Date of Hearing: January 11, 2022

ASSEMBLY COMMITTEE ON ENVIRONMENTAL SAFETY AND TOXIC MATERIALS
Bill Quirk, Chair
AB 1553 (O'Donnell) – As Amended January 3, 2022

SUBJECT: Southern Los Angeles Ocean Chemical Waste Community Oversight Council.

SUMMARY: Establishes the Southern Los Angeles Ocean Chemical Waste Community Oversight Council (Council) under the California Environmental Protection Agency (CalEPA) to oversee the study and mitigation of the toxic waste at "Dumpsite-2," the DDT dumpsite off the California coast. Specifically, **this bill**:

1) Establishes the Council within CalEPA.

2) Defines "DDT" as dichlorodiphenyltrichloroethane or any metabolite or byproduct thereof, including, but not limited to, 1,1-dichloro-2-2-bis(p-chlorophenyl)ethylene (DDE) and dichlorodiphenyldichloroethane (DDD).

3) Defines "Dumpsite-2" as the waters of the San Pedro Basin, off the coast of Los Angeles, where chemical waste, including, but not limited to, DDT, has been detected.

4) Requires the Council to oversee the study and mitigation of the negative impacts of the chemical waste deposits at or from Dumpsite-2 and to communicate with the public on those efforts, including, but not limited to, all of the following:

    a) Efforts to locate and identify anthropogenic chemical waste at Dumpsite-2;
    b) Investigations of water quality, sedimentation, wildlife, Indigenous culture, and human health relating to the impacts in the coastal waters of the state of chemical contaminants at or from Dumpsite-2;
    c) Investigations into the viability of any plan to remove, contain, mitigate, or eliminate chemical waste in the coastal waters of the state at or from Dumpsite-2; and,
    d) Disclosure to the public, receipt of feedback from the public, and education of the public on the investigation of the fate and transport in the coastal waters of the state of the chemical contaminants at or from Dumpsite-2 and the safety ramifications of the chemical contaminants at or from Dumpsite-2

5) Requires the Council to hold at least one public meeting every six months, with the first public meeting occurring on or before September 1, 2023, to do all of the following:
    a) Review and provide feedback on proposed scientific studies and mitigation strategies related to Dumpsite-2;
    b) Review completed scientific studies related to Dumpsite-2 to assess the implications of the studies on current and future mitigation efforts; review existing policies and regulations related to DDT to assess the implications on current and future mitigation efforts; and,
    c) Review and assess the implications of existing laws, regulations, and policies related to DDT on current and future mitigation efforts.

6) Requires the Council to report, on or before June 30, 2024, and on or before June 30 of each year thereafter, to the Governor and the Legislature with recommendations on how to further mitigate the negative impacts of anthropogenic chemical waste deposits at or from Dumpsite-2. Requires the Council to consider impacts on water quality, fish and wildlife habitat, Indigenous culture, and public health, and the technical and financial feasibility of proposed mitigation efforts. Requires the Council to also consider all costs of doing nothing, including the impacts to the environment, local communities, Indigenous culture, and public health.

7) Requires the Council to consist of 11 voting members and no more than nine nonvoting members. Provides that the eleven voting members consist of the following:
   a) The Secretary for Environmental Protection;
   b) The Chairperson of the State Water Resources Control Board;
   c) The Director of the State Department of Public Health;
   d) The Director of the Department of Toxic Substances Control;
   e) The Secretary for Natural Resources;
   f) Six members of the public, none of whom shall be elected officials at the time of appointment, appointed by the Governor as follows:
   g) Two members of the public, each of whom represents a different Los Angeles regional environmental, environmental health, or environmental justice organization;
   h) Two members of the public, each of whom represents a different statewide environmental, environmental health, or environmental justice organization;
   i) One member of the public who represents a statewide or Los Angeles regional fishing organization;
   j) One member of the public who represents a statewide or Los Angeles regional tourism industry organization; and,
   k) One member who represents a California Native American Tribe located in Los Angeles County and listed with the California Native American Heritage Commission, or who represents a California organization that is either formed by a Los Angeles County Native American Tribe or that serves Los Angeles County Tribes.

8) Provides that the nonvoting members, limited to nine, of the Council consist of the following:
   a) One research scientist from the University of California designated by the University of California Office of the President.
   b) One research scientist from the California State University designated by the California State University Office of the Chancellor;
   c) One research scientist from the University of California or the California State University with expertise in public health, epidemiology, or a related field;
   d) One Assembly Member appointed by the Speaker of the Assembly;
   e) One Senator appointed by the Senate Committee on Rules.;
   f) One member who is a tribal official from a California Native American Tribe located in Los Angeles County and listed with the California Native American Heritage Commission
   g) One member from the Los Angeles Regional Water Quality Control Board;
   h) One member from, and designated by, the National Oceanic and Atmospheric Administration, if the agency agrees to do so; and,
   i) One member from, and designated by, the United States Protection Agency (US EPA), if the agency agrees to do so.

9) Provides authority for specified members to have proxy votes.

10) Provides instructions for filling vacancies.

11) Provides that Council members will be reimbursed for the member's actual and necessary expenses, including travel expenses, incurred in traveling to and attending council meetings and in carrying out required duties.

12) Requires the voting members of the Council to annually elect, from among the voting members, a chairperson, a vice chairperson, and other necessary officers, as determined by the Council, each of whom shall serve a term of one year.

13) Requires the Council to make decisions by a majority of the total number of voting members. Provides that eight Council members establish a quorum.

14) Authorizes the Council to adopt rules, regulations, and procedures for the conduct of business by the Council.

15) Clarifies that nothing in this bill grants the Council any regulatory authority, and that nothing in this bill interferes with or prevents the exercise of authority by any other public agency to carry out its programs, projects, or responsibilities.

16) Sunsets this bill on January 1, 2027.

EXISTING LAW:

1) Provides, pursuant to the Comprehensive Environmental Response Compensation and Liability Act (CERCLA), also known as the federal Superfund law, the US EPA with authority over the remediation of uncontrolled or abandoned hazardous-waste sites as well as accidents, spills, and other emergency releases of pollutants and contaminants into the environment. (42 United States Code (USC) § 9601, et seq.)

2) Prohibits, pursuant to the Marine Protection, Research, and Sanctuaries Act (MPRSA, also known as the Ocean Dumping Act), the dumping of material into the ocean that would unreasonably degrade or endanger human health, welfare, or amenities, or the marine environment, ecological systems, or economic potentialities. (33 USC § 1401 et seq).

FISCAL EFFECT: Unknown.

COMMENTS:

Need for the bill: According to the author, "California's coastal and marine waters are among the state's most precious resources and their conservation is essential to the preservation of both marine wildlife and California's thriving ocean economy. Mitigating the damage from chemical waste in the San Pedro Basin will be a complicated multi-year effort that will require coordination by scientists, activists, elected officials, and multiple government agencies. To properly perform this necessary work these various institutions need a way to collaborate and cooperate that allows for transparency and public input. AB 1553 will provide this by establishing the Southern Los Angeles Ocean Chemical Waste Community Oversite Council.

With members representing multiple key agencies, environmental groups, and industries as well as participation by legislators and leading scientists, the Council will meet regularly and publicly to review completed and proposed scientific studies of the site, receive input from the public, and advise the Legislature on potential mitigation strategies. This will ensure that the development of any mitigation efforts at the waste site is thorough, transparent, and based on the latest scientific research."

What is DDT? Dichloro-diphenyl-trichloroethane, commonly known as DDT, is a colorless, tasteless, and almost odorless insecticide. Starting in the late 1940s, DDT was extensively used to combat insect-borne diseases like malaria and typhus around the world. It was credited with eradicating malaria in the United States and was also widely used in agricultural and commercial settings for pest control. Unlike most pesticides, whose effectiveness is limited to destroying one or two types of insects, DDT was capable of killing hundreds of different kinds at once.

In 1962, Rachel Carson's book *Silent Spring* meticulously described how DDT entered the food chain and accumulated in the fatty tissues of animals, including human beings, and caused cancer and genetic damage. A single application on a crop, she wrote, killed insects for weeks and months—not only the targeted insects but countless more—and remained toxic in the environment even after it was diluted by rainwater.

DDT has been shown to cause liver cancer in laboratory animals. It is stored in fatty tissues which results in biomagnification, meaning that DDT levels in animals increase in concentration farther up the food chain. DDT is highly acutely toxic to fish and aquatic invertebrates. Even though DDT is only slightly acutely toxic to birds, it can cause significant reproductive problems. Notably, one of the breakdown products of DDT causes the eggshells of birds to become thinner. This makes the eggs of birds crack under the weight of adult birds, interfering with birds' ability to reproduce and damaging bird populations.

According to the Centers for Disease Control and Prevention (CDC), human health effects of DDT at low levels in the environment are unknown. However, DDT is listed as a possible human carcinogen and a growing number of studies have linked it to endocrine disrupting effects like increased incidences of obesity and early onset of menstruation. It is possible that these effects could impact future generations (even if they are exposed to lower levels of DDT) as studies linked DDT levels in mothers during and just after pregnancy to impacts on those women and subsequent generations. These effects included breast cancer in the mothers themselves, obesity in their adult daughters, and obesity and early onset of menstruation in their granddaughters. Exposure to high doses of DDT can result in vomiting, tremors, and seizures.

DDT is highly persistent in the environment and has a half-life of 150 years in the aquatic environment, meaning that it will take hundreds of years to break down. Before it was banned for use in the United States by the US EPA, approximately 675,000 tons of DDT were applied domestically. Due to it widespread usage and persistence, DDT contamination is still a relevant environmental concern.

Rising concerns about carcinogenicity, bioaccumulation, and health effects on wildlife led to a ban on DDT use in the United States in 1972.

Perhaps Joni Mitchel cemented the concern about DDT in 1970 when she sang, "Hey farmer, farmer, put away your DDT. I don't care about spots on my apples, leave me the birds and the

bees." The public has been aware of the concerns with DDT for more than half a century, yet is still dealing with its toxic footprint today.

Legacy of DDT manufacturing: The Montrose Chemical Corporation of California was the largest producer of the insecticide DDT in the United States from 1947 until it stopped production in 1982. Even though DDT was banned for use in the United States after 1972, production continued in order to export DDT to other countries.

Between the late 1950s and early 1970s, the company was responsible for discharging an estimated 870-1450 tons of DDT into the ocean via the county's sewer system, which contaminated sediment on the ocean floor off the coast of Los Angeles on the Palos Verdes Shelf. In 1971, the last year Montrose used the county sewers, an estimated 50,500 pounds of DDT were discharged from the outfalls. PCBs, another persistent hazardous substance, also formed part of the industrial waste stream that was discharged to the sewer system until their ban in 1976. After these persistent pollutants ceased to dominate the waste steam, Los Angeles County Sanitation District continued discharging treated waste onto Palos Verdes Shelf. This created a layer of cleaner sediment on top of the DDT- and PCB-contaminated sediment.

The US EPA added the Montrose Chemical Corporation site to the Superfund National Priorities List in 1989. The site includes the former main plant near Torrance, California, stormwater pathways near the former plant, and a section of the Palos Verdes shelf. The cleanup of the Palos Verdes Shelf is still ongoing.

The San Pedro Bay Dominguez Channel was another recipient of runoff from Montrose. Consolidated Slip, the part of Inner Harbor immediately downstream of Dominguez Channel, continues to exhibit a very impacted benthic (bottom feeder) invertebrate community.

Dumpsite-2: San Pedro Basin, off the coast of Los Angeles, where barrels of chemical waste have been detected, is known as "Dumpsite-2."

In the 1980s, it was discovered that Montrose Chemical Corporation contracted with California Salvage to dispose of acid waste from the DDT manufacturing process by dumping it off the coast of California. Records indicated that hundreds of thousands of barrels containing waste laced with DDT were dumped at a deep sea site located between the California coast and Santa Catalina Island between 1947 and 1961. In April 2021, researchers at the Scripps Institution of Oceanography at the University of California San Diego and the National Oceanic and Atmospheric Administration (NOAA) conducted a survey to map the dump site. They found more than 27,000 barrels of what potentially could be DDT on the ocean floor between the Palos Verdes Peninsula and Catalina Island.

The survey, conducted from March 10 to 24, 2021, mapped more than 36,000 acres of seafloor — at depths of up to 3,000 feet, and about 12 miles offshore from the Palos Verdes Peninsula and eight miles from Catalina — in an area where scientists had previously discovered an accumulation of DDT. But, the mapping sonars cannot determine the contents of the barrels, which remains unknown.

Impacts to wildlife of Southern California: The rediscovered DDT waste dumping site off the north coast of Santa Catalina Island represents a significant threat to the health of marine life in those waters and all animals in the food chain dependent on that marine life. DDT is highly

persistent and moves from contaminated sediments into the water. Therefore, although the dumping of DDT stopped in 1982, the Palos Verdes Shelf remains contaminated to date and the recently rediscovered dumping site is still contaminated as well.

Since 1985, fish consumption advisories and health warnings have been posted in Southern California because of elevated DDT and other contaminant levels. Bottom-feeding fish are particularly at risk for high levels of contamination. Consumption of white croaker, which has the highest contamination levels, should be avoided and commercial fishing of white croaker has been banned in the area since 1990. Other bottom-feeding fish, including kelp bass, rockfish, queenfish, black croaker, sheepshead, surfperches, and sculpin, are also highly contaminated.

The high DDT levels in fish are reflected in predators that eat fish as well, including dolphins and birds of prey. A 2015 study by researchers from San Diego State University found high levels of DDT and other human-made chemicals in the blubber of Bottlenose Dolphins that died of natural causes. The Institute for Wildlife Studies, a conservation organization on Catalina Island, has worked to restore bald eagles to the island on Santa Catalina Island Conservancy land since the late 1970s. Bald eagles had been common on the island until the 1960s, when it is believed that the effects of dumping DDT off the coast of Southern California made it impossible for eagles to successfully hatch their young. Until as recently as 2007, bald eagles on the Island were unable to reproduce.

This bill: AB 1553 would establish, until January 1, 2027, the Southern Los Angeles Ocean Chemical Waste Community Oversight Council (Council) as a state agency within CalEPA to oversee the study and mitigation of the negative impacts of human made chemical waste deposits at or from the waters of Dumpsite 2 in the San Pedro Basin.

The Council: The bill would prescribe requirements relating to the composition and administration of the Council and would require that the Council consist of 11 voting members and no more than nine nonvoting members. The bill would require the voting members of the Council to establish and elect officers, as provided, and would require the Secretary for CalEPA to select an executive director of the Council.

This bill would require the Council to hold a public meeting every six months, with the first meeting occurring on or before September 1, 2023, to review and provide feedback on proposed scientific studies and mitigation plans and completed scientific studies related to Dumpsite-2, as provided. The bill would require the Council, on or before June 30, 2024, and on or before June 30 of each year thereafter, to report to the Governor and the Legislature with recommendations on how to further mitigate the negative impacts of anthropogenic chemical waste deposits at or from Dumpsite-2, considering impacts on water quality, fish and wildlife habitat, and public health, and the technical and financial feasibility of proposed mitigation efforts.

Existing efforts on DDT cleanup in California: Provided the designation of the aforementioned DDT contamination sites as Superfund sites, there has been coordination between the state, federal, and local governments to address the threat to human health posed by DDT and to determine the best courses of action for remediation. Those government-coordinated efforts have included public input and outreach to community groups, and have had similar goals as the Council proposed by this bill would have.

The author may wish to consider dovetailing the Council's oversight of Dumpsite 2 with the existing, coordinated efforts to study and mitigate the impacts of DDT contamination off the California coast, and consider expanding the scope of the Council to oversee DDT contamination comprehensively off California's coast, not just the isolated Dumpsite 2 contamination site.

Related legislation: AJR 2 (O' Donnell, Chapter 142, Statutes of 2021) requested that the United States Congress and US EPA take all measures necessary to ensure that the DDT waste dumped near Santa Catalina Island does not cause further harm to the citizens, wildlife, and natural resources of California.

REGISTERED SUPPORT / OPPOSITION:

Support

None on file.

Opposition

None on file.

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