



### **History of the Plant**

Sunnyvale was incorporated in 1912, with a population of about 1,500. Most of the land in the city was filled with fruit orchards and farms, and it was appropriate to dispose of wastewater by simply running a pipe to the water of the San Francisco Bay, where the tide carried it out to sea.

During the 1940s, Sunnyvale became an important industrial and residential community. In that decade, the population grew to 10,000. Because of the population boom, studies were undertaken to assess the need for a citywide sewage treatment system. The resulting sewage treatment plant, constructed in 1956, was a primary, or one-step plant that could process 7.5 million gallons of wastewater a day. However, it soon became overloaded due to an increased number of residents, canneries, and other industries locating in Sunnyvale.

By 1960, the population had grown to over 50,000 residents, plus many more non-residents working in the new industries that continued to sprout up. The increase in wastewater flows from this growth created the need to expand the plant.

Construction to increase the treatment capacity to 15 million gallons per day was completed in 1962. However, even with this plant expansion, it became apparent that special consideration to treatment processes would have to be made because of the high cannery flows. Cannery waste, which depletes great quantities of the oxygen available in the water as the waste decays, was identified as being a serious problem for the shallow and fragile South Bay environment. It became necessary to provide additional treatment.

Examining processes which would best solve the problem led City engineers and design consultants to suggest converting a salt evaporating pond at the south end of the Bay to an oxidation pond. A 115-acre pond was purchased from the Leslie Salt Company for this purpose. This controlled ponding process reproduced a natural method of wastewater

treatment, and added another vital step in upgrading the treatment of Sunnyvale's wastewater.

Over the years, a second evaporation pond of 325 acres was purchased and converted to an additional oxidation pond. The ponding system continues to be an invaluable part of the treatment process but it is unusual, since most cities lack the space and funding to incorporate ponds into their wastewater treatment plant's process.

New developments in chemistry and environmental studies during the technology explosion of the 70's led to further understanding about the processes needed to protect our waters from pollutants. With the enactment of the Clean Water Act in 1972, new concepts were incorporated into wastewater treatment, resulting in expansion of the Sunnyvale Water Pollution Control Plant. When a third process, called tertiary treatment, was added to the Plant in 1978, total capacity increased to 22.5 million gallons of treated wastewater each day. The final upgrade to increase the Plant to its present capacity of 29.5 MGD was completed in 1984.