

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
SAN FRANCISCO BAY REGION

ORDER NO. 93-118

CITIES OF SAN JOSE AND SANTA CLARA
SAN JOSE/SANTA CLARA WATER POLLUTION CONTROL PLANT
SAN JOSE
SANTA CLARA COUNTY

REQUIRING THE CITIES OF SAN JOSE AND SANTA CLARA TO CEASE AND DESIST
DISCHARGING WASTE CONTRARY TO DISCHARGE PROHIBITIONS IN ORDER NO.
93-117 (NPDES PERMIT)

The California Regional Water Quality Control Board, San Francisco Bay Region (hereinafter called the Board) finds that:

1. On October 20, 1993, the Board adopted Order No. 93-117 (NPDES Permit CA0037842) prescribing waste discharge requirements for the Cities of San Jose and Santa Clara (hereinafter the discharger).
2. The discharger currently (during a drought period) discharges an average dry weather flow of approximately 99 million gallons per day (mgd) from its advanced waste treatment facility at 700 Los Esteros Road, San Jose. A pre-drought average dry weather flow of 121 mgd was discharged in 1987.
3. Prior to adoption of Order No. 93-117, the discharger was subject to NPDES Permit CA0037842 (Order No. 89-012, adopted January 18, 1989, which was amended by the following orders: Order 90-033, adopted February 21, 1990; Order 90-068 adopted May 16, 1990; and, Order 91-066, adopted April 17, 1991). Order 89-012 was appealed to the State Water Resources Control Board after the adoption and the State Board ruled on the appeals in Order No. WQ 90-5, issued October 5, 1990.
4. The discharger was also subject to Cease and Desist Order 89-013 (adopted January 18, 1989, as modified by Order 89-140, adopted August 16, 1989, Order 89-188 adopted December 13, 1989 and Order No. 90-054, adopted April 18, 1990) to mitigate for effects of salt marsh conversion. Order 93-117 rescinded Order 89-013 and incorporates updated tasks concerning mitigation.
5. Order 91-066, adopted on April 17, 1991, revised the discharger's NPDES permit to include water quality based effluent limits. Between May 1991 and July 1993, the discharger had significant violations of their NPDES permit for exceeding effluent limits for the following constituents:

<u>Constituent</u>	<u>Order 91-066</u>	
	<u>Effluent Limits,ug/l</u>	<u># Violations</u>
Copper	2.9	111 (97%)
Nickel	8.3	73 (64%)
Silver	2.3	18 (16%)
Cyanide ¹	40.0	6 (7%)

6. The discharger disputes the findings of the Board with respect to effluent limit violations, but desires to settle its liability. On October 20, 1993, the Board required San Jose to pay an administrative civil liability of \$375,000 for effluent limit violations.
7. Results of ambient monitoring conducted by the South Bay dischargers between 1989 and 1991 showed that both total and dissolved concentrations of mercury frequently exceeded the water quality objective of 0.025 ug/l. The exceedances occurred at all stations. The Santa Clara Valley Nonpoint Source Program has begun investigating potential sources of mercury in runoff. The measurement of mercury concentrations in effluent at the levels of the effluent limitations and receiving water objectives requires advanced methods which are not routinely used making compliance determination difficult. However, the multiple potential sources of mercury in POTW waste streams, the low level of the effluent limitations, and the high rate of discharge by the dischargers into the South Bay, and the fact that the present water quality objective is frequently exceeded causes concern about the relationship between POTW discharges and potential water quality impacts. This concern necessitates the need to adequately define the levels of mercury discharged to San Francisco Bay.
8. Order No. 93-117, revised the discharger's existing effluent limits for copper and cyanide. On October 21, 1992, the Regional Board adopted a site-specific objective in San Francisco Bay and a shallow water marine effluent limit for copper of 4.9 ug/l. On September 16, 1992, the Regional Board adopted an effluent limit for cyanide of 5 ug/l.
9. If the 4.9 ug/l effluent limitation for copper had been in effect between May 1991 and July 1993, the discharger would have been in violation 78% of the time. If the 5 ug/l effluent limitation for cyanide had been in effect between April 1991 and August 1992, the discharger would have been in violation 84% of the time.
10. Based on the past data from, it is anticipated that the discharger will immediately be out of compliance with Provision B.4.1 (Limits for Toxic Pollutants) of Order 93-117 for copper, nickel, silver, and cyanide. It is also anticipated that the Discharger may threaten to violate the effluent limitation for mercury.
11. On June 16, 1993, the Board adopted Resolution 93-61 specifying a waste load allocation for sources of copper which enter San Francisco Bay. Based on the waste load allocation, Provision B.5 of Order 93-117 requires the discharger to discharge no more than 1760 lbs/year of copper. In addition, the discharger along with the two

¹ Based on data from May 1991 and August 1992.

other South Bay POTWs and the Santa Clara Valley Nonpoint Source Pollution Control Program are required to reduce their combined discharge of copper into South Bay by an additional 950 pounds per year, to be accomplished by 1998. In 1992, the discharger discharged 1811 lbs of copper. However, because 1992 was during a drought period, with associated lower flows to the treatment plant, it is anticipated that the discharger may threaten to violate Provision B.5 (mass limitation for copper) of Order 93-117.

12. In June 1989, EPA designated San Francisco Bay below the Dumbarton Bridge as an impaired water body under Section 304(l) of the Clean Water Act. There was evidence of water quality impacts in the South Bay associated with seven metals: cadmium, copper, lead, mercury, nickel, selenium, and silver. The three municipal plants and storm water discharges in the South Bay were designated as point sources contributing to this impairment. Section 304(l) requires States to adopt Individual Control Strategies for designated point source discharges that will result in attainment of objectives for toxic pollutants within three years. Exceedances of water quality objectives for copper, mercury, and nickel still occur.
13. Order No. 89-012, adopted January 18, 1989, required the discharger to identify all significant controllable sources of metals and to determine feasible measures to reduce the metals loadings to the treatment plant. On October 1, 1989, the discharger submitted the Pollutant Sources Evaluation for the San Jose/Santa Clara Water Pollution Control Plant. On December 1, 1989, the discharger submitted the Waste Minimization Study.
14. Order No. 90-068, adopted May 16, 1990, required the discharger to make pre-treatment program improvements, to implement a pilot waste minimization program, and to require targeted industries to submit waste minimization plans. The discharger submitted a progress report for the source reduction program on December 1, 1990 and a Status report for the Source Reduction Program on August 1, 1991.
15. The pre-treatment program improvements included expanding flow monitoring for targeted industries, regulating auto-repair and photoprocessing firms, and implementing more aggressive enforcement actions against violators. The discharger has initiated and continues to implement these pre-treatment program improvements. The discharger currently regulates 1014 commercial sources including photoprocessors, auto repair and parts cleaning.
16. The discharger's pilot waste minimization and public education program was targeted at reducing copper, zinc, and lead to the WPCP. The pilot program was directed at radiator repair shops and auto parts cleaning shops, and other potential targeted dischargers.
17. The discharger issued "zero-discharge" certifications to 18 radiator repair shops in their jurisdiction. A total of 2485 auto repair shops have been identified. The discharger has inspected 1836. The discharger has sent zero discharge certification letters to 825 facilities which could verify that they qualified. The discharger is conducting follow

up inspections. Nine hundred and ninety-two of the facilities have been verified as non-applicable.

18. The discharger developed a three tiered program for 141 photo-processors. Tier I included large photo-processors which were already regulated. Tier II includes small photography studios and one-hour photo stores. Tier III facilities includes hospitals and educational institutions. The discharger has issued 39 permits, 8 zero discharge certifications, and 94 zero spent solution certifications.
19. The discharger is in the process of developing a regulatory program for printers, hospitals, and dry cleaners.
20. The discharger has increased their source control program (including industrial pretreatment) staff from 20 to 44 employees since July 1990.
21. The EPA issued Enforcement Order CWA-X-F491-18 and the Board adopted Cleanup and Abatement Order No. 91-07 in July 1991 for violations of the discharger's pretreatment program. The program was deficient in the regulation of categorical industrial users. The Orders, as amended by correspondence dated April 15, 1992 required corrective actions and development of final local limits by March 31, 1993.
22. The discharger's pretreatment program includes 427 industries, of which 224 are Significant Industrial Users. It has been determined that approximately 50 (13%) of the industries contribute up to 85% of the copper and nickel discharged by the industrial sector to the WPCP. These firms are predominately printed circuit board manufacturers, electroplaters, and magnetic disk manufacturer industries.
23. The discharger initiated on December 18, 1992, 3 pilot pollution prevention studies. Three industries, a metal finisher, a printed circuit board manufacturer, and a disk manufacturing firm volunteered to participate in the program. Cost-effective pollution prevention measures will be identified as a result of these studies.
24. In December 1991, the discharger submitted an "Investigation of Un-Permitted Sources of Copper and Nickel in San Jose/Santa Clara WPCP Influent." The discharger evaluated the contribution of copper from the water supply, corrosion, commercial sector and other potential sources. The discharger's preliminary estimate of the contribution of copper from the water supply and corrosion is 46%.
25. On August 28, 1992, the Board issued a "Request for Information and a Proposed Strategy to Reduce Copper and Selenium in South Bay Drinking Water Sources" to the dischargers, water distributors and retailers in the South Bay. A steering committee representing the affected parties was formed and a joint monitoring proposal was submitted on November 2, 1992. A revised monitoring proposal was submitted on August 12, 1993.
26. On August 25, 1992, the San Jose City Council adopted an ordinance prohibiting the discharge of copper-based chemicals, containing greater than 5% by weight of copper, into the sewer system and requiring retailers who sell such products to notify

consumers of the ban. It is estimated that eliminating use of these products may significantly reduce residential copper loading to the WPCP. It is anticipated that the other agencies tributary to the SJ/SC WPCP will adopt a similar ordinance.

27. The discharger operates an approved pretreatment program with local discharge limits for non-domestic users of the collection system. The discharger originally developed its local limits in the 1970s.
28. On June 29, 1993, the discharger signed an agreement with Clean South Bay, a coalition of environmental groups, concerning the source control program for the WPCP. The discharger has submitted this agreement to the Board to achieve compliance with their NPDES permit requirements. The agreement includes source control measures to reduce the concentration and mass of metals in their influent. The proposal addresses contributions from the industrial, residential, commercial and corrosion/water supply sources. The compliance proposal has been incorporated into this Order as Attachment 1.
29. Section 13301 of the California Water Code authorizes the Regional Board to issue a Cease and Desist Order when it finds that a waste discharge is taking place or threatening to take place in violation of the Board's prescribed requirements.
30. This action is an order to enforce waste discharge requirements adopted by the Board and is categorically exempt from CEQA pursuant to Section 15321 of the Resources Agency Guidelines.
31. The discharger and interested persons have been notified of the Board's intent to adopt the enforcement order, and have been provided with the opportunity for a public hearing and the opportunity to submit their written views and recommendations. The Board, in a public meeting, heard and considered all comments pertaining to the discharge.
32. The entry of this Order, and the performance by the discharger of the obligations set forth herein, shall constitute satisfaction of dischargers' liability under the Clean Water Act and the Porter-Cologne Act for discharges occurring between April 17, 1991 and October 20, 1998, with respect to any violation of copper, nickel, and/or silver effluent limits established in Order 91-066 and Order 93-117, or any obligation of discharger with respect to matters covered by this Order. However, this Cease and Desist Order does not preclude any rights that the Board or any interested party may have as to violations of the interim limits established in this Order, violations of the requirements of this Order, or to other matters not covered by this Order. It is the intent of the Board that this Order shall be deemed to constitute appropriate enforcement and diligent prosecution of an action under the Porter-Cologne Act comparable to an administrative penalty action under the Clean Water Act as provided in Sections 309(a), 309(g)(6)(A), and 505(b) of the Clean Water Act, with respect to violations stated in the first sentence above.

IT IS HEREBY ORDERED THAT, the Discharger shall cease and desist from violating waste discharge requirements contained in Order No. 93-117 as follows:

1. Compliance with effluent limitation B.4.1 of Order 93-117 for copper, nickel, and silver shall be achieved in accordance with the time schedules and interim measures described in Attachment 1 which is incorporated herein and made a part of this Order. Full compliance with the copper, nickel, and silver effluent limits shall be achieved by October 20, 1998.(1)(3)(4)
2. Compliance with effluent limitation B.4.1 of Order 93-117 for cyanide shall be achieved in accordance with the timeschedules and interim measures described in Attachment 1. Full compliance with the cyanide effluent limit shall be achieved forthwith.
3. The discharger shall comply immediately with the following interim limits. The interim limits are derived from the 95th percentile plant performance concentrations during the period from January 1992 through May 1993. (5)

<u>Constituent</u>	<u>Interim Limit (ug/l)</u>
Copper	9.0, 1-day average
Nickel	13.0, 4-day average
Silver ²	2.3, 1-day average
Cyanide	26.0, 1-day average

4. Compliance with mass limit B.5.2 of Order 93-117 for copper shall be achieved in accordance with the time schedule below and implementation of interim measures described in Attachment 1. Full compliance with the copper mass effluent limit shall be achieved by October 20, 1998 (2)(3)(4)

Notes:

- (1) According to the Basin Plan, after a wasteload allocation (for copper) is implemented in permits and load reductions consistent with that allocation are occurring, the Board will reevaluate the effluent concentration limitation for copper.
- (2) Mass loadings are to be calculated weekly using average weekly flow data. The discharger shall submit a cumulative total of mass loadings for the previous twelve months with each Self Monitoring Report. Compliance shall be determined based on the previous twelve months of monitoring and shall be calculated weekly.
- (3) If in the process of attaining these limits, the discharger determines that measures required to attain these limits would result in substantial and widespread economic and social impact, the discharger may petition the Board to reevaluate these limits.

² Interim silver limit is identical to permit limit of Order 93-117.

- (4) If in the process of attaining these limits, additional information justifying a later compliance date becomes available, the discharger may petition the Board to reevaluate the compliance schedules.
- (5) The discharger shall evaluate compliance with the 95th percentile limit monthly. The 95th percentile value is the highest concentration measured during a time period (two years maximum) after removing the top 5% of the results for that time period. After 5% of the measures for any parameter have exceeded the effluent limit, each additional exceedance shall constitute a violation for the measurement period of that parameter (e.g., for metals measurements that are measured weekly, each exceedance after the 5% allowed shall be counted as one week of violation).

I, Steven R. Ritchie, Executive Officer, do hereby certify that the foregoing is a full, true, and correct copy of an Order adopted by the California Regional Water Quality Control Board, San Francisco Bay Region, on October 20, 1993.



STEVEN R. RITCHIE
Executive Officer

Attachment 1, Order No. 93
San Jose/Santa Clara WPCP

The following measures are designed to achieve compliance with the Discharger's NPDES permit (Effluent concentration and mass limits B.4.1 and B.5). All "ongoing" measures are required to be continued until the Discharger fully complies with those provisions. The Board will decide which measures should be continued beyond that date.

I. GENERAL (NON-SOURCE SPECIFIC) ACTIVITIES

A. Source Identification

1. Locate new industrial and commercial sources annually by utilizing the "Pac Bell" list, business tax referrals, city databases and mail surveys.
2. The Discharger will continue to maintain its computer database of historical and current laboratory data. The data will be made available in Dbase IV format to the Executive Officer of the Regional Board and the public upon reasonable request in accordance with the public records act.
3. Continue to enhance and upgrade the Pretreatment Program Database Management system.
4. Evaluate new waste minimization techniques as they become available.

B. Staffing

The Discharger shall maintain the staffing levels necessary to administer and enforce the Expanded Source Control Program. The Discharger currently has 44 staff dedicated to the source control/industrial pretreatment program.

C. New Laboratory Facility

The Discharger shall continue efforts to upgrade and expand its laboratory facility, to enhance enforcement capabilities.

II. POLLUTION PREVENTION STUDIES (AUDITS)

A. Pilot Studies

The Discharger shall complete three in depth Pilot Pollution Prevention Studies that follow the "Pilot Pollution Prevention Study Protocol."¹ The studies shall focus on copper and nickel reductions. One company in each of the following categories of industry will be the subject of a study: printed circuit board, electroplating, and disc manufacturer.

Report Due: July 15, 1993

B. Mass Audit Study Program

1. Mass Audit Study Protocol

The Discharger shall submit a "Mass Audit Study Protocol" which defines the scope of a Mass Audit Study. The protocol shall be based on the information developed by the pilot studies and available information from similar studies conducted by Palo Alto and Sunnyvale. The "Mass Audit Study Protocol" shall be used as the protocol for the required mass audits.

At a minimum the "Mass Audit Study Protocol" shall:

- a. be designed so that to the maximum extent feasible companies can use qualified in-house personnel to perform audit study tasks along with any necessary outside consulting or technical assistance.
- b. be designed to meet a goal of costing less than \$30,000, except where the circumstances of individual facilities require additional costs to meet the audit's essential purposes.
- c. be designed to minimize unnecessary and redundant tasks and include, to the extent necessary, and the maximum extent practical, the elements set forth in the "Pilot Pollution Prevention Study Protocol."
- d. include a review of the following levels of reduction.

¹ Study Protocol refers to the scope of services set forth in the Pilot Pollution Prevention Studies conducted by discharger -- a copy of which is attached hereto. (Pilot Pollution Prevention Study Protocol)

- i. 90% to 100% elimination of copper and nickel through a sequence of pollution prevention measures, including treatment and recycling (closed-loop process).
 - ii. the maximum feasible pollutant reduction that would be cost effective using the prevailing interest rate with assumed payback period of five years.
 - iii. the maximum feasible pollutant reduction that would be cost effective using the prevailing interest rate with an assumed payback period of three years.
- e. recommend specific measures necessary to accomplish the above levels of reduction.
 - f. determine the cost of measures described in (e) using interest rates of zero and nine percent.
 - g. recommend a schedule for expeditious implementation of the measures necessary to achieve maximum feasible reductions² including development of any construction plans, acquisition of financing, construction, operation, etc. The schedule should also include an analysis of any financial barriers to expeditious

² Maximum feasible reduction means the amount of reduction that would be cost-effective for the industrial discharger, calculated at the prevailing interest rate with an assumed payback period of five years, and would result in the smallest pollutant discharge. Measures included in the Maximum Feasible Reduction shall include all individual measures which payback in five years or less, as well as functionally interdependent groups of measures which as a group payback in five years or less. Single measures which by themselves payback in longer than five years shall be considered part of a functionally interdependent group if their addition substantially increases the mass of copper or nickel removed and if the other measures with which they are grouped are their functional prerequisites. The calculation of cost effectiveness shall include all costs listed in the study protocol, plus the cost of the audit. Use of a shorter payback period may be requested, based on information from the development of the local limits and the results of the mass audit studies, from the Executive Officer of the RWQCB. Use of a shorter payback period will be allowed to provide selective relief to individual industrial dischargers so long as Discharger can demonstrate that 85% of the total mass that is cost effectively achievable from all largest dischargers will be achieved. Selective relief will be granted in compelling individual circumstances and will be based on economic hardship or other special burdens unanticipated by the audit protocol. Maximum feasible reduction is defined throughout this document by the above definition.

implementation, and an analysis of improvements in the timelines that would result from the removal of those barriers.

Preliminary Report for comment by CLEAN, RWQCB and Industry: August 31, 1993

Final Report: October 31, 1993

2. Identification of Largest Dischargers

The Discharger shall identify the regulated industries that are the largest dischargers of copper and/or nickel into the WPCP, and that together discharge 85% of the total mass of copper and 85% of the total mass nickel from the permitted industrial sector (hereinafter called the "largest dischargers").

Report Due: July 31, 1993

3. Commencement of Mass Audit Studies by Largest Dischargers

The Discharger shall cause the Mass Audit Studies (as defined by the Mass Audit Study Protocol) to be commenced by dischargers who are in the identified group of "largest dischargers" and are in the electroplating, printed circuit board or disc manufacturing industry. Any firm that appears on the largest discharger list that performs any of the six metal finishing operations listed in 40 CFR part 433.10 of the Code of Federal Regulations will be required to complete a mass audit study. Studies on dischargers in other industrial categories within the largest dischargers will also be initiated if an appropriate audit procedure, likely to produce significant reduction, can be defined.

Commencement Date: November 30, 1993

4. Completion of Mass Audit Studies by Largest Dischargers

The Discharger will provide for the completion of the Mass Audit Studies on the "largest dischargers."

Completion of Mass Audit Studies by largest dischargers: August 31, 1994

5. Review of Mass Audit Studies by San Jose and CLEAN

San Jose will review the Mass Audit Studies. Review will include identification of company-specific and categorical measures designed to

achieve maximum feasible reductions and an analysis of whether the Mass Audit Study Protocol was properly followed.

San Jose shall allow CLEAN to review and comment on the Mass Audit Studies. San Jose will consider and respond to any written comments submitted by CLEAN on the mass audit studies. Such response will precede the conclusion of the City review described above.

The Discharger shall submit a technical report, acceptable to the Executive Officer, containing the results of the audits.

Report Due: October 31, 1994

C. Implementation of Maximum Feasible Reductions

1. The Discharger shall provide for the implementation of measures which will at a minimum achieve maximum feasible reductions or an equivalent pollutant reduction of copper and nickel from the "largest dischargers." The method of implementation will take into account information generated from the mass audit studies as well as results from Palo Alto and Sunnyvale's ordinance process. The Discharger shall submit the proposed implementation method for review and approval by the Executive Officer.

If any other municipal discharger within the San Francisco Bay Region requires companies within its jurisdiction to implement a measure achieving maximum feasible reductions that is applicable to industries in the Discharger's WPCP tributary area, the Discharger shall present for consideration by City Councils and District Boards of all tributary agencies an ordinance based on such requirement.

Draft Implementation Method Submittal: October 31, 1994

Implementation Date: January 31, 1995

2. The Discharger shall incorporate implementation requirements into the individual control mechanisms for each affected industrial or commercial user by April 1, 1995.

III. LOCAL LIMITS

A. Local Limits Development

1. The Discharger shall develop preliminary local limits, acceptable to the Executive Officer, for industrial and non-domestic commercial users, which are designed to enable the Discharger to meet the NPDES effluent limits. The process for development of these preliminary local limits shall include, at a minimum, bimonthly meetings with EPA and RWQCB staff at a time and place to be mutually agreed upon. The development of these preliminary limits shall include, at a minimum, the following:
 - a. A calculation of "maximum allowable headworks loading," using either the 95th percentile confidence interval removal rate, the decile approach or a statistically valid removal rate designed to meet NPDES permit limits 95% of the time. A minimum of one year of monitoring data should be used to calculate the appropriate removal rate. The Discharger's calculation of the "maximum allowable headworks loading" shall also make use of a safety factor. The safety factor will account for uncertainties including potential future growth and variability in influent loadings. A minimum of one year of data should be used to determine influent loading variability. Loadings due to potential growth should be incorporated into the safety factor and subtracted from the maximum allowable headworks loading calculated above.
 - b. Information and appropriate analysis, acceptable to the Executive Officer, which substantiates the flows and concentrations used to represent water supply, corrosion, domestic, and commercial sources which are not monitored.
 - c. A definition of what types of facilities are to be grouped into domestic and non-domestic sectors.
 - d. A preliminary allocation of the maximum allowable headworks loadings to industrial, commercial, domestic, water supply and other significant source categories based on existing information. A discussion of the specific methods to be further investigated in order to reduce pollutants contributed from the water supply, domestic and commercial sources and methods for reducing corrosion.
 - e. A discussion of possible scenarios on how the results of the mass audit studies might be used in the development of proposed local limits.

Report with Preliminary Local Limits Due: November 15, 1993

2. The Discharger shall propose local limits, acceptable to the Executive Officer, for industrial and commercial users which are designed to enable the Discharger to meet the NPDES effluent limits. The Discharger shall:
 - a. Allocate the maximum allowable headworks loadings to industrial, commercial, domestic, water supply and other significant source categories.
 - b. Specify responsible entities and/or the specific methods for reducing the pollutants, to ensure that the necessary pollutant reductions in each source category occur, in accordance with the proposed allocations. The Discharger shall include a plan to confirm the reductions (e.g. inspections to ensure Best Management Practices compliance and/or monitoring).
 - c. Describe the method for determining loading allocation for each non-domestic user. The method shall account for allocation to source categories of users as well as individual users as necessary. The allocation shall include an analysis of methods such as industrial contributory limits, mass-based limits, concentration limits, and a required percentage reduction of pollutants. Data shall be provided on the industrial and commercial users to justify the methodology for achieving required reductions. Loading allocations to source categories and individual users may take into account pilot study, mass audit studies and other available data as part of a technical justification for local limits designed to enable NPDES compliance. An evaluation of mass-based local limits, including any improvements needed in flow verification, shall be included and proposal of mass-based local limits is encouraged.

Report with Proposed Local Limits Due: October 31, 1994

B. Local Limits Adoption

The Discharger shall adopt final local limits which are designed to enable the discharger to meet NPDES effluent limits. The information generated by the mass audit studies may be taken into account in establishing local limits that are designed to enable the Discharger to meet NPDES effluent limits. Neither the information generated by the mass audit studies, nor the absence of financial assistance to permitted industrial dischargers shall be a reason for not adopting local limits which are designed to enable the discharger to meet NPDES effluent limits.

Date: December 15, 1994 if comments from EPA, Regional Board, CLEAN or the public do not result in substantial revision of proposed local limits.

January 31, 1995 if EPA, Regional Board, CLEAN or public comments result in substantial revision of proposed local limits and the necessity to recirculate the proposal.

C. Local Limits Compliance

1. The Discharger shall incorporate limits and timelines for implementation of the actions necessary to comply with the adopted local limits in the individual control mechanisms for each permitted industrial or commercial user into the system.

Compliance Date: April 1, 1995, for the "largest dischargers" defined in Section II.B.2 and July 31, 1995, for the remaining permitted industrial or applicable commercial users, unless individual compliance schedules are warranted and issued by San Jose.

IV. INDUSTRIAL SECTOR

A. Waste Minimization Plans

All permitted industrial users discharging targeted pollutants will be required to submit waste minimization plans at the time of permit issuance or renewal. The Discharger will review and verify implementation of identified measures. Annual certification and updating of the waste minimization plans will be required.

B. Discharge Information

1. The City will continue its flow verification program for each of the currently regulated Industrial Users (IUs) using an accurate method of flow measurement in each case. Some of the methods used include influent and/or effluent process meters, water bills, adjusted flow use calculations, and batch quantification. The City is requiring each IU to provide an accurate method of flow measurement as a condition of their Industrial Wastewater Discharge Permit, and will continue to do so for each new permit or permit renewal.
2. Permits will be required of facilities found to produce a wastestream from a manufacturing process containing copper, nickel, silver, mercury or cyanide.

C. Incentives for Pollutant Reduction

1. The Discharger shall submit a report, acceptable to the Executive Officer, evaluating additional methods for achieving reductions that represent substantial opportunities for source reductions, including financial incentives.
 - a. San Jose will conduct an assessment (including technical, financial, and policy considerations) of the feasibility, costs, and benefits of restructuring sewer fees to create or strengthen incentives for pollution prevention (e.g. charging fees for the discharge of toxic materials such as copper and nickel). The public will be provided an opportunity to comment on both the proposed study scope and the draft results. The other agencies tributary to the treatment plant will be encouraged to participate, and results and recommendations will be shared with all tributary agencies. Recommendations based on the study will be presented for consideration by the City Council by September 30, 1994.
 - b. San Jose will conduct an assessment (including technical, financial, and policy considerations) of the feasibility, costs, and benefits of establishing requirements to minimize new industrial and new construction related sources of pollution (e.g. corrosion resistant plumbing and fixtures and preconstruction industrial pollution prevention design standards, performance standards, and/or audit requirements). The public will be provided an opportunity to comment on both the proposed study scope and the draft results. The other agencies tributary to the treatment plant will be encouraged to participate, and results and recommendations will be shared with all tributary agencies. Recommendations based on the study will be presented for consideration by the City Council by September 30, 1994.

Reports Due: September 30, 1994

2. Continue aggressive enforcement.

V. COMMERCIAL SECTOR

Permits and Best Management Practices (BMPs) issued in the commercial sector shall assure at a minimum the maximum extent practicable reduction of pollutant discharges, including where practical, requiring zero discharge for the pollutants of concern, to the WPCP, based on the information available.

A. Automotive/Radiator and Photoprocessors (Phase I)

1. The Discharger shall continue inspection and certification of all zero dischargers in Phase I category. New firms in the Phase I categories needing zero discharge certification or permits shall be identified through the Pac Bell list, business tax referrals and other sources. Firms under permit will be subject to ongoing inspection and monitoring. Zero dischargers shall be subject to spot check and recertification.
2. Continue educational efforts for automotive and photoprocessors including workshops, technical assistance, and educational materials.
3. The Discharger shall submit a schedule for proposed activities and completion dates for continued implementation of the Phase I waste minimization program (inspections, certification of zero discharge, education outreach, etc.).
4. The Discharger shall submit a report, acceptable to the Executive Officer, which evaluates the results of the Phase I photoprocessor program. The report shall include an evaluation of how the program has affected the influent silver concentrations. The report shall also include a proposal and action plan for an expanded waste minimization program for silver. At a minimum, the Discharger shall consider addressing additional programs for photoprocessors, hospitals, laboratories, and x-ray facilities (medical/dental offices).

Report Due: September 15, 1993

B. Additional Commercial Categories (Phase II)

Based on the Phase I model, the Discharger shall investigate and regulate, if appropriate, additional commercial dischargers in the following categories: hospitals, educational institutions, vehicle fleet maintenance, printers, dry cleaners, industrial laundries, and machine shops. These Phase II dischargers will be brought under permit or zero discharge certification. The Discharger shall submit a schedule for 1993 activities for accomplishing permit or zero discharge certification for Phase II discharges.

Schedule Due: Annual Pretreatment Report

Efforts in Phase II shall be closely coordinated with other agencies, such as the Santa Clara Valley Water District Non-Point Source Program, the Santa Clara County Office of Solid Waste and Toxics Control, the Bay Area Air Quality Management District (for dry cleaners only), other city departments and the Cities of Sunnyvale and Palo Alto.

The model for investigation and possible regulation within the Phase II categories will be: develop mailing list, survey targeted group, sponsor workshop, require and verify zero discharge verification, or require and issue permit. Permitted firms will be subject to on-going inspection and sampling. In conjunction with other agencies, Best Management Practices to minimize or eliminate discharge will be developed for the Phase II dischargers.

C. Additional Commercial Categories

1. Continue to regulate existing and new companies in the commercial sector in the above categories and begin to regulate companies in any new categories of the commercial sector which are found to be significant contributors of copper, nickel, silver or cyanide.

VI. RESIDENTIAL SECTOR

A. General Public Education

The Discharger shall conduct ongoing public education in the tributary service area through the City of San Jose Environmental Services Department, to raise awareness of the source control program and inform residents of available source control measures. The public education effort includes: targeted mailings, radio spots, and newspaper advertisements.

B. Consumer Products

The Discharger shall recommend for adoption, by the agencies tributary to the WPCP, an ordinance prohibiting the discharge of copper-based chemicals into the sewer system and requiring retailers who sell such products to notify consumers of the ban.

The Discharger shall continue to identify other consumer products, which can be reduced or eliminated. For products for which reasonable alternatives are available, similar ordinances shall be presented for City Council consideration.

C. Other

1. Continue collection and analysis of residential composite samples for metals of concern.
2. Continue to research potential residential sources and augment existing and developing information.
3. The City of San Jose commits to continued participation in local programs such as the countywide Household Hazardous Waste Collection Program

and curbside collection for used motor oil providing these programs remain in effect. Tributary agencies will be encouraged to participate in similar programs.

VII. WATER SUPPLY

- A. Pursuant to the "Request for Information and a Proposed Strategy to Reduce Copper and Selenium in South Bay Drinking Water Sources" submit a joint report generated from the steering committee, which includes monitoring results of drinking water sources and a proposal for immediate actions that can be taken to reduce copper inputs to the water supply. The proposal shall include an evaluation of reducing and/or eliminating the addition of copper sulfate into drinking water sources as an immediate action.

Report Due: January 15, 1994

- B. Commence implementation of immediate actions, as approved by the Executive Officer.

Commencement Date: April 15, 1994

- C. Submit a proposal for approval by the Executive Officer for long term actions and a proposed implementation schedule that can be taken to reduce copper inputs to the water supply. The proposal shall include an evaluation of the results of the Santa Clara Valley Water District corrosion inhibitor study.

Report Due: July 1, 1994

- D. Submit a status report in Pretreatment Annual Report

Status Report Due: February 28, 1994

VIII. PILOT WASTE MINIMIZATION PROGRAM FOR MERCURY

- A. If monitoring results submitted, at appropriate detection limits, indicate that mercury effluent concentrations exceed the effluent limitation, the Discharger shall develop a pilot waste minimization program for mercury for approval by the Executive Officer. The program should be done in coordination with Palo Alto, Sunnyvale, and the Bay Area Waste Minimization Group.

Submit Proposal: October 1, 1993

- B. Begin implementation of the pilot waste minimization program for mercury, if required, according to the proposal approved by the Executive Officer.

Implementation Date: January 1, 1994

- C. Complete pilot waste minimization program for mercury.

Completion Date: January 1, 1995

IX. PILOT WASTE MINIMIZATION PROGRAM FOR CYANIDE

- A. Develop a pilot waste minimization program for cyanide for approval by the Executive Officer.

Submit Proposal: October 1, 1993

- B. Begin implementation of pilot waste minimization program for cyanide according to the proposal approved by the Executive Officer.

Implementation Date: January 1, 1994

- C. Complete pilot waste minimization program for cyanide.

Completion Date: January 1, 1995

X. COORDINATION WITH SANTA CLARA VALLEY NON-POINT SOURCE CONTROL PROGRAM

The Discharger shall coordinate waste minimization/source control activities with the Santa Clara Valley Non-Point Source Pollution Control Program in order to increase overall effectiveness of controlling heavy metal discharges to the South Bay. Coordination should include, but not be limited to, the following areas: source identification, illicit connection elimination to stormwater drains, industrial discharge runoff identification and control programs, and public information and participation programs.

XI. MONITORING AND EVALUATION

- A. The Discharger shall provide on-going tracking of influent, sludge and effluent levels to determine the reduction of pollutants and show the effectiveness of the revised local limits and other waste minimization activities intended to reduce treatment plant loadings.

The Discharger shall include this summary of reductions to influent and effluent loadings and sludge metal concentrations and status of compliance with the mass and concentration effluent limits contained in this Order as part of the Annual Pretreatment Report.

- B. Annually, recalculate copper and nickel pollutant contributions by the following sectors: residential, commercial, industrial, and water supply. Include an evaluation of the effectiveness of the waste minimization measures at achieving reductions.

XII. REPORTING REQUIREMENTS

- A. The Discharger shall include in the pretreatment annual report, required by Order No. 89-179 (Pretreatment Amendments):
- The status, progress, evaluation, results and any written products of all of the above program areas.
 - Reasons for any delays or potential delays in completion of any of the tasks, together with proposed remedies for the delays shall be included.
 - A proposal for the following year's work program to achieve the mass and concentration limits including budget and staffing.
 - The previous year's budget and staffing to accomplish the pretreatment/waste minimization program.
- B. The Discharger shall include in the second quarterly report a status report on all of the above program areas.