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In Re Tentative Cleanup and Abatement Order No. R9-2011-001

SAN DIEGO GAS & ELECTRIC COMPANY'S
PRESENTATION FOR
EVIDENTIARY HEARING BEFORE THE CALIFORNIA
REGIONAL WATER QUALITY CONTROL BOARD
NOVEMBER 9, 2011



A Sempra Energy asset

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Jason Conder, Ph.D.

- General experience
 - Ph.D. environmental toxicologist and chemist
 - Over 20 peer-reviewed scientific publications in ecotoxicology, environmental chemistry, and contaminated sediment assessment and management
 - Experience with numerous contaminated sediment and terrestrial site assessments in the US (CA, TX, WA, MN, MI, NY, NJ, VA, HI, etc.) and worldwide (Italy, Indonesia, Israel, etc.)
- Experience with the San Diego Shipyard Sediment Site since 2007: Over 4,700 hours of effort
 - Reviewed several hundred thousand pages of Site documents
 - Analyzed Site data and other information
 - Several dozen mediation support meetings with other parties and CRWQCB Cleanup Team
 - Authored three expert reports on sediment chemistry and Beneficial Use Impairments
 - Authored additional reports filed to the public record on tidelands soil chemistry, technical comments regarding the DTR, and technical comments regarding other parties' technical opinions

Jason Conder, Ph.D.
Admission of Testimony

SDG&E is Not Properly Named as a Discharger in this Action

- SDG&E's Request for Rescindment has not been challenged by credible evidence and must be granted
- Regional Board's decision to name a discharger must be based upon substantial evidence caused a condition of "pollution"
- Cleanup Team acted unreasonably in naming SDG&E
 - Failed to offer any evidence establishing SDG&E caused a condition of nuisance or pollution
 - Ignored substantial and credible evidence SDG&E is not responsible for impacts to Site
 - WB Orders cited by Cleanup Team compel the Regional Board to grant SDG&E's Request for Rescindment
 - Failed to evaluate probability of shipyards as sole cause

Cleanup Team's Legal Burden

- Must Produce Evidence Which Establishes That a Discharger Was Responsible for Releasing Contaminates Of Such a Mass and Concentration That The Beneficial Use of the Receiving Water Was Unreasonably Affected; and
- The Evidence Produced Must Meet the Legal Test of "Substantial"
 - Excludes Speculation
 - Must be
 - "Reasonable in Nature";
 - "Credible"; and
 - "Of Solid Value"

Discharger Liability Attaches *Only* to Discharges That Are Significant Enough to Create “Pollution”

Cleanup Team’s Prehearing Brief, page 1

Water Code section 13050 defines “pollution” as an alteration of the quality of the waters of the state by waste to a degree which unreasonably affects either “the waters for beneficial uses[,]” or “[f]acilities which serve these beneficial uses.”²² Water Code § 13050(l). As the Tentative Cleanup and Abatement Order (TCAO) finds, each of the Dischargers caused and/or contributed to an alteration of the quality of the waters at the Shipyard Sediment Site (Site) to a degree that has unreasonably affected beneficial uses there.

Clean-Up Team Acted Unreasonably

By:

1. Failing to Evaluate Probability of Shipyards as Sole Cause
2. Failing to engage in any meaningful evaluation of extensive exculpatory evidence submitted by SDG&E and Port
3. Relying upon biased, unsubstantiated information provided by the Shipyards and others seeking to implicate SDG&E as an additional discharger
4. Failing to produce any evidence that alleged SD&E discharges were of a sufficient mass and concentration to cause a condition of pollution

No Substantial Evidence of SDG&E's Liability as a Discharger

- The Clean-Up Team has refused to update invalid assumptions and incorrect statements despite overwhelming and substantial evidence gained during the last 7 years of investigation

No Substantial Evidence of SDG&E's Liability as a Discharger

- Examples:
 - It has been established that previous allegations that the SDG&E tidelands ponds/oil-water separators discharged to San Diego Bay were in error
 - Extensive sampling of the tidelands leasehold and cooling water system (312 soil, groundwater, and cooling water tunnel solid samples collected by Port) demonstrated that neither SDG&E feature is a source of the observed condition of pollution or nuisance at the Shipyard Sediment Site
 - PCB signature in Site sediments different from tidelands/cooling water tunnel PCBs, demonstrating dissimilar sources
 - Concentrations of COCs in leasehold soils and cooling water tunnels were insufficient to explain elevated levels found in San Diego Bay sediment
 - The absence of a pattern of COCs leading from pond areas to the Bay demonstrates that the low levels of COCs associated with the ponds did not discharge or migrate to the Bay
- Neither the Clean-Up Team nor the other dischargers have provided any credible evidence to rebut these facts

CUT's Legal Authority Does Not Justify Adding SDG&E

- CUT cites to *In re County of San Diego*, WQO 96-6.
 - Order addressed whether parties were properly designated as dischargers to County landfill
- Not applicable to our circumstances:
 - City claimed it should not be named because it was only an easement holder for roadway adjacent to landfill and had not contributed to contamination at site.
 - RWQCB found that, despite City's "relatively minor" contribution, it would still be required to participate in remediation **because the RWQCB was unable to locate any other PRPs to participate in remediation.**

Evidence of the Shipyards' Sole Responsibility is Overwhelming

- Administrative record replete with uncontradicted evidence of decades of mass quantities of direct discharges of COCs to sediment by shipyards
- Historical and current shipyard physical disturbance of sediment:
 - Incorporates deeper contamination into surface layers to prevent natural recovery following control of shipyard COC sources
 - Spreads contamination from shipways and adjacent to shipyard activities over Site, necessitating a large-scale SWAC approach
 - Prevents consideration of Monitored Natural Recovery as a remedy, forcing selection of remedies that result in orders-of-magnitude higher costs
- Past and Present shipyards, and not SDG&E are liable as dischargers for Beneficial Use Impairment at Shipyard Sediment Site

Demonstrative Exhibits Illustrating Testimony of Jason Conder, Ph.D.

Conclusion: Shipyards Systematically Discharged PCBs to Bay

- Repeated detection of lighter PCB Aroclors 1242/1248 through 2006 in Pier 1 area consistent with hydraulic fluid/marine paint sources attributed to shipyard activities in marine railways
 - In contrast, lighter Aroclors were only found in two of 185 samples (max 170 $\mu\text{g}/\text{kg}$) on the SDG&E tidelands leasehold, confirming SDG&E not attributable for this Aroclor signature (ENVIRON, 2011a)
- PCBs detected in BAE marine railways (as high as 160,000 $\mu\text{g}/\text{kg}$) indicates PCB sources attributable to BAE were present until removal in 1998 (Ogden , 1998)
 - Note that these concentrations represent conditions after the top layer of soils were removed

Other Shipyard COCs

- Shipyards clearly-documented sources of the other primary COCs: HPAH, TBT, Copper, and Mercury (ENVIRON, 2011b)
 - HPAHs from creosote piers (Chadwick et al., 1999)
 - Use and discharge of TBT, Copper, and Mercury in marine paints and sandblasting material and leaching from ships (CRWQCB, 1972; Young and Heesen, 1974)
 - Stormwater runoff (sources cited in ENVIRON, 2011b)
 - DTR clearly acknowledges “particularly strong positive correlation of TBT with copper, HPAH and total PCBs indicated by their correlation coefficients (DTR 2011, Section 18-2, p. 18-5)

The Oppositions to SDG&E's Request for Rescindment are Baseless

- Arguments repeat the same flawed and self-serving evidence
- BAE Systems continues to fail to disclose or even acknowledge their decades of activities on the tidelands leasehold
 - Rather, they continue to encourage the CUT's flawed arguments regarding chemicals found on the tidelands
- CUT joins BAE in refusing to acknowledge the probability that BAE's activity explains presence of chemicals on the tidelands

Conclusions

- SDG&E not properly named as Discharger.
- Evidence relied upon by the Cleanup Team is replete with bias, errors and speculation.
- Clean-Up Team completely fails to carry its legal burden:
 - No substantial evidence that SDG&E contributed to condition of nuisance or pollution.

References Cited

- Chadwick et al. 1999. Sediment quality characterization, Naval Station San Diego, final summary report. US Navy Technical Report 1777. SAR372960.
- CRWQCB. 1972. Wastes Associated with Shipbuilding and Repair Facilities in San Diego Bay. SAR374265.
- ENVIRON. 2011a. Summary of Sampling and Analysis of Soil and Cooling Water Tunnels, BAE Subleasehold Area, San Diego Bay, San Diego, CA. February 23.
- ENVIRON. 2011b. Technical Comments on May, 26, 2011 Documents Submitted on Behalf of Parties to the San Diego Shipyard Sediment Site. June 23.
- Ogden. 1998. Final Report Site Remediation, Marine Railway Removal Project, Southwest Marine Shipyard. December. SAR198846.
- Young, D.R., Heesen, T.C. 1974. Inputs and Distributions of Chlorinated Hydrocarbons in Three Southern California Harbors. SAR393796.