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## Characteristics of effluents from non-power industrial facilities in 2000

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## **ABSTRACT**

Industrial facilities represent a diverse class of point source dischargers that can be separated into one of two categories: power generating stations and non-power-related industries. In 2000, non-power industries in southern California consisted of facilities such as petroleum refineries, a chemical plant, aquarium/research institutions, and a salt plant. The types of non-power industries that discharge to the SCB can vary yearly, making industrial discharges an unpredictable source of contaminants to the SCB. In 2000, seven non-power industrial facilities discharged treated effluents to harbors, storm channels, and the coastal ocean within the SCB. Emissions from these facilities were characterized for the year 2000, and compared to data from studies conducted in previous years. In 2000, non-power industrial facilities discharged a combined total of 12.4 x 109 liters (L) of effluent to the SCB, for which petroleum-related industrial facilities accounted for 83%. The total effluent volume in 2000 represented a 45% decrease from the volume discharged by industrial sources in 1995. Constituent mass emissions also decreased between 7% (arsenic) and over 95% (suspended solids, CBOD, oil/grease, cadmium, chromium, mercury, zinc, and phenols) from 1995 to 2000. Decreases in effluent volumes and contaminants can be attributed to a general decline in the presence of pollutants in the waste stream of industrial facilities, as well as to a decrease in the number of industrial facilities with direct discharge to the coastal ocean. Since 1971, the number of industrial facilities has decreased by approximately 93%, the total volume of non-power industrial effluent has decreased by 93%, and constituent mass emissions have decreased by greater than 98%. Increased regulations placed on industrial facilities, resulting in decreases in the number of facilities with direct discharges to the SCB and improvements in industrial effluent quality, is the primary reason for significant historical changes in emissions from non-power industrial facilities. When compared to large POTWs in 2000, industrial facilities represented a relatively insignificant fraction of the total pollutant load from both sources combined, accounting for only 0.8% of the total effluent volume, and typically less than 0.1% of the load for any given constituent. Ultimately, in 2000, industrial discharges were an insignificant source of pollutants to the SCB.

## **Full Text**

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