

ATTACHMENT 31

February 19, 2010

Kenneth L. Andrecht
1056 Venture Valley Road
Julian, CA 92036

San Diego Regional Water Quality Control Board
9174 Sky Park Court
San Diego, California

Re: South Bay Power Plant Discharge Effects on Eelgrass (*Zostera Marina*) Distribution in South San Diego Bay

Self Introduction: I am Ken Andrecht, South Bay resident from 1960 until 2007. I worked for the Port of San Diego for 25 years, eight years as the Chief of Property Engineering, and fourteen years as the Assistant Director or Acting Director of Environmental Management. My environmental duties included CEQA and NEPA compliance; the preparation of EIRs and EISs; Bay clean up activities, including water quality issues; and management of the Bay's natural resources, including the Chula Vista Wildlife Reserve, which lies between the South Bay Power Plant's (SBPP) cooling water intake and discharge channels.

Eel Grass History in South Bay: This first is anecdotal. As a South Bay user in 1960, I remember the bay water to be very warm, with vast mats of bottom algae which would often become detached, and float and rot on the water surface. There was no eelgrass in South Bay south of the old Chula Vista G Street Boat launching ramp, nor south of the Silver Strand Beach Park's bayside cove. The bay bottom was covered with red and green algae.

In 1974, the Port District conducted a Biological Reconnaissance of the mudflats and shallow water areas just north of the SBPP cooling water separation dike. The area was found to be sparsely populated with benthic biota typically associated with conditions of high organic loading and restricted water circulation, including domestic waste discharges. No eelgrass was found within the study area. The Biological Reconnaissance was undertaken as a part of the environmental and permitting processes for the dredging of the Chula Vista Harbor, and the construction of the 80-acre Chula Vista Wildlife Reserve by the Port District.

The Harbor dredging and Wildlife Reserve construction commenced in 1977 and was completed in 1980. In 1984, the Port District began the development of a salt marsh within the Reserve, with the initial planting of cordgrass (*Spartina foliosa*) in the Reserve's tidal basins. A second planting of *Spartina* and other salt marsh species was subsequently conducted. The salt marsh was monitored yearly, and the 40 acre marsh creation project was found to be a great success. No eelgrass was found within the 80 acre Reserve area, nor adjacent water areas.

In 1985, Chula Vista requested the realignment of the Chula Vista Harbor entrance channel. A benthic survey found that eelgrass had migrated south into the northern portions of the channel. Mitigation for the disruption of this eelgrass would be required for the project to proceed.

Introduction of Eelgrass alongside SBPP Cooling Water Channel: In early 1986, I with two assistants, conducted an experimental eelgrass transplant along the north shore of the Reserve, adjacent to the SBPP

cooling water intake channel. Approximately 200 eelgrass transplants were made along eleven transects at elevation minus 1.9 feet MLLW. This was the first introduction of eelgrass into the area near the SBPP. Monitoring of these transplants was conducted by me and my staff in 1986, 1987 and 1988. The transplants succeeded. Based on this success, the Port District undertook a large scale (approximately six acre) eelgrass transplant along the south side of the SBPP cooling water channel in 1988. This transplant was monitored annually for ten years. By 1995, over thirteen (13) acres of eelgrass had established itself alongside the cooling water channel.

South Bay Power Plant Cooperation: It must be noted that the management, crew, and guards of the SBPP have extended the utmost cooperation over the years to me and my staff. Access to the Wildlife Reserve is through the Power Plant and over its cooling water separation dike. Our activities at the Reserve included years of salt marsh plantings and monitoring, eelgrass monitoring, California least tern nesting site preparation, and bi-weekly tern monitoring during the nesting season.

Conclusion: It has been stated by some that the SBPP has negatively impacted eelgrass in South Bay. I believe this to be incorrect. It is my conclusion that the SBPP has, in fact, facilitated the introduction of eelgrass into South Bay. The SBPP cooperated with the construction of the Chula Vista Wildlife Reserve through the concession of some of its water lease area to the Port in 1976 and by allowing access through its plant for the Port's construction of the Reserve. The Reserve provided approximately 20 acres of new eelgrass habitat within South Bay. This habitat now supports a viable eelgrass meadow directly adjacent to, and within, the SBPP cooling water intake channel. Further, two of the Port's environmental consultants, Merkle & Associates and MBC Applied Environmental Sciences, have speculated that the increased water circulation provided by the SBPP intake channel have assisted the proliferation of the Reserve's eelgrass beds by providing for the introduction of nutrients into the beds, and by dispersing the turbidity associated with the gradual erosion of the Reserve's containment dikes.

Sincerely,

KENNETH L. ANDRECHT

Kenneth L. Andrecht

References:

1. Biological Reconnaissance and Sediment Chemistry Study, Chula Vista Small Boat Basin, February 15, 1975, UPD #EM74/1.1
2. Eelgrass Transplanting at Chula Vista Wildlife Reserve, Specification #87-37, San Diego Unified Port District
3. Development of a Coastal Salt Marsh in South San Diego Bay, Andrecht, May 1990
4. Eelgrass Distribution Mapping and Vegetation Survey Bayward of the North Dike, Chula Vista Wildlife Reserve, July 1994, MBC Applied Environmental Sciences
5. Eelgrass Survey of the North Kike of the Chula Vista Wildlife Reserve, May 25, 1995, Merkel & Associates, Inc.
6. Eelgrass Distribution, Chula Vista Wildlife Reserve, San Diego Bay, California, May 1996, Merkel & Associates, Inc.