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**SENATE COMMITTEE ON ENVIRONMENTAL QUALITY**

**Senator Allen, Chair**

**2021 - 2022 Regular**

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**Bill No:** AJR 2  
**Author:** O'Donnell  
**Version:** 12/7/2020  
**Urgency:**  
**Consultant:** Rylie Ellison

**Hearing Date:** 6/14/2021  
**Fiscal:** No

**SUBJECT:** Coastal and marine waters: Santa Catalina Island: dichloro-diphenyl-trichloroethane

**DIGEST:** Requests that the Congress of the United States and the United States Environmental Protection Agency (US EPA) take all measures necessary to prevent further damage to California's citizens, wildlife, and natural resources by the dichloro-diphenyl-trichloroethane (DDT) waste dumped in the waters near Santa Catalina Island.

**ANALYSIS:**

Existing Federal Law:

- 1) Prohibits, under 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. (16 United States Code (U.S.C.) §1431 et seq. and 33 U.S.C. §1401 et seq.)
- 2) Provides, under 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 U.S.C. §9601 et seq.)

Existing State Law: Under the Marine Life Protection Act, directs the state to redesign California's system of marine protected areas (MPAs) to function as a network in order to: increase coherence and effectiveness in protecting the state's marine life and habitats, marine ecosystems, and marine natural heritage, as well as to improve recreational, educational and study opportunities provided by marine ecosystems subject to minimal human disturbance. (Fish and Game Code (FGC) §2850 et seq.)

This Resolution:

- 1) Recognizes that California's coastal waters are precious resources and their conservation is essential to the preservation of marine wildlife and the state's ocean economy and that Santa Catalina Island is a key part of Southern California's ocean tourism economy.
- 2) Finds that, despite protections provided by the federal Marine Protection, Research, and Sanctuaries Act of 1972, the dumping of hazardous material in ocean waters before the implementation of that act continues to threaten the health of California's citizens and wildlife.
- 3) States that 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, animals dependent on the food chain on that marine life, as well as to the ecosystems on and around Santa Catalina Island and the economy of the Island and California.
- 4) Declares that it is incumbent upon both state and federal government to ensure that natural resources are protected for future generations and from further damage by past ecological mistakes.
- 5) Resolves, on behalf of the Senate and the Assembly of the State of California, jointly, that the Legislature requests that the Congress of the United States and US EPA take all measures necessary to prevent further damage to California's citizens, wildlife, and natural resources by the DDT waste dumped in the waters near Santa Catalina Island.
- 6) Resolves that the Chief Clerk of the Assembly transmit copies of this resolution to the President and Vice President of the United States, to the Speaker of the United States House of Representatives, to the Majority Leader of the United States Senate, to each Senator and Representative from California in the Congress of the United States, and to the author for appropriate distribution.

## **Background**

- 1) *DDT*. Dichloro-diphenyl-trichloroethane, commonly known as DDT, is a colorless, tasteless, and almost odorless insecticide that was in use in the United States from the 1940's until it was banned in 1972. The US EPA issued a cancellation order for DDT based on its adverse impacts to the environment, such as those to wildlife, as well as its potential impacts to human health.

DDT is a bioaccumulating chemical, meaning that it is stored in the fatty tissue of animals, and concentrations increase farther up the food chain. It is toxic to fish and aquatic invertebrates and threatens the reproduction of predatory birds by causing eggshell thinning and is considered a major factor in the decline of several bird species, including the bald eagle. Human health effects of DDT at low levels in the environment are unknown according to the Centers for Disease Control and Prevention (CDC), however DDT is listed as a possible human carcinogen. A growing number of studies have also linked it to endocrine disrupting effects like increased incidences of obesity and early onset of menstruation.

During its more than 30 years of use, an estimated 675,000 tons of DDT were applied domestically. DDT is persistent in the environment, absorbing into soils and sediments. In aquatic environments it has a half-life of 150 years, meaning that it will take hundreds of years to break down fully and remains a relevant environmental and health concern today.

- 2) *Santa Catalina Island.* Santa Catalina Island is a 75 square mile island home to over 4,000 people located off the coast of Southern California, 29 miles southwest of Long Beach. It is known for its ocean tourism, drawing more than one million people per year and generating over \$160,000,000 in economic activity, as of 2016. The Island and its surrounding waters provide habitats for a variety of marine creatures, including mantis shrimp, horn and leopard sharks, moray eels, and several species of sea birds. Most of the island is managed by the Catalina Island Conservancy, a private nonprofit focused on conservation, education, and recreation, responsible for stewarding 88% of the land and 62 miles of shoreline on the island.
- 3) *A Legacy of DDT Dumping off the Southern California Coast.* The Montrose Chemical Corporation, formerly located in Torrance, California, was the largest producer of 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 the 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 2011 and 2013, 60 sunken barrels of DDT were discovered by University of California Santa Barbara researchers 3,000 feet deep on the ocean floor between the California Coast and the North Coast of Santa Catalina Island.

Since then, a team of scientists have detected more than 27,000 barrels over a 56 square mile area, with potentially hundreds of thousands more still to be discovered. Shipping logs from Montrose confirmed that thousands of barrels of acid waste from the DDT manufacturing process were transported monthly and discarded in the sea, with some dumped considerably closer to the coast than the designated deep sea site. Many of the barrels were also punctured to ensure that they would sink.

- a) *Government Action.* The former Montrose Chemical site was designated Superfund site by the US EPA in 1989. Both the United States and California filed lawsuits against Montrose Chemical and three other companies and by 2000, the companies settled for a total of up to \$140M to fund restoration of the Palos Verdes Shelf Marine Environment.

In a letter to the agency penned on March 12, California Senator Dianne Feinstein requested that the US EPA "prioritize urgent and meaningful action to remediate this serious threat to human and environmental health."

- b) *A Lasting Impact.* The DDT from the barrels have leaked over time and concentrations around the barrels have been measured to be up to 40 times higher than those at the Superfund site. Since 1985, fish consumption advisories and health warnings have been posted in Southern California because of elevated levels of DDT and other contaminants. Until as recently as 2007, bald eagles on Santa Catalina Island were unable to reproduce. Marine mammals in the area have some of the highest concentrations of DDT in the world and California sea lions have also experienced high rates of cancer as a result of DDT exposure.

## Comments

- 1) *Purpose of 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. While numerous actions have been taken to limit the dumping of hazardous waste in the waters off the California coast, waste sites created prior to modern environmental protections continue to pose a threat to oceanic wildlife and human health. The recently rediscovered DDT waste dumping site near Santa Catalina Island has likely done significant damage to our ocean's ecosystem and will continue to do so unless further action is taken. AJR 2 calls upon the Environmental Protection Agency and the United States Congress to take the necessary actions to protect our environment and the public health."

- 2) *Further Investigation.* While elevated levels of DDT have been detected near some of the barrels, additional testing and exploration is needed to understand the extensiveness of the dumping grounds and to verify the contents and origin of the barrels. Shipping logs show that multiple industrial companies in southern California used the basin as a dumping ground until 1972 when the Ocean Dumping Act was enacted.

**Related/Prior Legislation**

AB 78 (O'Donnell, 2021) would expand the San Gabriel and Lower Los Angeles Rivers and Mountains Conservancy (RMC) to include the Dominguez Channel watershed and Santa Catalina Island. AB 78 is pending on the Assembly Floor.

AB 1511 (Bloom, 2019) would have replaced the State Water Resources Control Board with the State Coastal Conservancy as the state agency that provides administrative services for the Santa Monica Bay Restoration Commission (Commission) and would have established the purposes of the Commission to promote, support, and achieve the restoration and enhancement of the Santa Monica Bay and its watershed. AB 1511 was vetoed by the Governor.

**SOURCE:** Author

**SUPPORT:**

City of Rancho Palos Verdes  
Los Angeles County Board of Supervisors

**OPPOSITION:**

None received

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