

INDUSTRIAL POLLUTION PREVENTION

In 1990 an Ordinance revision was adopted for the cities within the Palo Alto Regional Water Quality Control Plant (RWQCP) service area requiring the preparation of Waste Minimization (now called "Pollution Prevention") Plans. Between 1990 and 1993, 28 companies were required to prepare plans for the pollutants shown on the reverse side. For each pollutant of concern, the major industrial contributors (those contributing a total of 85% of the industrial loading for one or more pollutants) were required to prepare a plan. Where an enforcement order was in progress, an enforcement order was used as the vehicle for imposing the requirement. For the other industries, permit modifications were used.

Six to nine months was typically allowed for preparation of the plans. Kennedy-Jenks Consultants (a consulting engineering firm) was hired to review the plans and offer further suggestions for study, analysis and/or implementation. The RWQCP held a series of meetings with each firm encouraging revisions to plans and implementation of resulting plans. Where violations had occurred, implementation of some or all of the plans was required. In other cases, implementation was strongly encouraged. Many elements of the plans were implemented, contributing to the 60% reduction in industrial copper loading achieved from 1989 through 1992. The February 1993 agreement with CLEAN South Bay called for the RWQCP

to prepare Pollution Prevention Reviews. The function of the reviews was to look for more opportunities for pollutant discharge reduction than had been identified by the industry plans. Because the agreement narrowed the list of pollutants of concern to copper and nickel, four printed circuit board manufacturers, two metal finishers, and one hospital were selected for study. In late 1993, Kennedy-Jenks Consultants completed the reviews, which were used in developing new discharge standards for industries that were adopted in December 1994.

The purpose of the reviews was to look for measures that could reduce pollutants and save industry money in reduced water bills, sewer bills, chemical costs and other savings (see the "Pollution Prevention Reviews" Fact Sheet for results). Because industry discharges of copper and nickel have decreased so much, (down from about 33% to about 18% of the total copper loading in RWQCP influent), the RWQCP 1995 ordinance imposed only those additional requirements that are found to pay for themselves.

WASTE MINIMIZATION STUDIES

INDUSTRY NAME	WM TARGET CONSTITUENTS										STUDY STATUS		
	As	Cd	Cr	Cu	CN	Pb	Ni	Ag	Zn	TTO	IMPOSED	DUE	REC'D
SILVER SOURCE CONTROL - TARGET FACILITIES													
AMES		•	•		★	•	•	•	•		05/31/90	12/31/90	✓
EO SENSORS INC.			•			•	★	•			07/30/90	03/01/91	✓
HEWLETT PACKARD 4-6			•		•	•	•	•	•		08/17/90	02/17/91	✓
KODALUX								•			04/02/90	08/02/90	✓
VARIAN 1-2								★			03/29/90	09/29/90	✓
WATKINS-JOHNSON 4				★	★	★	★	•	★		04/29/91	10/29/91	✓
TIER 1 - TARGET FACILITIES													
DAVILA				•	•	•	•				05/06/91	11/06/91	✓
ELECTRITE		•	•	•	•				•		12/14/90	05/30/91	✓
FORD		•	•		•						01/30/90	05/03/90	✓
HEWLETT-PACKARD 17									•		07/08/91	12/31/91	✓
HEWLETT-PACKARD 25	•		•		•	•		•	•		8/15/91	2/15/92	✓
MARTEX				•	•	•	•			•	9/5/91	3/5/92	✓
RAMLOR				•	•	•	•				10/29/90	06/01/92	✓
SYMTRON, PLYMOUTH		•	•	•	•	•	★				09/21/90	03/30/91	✓
TECHNITRON				•			•		•		11/07/90	05/07/91	✓
VARIAN 1-2		•		•	•		•				08/10/90	02/10/91	✓
WATKINS-JOHNSON 1				•	•		•				04/01/91	10/01/91	✓
TIER 2 - TARGET FACILITIES													
CAL SPRAY			•	•			•		•		03/19/91	09/29/92	✓
COHERENT				-			-				04/15/90	05/15/91	✓
HAMMON					★		★				07/16/90	01/16/91	✓
HEWLETT PACKARD 12			★								12/03/90	06/03/91	✓
LOCKHEED		•	•	•	•	•	•	•	•		03/25/91	10/01/91	✓
SANDOZ		•	•	•	•	•	•	•	•	•	01/15/91	07/15/91	✓
SPECIFIC PLATING					★						03/26/90	12/21/90	✓
SYNTEX										•	05/15/91	11/03/91	✓
TELEDYNE MEC		•	•	•	•	•	•	•	•		05/07/91	12/01/91	✓
VARIAN 7							•				10/25/90	04/25/91	✓
WATKINS JOHNSON 5					•						06/06/91	12/06/91	✓