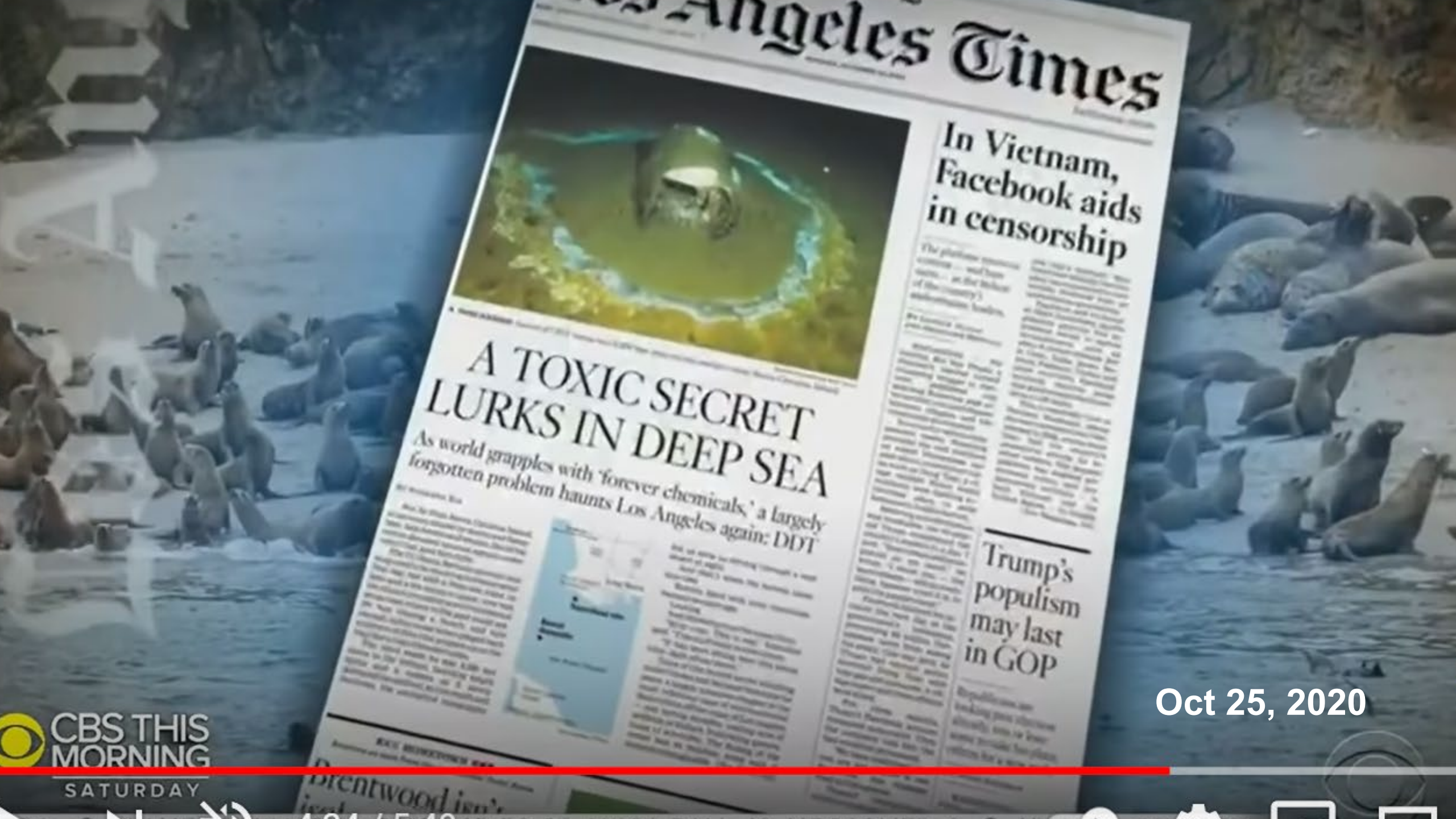




Deep-Water Ocean Disposal Off Southern CA Coast

October 21, 2021

John Chesnutt
U.S. EPA Region 9



In Vietnam, Facebook aids in censorship

The platform's...
...and their...
...of the country's...
...leaders.

A TOXIC SECRET LURKS IN DEEP SEA

As world grapples with 'forever chemicals,' a largely forgotten problem haunts Los Angeles again: DDT

By [Name]

Los Angeles, California...
...DDT...
...toxic...
...secret...



...DDT...
...toxic...
...secret...
...DDT...

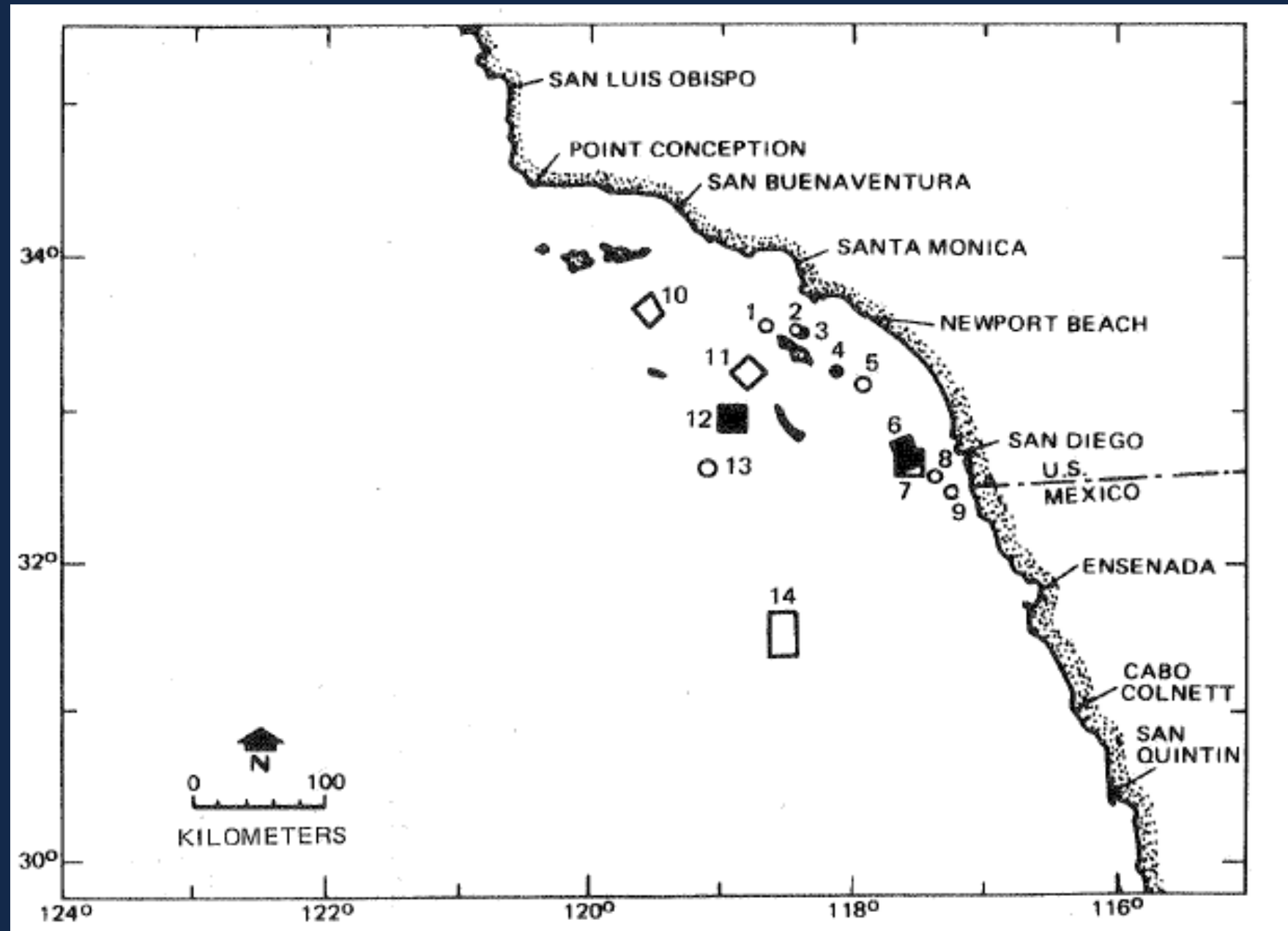
Trump's populism may last in GOP

...Trump's...
...populism...
...may last...
...in GOP...

Initial Assessment

There are fourteen documented deep-water ocean disposal sites off the Southern CA coast that received chemical, refinery, and other wastes from a variety of sources between the 1930's and the early 1970's.

Very little information is available as to the conditions of these sites, and whether their contamination poses, or could pose, risks to environmental or human health.



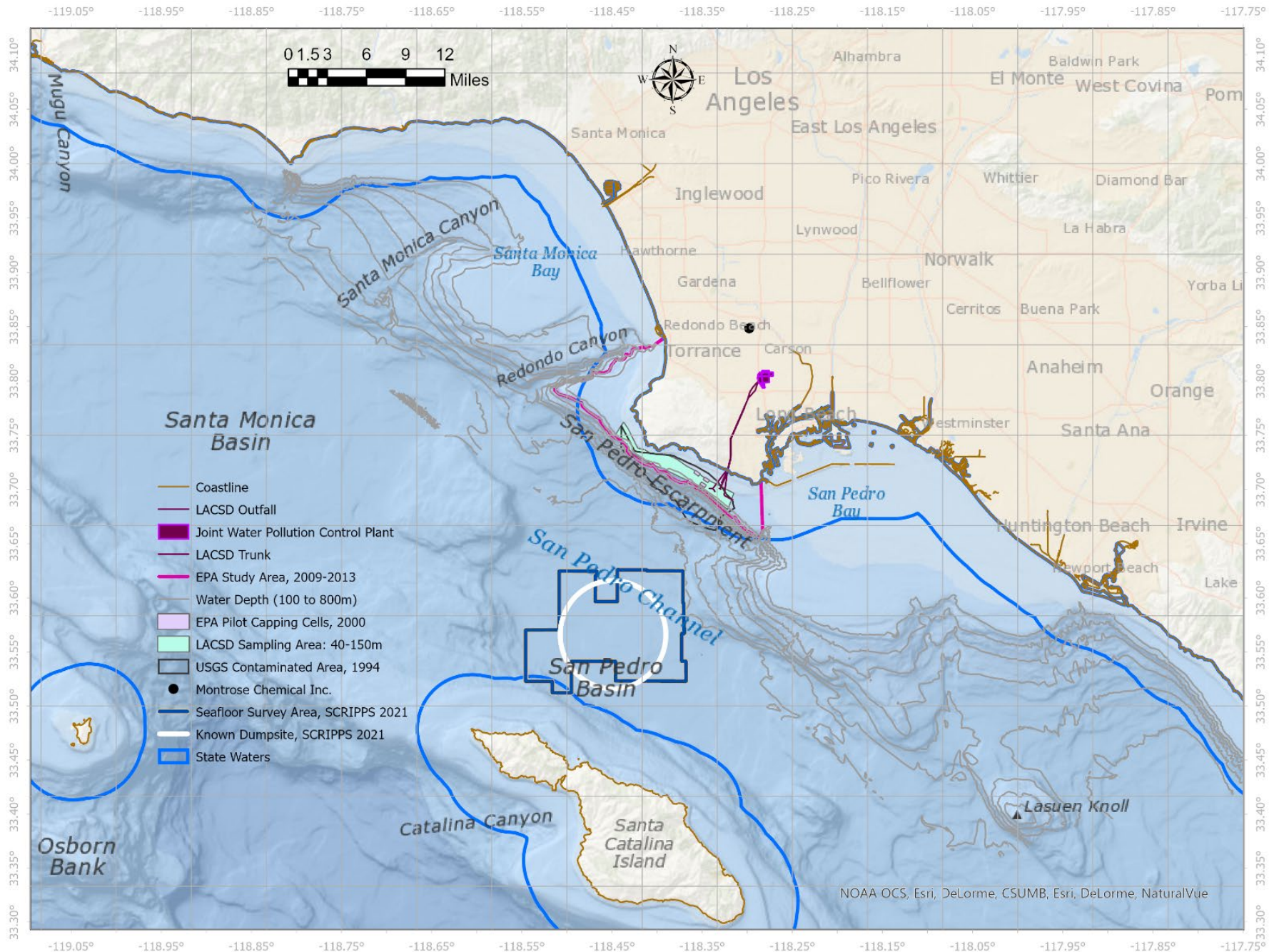
Source: 1973 Southern CA Coastal Water Research Project (SCCWRP) Report

Table 4-31

SUMMARY OF WASTES DUMPED INTO THE
SOUTHERN CALIFORNIA BIGHT, 1931-71

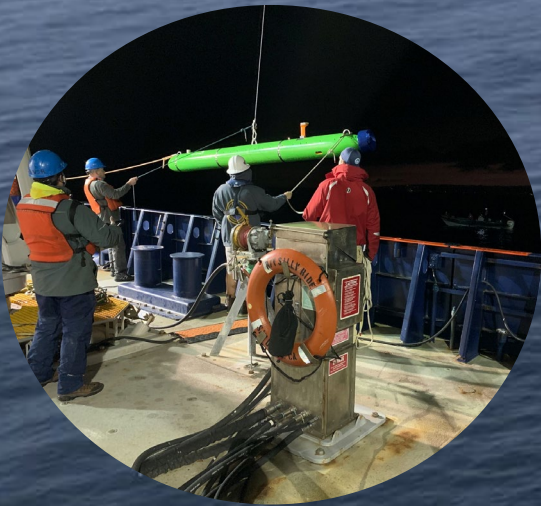
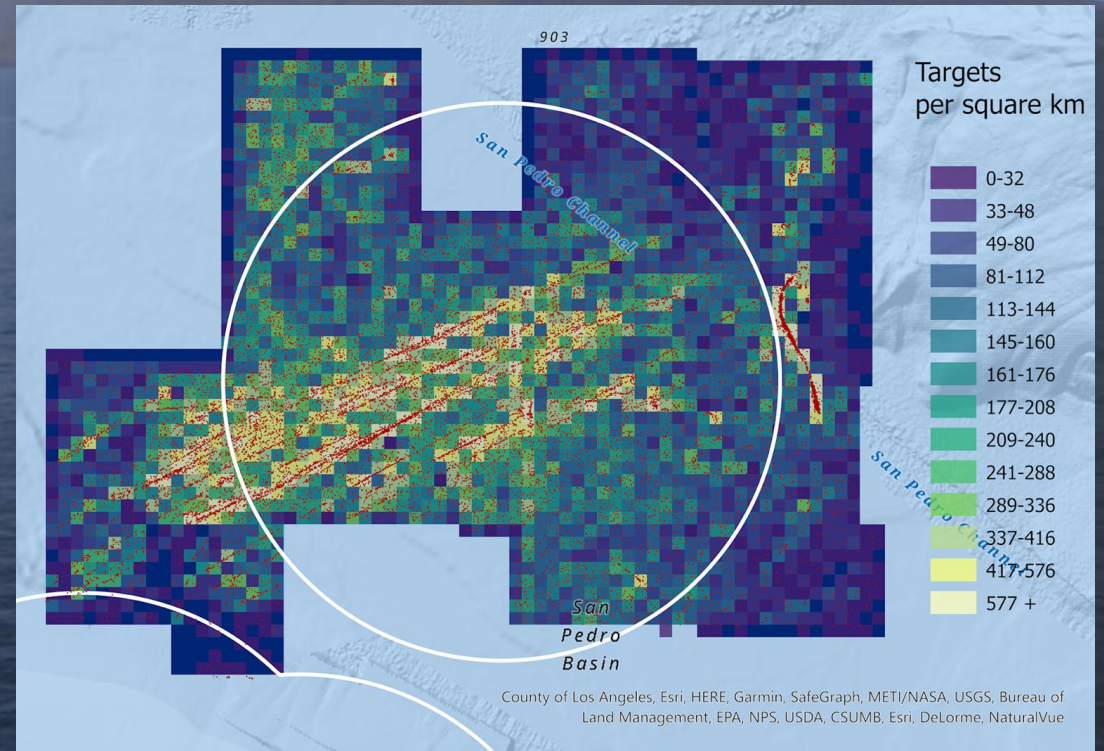
Type of Wastes	Major Dumping Sites*	Record Period	Estimated Total During Record Period (M tons)	Estimated Present Tonnage** (M tons/yr)
Refinery Wastes	3	1946-71	480,000	1,800
Chemical Wastes	2, 3	1965-71	2,800	470
	4	1947-71	5,700	210
	7	1960-67	140	-
Filter Cake	8	1969-70	320,000	-
Oil Drilling Wastes	2	1966-70	3,000,000	-
Refuse and Garbage	4	1931-71	47,000	1,200
	5	1944-70	7,400	-
	9	1947-68	90,000	-
Radioactive Wastes	10, 14	1946-68		-
Military Explosives	6, 11, 12	1945-70		-
Miscellaneous Wastes				250

Disposal Site #2

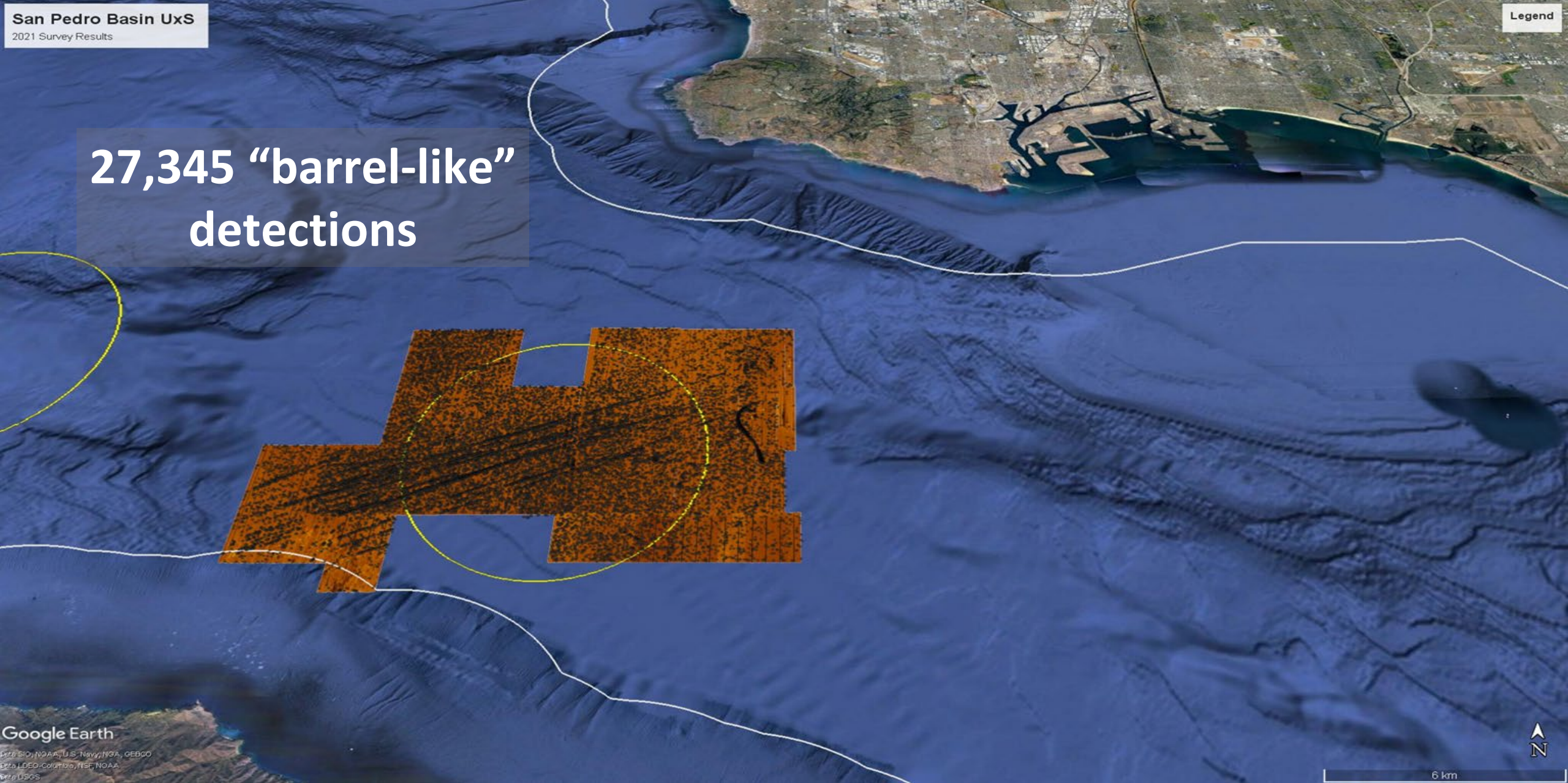


March 2021 Survey - NOAA through an MOU with Scripps conducted a survey on the R/V *Sally Ride*.

- 148 square kilometers; 36,000 acres
- Water depth: 3000'
- Greater than 25,000 barrel-like targets
- Excess of 100,000 debris objects
- Nature of targets varied through dump site
- Debris field approaches CA State Waters
- Emerging Robotics and "Big Data" Analytics enabled this study



27,345 “barrel-like”
detections



Google Earth
Data SIO, NOAA, U.S. Navy, NGA, GEBCO
Map, LDEO, Courtney, NSF, NOAA
© 2021 USGS



Scripps/Schmidt Aug 2021

EPA First Steps

EPA's Pacific Southwest Region has convened senior leaders from Federal and State agencies to discuss these coastal ocean disposal sites and next steps

Participating agencies include:

- The United States EPA
- NOAA
- The United States Department of the Interior
- The California Natural Resources Agency
- The California EPA
- The California State Water Resources Control Board
- The Los Angeles Regional Water Quality Control Board
- The California Department of Toxic Substances Control

Actions Being Discussed by the Participating Agencies – Focusing on Site #2

1. Document the Operational and Regulatory History of Disposal Site #2
2. Determine the Extent of Drum Disposal and Nature of Contamination – Disposal Site #2.
3. Evaluate Southern California Bight Environmental Conditions and Trends
4. If Conditions at Disposal Site #2 Are Determined to Threaten Human Health or the Environment – Conduct Technology Screening for Disposal Site #2

1. Operational and Regulatory History of Disposal Site #2

Objective: Identify contaminants of concern (CoCs), wastes and volumes disposed, and entities that produced the waste

Actions:

- a) Continue review of Montrose DDT Plant's operational history
- b) Locate and review supporting references and documents for the 1985 Los Angeles Regional Water Quality Control Board Report
- c) Locate and review Los Angeles Regional Water Quality Control Board records and documents regarding administration of Waste Discharge Requirements during 1961-1970
- d) Locate and review local records regarding pre-1961 operation and waste disposal

Operational and Regulatory History of Disposal Site #2

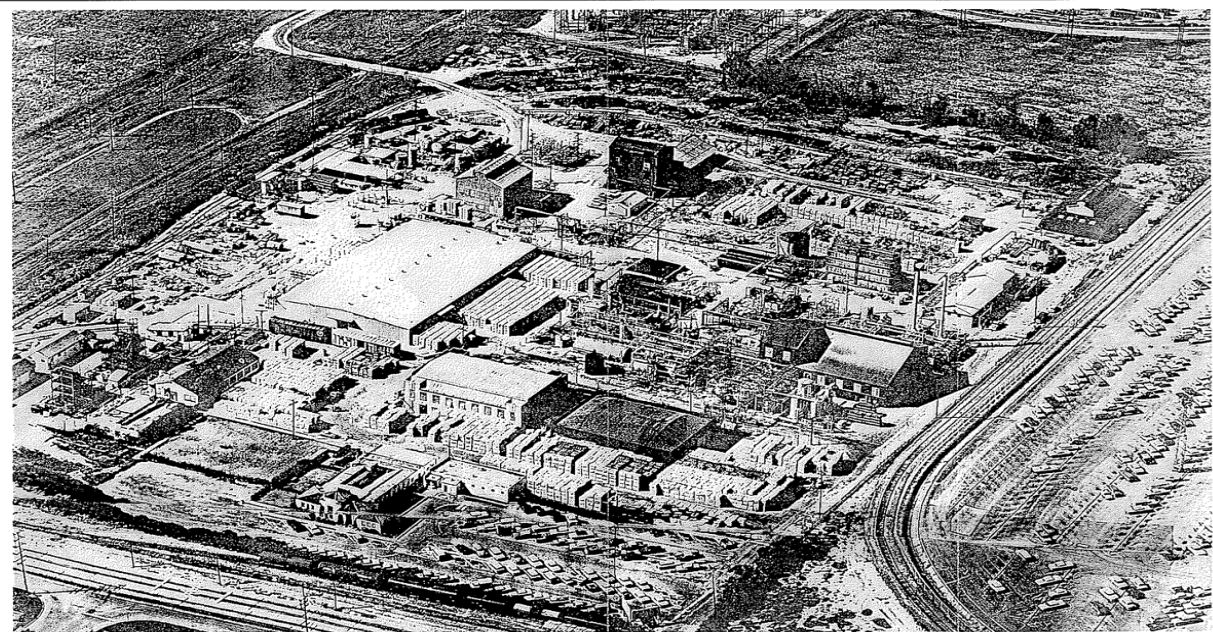
EPA WORK UNDER THIS ACTION

EPA is reviewing the historical record of DDT and acid waste disposal, to deepen understanding of the underwater DDT-containing waste.

This is being done by drawing on EPA's prior extensive investigation of the operational history of the Montrose DDT Plant, based in Torrance and part of an existing major Superfund site.

PRELIMINARY FINDING

DDT-containing waste from Montrose deposited in Pacific Ocean as a **bulk** product, rather than in drums



Source: Unknown

Figure 1.6J
Montrose Property -
Mid- to Late 1960s

2. Extent of Drum Disposal and Nature of Contamination – Disposal Site #2

Objective: Determine boundaries of drum disposal. Provide information regarding the contaminants and their concentrations present in sediment

Actions:

- a) Conduct follow-up survey of Disposal Site #2
- b) Conduct targeted sediment sampling, possibly including water and biota as well

Status: Workgroup of Federal and State technical/scientific staff and managers have been meeting to work on defining the goals, objectives for this survey and support efforts to plan and conduct the survey. EPA has provided \$500,000 to NOAA thru an Interagency Agreement in order to develop scope for this survey.

3. Southern California Bight Environmental Conditions and Trends

Objective: Establish historical baseline concentrations and conduct trend analysis for Chemicals of Concern (CoCs) in sediment, water, and biota

Actions:

- a) Review available technical reports and studies (including bight study reports)
- b) Establish an agreed upon list of analytes and biota to compare
- c) Establish an agreed upon comparison method
- d) Establish agreed upon baseline conditions (concentrations in sediment, water, and targeted biota)
- e) Conduct trend analysis for CoCs in sediment, water, and biota
- f) Evaluate physical and biological processes for CoCs in sediment or drums at Disposal Site # 2 to impact biota

4. If Warranted – Conduct Technology Screening for Disposal Site #2

Objective: Evaluate potential remediation technologies to address the contamination (screening level evaluation)

Actions: Evaluate and compare technologies in terms of effectiveness, ease of implementation/practicality/feasibility of implementation, and cost

Stakeholder Involvement

- Briefed House Appropriations Committee Minority Staff
- Updating multiple Congressional offices, including Senators Feinstein and Padilla Offices
- Developing Public Outreach (website and/or fact sheet)
- One-on-one conversations with scientific community

Questions ?

