

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD  
SAN FRANCISCO BAY REGION

ORDER NO. 90-068  
NPDES PERMIT NO. CA0037842

AMENDMENT OF WASTE DISCHARGE REQUIREMENTS, ORDER NO. 89-012

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

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

1. The Board adopted Order No. 89-012, reissuing waste discharge requirements for the Cities of San Jose and Santa Clara (hereinafter called the discharger) on January 18, 1989. The City discharges tertiary treated effluent from the Water Quality Control Plant into Artesian Slough, tributary to Coyote Creek and South San Francisco Bay.
2. The Basin Plan does not establish water quality objectives and effluent limitations for heavy metals in South San Francisco Bay. The discharger is obligated to perform specific heavy metals and toxicity monitoring studies, and assist in the gathering of data needed for development of site-specific water quality objectives and effluent limitations, to comply with the limitations of the Basin Plan.
3. The site specific metals limits that the discharger will receive, in December, 1991, may be either higher or lower than the existing interim metals limits. Because the discharger will be required to meet the new limits when they are added to the permits, it is necessary for the dischargers to investigate methods of lowering loadings and concentrations of toxins contained in effluent. Source control, including waste minimization, is a more desirable pollutant reduction technique than structural modification at the discharger's plant. Cost-effective opportunities for source control should be implemented before making any major structural changes, such as a deep-water outfall or at-plant metals treatment and removal.
4. The discharger performed two source studies ((Pollutant Sources Evaluation (Provision 5B), San Jose/Santa Clara Water Pollution Control Plant, Permit Assistance Program, October, 1989; Waste Minimization Study (Provision 5B), San Jose/Santa Clara Water Pollution Control Plant, Permit Assistance Program, December, 1989)). The studies identify sources of metals to the sanitary sewer and opportunities for waste minimization, source control and pretreatment program improvements. These studies indicate that the discharger has the opportunity to reduce metals entering the sewer system. Controls include regulating additional types of discharge, prohibiting certain discharges to the sewers, assuring better compliance through an aggressive program of inspections and enforcement, requiring industries applying for new permits or renewing permits to produce waste minimization plans, and targeting certain problem metals in an integrated waste minimization effort. The controls are aimed at reducing toxins

discharge to the sanitary sewers, with a resultant decrease in metals concentrations and loading in the plant influent and effluent.

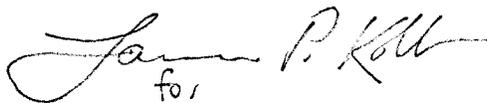
5. Waste minimization, the reduction in toxic pollutant generation by product substitution, recycling, and other means, has not been systematically applied to industrial or non-industrial sources. The most effective way for the discharger to develop a waste minimization program is by targeting specific toxic pollutants and categories of sources. The results of this pilot program can then be applied to other toxic pollutants and categories of sources.
6. The complexity of effluent-metals interactions make the specific results of a source control effort unpredictable, and existing variability in the plant effluent may make the results difficult or impossible to measure at that point. However, toxins decreases should be measurable in flows into the sanitary sewer system. It is possible that the major toxins reductions from additional source controls will occur in sludge.
7. This action to amend an NPDES Permit is exempt from the provision of Chapter 3 (commencing with Section 21100) of Division 13 of the Public Resources Code (CEQA) pursuant to Section 13389 of the California Water Code.
8. The discharger and interested agencies and persons have been notified of the Board's intent to amend waste discharge requirements for the existing discharge and have been provided with the opportunity for a public hearing and the opportunity to submit their written views and recommendations.
9. The Board, in a public meeting, heard and considered all comments pertaining to the discharge.

IT IS HEREBY ORDERED that the discharger, in order to meet the provisions contained in Division 7 of the Clean Water Code and regulations adopted thereunder and the provisions of the Clean Water Act as amended and regulations and guidelines adopted thereunder, shall comply with the following:

1. Provision E.5.b. of Order No. 89-012 shall be amended to include the following:

<u>Task</u>	<u>Deadline</u>
Implement additional source controls, including pretreatment program improvements and a pilot waste minimization program, as described in Attachment 2. Submit a status report on the implementation of additional source controls by the deadline.	August 1, 1991
Submittal of interim progress report	December 1, 1990

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 May 16, 1990.

A handwritten signature in cursive script, appearing to read "James P. Kelly".

for  
Steven R. Ritchie  
Executive Officer

Attachment

[File No. 2189.8014  
Originator: CAN  
Reviewer: SAH, TCW]

A. Pre-treatment Program Improvements:

1. The discharger shall implement a system to require permitted firms to accurately measure their process-waste flows to the sanitary sewer. This shall be done directly, for at least 35% of the permitted industrial users and 100% of the industrial users within the targeted categories before August 1, 1991, through installation of reliable flow meters or equivalent methods. If direct flow measurement is infeasible, then a firm can measure flow indirectly by linking flow to production rate and other uses. The pretreatment program should verify all flow data by comparison with water billing information or other available information.
2. Auto repair and photo-processing firms shall be regulated by August 1, 1991. Regulation may include individual industrial user permits, permit by rule, or prohibition of discharge to the sewers. Because these firms are numerous, the discharger may wish to use flow, toxins concentration, or some other measure (e.g. number of employees, square feet of work area, etc.) as thresholds to determine inclusion in the pretreatment program. These thresholds should be set so that a large part of the discharge from these groups is regulated. Dischargers should consider the option of prohibiting discharges to the sewers by some groups, such as radiator repair shops.
3. The discharger shall assure that regulated dischargers better comply with local limits by implementing more frequent inspections and more aggressive enforcement actions against violators. Aggressive enforcement may be linked to violations by industries that discharge large mass loadings or concentrations of "problem" toxins (those metals that are not currently at or below Basin Plan limits in treatment plant effluent). This shall be demonstrated by a high level of compliance.

B. Pilot Waste Minimization Program:

1. The discharger shall implement a pilot waste minimization program aimed at specific metals of concern in their discharge. The discharger's source control study indicates that copper, zinc and lead are important metals to target in waste minimization. The waste minimization program shall consist of public education efforts and a pilot waste minimization for radiator repair shops, auto parts cleaning shops, and any other groups the pretreatment program identifies as important target sources.
2. The discharger shall implement a public education effort aimed at reducing the amount of copper, zinc, and lead discharged to the sewers. Public education efforts should be coordinated with the Santa Clara County Executive's Toxins Program, but the discharger may modify the efforts in order to more effectively address their specific waste minimization effort. The public education efforts shall consist of an outreach program for the communities, a program to identify and educate small-quantity generators, and seminars and workshops on waste minimization for specific types of dischargers.

3. The waste minimization efforts shall focus on targeted commercial and industrial categories, and shall consist of developing a list of firms in the targeted category, developing a set of best management practices and waste minimization alternatives for that category, and, in coordination with the Santa Clara County Executive's Toxins Program, providing technical assistance to those targeted firms. Technical assistance may include, but not be limited to, providing information on waste minimization to targeted firms. In addition, the discharger shall prepare an estimate of the effectiveness of the program by August 1, 1991.
4. Permitted industries, if in violation of local limits or if targeted by the discharger for waste minimization efforts, shall be required to submit waste minimization plans for their firms. New permit applicants shall submit and implement waste minimization plans as a condition of permitting. Waste minimization plans should include: (i) a list of toxic pollutants discharged and the associated plant processes, (ii) a mass balance showing the mass loading of each pollutant through the plant, (iii) an evaluation of waste minimization alternatives, and (iv) proposed waste minimization measures, including a schedule for implementation. The discharger shall review and approve the waste minimization plans in a timely fashion. New permittees shall be required to use Best Management Practices in their waste minimization program.
5. The discharger shall coordinate further program development with the other two South Bay municipal dischargers by sharing the results of their waste minimization efforts. The results of the pilot program will be used to identify new permitted categories.

C. Status Report

1. The discharger shall submit a progress report on December 1, 1990, and a status report on the waste minimization program by August 1, 1991. These reports shall address tasks completed and underway, problems encountered, and additional recommendations for the pretreatment programs (e.g., successful or unsuccessful methods of flow monitoring, advice on working with specific types of firms, etc.). The status report shall include recommendations for an expanded waste minimization program, based on pilot program results (e.g., which metals and categories of metal-dischargers).