for water quality objectives in water quality control plans under the Porter-Cologne Water Quality Control Act (Division 7 (commencing with Section 13000) of the Water Code) and to develop integrated regional water management plans."

A 2017 US EPA presentation, *Financial Capability Assessments & Stormwater Finance Plans*, stated that Porter-Cologne is vague about consideration of economic factors. While California is governed by the 1969 Porter-Cologne Act, it is not subject to direct regulation by the US EPA; therefore, US EPA's FCA does not apply to California.

The San Gabriel Valley Council of Governments (SGVCOG), which is a joint powers authority comprised of 31 cities, three Los Angeles County Supervisorial Districts, and three Municipal Water Districts located in the San Gabriel Valley of Southern California, unanimously adopted Resolution 18-02 laying out their stormwater legislative agenda for the year. One element of that agenda addresses FCA: "Modify the Porter-Cologne Water Quality Control Act to adopt FCA guidance issued by the EPA, in order to address the total cost of all water and stormwater regulations on municipalities and households." SGVCOG argues that FCA should be codified in federal law and extended to states not directly governed by the US EPA.

Short of that, and short of requiring FCA in California law, AB 2538 would compel the creation of FCA guidelines for compliance with MS4 permit holders that take costs of compliance mechanisms into consideration.

Putting state FCA guidelines into practice: AB 2538 would require the LA Regional Water Board to use the guidelines developed by the State Water Board in a pilot project conducted to assess if a financial capability analysis can be effectively used to help municipalities to implement a MS4 permit.

Committee amendments:

1) The bill includes a blank space in section (a) where a date should be included by which the State Water Board should complete its FCA guidelines. Given the availability of federal resources, the Committee may wish to consider filling in that blank with July 1, 2019.

   On this amendment, the author may wish to consider working with the State Water Board to determine a timeframe that may be better suited to the State Water Board's workload, should they need more or less time, and whether that guidance can be incorporated in the development of permit conditions in the next permit cycle up for renewal.

2) There is no mandated timeline in section (b) under which the LA Regional Board must do the pilot project. The Committee may wish to consider clarifying that the LA Regional Water Board shall initiate the pilot project within 60 days of completion of the State Water Board's FCA guidelines.

Related legislation: Last year, the Legislature considered SB 589 (Hernández, 2017) to require the State Water Board to establish FCA guidelines by an unspecified date and require the Los Angeles Regional Water Board to use the guidelines in a pilot project conducted by an independent or educational entity for assessing the financial capability of municipalities to implement a MS4 permit. That bill was held in Senate Appropriations Committee.

REGISTERED SUPPORT / OPPOSITION:

Support

City of Glendora
Engineering Contractors' Association
San Gabriel Valley Council of Governments

Opposition

None on file

Analysis Prepared by: Paige Brokaw / E.S. & T.M. /

Date of Hearing: April 10, 2018

ASSEMBLY COMMITTEE ON ENVIRONMENTAL SAFETY AND TOXIC MATERIALS
Bill Quirk, Chair
AB 2787 (Quirk) – As Amended April 3, 2018

SUBJECT: Lead fishing weights and sinkers

SUMMARY: Prohibits, on and after January 1, 2025, a person from manufacturing, selling, or purchasing a fishing weight or sinker in California, if it is less than 50 grams in mass and contains more than 0.1 percent lead by weight. Specifically, **this bill**:

1) Prohibits, on and after January 1, 2025, a person from manufacturing, selling, or purchasing a fishing weight or sinker in California, that has no cross section greater than or equal to two centimeters in length, is less than 50 grams in mass and contains more than 0.1 percent lead by weight.

2) Requires the Department of Toxic Substances Control (DTSC), if it identifies an alternative to lead used in fishing weights under the Safer Consumer Products Program (Program), to subject that alternative to an evaluation process under the Program to determine how to best limit exposure or to reduce the level of hazard posed by the alternative.

EXISTING LAW:

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

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

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

4) Requires DTSC, on or before January 1, 2011, to adopt regulations to establish a process to identify and prioritize those chemicals or chemical ingredients in consumer products that may be considered a chemical of concern. (HSC § 25252 (a))

5) Requires DTSC, on or before January 1, 2011, to adopt regulations to evaluate chemicals of concern and their potential alternatives in consumer products and to determine how best to limit exposure or to reduce the level of hazard posed by the chemical of concern in the product. (HSC § 25253(a)(1))

6) Authorizes DTSC to take specified regulatory actions to limit exposure or to reduce the level of hazard posed by a chemical of concern. (HSC § 25253(b))

FISCAL EFFECT: Unknown.

COMMENTS:

Need for the bill: According to the author,

> "Lead is a commonly used metal in fishing weights due to its high density, malleability, and low cost. However, lead is also highly poisonous to both human and animals. Starting in the 1980s studies have looked at the impact discarded lead fishing weights have on resident animal populations. These studies found significant evidence linking consumption of discarded fishing weights to lead toxicosis and animal mortality.
>
> Since 1987 lead has been listed under Proposition 65 as carcinogenic and reproductive toxin. It has been banned from a variety of products, including ammunition, paint, gasoline and children's toys. In 2008 the Office of Environmental Health Hazard Assessment has issued a guideline to measure lead exposure to anglers from fishing tackle. The methodology in the guideline makes clear that anglers can be exposed to amounts of lead in excess of safe exposure recommendations.
>
> AB 2787 would bring California up to speed and ban lead fishing weights under 50 grams and with a cross section of less than 2 centimeters in any direction. Lead-free alternatives have been widely available in these jurisdictions in the decades since these bans were implemented."

Lead is a well-known toxin: Lead has been listed under California's Proposition 65 since 1987 as a substance that can cause reproductive damage and birth defects and has been listed as a chemical known to cause cancer since 1992. According to the Office of Environmental Health Hazard Assessment, lead has multiple toxic effects on the human body. Decreased intelligence in children and increased blood pressure in adults are among the more serious non-carcinogenic effects. There is no level of lead that has been proven safe, either for children or for adults.

The CDC found, based on the U.S. Census Bureau 2010 count of the number of children between the ages of 1 and 5 years old, that approximately 2.6% of U.S. children in that age group have high levels of lead in their blood (blood lead levels $\geq$ 5 micrograms per deciliter (µg/dL)).

Exposure to lead can seriously harm a child's health. Even a slight elevation in blood levels can reduce IQ and stunt development. Millions of children are being exposed to lead in their homes through aging lead-based paint, increasing their risks for damage to the brain and nervous system, slowed growth and development, learning and behavior problems, hearing, and speech problems.

The Centers for Disease Control and Prevention's (CDC) 2012 Advisory Committee on Childhood Lead Poisoning Prevention statement, *Low Level Lead Exposure Harms Children: A Renewed Call for Primary Prevention,* found that the adverse health effects of blood lead levels less than 10 µg/dL in children extend beyond cognitive function to include cardiovascular, immunological, and endocrine effects.

The California Green Chemistry regulation: The California legislature passed, and Governor Schwarzenegger signed, the Green Chemistry law AB 1879 (Feuer, Chapter 559, Statues of

2008) and SB 509 (Simitian, Chapter 560, Statues of 2008) in 2008. The law authorizes and requires DTSC to adopt regulations to identify and prioritize chemicals of concern in consumer products, and their possible alternatives, and to take regulatory action to best protect people and the environment. In response, DTSC promulgated the Safer Consumer Products Regulations. According to DTSC, the regulations provide for a continuous, four-step, science-based, ongoing process to identify safer consumer product alternatives. DTSC describes the process as follows:

1) Candidate Chemicals – The regulations establish a list of candidate chemicals (approximately 1,200) based on the work of authoritative organizations, and specify a DTSC process to add to the list. Candidate chemicals have at least one quality that can cause harm to people or the environment (called a hazard trait).

2) Priority Products – Priority products are consumer products that contain one or more candidate chemical. An initial list of three product-chemical combinations was released on March 13, 2014, and on July 15, 2016, DTSC proposed to list Children's Foam-Padded Sleeping Products containing the flame retardants TDCPP and TCEP as a priority product. Before a priority product is finalized, it goes through the rulemaking process, which may take up to one year. Sixty days after a priority product is finalized, responsible entities, e.g., manufacturers will need to submit priority product notifications.

3) Alternatives Analysis – The regulations require responsible entities (manufacturers, importers, assemblers, and retailers) to notify DTSC when their product is listed as a priority product. DTSC will post this information on its web site. Priority product manufacturers (or other responsible entities) must perform an alternatives analysis on the product's candidate chemicals to determine how to limit exposure to, or reduce the level of, public health and/or environmental harm.

4) Regulatory Responses – The regulations require DTSC to identify and implement regulatory responses that will protect public health and/or the environment, and maximize the use of acceptable and feasible alternatives. DTSC may require regulatory responses for a priority product if the manufacturer decides to keep the chemical, or for an alternative chemical replacement selected.

Fishing and angling equipment in DTSC Workplan: DTSC's 2015-2017 Priority Product Workplan (Workplan) includes fishing and angling equipment. This is important because DTSC cannot consider a product as a possible priority product unless it is within their Workplan. According to the Workplan, "Recreational anglers fish in sensitive habitats such as lakes, rivers, streams, bays, and the ocean. More than one million Californians fish recreationally. Together, these anglers may lose a significant amount of fishing and angling equipment into the environment. Any hazardous chemicals in the equipment they lose can expose, and potentially harm, birds and other wildlife. Products in this category contain a variety of chemicals that appear on the Candidate Chemicals List, including metals such as lead, zinc, and copper. Of particular concern are products such as fishing weights and sinkers made from lead that are used to add weight to a fishing line, lure, or hook. Lead poisoning associated with the ingestion of lead fishing weights has been well documented in a variety of bird and animal species around the world, including swans, waterfowl, gulls, turtles, cranes, herons, and pelicans. We are most concerned about fishing weights and gear that might be consumed by water fowl due to characteristics of size, shape and density."

California laws banning/limiting lead in products: Over the years California has banned or greatly restricted the amount of lead in products. Below is a snapshot of some of those laws (lead paint and lead in gasoline were banned at the federal level):

1) Toxics in packaging (AB 455, Chu, Chapter 679, Statutes of 2003). Bans selling or promoting packaging that has cadmium, lead, mercury, and hexavalent chromium in exceedance of certain limits.

2) Lead in candy (AB 121, Vargas, Chapter 707, Statutes of 2005). Sets maximum allowable lead levels for candy and requires the California Department of Public Health to test the candy for the presence of lead.

3) Lead-containing jewelry (AB 1681, Pavley, Chapter 415, Statutes of 2006). Prohibits the sale of jewelry that does not meet specified lead content standards and provides processes for the oversight of jewelry manufactured or sold in California.

4) Lead-free plumbing parts (AB 1953, Chan, Chapter 853, Statutes of 2006). Tightens standards that replaced or new plumbing must meet in order to be considered "lead-free."

5) Lead wheel weights (SB 757, Pavley Chapter 614, Statutes of 2009). Prohibits a person from manufacturing, selling, or installing a wheel weight that contains more than 0.1 percent lead by weight and enacts civil and administrative penalties for violations of the prohibition.

6) Glass beads (AB 1930, De La Torre Chapter 368, Statutes of 2010). Prohibits the manufacture, sale, offering for sale, or offering for promotional purposes of glass beads containing arsenic or lead above a specified level if those beads will be used with blasting equipment.

Non-lead ammunition required in California: Assembly Bill 711 (Rendon, Chapter 742, Statutes of 2013) requires the use of non-lead ammunition when taking any wildlife with a firearm in California. This law required the Fish and Game Commission (Commission) to adopt regulations that phase-in the statute's requirements and require it to be fully implemented by July 1, 2019.

In April 2015, the Commission adopted regulations, which will implement the non-lead requirement in the following three phases:

1) Phase 1 – Effective July 1, 2015, non-lead ammunition required when taking Nelson bighorn sheep and all wildlife on state wildlife areas and ecological reserves.

2) Phase 2 – Effective July 1, 2016, non-lead shot required when taking upland game birds with a shotgun, except for dove, quail, snipe, and any game birds taken on licensed game bird clubs. In addition, non-lead shot required when using a shotgun to take resident small game mammals, furbearing mammals, nongame mammals, nongame birds, and any wildlife for depredation purposes.

3) Phase 3 – Effective July 1, 2019, non-lead ammunition will be required when taking any wildlife with a firearm anywhere in California.

Proposed Rule by the United States Environmental Protection Agency (US EPA) banning lead fishing weights and sinkers: In 1994, the United States Environmental Protection Agency (US EPA) proposed a rule that would prohibit the manufacture, processing, and distribution of smaller size fishing sinkers containing lead and zinc. Though not adopted, the US EPA did a very extensive analysis of the impacts of lead fishing weights and sinkers.

On October 20, 1992, the US EPA received a petition to initiate rulemaking proceedings to require that the sale of lead fishing sinkers be accompanied by an appropriate label or notice warning that such products are toxic to wildlife. The US EPA granted the petition; however, the US EPA concluded that a labeling provision would not adequately address the risk of injury to waterfowl and other birds (water birds) from ingestion of lead fishing sinkers. In addition, the US EPA found that zinc fishing sinkers adversely affect water birds, and can cause mortality. Therefore, the US EPA issued a proposed rule to prohibit the manufacturing, processing, and distribution in commerce in the United States of certain smaller size fishing sinkers containing lead and zinc, and mixed with other substances, including those made of brass. The US EPA based this proposed regulatory action on a number of factors such as the scientific evidence regarding the toxicity of lead and zinc, exposure to fishing sinkers, the economic consequences of the rule as proposed, and availability of substitutes.

Extremely low amounts of lead and zinc adversely affect water birds. Lead causes damage to the liver, kidney and central nervous system, and adversely affects reproduction and growth in water birds. Zinc is also toxic to water birds and can damage the central nervous system. Not only would the proposed rule serve to reduce risks posed to water birds, but it would also assist in reducing human health risk to home manufacturers of lead fishing sinkers.

While the US EPA has not analyzed the risks to human health due to the manufacture of lead fishing sinkers at home, the health effects of lead are well documented. Lead can cause learning disabilities in children, miscarriages, and may contribute to hypertension or high blood pressure. Persons who make lead sinkers at home may receive harmful exposures during the melting and pouring of lead through the inhalation of dust or vapors.

US EPA identifies viable affordable alternative: The US EPA did not believe that the use of lead- and zinc-containing sinkers is essential. Several available or commercially viable substitutes for lead and zinc sinkers exist that are less toxic to water birds (e.g., bismuth, tin, antimony, steel, and tungsten). The economic impact (purchase price of sinkers) of the proposed regulation on consumers is estimated to be less than $4.00 for the average angler per year. This is minimal in comparison to other fishing expenditures, such as rods, reels, licenses, etc.

Washington Department of Fish and Wildlife Study of Fish and Wildlife: In 2006 the Washington Department of Fish and Wildlife released a study, "Issues Related to the Use of Lead Fishing Gear". According to the study, "There is growing concern about the amount of lead that is deposited into our environment by various means. Federal laws have addressed what appear to be the most common pathways. The manufacture of paint with high levels of lead was banned in 1978, and leaded gasoline was banned in the mid-1980s. But problems persist, and a recent New York Times article (January 17, 2006) states that about 25% of our nation's children are still exposed to lead in their homes and more than 400,000 each year are found to have amounts of lead in their bodies that are hazardous to normal mental and physical development. Workers in the metals trades are still at risk – as recently as 1998, over 320,000 workers in the U.S. were exposed to lead (Needleman, 2004). Another more recent area of concern is the lead

deposited into the environment from hunters and fishers in the form of lead shot and lead fishing tackle. Although many different species of birds, reptiles, and small mammals are known to have died from ingesting lead, studies have shown that birds are very susceptible to lead poisoning because the grinding action of their gizzards releases the toxic metal directly into their bloodstream. Loons are the birds most likely to ingest lead fishing tackle, and one lead sinker or lead jig can kill a loon. Several countries have enacted laws banning or limiting the use of lead fishing tackle. Several U.S. states also have passed laws, often based limiting the use of small lead sinkers or jigs that are more likely to be swallowed."

There have been several studies highlighting the potential adverse effects of lead fishing weights and sinkers on wildlife. However, there have not been any studies done in California. Given the negative health effects of lead on humans and wildlife it is important to investigate the impacts of lead fishing weights and sinkers on California wildlife. The author and Committee may wish to consider directing the Department of Fish and Wildlife, along with DTSC and the State Water Resources Board, to look into this issue further and report back to the Legislature.

REGISTERED SUPPORT / OPPOSITION:

Support

Alameda Creek Alliance
Center for Biological Diversity
Center for Public Environmental Oversight
Clean Water Action
Environmental Working Group
Ohlone Audubon Society, Inc.
Physicians for Social Responsibility San Francisco Bay Area Chapter
Turtle Island Restoration Network
Ventana Wilderness Alliance

Opposition

American Sportfishing Association
California Aquaculture Association
California Association of Harbor Masters and Port Captains
California Association for Recreational Fishing
California Chamber of Commerce
California Parks Company
California Parks Hospitality Association
California Sportfishing League
California Sportsman's Lobby
California Yacht Broker's Association
California Yacht Marina
Coastal Conservation Association of California
Coastside Fishing Club
Congressional Sportsmen's Foundation
Coyote Bait and Tackle
Dana Wharf Sportfishing and Whale Watching
Los Angeles Rod and Reel Club

Mammoth Lakes Tourism
Marina Recreation Association
National Federation of Independent Business
National Marine Manufacturers Association
Oceanside Senior Anglers, Inc.
Outdoor Sportsmen's Coalition of California
San Diego County Wildlife Federation
Safari Club International
Safe Harbor Marinas
Tehama County Board of Supervisors
United Pier and Shore Anglers of California
Western Boaters Safety Group
7 individuals

As well as over 5,500 signatures in opposition submitted to online petition circulated by the California Sportfishing League and Coastal Conservation Association of California

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

Date of Hearing: April 24, 2018

ASSEMBLY COMMITTEE ON ENVIRONMENTAL SAFETY AND TOXIC MATERIALS
Bill Quirk, Chair
AB 2816 (Muratsuchi) – As Amended April 16, 2018

SUBJECT: Pesticides: schoolsites

SUMMARY: Requires the Department of Pesticide Regulation (DPR) to submit a report to the Legislature that evaluates the implementation and effect of specified provisions of the Healthy Schools Act of 2000 and that recommends whether one or more pesticides should be banned for use at schoolsites. Specifically, **this bill**:

1) Requires DPR, on or before January 1, 2020, to submit a report to the Legislature that does both of the following:

   a) Evaluates the implementation and effect of the provisions of Senate Bill (SB) 1405 (DeSaulnier, Chapter 848, Statutes of 2014), which amended the Healthy Schools Act of 2000; and,

   b) Recommends whether one or more pesticides should be banned for use at schoolsites.

2) Requires DPR, in determining whether a pesticide should be banned, to do both of the following:

   a) Consider what options are available to schoolsites to address an infestation for which the pesticide being considered to be banned is used; and,

   b) Consult with appropriate local, state, or federal agencies, stakeholders, and experts.

3) Sunsets the reporting requirement on July 1, 2020.

EXISTING LAW:

1) Provides that the purposes of California's pest control operations statute are to, among other things, provide for the proper, safe, and efficient use of pesticides essential for production of food and fiber and for protection of the public health and safety; protect the environment from environmentally harmful pesticides by prohibiting, regulating, or ensuring proper stewardship of those pesticides; and, encourage the development and implementation of pest management systems, stressing application of biological and cultural pest control techniques with selective pesticides when necessary to achieve acceptable levels of control with the least possible harm to nontarget organisms and the environment. (FAC § 11501)

Under the Healthy Schools Act of 2000 (HSA):

2) Establishes the HSA under the Education Code (EC) and the Food and Agricultural Code (FAC). (EC § 17608 and FAC § 13180)

3) Defines "school designee" or "IPM coordinator" (IPM stands for integrated pest management) as a schoolsite or school district employee identified by a schoolsite or school district to ensure that the requirements of the HSA are carried out. (EC § 17609 (e))

4) Defines "schoolsite" as any facility used for K-12 school purposes or used as a child day care facility, including the buildings or structures, playgrounds, athletic fields, vehicles, or any other area of property visited or used by students. Exempts postsecondary educational facilities attended by secondary pupils and private K-12 facilities from the definition. (EC § 17609 (f))

5) Provides that it is the policy of the state that effective, least-toxic pest management practices should be the preferred method of managing pests at schoolsites, and that the state, in order to reduce children's exposure to toxic chemicals, shall take the necessary steps to facilitate the adoption of effective, least-toxic pest management practices at schools. Establishes that it is the intent of the Legislature that all school personnel involved in the application of a pesticide at a schoolsite be trained in IPM and the safe use of pesticides in relation to the unique nature of schoolsites and children's health. (EC § 17610 and FAC § 13182)

6) Prohibits the use of a pesticide that has been granted conditional registration, an interim registration, or an experimental use permit by DPR, or if the pesticide is subject to an experimental registration issued by the United States Environmental Protection Agency (US EPA) as specified. (EC § 17610.1)

7) Exempts from the prohibition any pesticide product deployed in the form of a self-contained bait or trap; a gel or paste deployed as a crack and crevice treatment; a pesticide exempted from regulation pursuant to the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA, 7 U.S.C. Sec. 136 et seq.); and, antimicrobial pesticides, including sanitizers and disinfectants. (EC § 17610.5)

8) Requires schools to keep records for four years of all pesticides used at the schoolsite and requires this information to be made available to the public. (EC § 17611 (a))

9) Requires, if a schoolsite chooses to use a non-exempt pesticide, the school designee to submit to DPR a copy of the records of all pesticide use at the schoolsite for the calendar year. (EC § 17611 (b))

10) Requires, if certain pesticides are used at a schoolsite, a school designee to develop and post on a school's website an IPM plan. (EC § 17611.5)

11) Requires schools to annually provide a written notice to staff and parents with the name of all pesticide products expected to be applied at the school during the upcoming year. Requires schools to post a warning sign at each area of the schoolsite where pesticides will be applied. (EC § 17612)

12) Requires the school designee and any person, including staff, who intends to apply a non-exempt pesticide at a schoolsite to annually complete a training course provided by DPR. Requires the training course to include IPM and the safe use of pesticides in relation to the unique nature of schoolsites and children's health. (EC § 17614 (a) and FAC § 13186.5(a))

13) Requires any person hired to apply a non-exempt pesticide at a schoolsite to complete at least a one-hour training course in IPM and the safe use of pesticides in relation to the unique nature of schoolsites and children's health before applying pesticides at a schoolsite and during each subsequent licensing period. (EC § 17614 (b) and FAC § 13186.5(b))

14) Defines, as it relates to school facilities and child day care facilities, "integrated pest management" (IPM) as a pest management strategy that focuses on long-term prevention or suppression of pest problems through a combination of techniques such as monitoring for pest presence and establishing treatment threshold levels, using nonchemical practices to make the habitat less conducive to pest development, improving sanitation, and employing mechanical and physical controls. Provides that pesticides that pose the least possible hazard and are effective in a manner that minimizes risks to people, property, and the environment, are used only after careful monitoring indicates they are needed according to pre-established guidelines and treatment thresholds. (FAC § 13181)

15) Requires DPR to promote and facilitate the voluntary adoption of IPM programs for schoolsites and child day care facilities, excluding privately operated child day care facilities. (FAC § 13183 (a) and (b))

16) Requires DPR to develop a training course to train any person who intends to apply pesticides on a schoolsite. Requires the training course to cover IPM and the safe use of pesticides in relation to the unique nature of schoolsites and children's health. (FAC § 13183 (c))

17) Requires DPR to establish an IPM training program in order to facilitate the adoption of a model IPM program and least-hazardous pest control practices by schoolsites. (FAC § 13185)

18) Requires DPR to prepare a school pesticide use form to be used by licensed and certified pest control operators when they apply any pesticides at a school. (FAC § 13186)

FISCAL EFFECT: Unknown.

COMMENTS:

Need for the bill: According to the author,

> "Under current law, the least toxic pest management practices are the preferred method of managing pests at school sites. A 2010 CA Department of Pesticide Regulation (DPR) survey revealed that most schools using these practices found them to be more effective and no more costly than the conventional practices they had used in the past. The last survey in 2010 survey found that 40 percent of school districts continue to use high-exposure methods for treating weed problems, and only 60 percent use low-exposure baits for ant management.
>
> In 2017 the Palos Verdes Peninsula School District suspended the use of chemicals and pesticides at several schools. Concerned parents reported to the district that students showed symptoms that included rashes and difficulty breathing. The district decided to suspend pesticide use due to health concerns.

Pesticides cause a variety of health problems. According to the U.S. Environmental Protection Agency, "adverse effects of pesticide exposure range from mild symptoms of dizziness and nausea to serious, long-term neurological, developmental and reproductive disorders." Further, the Agency states, "There are 'critical periods' in human development when exposure to a toxin can permanently alter the way an individual's biological system operates."

The National Academy of Sciences reports that children are more susceptible to chemicals than adults and estimates that 50% of lifetime pesticide exposure occurs during the first five years of life. Pesticides can increase susceptibility to certain cancers, by breaking down the immune system's surveillance against cancer cells. Infants and children, the elderly, and the chronically ill are at greatest risk from chemically-induced immune suppression.

Children are more exposed to pesticides than adults and are more susceptible to pesticides than adults since their bodies are growing and developing. AB 2816 ensures children are protected from exposure to highly toxic pesticides on school sites."

Pests in schools: Pests such as insects, rodents, fungi, and weeds can affect the school environment and the people who work and learn there. While pests can be found in many places in and around schools, common habitats for pests include cafeterias, classrooms, lockers, gyms, locker rooms, dumpsters, landscapes, school grounds, and athletic fields. Pests can cause human health problems, structural damage, and plant damage.

The US EPA notes that by using IPM instead of solely relying on extensive pesticide applications, schools can reduce pest populations and reduce the use of pesticides, making schools safer for children and for school personnel. Schools can reduce pest infestations by identifying and removing conditions that will attract pests.

Risks of pesticide exposure: The US EPA reports that the adverse effects of pesticide exposure range from mild symptoms, such as dizziness and nausea, to serious, long-term effects, including neurological, developmental, reproductive, endocrine disrupting, and carcinogenic effects. According to the American Medical Association, pesticide poisoning is a commonly under-diagnosed illness, as it can resemble acute upper respiratory tract illness, conjunctivitis, gastrointestinal illness, and many other conditions.

Children and pesticide exposure: According to the American Academy of Pediatrics (AAP), children encounter pesticides daily and have unique susceptibilities to their potential toxicity. While acute pesticide poisoning risks are clear, an understanding of chronic health implications from both acute and chronic exposure to pesticides is emerging. Epidemiologic evidence demonstrates associations between early life exposure to pesticides and pediatric cancers, neurobehavioral and cognitive deficits, and asthma. Related animal toxicology studies provide supportive biological plausibility for these findings.

The AAP notes that children encounter pesticides daily in air, food, dust, and soil and on surfaces through home and public lawn or garden application, household insecticide use, application to pets, and agricultural product residues. For many children, diet may be the most influential source of pesticide exposure. In agricultural settings, pesticide spray drift may impact residences near treated crops or by take-home exposure on clothing and footwear of agricultural workers. Teen workers may have occupational exposures on the farm or in lawn care. Heavy

use of pesticides may also occur in urban pest control. Schools and day care facilities are another location where children may encounter pesticides. Children's exposures to pesticides should be limited as much as possible.

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

California law (FAC §13181) defines IPM, as it relates to school facilities and child day care facilities, as a pest management strategy that focuses on long-term prevention or suppression of pest problems through a combination of techniques such as monitoring for pest presence and establishing treatment threshold levels; using nonchemical practices to make the habitat less conducive to pest development; improving sanitation; and, employing mechanical and physical controls. The law provides that pesticides that pose the least possible hazard and are effective in a manner that minimizes risks to people, property, and the environment are to be used only after careful monitoring indicates they are needed according to pre-established guidelines and treatment thresholds.

Pest management in schools: The USEPA reports that preventive pest control measures are easy to implement and often improve the overall maintenance of the school. These measures can include: restricting where food is eaten; moving dumpsters and food disposal containers away from the school; repairing and maintaining leaking pipes, pressure cleaning food service areas; sealing cracks and crevices; instituting sanitation measures; cleaning gutters and directing water flow away from buildings to prevent saturation; and, educating students and staff about how their actions affect pest management and control.

The USEPA adds that in addition to adopting preventive measures, the IPM approach includes evaluating a school's pest management practices and choosing lower-risk methods of pest removal and prevention. When developing an IPM program, schools should consider methods that minimize health risks to humans and the environment; minimize disruption of the natural, outdoor environment; are least-toxic to species that are not pests; prevent a recurrence of the pest infestation; are safe and easy to apply effectively; and, are cost-effective.

History of the Healthy Schools Act (HSA): The HSA of 2000 (AB 2260, Shelley, Chapter 718, Statutes of 2000) aims to reduce children's exposure to pesticides in schools through the schools' voluntary adoption of IPM and least-toxic methods of pest control. The HSA was amended in 2005 (AB 405, Montanez, Chapter 566, Statutes of 2005) to prohibit the use of certain pesticides at schools and public child day care facilities. In 2006, AB 2865 (Torrico, Chapter 865, Statutes of 2006), expanded the requirements in the HSA to also include private child day care facilities. In 2014, SB 1405 (DeSaulnier, Chapter 848, Statutes of 2014) built upon the HSA by requiring a school designee to post on the Internet Web site of a schoolsite an IPM plan if certain pesticides are used; requiring online notification of pesticide use at schools; requiring schools to submit pesticide use information to DPR; requiring DPR to create a school IPM training course; and, requiring individuals applying pesticides at schoolsites to complete an annual IPM training.

The HSA: The goals of the HSA are to address the health and environmental concerns associated with the use of pesticides at schools and child care centers and to assure healthy learning environments for California children. DPR is charged with carrying out the HSA.

The HSA provides that it is the policy of the state that effective, least-toxic pest management practices should be the preferred method of managing pests at schoolsites, and that the state, in order to reduce children's exposure to toxic chemicals, shall take the necessary steps to facilitate the adoption of effective least-toxic pest management practices at schools. The best way to illustrate the HSA in more detail is to list the requirements for public K–12 schools, public and private child care centers, and employer-sponsored child care centers. These requirements include:

1) Designating a district employee who will make sure the requirements of the HSA are met when pesticides are used in the district;

2) Developing, if a school chooses to use a non-exempt pesticide, an IPM plan using the DPR IPM Plan template or its own school district IPM plan, approved by DPR, and posting the IPM plan on the district website;

3) Sending parents, guardians, and staff a written notification of pesticides expected to be applied at district schools during the year;

4) Establishing a registry for all interested parents, guardians, and staff to sign up and receive notifications of individual pesticide applications;

5) Posting signs where pesticides will be applied;

6) Keeping records of pesticide applications made by district staff and pest management contractors for at least four years;

7) Sending pesticide use reports for pesticide applications made by district staff to DPR at least once per year;

8) Never using prohibited pesticides; and,

9) Ensuring that the IPM coordinator and any person who applies any pesticide (including exempt pesticides) on school grounds completes the required IPM training (annually for district staff and during each licensing period for professional applicators).

The HSA includes additional requirements for DPR, including promoting and facilitating the voluntary adoption of IPM programs for schoolsites and child day care facilities; developing a training course on IPM and the safe use of pesticides in relation to the unique nature of schoolsites and children's health for any person who intends to apply pesticides on a schoolsite; establishing an IPM training program; and, preparing a school pesticide use form to be used by licensed and certified pest control operators when applying pesticides at a school.

Schoolsite compliance with the requirements of the HSA: The most recent, readily available data available on school compliance with HSA statute are the results of a 2010 DPR school district

survey (day care centers were surveyed separately). This survey was performed prior to the enactment of SB 1405 (DeSaulnier, Chapter 848, Statutes of 2014), which expanded the requirements of the HSA. As a result of the survey, DPR reported that almost all reporting school districts posted the required warning signs and notified families and staff annually of expected pesticide use. Eighty-seven percent annually provided staff and parents with written notification of expected pesticide use at their school. Roughly three-quarters of districts maintained a list of parents who wanted notification about specific pesticide applications, and two-thirds maintained school site records of all pesticides used for at least four years. Despite the law being in place since 2001, not all districts complied with all of the requirements of the HSA. The survey found that three factors significantly predict better compliance with the HSA in 2010 by school districts: attending DPR's IPM training; contracting for pest management by licensed professionals; and, employing more experienced IPM coordinators.

Child care facility compliance with the HSA: The most recent, readily available data available on child care facility compliance with HSA statute are the results of a 2013 DPR child care facility survey. This survey was performed prior to the enactment of SB 1405 (DeSaulnier, Chapter 848, Statutes of 2014), which expanded the requirements of the HSA. As a result of the survey, DPR reported that only one-third of centers responding to the survey said that they always sent annual notification of pesticide use to parents. Less than one half of centers required to post warning signs for the use of high exposure potential pesticides actually posted the signs. Approximately half of responding centers reported that they received advance notice from pest management providers and property owners who applied pesticides at the center and only 17% of centers had a registry of parents for pesticide use notification. Less than one-half of centers using high exposure potential pesticides kept written records of pesticide applications. DPR ultimately concluded that the survey results indicate that, at the time, most child care centers were still not following the HSA requirements.

This bill seeks to strengthen the protection of children and school staff from pesticide exposure at schools and day care facilities by requiring DPR to draft and submit a report to the Legislature that evaluates the implementation and effect of the specified provisions of the HSA and recommends whether one or more pesticides should be banned for use at schoolsites.

Arguments in support: A coalition of supporters argues, "A growing body of scientific evidence indicates that even some of the most ubiquitous and unrestricted pesticides may have a terrible impact on children's health. We are especially concerned about the widespread use of glyphosate (marketed as Roundup) as a weed killer in public spaces, including schools. New evidence of glyphosate's carcinogenicity has led some California school districts to ban its use on campus. There is also growing concern over the pesticide aluminum phosphide (marketed as Fumitoxin), which continues to be used for gopher control on school athletic fields despite numerous exposure incidents in which young children have been sickened, most recently in the Palos Verdes Peninsula… As parents learn about the potential for harm caused by chemicals to which their children are routinely exposed, and start to connect the dots with the health impacts they face in their own families, they are increasingly joining together to ask that schools take steps to keep school campuses safe. AB 2816 would require close and public evaluation of such protections to all children."

The California Teachers Association writes in support, "...children with asthma and allergies are adversely impacted because of the use of toxic pesticides around their classrooms and at their school sites. Additionally, we know the use of toxic pesticides adversely impacts air pollution. And, lastly, the use of non-hazardous pesticides results in fewer workplace-related employee absences."

Arguments in opposition: Opponents, in a joint letter, argue, "All products proposed for registration in California must be supported by scientific data. Prior to registering any pesticide product for use in California, DPR reviews extensive data on product performance, along with human health and ecological risks... After registration, DPR continues to evaluate products through a variety of programs including, pesticide illness surveillance, human exposure monitoring, air and water monitoring, and more... DPR also has authority to initiate a risk assessment, which is a process designed to answer questions about how toxic a chemical is, what exposure results from its various uses, what is the likelihood that use will cause harm, and how to characterize that risk... DPR has express authority to cancel, suspend, or refuse to register any pesticide in the state. DPR also has the authority to place any use restrictions or require any mitigation efforts for any products. The current bill language requires DPR to recommend "whether one or more pesticides" should be banned from use in schools. It is unnecessary, and potentially dangerous, to require DPR to report back to the legislature what pesticide should be banned, when they already have the authority to ban those pesticides without legislative oversight. If DPR were to find a product is so dangerous it should be banned from use in schools, they should initiate action on that information immediately, and not wait for the legislature to do so. It is also concerning that the language require DPR to recommend one or more pesticides, which suggests there is no option for DPR to report that no products need to be banned."

Previous related legislation:

1) SB 1405 (DeSaulnier, Chapter 848, Statutes of 2014). Requires a school designee to post on the website of a schoolsite an IPM plan if certain pesticides are used at a schoolsite; requires reporting of specified pesticide use at a schoolsite to DPR; and, requires individuals applying pesticides at schoolsites to complete IPM training, as specified.

2) SB 394 (DeSaulnier, 2011). Would have prohibited the indoor and outdoor use of pesticides on a schoolsite unless a local public health officer determined that a public health emergency existed requiring emergency application of a pesticide. This bill was referred to the Senate Committee on Rules where it died pursuant to Joint Rule 56.

3) SB 1157 (DeSaulnier, 2010). Would have required the adoption of an IPM program by all schools and required DPR to reimburse school districts for the costs of IPM training. The bill was vetoed by Governor Schwarzenegger with the following veto message:

> "While currently voluntary in state law, I support the policy of implementing integrated pest management programs at schools to the greatest extent possible. Unfortunately, I cannot support paying for this school program out of an alternative fund at DPR. To do so would start a dangerous precedent for finding unrelated revenue sources to fund, expand, or create K-12 programs outside of the Proposition 98 guarantee."

4) AB 2865 (Torrico, Chapter 865, Statutes of 2006). Expanded the HSA to include private child care facilities.

5) AB 1006 (Chu, 2003). Would have prohibited specified pesticides from being used in schools. The hearing in the Senate Agriculture and Water Resources Committee on this bill was cancelled at the author's request and the bill subsequently died on file.

6) AB 2260 (Shelley, Chapter 718, Statutes of 2000). Established the Healthy Schools Act of 2000.

Double referral: This bill passed out of the Assembly Committee on Education on a 6 – 0 vote on April 11, 2018.

Proposed amendments: The Committee may wish to consider amending the bill to require that the report includes an evaluation of the implementation of all of the provisions of the Healthy Schools Act of 2000 in the EC and the FAC, not just those provisions enacted by SB 1405; that the report includes a recommendation of whether one or more pesticides should be considered for restricted use or prohibition at schoolsites, instead of a recommendation of whether a pesticide should be banned; and, that potential public health and environmental impacts be considered when DPR is determining whether a pesticide should be considered for restricted use or prohibition at schoolsites.

REGISTERED SUPPORT / OPPOSITION:

Support

California Guild
California Rural Legal Assistance Foundation
California Teachers Association
Californians for Pesticide Reform
Center for Environmental Health
Center on Race, Poverty, and the Environment
Central California Environmental Justice Network
Monterey Bay Central Labor Council
Non Toxic Communities
Pesticide Action Network
Physicians for Social Responsibility – Los Angeles
Four individuals including Michelle Perro, MD

Opposition

American Chemistry Council
Household & Commercial Products Association
RISE
Western Plant Health Association

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

Date of Hearing: April 24, 2018

ASSEMBLY COMMITTEE ON ENVIRONMENTAL SAFETY AND TOXIC MATERIALS
Bill Quirk, Chair
AB 2934 (Mark Stone) – As Amended March 8, 2018

SUBJECT: Residential lead-based paint hazard reduction program: local health departments: certification

SUMMARY: Amends the Residential Lead-Based Paint Hazard Reduction Program to authorize the California Department of Public Health (CDPH) to authorize a local health department to implement and administer the certification program to certify individuals doing lead construction work.

EXISTING LAW:

1) Establishes the federal Lead-Based Paint Poisoning Prevention Act to create a prohibition against the future use of lead-based paint. (42 United States Code § 4851)

2) Establishes the United States Environmental Protection Agency's (US EPA) Lead-Based Paint Renovation, Repair and Painting (RRP) Rule to require workers to be certified and trained in the use of lead-safe work practices, and requires renovation, repair, and painting firms to be US EPA-certified. (Title 40 Code of Federal Regulations (CFR) § 745)

3) Establishes the Residential Lead-Based Paint Hazard Reduction Program to require any person offering lead-related construction courses to meet CDPH certificate requirements. (Health & Safety Code § 105250)

FISCAL EFFECT: Unknown.

COMMENTS:

Need for the bill: According to the author, "AB 2934 allows the California Department of Public Health to partner with counties to certify lead-paint inspectors. By allowing counties to administer this certification, more inspectors will be made available in counties that have identified a shortage of certified individuals. Without the ability to increase the amount of those able to inspect and perform the abatement of lead paint, homes will remain contaminated and a potential hazard. AB 2934 will provide the best path forward for those local jurisdictions that need more inspectors."

Lead is a well-known toxin: Lead has been listed under California's Proposition 65 since 1987 as a substance that can cause reproductive damage and birth defects and has been listed as a chemical known to cause cancer since 1992. According to the Office of Environmental Health Hazard Assessment, lead has multiple toxic effects on the human body. Decreased intelligence in children and increased blood pressure in adults are among the more serious non-carcinogenic effects. There is no level of lead that has been proven safe, either for children or for adults.

The Center for Disease Control and Prevention (CDC) found, based on the U.S. Census Bureau 2010 count of the number of children between the ages of 1 and 5 years old, that approximately

2.6% of U.S. children in that age group have high levels of lead in their blood (blood lead levels ≥ 5 micrograms per deciliter (μg/dL)).

Exposure to lead can seriously harm a child's health. Even a slight elevation in blood levels can reduce IQ and stunt development. Millions of children are being exposed to lead in their homes through aging lead-based paint, increasing their risks for damage to the brain and nervous system, slowed growth and development, learning and behavior problems, hearing, and speech problems.

The CDC's 2012 Advisory Committee on Childhood Lead Poisoning Prevention statement *Low Level Lead Exposure Harms Children: A Renewed Call for Primary Prevention* found that the adverse health effects of blood lead levels less than 10 μg/dL in children extend beyond cognitive function to include cardiovascular, immunological, and endocrine effects.

Lead-based paint history: Lead-based paint was shipped in Colonial days to what became the United States as a luxury good, and was later used to paint such important structures as the White House, the Capitol, and Mount Vernon.

When lead pigment was used in paints, currently reported risks to children were unknown and unknowable. Medical science has evolved, leading to concerns about childhood health that had not existed when lead-based paint was marketed.

Before 1940, paint manufacturers began to use non-lead pigments, such as lithopone, zinc oxide, and titanium dioxide, in many interior paints mixed at the factory. In fact, Sherwin-Williams introduced the first, successful lead-free water-based paint for interior use in 1941. Its easy use, clean-up, and quick drying launched a do-it-yourself paint market.

In 1948, the Baltimore Public Health Department observed an increase in childhood lead poisoning in Baltimore, primarily among those who lived in its substantial number of rundown, neglected row houses amid massive amounts of peeling and flaking lead paint. That led health inspectors to investigate those houses and to learn that children were eating lead from peeling and chipping lead paint in that city's inner-city housing, poorly maintained during and after World War II.

As soon as those new concerns were raised, the paint industry worked closely with public health officials to investigate the risk. The paint industry provided research funding, which helped lead to the Baltimore Public Health Department issuing a ban in 1951 on the use of lead pigment in interior paint in Baltimore housing. That was the first restriction on the use of interior lead paint in the country.

When the same problem was found in the dilapidated housing in older cities in the Northeast and Midwest, the paint industry also worked with the American Academy of Pediatrics, along with other groups interested in child health issues. In 1955, a voluntary national standard was adopted to prohibit, in effect, the use of lead pigments in interior residential paints.

When lead-based paint was marketed before 1978, it was a legal product in great demand because it was washable and durable. It was repeatedly endorsed by the federal, state, and local governments, and specified for use on government buildings until the mid-1970s. For example,

the 1950 California Department of Education vocational book on painting endorsed the use of white lead paint.

It was not until 1974 that a new theory emerged on the predominant pathway for children to be exposed to gratuitous levels of lead. In a paper by Dr. James W. Sayre, *House and Hand Dust as a Potential Source of Childhood Lead Exposure*, Dr. Sayre felt that the major source might be house dust, contaminated with lead from many sources. The theory was that children were licking their hands that had become dirty with lead-contaminated dust. His theory brought about a move beyond the earlier recognition of a risk from chipping and peeling paint. He also observed that average blood lead levels of children living in low-risk areas of Rochester, New York, were in the range then of 18-25 μg/dL.

In 1978, the U.S. Consumer Product Safety Commission banned consumer uses of lead-based paint. However, buildings built prior to the ban still likely have lead paint, as well as commercial, government, and industrial buildings and structures, which are permitted to use lead-based paint.

Lead-based paint, like all paint, inevitably deteriorates: it flakes, chips, and turns to dust and can contaminate the air, soil, floors and other surfaces in the home. This is particularly true of lead paint on windows, doors, and other friction surfaces.

Lead-based paint in California: According to the Legislative Analysist's Office, about 60% of houses in California were built before 1978 and are presumed to have lead-based paint.

As a case in point, about 75% of Alameda County's homes were built before 1980, which amounts to 430,000 units. Nearly 174,000 of those units are pre-1950. Lead-based paint hazards in Oakland homes are considered by local health officials to be "coming close to crisis mode." In Oakland, between 80% and 90% of the housing is pre-1978, which accounts for about 174,000 units.

In Los Angeles County, 77% of the housing was built before 1978, which is more than 2.6 million housing units. More than 900,000 of those housing units are pre-1950. In at least 75% of Los Angeles County's lead poisoning cases, lead-based paint is a potential source of the lead poisoning. At least 70% of those cases involve individuals living in pre-1978 housing.

Regulation of lead-paint cleanup: Title X of the federal Housing and Community Development Act of 1992, also known as the Residential Lead-Based Paint Hazard Reduction Act of 1992 (Title X) was enacted to develop a national strategy to build an infrastructure necessary to eliminate lead-based paint hazards in housing and to establish a workable framework for lead-based paint hazard evaluation and reduction.

In 1995, the California Legislature enacted SB 1360 (Chapter 415, Statutes of 1995) to establish a program within the State Department of Health Services (DHS, which is now the CDPH) to meet the requirements of Title X. That state program required DHS to adopt regulations regarding the accreditation of training providers that engage in or supervise lead-related construction work, and required the establishment of fees for the accreditation of training providers, the certification of individuals, and the licensing of entities engaged in lead-related occupations.

In 2003, the Legislature enacted SB 460 (Ortiz, Chapter 931, Statutes of 2002) to establish the requirement that lead safe work practices be used in pre-1978 buildings. SB 460 added lead hazards to the conditions that make premises uninhabitable and substandard. It also prohibited an individual from disturbing more than a "de minimis" amount of lead-based paint without "containment."

In 2008, under the Lead-Based Paint Renovation Program (Section 402(a) of the federal Toxic Substances Control Act (TSCA)), the US EPA issued the Lead-Based Paint Renovation, Repair and Painting (RRP) Rule governing lead-based paint activities to ensure that individuals engaged in such activities are properly trained; that training programs are accredited; and, that contractors engaged in such activities are certified.

TSCA provides that any state that wishes to administer and enforce these regulations may submit an application to the Administrator for authorization of such a program. Subsequently, with federal approval, California enacted and CDPH administers the Residential Lead-Based Paint Hazard Reduction Program, known as the Lead-Related Construction (LRC) Program, to require any person offering lead-related construction courses to meet CDPH's certificate requirements. (HSC § 105250, et seq.)

Judgment against paint industry: In 2000, a complaint was filed on behalf of the People of the State of California against three major paint manufacturers to hold former lead paint manufacturers responsible for promoting lead paint for use in homes despite their knowledge that the product was highly toxic. The case was filed by Santa Clara County, and nine other cities and counties subsequently joined the litigation: the County of Alameda, the City of Oakland, the City and County of San Francisco, the City of San Diego, the County of Los Angeles, the County of Monterey, the County of San Mateo, the County of Solano, and the County of Ventura.

After a six-week trial in 2013, the trial court issued its order in 2014, finding that Sherwin-Williams, ConAgra, and NL Industries (collectively, the "manufacturers") had created a public nuisance in the 10 jurisdictions by promoting lead paint for interior use despite knowledge of the substantial harms that would result. The public nuisance created by these manufacturers consists of the collective presence of lead paint in the interiors of homes in the ten cities and counties.

Manufacturers were ordered to pay $1.15 billion to fund inspection for, and abatement of, lead paint and lead-contaminated dust from the interiors of homes and lead-contaminated soil around homes built in 1980 or earlier in the ten cities and counties; remediation of any structural deficiencies in the homes that would cause the lead control measures to fail; and, public education and outreach necessary for the program.

The ten cities and counties were designated to oversee the lead inspection and abatement program in their respective jurisdictions. Property owners' participation would be entirely voluntary, and any funds unspent after four years would revert back to the manufacturers.

In 2017, the Court of Appeal upheld the Superior Court's determination that the manufacturers were liable for creating a public nuisance in the ten cities and counties. (*People v. ConAgra Grocery Products Co.* (2017) 17 Cal.App.5th 51.). However, the Court of Appeal limited the judgment to homes built before 1951.

On February 14, 2018, the California Supreme Court denied requests by the manufacturers to review a decision requiring those companies to pay several hundred million dollars to identify and clean up lead paint from millions of homes built before 1951 in Santa Clara County and nine other California cities and counties. In the meantime, however, the case is returning to the trial court to (1) calculate the amount that manufacturers must pay for pre-1951 homes only and (2) decide on a receiver to administer the fund and distribute the monies to the ten cities and counties.

Abatement program required by the court: Under the 2014 judgment from the trial court, property owners who enroll in the local jurisdiction's abatement program will be screened to see if they own a pre-1951 property that qualifies for inspection and services. Certain types of properties are excluded from the abatement program, including, but not limited to correctional facilities, day care centers, elderly housing facilities, and all homes constructed after 1980. Properties will then be prioritized for inspection as described in the court's decision.

Workforce needs: There is a significant shortage of licensed lead paint inspectors and abatement contractors who are approved by the state to carry out this work. The need for licensed lead inspectors and abatement contractors is likely to be intensified because the upheld settlement means ten jurisdictions will be simultaneously competing for a scare number of contractors to conduct large-scale abatement projects throughout California under a tight 4-year time frame.

The following chart provides an estimate of the number of pre-1978 housing units in each of the ten jurisdictions involved in the lawsuit:

Selected California County and City Housing Age Percentages (2011 U.S. Census Estimates) [4]

County or City	% Pre-1980	Total Housing Units (2011 Estimate)
County		
Alameda	74.3	584,631
Los Angeles	76.4	3,449,489
Monterey	66.2	138,811
San Mateo	79.1	271,363
Santa Clara	67.3	633,349
Solano	51.1	153,295
Ventura	60.5	282,521
City		
Oakland	83.3	175,054
San Diego	60.5	513,906
San Francisco	82.4	378,261

* Summed for housing age bands from U.S. Census Bureau figures

According to CDPH, as of April 5, 2018, there are 910 actively certified lead-related construction certified inspector and assessors statewide.

However, those inspectors are spread across all 58 counties, likely leaving gaps in some regions where more inspectors are needed. For instance, there are only 12 certified lead inspectors in Santa Clara County. Many more certified lead inspectors will be needed to inspect the approximate 633,349 homes with lead paint in the County within a four year period.

Certification of lead-related workers: Under CDPH's LRC Program, certification means that CDPH has evaluated and approved a person's qualifications to perform lead-related construction work in residential and public buildings. CDPH evaluates applicants to make sure they have completed State-approved training and have relevant experience and education to perform lead work. As of February 20, 2018, there are 20 accredited training providers and 6,842 certified individuals broken down as follows:

- 910 Inspector/Assessor;
- 69 Project Designers;
- 390 Project Monitors;
- 598 Sampling Technicians;
- 629 Supervisors; and
- 4,246 Workers.

The certification numbers fluctuate throughout the year, as individuals apply for initial or renewal certification. To meet the qualifications for certification, an individual seeking to become an Inspector/Assessor would need to take a class from an accredited training provider, meet minimum education and experience requirements, and pass a state exam before submitting an application to CDPH for certification. The average time it takes an individual to complete the requirements for certification varies person to person based on education and experience of the individual applying.

Under the LCR, local agencies/counties may apply to be accredited training providers to teach LRC courses, including for inspector/assessors and for those seeking to perform lead abatement. (HSC § 105252) Although at least one county had been a CDPH LRC accredited training provider in the past, there are no counties currently accredited.

Local agencies/counties currently cannot certify individuals in LRC including inspector/assessors and individuals seeking to perform lead abatement. Only CDPH has the authority to certify LRC individuals in California.

On February 26, 2018, the Assembly Budget Subcommittee on Health and Human Services had an oversight discussion on CDPH's lead construction certification processing delays.

In the analysis, the Subcommittee notes that labor has complained about the amount of time it takes CDPH to certify individuals, thereby allegedly leading to significant delays in construction projects. CDPH told that Subcommittee that the current average application turn-around time is approximately 60 days, while state regulations allow for up to 120 days.

Oddly, CDPH informed this Committee that, once the individual's completed application is submitted, current turn-around time for LRC certification is an average of 37 days.

In any case, if CDPH has limited resources, or any other challenges preventing faster certification, enabling counties to provide certification would multiply the entities who could certify, thereby greatly increasing worker certification statewide.

Solution: AB 2934 would authorize CDPH to enable local governments to implement the certification provision of the LCR at the local level. Doing so would authorize local agencies to certify individuals doing lead construction related work.

But first, permission: Before CDPH can bequeath authority to counties to administer the certification program for inspectors/assessors, it must first request permission from the federal government. CDPH would have to obtain authority from the USEPA to give LRC authority to the counties because US EPA provides funding to LRC and any modifications to the agreement need to be approved by US EPA.

Therefore, in order to effectuate the intent of this bill, CDPH will need to request, and be granted, permission to give authority to the counties, as provided by this bill.

The Committee may wish to consider including language in the bill requiring CDPH to request this permission by a date certain. While this step will cause a significant delay in certifying inspectors at the local level, it is necessary before the bill can be implemented.

Permissible exposure limit for lead: The California Department of Industrial Relations, Division of Occupational Safety and Health (Cal/OSHA) maintains a permissible exposure limit (PEL) for occupation lead poisoning prevention. Since 2011, Cal/OSHA has been working on revising the PEL, known as the General Industry Lead Standard and Construction Industry Lead Standard for the protection of workers who are exposed to lead on the job.

The current standard requires that every employer shall assure that no employee is exposed to lead at concentrations greater than 50 micrograms per cubic meter of air (50 μg/m3) averaged over an 8-hour period. That standard is based on medical and scientific information that is more than 35 years old. Over this time much has been learned about the effects of lead among adults at lower exposure levels.

According to CDPH, current science from the Environmental Health Perspectives, the National Toxicology Program, and the US EPA strongly indicates that worker blood lead levels should not exceed 5 to 10μg/dL over a working lifetime, yet existing standards allow workers to have blood lead levels up to 50 - 60 μg/dL before they have to be removed from significant lead exposure.

The PEL is proposed to be updated to reflect current medical science and establish a more protective standard for lead construction professionals, but it has been 7 years since the rulemaking was opened and no revisions have been made. Cal/OSHA is working with an external consultant to estimate the economic impact of the regulation – the contract with that consultant appears to be open-ended with no deadline in sight. Worse yet, when it is complete, Cal/OSHA will still then need to enter formal rulemaking, which can take an additional year before the revised standard is final.

Timing of the revised PEL is relevant to the context of this bill. Lead-paint certified construction workers cannot be certified under a more appropriate and scientifically supported PEL for lead

until a revised PEL is established. It is imperative to get a timely approval of the revised PEL, so that workers certified to inspect, assess, or abate/remediate the lead-based paint contaminated homes are just as protected as the public/homeowners the court ruling wants protected.

Unfortunately, the timing of doing the actual lead-paint cleanup is tight – the counties have four years to encumber the funds – but without an approved PEL and a certified workforce, cleanup will be delayed. Therefore, the author may consider including language instructing Cal/OSHA to complete its rulemaking by July 2019 on the proposed revisions to PEL for lead.

Committee amendments:

1) Add (h) to HSC § 105250 to require CDPH, by February 1, 2019, to request permission from the US EPA to modify its LCR agreement with the US EPA to expand its authority and contract with counties to provide certification to lead construction workers.

2) Add a new section to the bill requiring Cal/OSHA to complete rulemaking by July 2019 on the proposed revisions to the Lead Standards in the General Industry Safety Orders (Chapter 4, subchapter 7, Section 5198) and Construction Safety Orders (Chapter 4, subchapter 4, Section 1532.1)

Related legislation: Lead-based paint is still in many California homes built before 1978, putting another generation of kids at risk. A package of legislation has been introduced to address the proposed policy provisions in the pending ballot measure, as well as set up frameworks for implementing the settlement funds should the ballot measure fail. The package includes the following bills:

1) AB 2073 (Chiu) protects homeowners from frivolous lawsuits threatened by the lead paint manufacturers if the homeowners participate in the abatement program created by the judgement. This legislation delivers needed assurance that homeowners, who do the right thing by removing toxic paint from their homes, will not be victimized by frivolous litigation from deep-pocketed paint companies. This bill will be heard in the Assembly Judiciary Committee.

2) AB 2934 (Stone) would allow the California Department of Public Health to contract with counties to certify lead paint inspectors. This bill helps fill a shortage of inspectors to help bring homes up to safe standards. Additional qualified, lead paint inspectors will be needed as work proceeds to remove toxic paint from homes under the judgement.

3) AB 2074 (Bonta) removes a significant hurdle to homeowners holding poison paint manufacturers legally accountable for injuries by establishing that lead paint companies are responsible to prove they did not produce, sell, distribute or promote the lead-based paint used during a particular time or area, and allowing homeowners to hold companies jointly liable if there were multiple companies selling or distributing paint at that time and area. Codifying this "risk contribution" theory in statute allows those poisoned by lead-based paint, who are unable to identify the exact manufacturer of the lead paint pigment, a new avenue to litigate cases they may not otherwise be able to litigate. This bill will be heard in the Assembly Judiciary Committee.

4) AB 2995 (Carrillo) classifies the presence of lead-based paint in a home or building as a physical injury to the property, enabling property owners to sue for the cost of abating or removing lead paint to prevent the further deterioration of peoples' health. Secondly, the bill delays the start of the clock on the statute of limitations to when property owners become aware that lead paint is present, rather than starting the clock at the time of purchase. This bill will be heard in the Assembly Judiciary Committee.

5) AB 2803 (Limon) would provide additional liability protection for homeowners by redefining the definition of "hazardous substance" to include lead-based paint for purposes of the Carpenter-Presley-Tanner-Hazardous Substance Account Act, otherwise known as California's Superfund law. This would allow homeowners to seek damages for clean-up or otherwise implement their own clean-up without fear of liability lawsuits. Should this bill be approved by this Committee, it will be heard next in the Assembly Judiciary Committee.

6) AB 3009 (Quirk) would enact a fee on paint manufacturers for all paint sold in California to create a fund for residents of single-family or multi-family dwellings to clean up lead paint that has contaminated their homes. This fee will only be imposed if an initiative passes that states that lead paint is not a public nuisance. This bill passed out of this committee on April 10th and will be heard in the Assembly Revenue & Taxation Committee on April 30th.

REGISTERED SUPPORT / OPPOSITION:

Support

Bay Area Legal Aid
California League of Conservation Voters
City of Oakland
Clean Water Action
Consumer Federation of California
Environmental Working Group
Santa Clara County

Opposition

None on file.

Analysis Prepared by: Paige Brokaw / E.S. & T.M. /