

## Office of the City Auditor

Report to the City Council City of San Jose

AN AUDIT OF THE WATERSHED PROTECTION DIVISION'S INDUSTRIAL AND COMMERCIAL INSPECTION PROGRAM

The ESD Needs To Completely Revamp The Industrial And Commercial Inspection Program Before Requesting Program Related Increases In Storm Sewer Fees



## CITY OF SAN JOSÉ, CALIFORNIA

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September 7, 2000

Honorable Mayor and Members of the City Council 801 North First Street, Room 600 San Jose, CA 95110

Transmitted herewith is a report on An Audit Of The Watershed Protection Division's Industrial And Commercial Inspection Program. This report is in accordance with City Charter Section 805.

An Executive Summary is presented on the blue pages in the front of this report. The City Administration's response is shown on the yellow pages before the Appendices.

I will present this report to the Finance Committee at its September 27, 2000, meeting. If you need additional information in the interim, please let me know. The City Auditor's staff members who participated in the preparation of this report are David Moreno and Lynda Flores Brouchoud.

Respectfully submitted,

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## **Executive Summary**

In accordance with the City Auditor's 1999-00 Audit Workplan, we have audited the Industrial and Commercial Inspection Program (Program) as conducted by the Watershed Enforcement Section of the Watershed Protection Division (Division) in the Environmental Services Department (ESD). This is the first in a series of audit reports on the ESD's Watershed Enforcement Division. We conducted this audit in accordance with generally accepted government auditing standards and limited our work to those areas specified in the Scope and Methodology section of this report.

# Finding I

# The ESD Needs To Completely Revamp The Industrial And Commercial Inspection Program Before Requesting Program Related Increases In Storm Sewer Fees

The City's storm water permit requires the City to inspect industrial and commercial facilities to ensure against pollutants entering the storm sewer system. To satisfy the permit requirements, the Industrial and Commercial Inspection Program (Program) inspects over 2,000 of these facilities in San Jose. We found that the Environmental Services Department (ESD) needs to significantly improve the management, efficiency and effectiveness of the Program. Specifically, we found that:

- The Program's database inventory of facilities requiring an inspection was not complete or accurate, and overstated the number of facilities subject to inspection by 370 percent;
- Poor scheduling of inspections created widely fluctuating inspector workloads and over \$100,000 in unnecessary expenditures in 1998-99;
- The Program spent over \$120,000 for inspection services it did not receive in 1999-00;
- Program management did not properly assign inspections; consequently inspectors did not conduct all

required inspections but did conduct inspections that were not required;

- Inspectors did not properly document the results of their inspection activities;
- Inspectors did not properly follow-up on identified violations; and
- There was no indication of supervisory review of inspector activities.

As a result, the City is not in compliance with its storm water permit requirements related to industrial and commercial facility inspections.

Given the City Council's stated desire to not increase Storm Sewer Fees, the fact that the Program addresses a relatively small percentage of the major pollutants entering the storm sewer system, and the Program's lack of demonstrated effectiveness, the ESD needs to completely revamp this Program before requesting Program related increases in Storm Sewer Fees.

Specifically, the ESD should 1) develop a complete, accurate, and timely inventory of facilities requiring inspection, 2) use a data system that provides Program management with needed information, 3) prioritize and schedule inspections, 4) produce complete, accurate, and timely management information, 5) establish and enforce violation follow-up procedures, and 6) prescribe and ensure adequate supervisory review of inspector activities. By so doing, the Program will be more efficient and effective, any proposed Storm Sewer Fee increases will be more justifiable, and the City Council and regulatory agencies will have more reliable information for assessing Program activities and accomplishments and allocating resources.

## RECOMMENDATIONS

We recommend that the ESD:

**Recommendation #1** 

Establish specific data management procedures to ensure that the Industrial Facilities Database:

- Is routinely updated, utilizing the business license number as a primary identifier,
- Contains all appropriate facilities located in the City of San Jose,
- Includes facilities that have filed an NOI with the State Board, and
- Contains all Pretreatment and Zero-Discharge facilities. (Priority 3)

**Recommendation #2** 

Acquire a data system that more adequately meets Program needs. (Priority 3)

**Recommendation #3** 

Schedule inspections to balance the workload throughout the year and develop periodic reports allowing managers and supervisors to assess progress in meeting inspection goals. (Priority 3)

**Recommendation #4** 

Transfer \$120,000 from the Treatment Plant Operating Fund (Fund 513) to the Storm Sewer Operating Fund (Fund 446) to reimburse the Program for Source Control inspection services it did not receive in 1999-00 and develop a procedure to pay for Source Control services based upon actual inspections conducted. (Priority 2)

**Recommendation #5** 

Assign inspectors to ensure that required inspection frequencies are met. (Priority 2)

**Recommendation #6** 

Develop written procedures that provide inspectors with specific guidance on how to report desk reviews and identify facilities listed more than once in the database. (Priority 3)

**Recommendation #7** 

Develop written criteria for determining compliance dates and provide facilities with clearly defined compliance dates for correcting violations. (Priority 3) **Recommendation #8** Develop written procedures to ensure that Program

inspectors follow-up on identified violations and when necessary use available enforcement actions. (Priority 3)

Recommendation #9 Develop written procedures that ensure adequate

management review and oversight of the inspectors' activities and reports to improve Program efficiency and effectiveness and ensure inspector compliance with

**Program procedures.** (Priority 3)

Recommendation #10 Not seek an increase in Storm Sewer Fees for the Program

until it has revamped the Program and significantly improved its effectiveness and efficiency. (Priority 3)

## Introduction

In accordance with the City Auditor's 1999-00 Audit Workplan, we have audited the Industrial and Commercial Inspection Program (Program) as conducted by the Watershed Enforcement Section of the Watershed Protection Division (Division) in the Environmental Services Department (ESD). This is the first in a series of audit reports on the ESD's Watershed Enforcement Division. We conducted this audit in accordance with generally accepted government auditing standards and limited our work to those areas specified in the Scope and Methodology section of this report.

The City Auditor's Office thanks the ESD staff who gave their time, information, insight, and cooperation during the audit process.

## **Background**

The Division's Urban Runoff core service purpose is to, "Prevent pollution from entering the storm sewer system and waterways to protect the health of the South Bay watershed." The Division is responsible for the enforcement, administration, and programmatic components of the City's storm water discharge permit – the National Pollutant Discharge Elimination System (NPDES) Permit for municipal separate storm sewer systems (MS4s). The Federal Clean Water Act requires municipal dischargers such as the City of San Jose to obtain NPDES permits and has empowered the Environmental Protection Agency (EPA) to administer the Act and enforce its requirements. The EPA delegated authority to issue such permits to the California State Water Resources Control Board (State Board). The State Board in turn delegated enforcement responsibility to the Regional Water Quality Control Board (Regional Board) for the San Francisco Bay Region.

NPDES Permit Requirements And Process The Regional Board considers storm water discharges from the urban and developing areas in the San Francisco Bay Region, such as the Santa Clara Valley basin, to be significant sources of pollutants in waters of the Region. On February 1, 1989, the State Board included South San Francisco Bay on the 304 (l)(1)(B) list of impaired waters for the pollutants cadmium, chromium, copper, lead, mercury, nickel, silver, selenium, and zinc. The State Board also listed 13 South Bay cities, the Santa Clara Valley Water District, and Santa Clara County (copermitees) as sources of the listed pollutants. Subsequently, the Regional Board issued an order to subject the listed parties to a

joint five-year NPDES permit for storm water runoff. The Regional Board required the co-permitees to submit a storm water management plan to reduce the discharge of toxic pollutants in storm water and effectively prohibit non-storm water discharges into municipal storm drain systems and watercourses within the co-permitees' jurisdictions.

In order to satisfy permit requirements, in 1990 the copermitees formed a collaborative program now called the Santa Clara Valley Urban Runoff Pollution Prevention Program (SCVURPPP). Although a joint permit covers the SCVURPPP, each co-permitee also holds an individual NPDES permit, similar to the joint permit. The separate permits hold the individual entities responsible for maintenance and jurisdiction over their respective municipal storm drain systems.

The City of San Jose has dual responsibilities under the storm water permit. As a co-permittee, the City has shared responsibility to support the activities of the SCVURPPP regional program. As a discharger, the City is responsible for specific activities to prevent and reduce storm water pollution within its jurisdiction.

In 1995 as part of the second permit application, the Regional Board required the SCVURPPP and co-permittees to develop and submit performance standards to measure and document co-permittee compliance with the permit. Once completed, the Regional Board required the City to submit an Urban Runoff Management Plan (Plan) that incorporated these performance standards and specified activities the City would complete to meet its compliance requirements. These activities include the Illicit Connections/Illegal Dumping Program; the Industrial/Commercial Discharger Inspection Program; residential outreach and education; municipal storm drain operations and maintenance; and public streets, roads, and highways operation and maintenance.

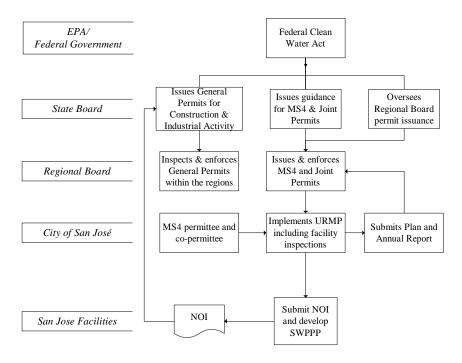
The City's Plan serves as the basis for determining the activities and workload for the City's Program. The Plan details the number and frequency of facility inspections, categorizes facilities, specifies outreach and training efforts, and outlines coordination with City departments.

The current storm water permit expired in June 2000, but the Regional Board gave an administrative extension through

September 2000. The City is in the process of renewing the permit for another term.

In addition to the City's storm water permit, the State and Regional Boards issue general storm water permits directly to entities with identifiable industrial/commercial and construction activities. Based on the Clean Water Act, certain commercial and industrial facilities are required to file with the State Board a Notice of Intent (NOI) to discharge into the storm water system. These facilities are also required to prepare a Storm Water Pollution Prevention Plan (SWPPP). Although the NOI and SWPPP are State Board requirements and the facilities submit NOI fees to the State Board, the City is responsible for inspecting these facilities. According to the joint NPDES Permit, the listed cities and entities, "will conduct investigations and local regulatory activities at industries or construction sites covered by these general permits." The following is a chart of the process.

### **Storm Water Permit Process**

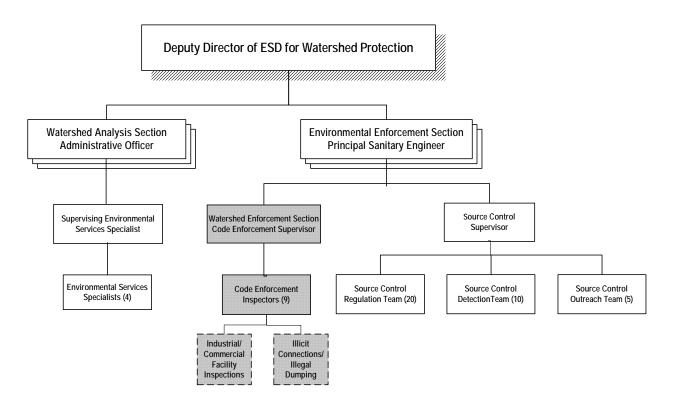


Organizational Structure The Division's Watershed Enforcement Section conducts Program inspections of industrial and commercial facilities to identify, eliminate, and prevent illegal discharges. Their mission is "to educate and encourage urban runoff dischargers in proper disposal practices through cooperative leadership." As part of the inspection process, inspectors are required to inform the facility operator of violations needing correction in order to be in compliance with federal, state and local regulations. The Watershed Enforcement Section also responds to complaints of Illicit Connection and Illegal Dumping (IC/ID) into the storm sewer system.<sup>1</sup>

The Watershed Enforcement Section is part of the Division's Environmental Enforcement Section and has nine inspectors – seven inspectors are dedicated to industrial/commercial inspections and non-commercial IC/ID cases and two inspectors are dedicated to commercial IC/ID cases. The Program also utilizes Source Control Inspectors to conduct urban runoff inspections at Pretreatment facilities. In 1997-98 and 1998-99, the Source Control Inspectors were also used to conduct inspections at vehicle service facilities.

The Watershed Enforcement Section is highlighted in the following Watershed Protection Division Organizational Chart.

# ENVIRONMENTAL SERVICES DEPARTMENT WATERSHED PROTECTION DIVISION



<sup>&</sup>lt;sup>1</sup> The Program's IC/ID component is not included in the scope of this audit.

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## Budget

The Division's 1999-00 adopted budget accounts for \$12.4 million (9.9%) of the ESD's \$124.3 million budget. This is an 8.5 percent decrease from the previous year's 1998-99 funding of \$13.6 million. The Watershed Enforcement Section's 1999-00 adopted budget accounts for \$980,607 of the Division's \$12.4 million budget.

The Division is funded through the Treatment Plant Operating Fund (513) and the Storm Sewer Operating Fund (Fund 446). Fund 446 supports the Program and urban runoff-related programs in the Division and in other City departments. The source of funds for Fund 446 comes from storm sewer charges on commercial, industrial, and residential land parcels in San Jose. The source of funds for Fund 513 comes from contributions from participants in the wastewater treatment system. Fund 513 supports Division activities including Source Control inspections, detection, and outreach.

## Audit Scope, Objectives, And Methodology

The objective of our audit was to evaluate the effectiveness of internal controls over the Industrial and Commercial Inspection Program of the Watershed Protection Division. More specifically we 1) determined the accuracy and completeness of the facility information database; 2) verified that inspections were properly scheduled and satisfied inspection frequency requirements; and 3) determined if inspection activities were properly documented, identified violations were resolved, and inspection activities received supervisory review. The scope of our audit included facility information for industrial and commercial dischargers of the Environmental Enforcement Program, primarily from 1998-99 and 1999-00.

A Microsoft Access Database called the Industrial Facility Database (Database) serves as the Program's principal control in assigning and tracking facility inspections and results. We obtained a copy of the Database's most current information, as it existed at the end of 1998-99, and performed numerous analytical tests. At the time of our analysis in January 2000, the Program had not updated the Database since completing 1998-99 data entry.

To determine the accuracy and completeness of the Database, we compared it to other sources of current 1999-00 information including the City's Business License Data, the State Board's list of NOI filers, and the ESD's list of Pretreatment facilities. We interviewed staff members at the Santa Clara County

Health Department, Regional Board, cities participating in SCVURPPP, and the ESD staff responsible for updating and maintaining the database.

To identify duplicate facility records, we compared the facility number, name, and address for each active site listed in the Database. We considered a record to be a duplicate if a single location had more than one active business listed. We also sampled 80 facility numbers to compare information in the Database to the San Jose phone book, the Reverse Address Directory, the Business License Data, and the hardcopy files of inspection reports. In addition, we randomly sampled 75 facility numbers to compare the database to the hardcopy inspection files. These 75 facility numbers represented 124 inspection reports from 1993-94 through 1999-00.

To verify that inspections are properly scheduled and satisfy inspection frequency requirements, we determined the Program's actual inspection workload. We analyzed the Database for facilities inspected in 1998-99 and obtained the list of facilities scheduled for inspection in 1999-00. We then analyzed the assignment list to determine the number of inspections Program inspectors actually conducted each month in 1998-99 by eliminating desk reviews and any inspections that Source Control Inspectors completed. Our estimate of the Program's 1998-99 workload does not account for duplicates in the database.

We compared the list of facilities scheduled for inspection in 1999-00 to the list of duplicate facilities and the Business License Data to confirm the facilities were still in business and were not duplicates. After verifying that the inspection dates included in the Database were generally correct, we compared the assignment list to the Database to determine if the facilities were due for inspection in 1999-00. In this manner, we were able to ascertain if the facilities were scheduled and inspected according to the required inspection frequency.

We also sampled inspection reports in the Program files to verify follow-up on identified violations and documentation of inspection activities. Using the same randomly generated sample we tested 100 files for consistency in inspection documentation, occurrences of repeat violations, and evidence of supervisory review. We then reviewed 129 case files from 1999-00 and 1) documented occurrences of duplicate facilities, 2) tested for inconsistencies in inspections, and 3) determined if

inspectors verified that facilities corrected identified violations. Finally, we tested a sample of 29 cases from 1998-99 in which the inspector identified at least five violations. Using the sample set, we examined the case files to determine if the inspector requested, and the facility provided, information on resolving identified violations.

We performed only limited testing on the adequacy of controls over data entry, including passwords and Database access.

## Major Accomplishments Related To This Program

In Appendix B, the Watershed Enforcement Division of the ESD informs us of its major accomplishments regarding the Urban Runoff Environmental Enforcement Program.

# Finding I The ESD Needs To Completely Revamp The Industrial And Commercial Inspection Program Before Requesting Program Related Increases In Storm Sewer Fees

The City's storm water permit requires the City to inspect industrial and commercial facilities to ensure against pollutants entering the storm sewer system. To satisfy the permit requirements, the Industrial and Commercial Inspection Program (Program) inspects over 2,000 of these facilities in San Jose. We found that the Environmental Services Department (ESD) needs to significantly improve the management, efficiency and effectiveness of the Program. Specifically, we found that:

- The Program's database inventory of facilities requiring an inspection was not complete or accurate, and overstated the number of facilities subject to inspection by 370 percent;
- Poor scheduling of inspections created widely fluctuating inspector workloads and over \$100,000 in unnecessary expenditures in 1998-99;
- The Program spent over \$120,000 for inspection services it did not receive in 1999-00;
- Program management did not properly assign inspections; consequently inspectors did not conduct all required inspections but did conduct inspections that were not required;
- Inspectors did not properly document the results of their inspection activities;
- Inspectors did not properly follow-up on identified violations; and
- There was no indication of supervisory review of inspector activities.

As a result, the City is not in compliance with its storm water permit requirements related to industrial and commercial facility inspections. Given the City Council's stated desire to not increase Storm Sewer Fees, the fact that the Program addresses a relatively small percentage of the major pollutants entering the storm sewer system, and the Program's lack of demonstrated effectiveness, the ESD needs to completely revamp this Program before requesting Program related increases in Storm Sewer Fees.

Specifically, the ESD should 1) develop a complete, accurate, and timely inventory of facilities requiring inspection, 2) use a data system that provides Program management with needed information, 3) prioritize and schedule inspections, 4) produce complete, accurate, and timely management information, 5) establish and enforce violation follow-up procedures, and 6) prescribe and ensure adequate supervisory review of inspector activities. By so doing, the Program will be more efficient and effective, any proposed Storm Sewer Fee increases will be more justifiable, and the City Council and regulatory agencies will have more reliable information for assessing Program activities and accomplishments and allocating resources.

Commercial/ Industrial Inspections Because of the storm water permit requirements, the City conducts inspections of sites in San Jose that are identified as "mandatory" or "conditional" facilities per EPA guidelines. The City is also responsible for conducting storm water inspections for vehicle service facilities, food service facilities and those with Pretreatment and Zero-Discharge permits. According to the Urban Runoff Management Plan (Plan), the County Health Department incorporates storm water inspections into the Health Department's routine inspections of food service facilities.

Using federal guidelines, the City identifies facilities by the industry description and by Standard Industrial Classification Code. These facilities include auto body shops, metal fabrication companies, moving companies, and printing shops. According to the Program's standards, as part of the routine inspection of these facilities, inspectors are required to review such things as the wastewater disposal methods, vehicle washing and maintenance processes, and the parking lots. In the 1998-99 City of San Jose Urban Runoff Management Plan Annual Report (Annual Report), the City stated that it identified 3,333 facilities for inspection during that same year. The seven Program inspectors assigned to this task inspected 2,714 (81%) of these facilities.

The Plan's standard operating procedures describe the frequency of inspections for all identified facilities. The exhibit below shows the frequency of inspections based on the type of facility.

**Exhibit 1** Required Urban Runoff Inspection Frequency

Type Of Facility	Frequency Of Inspections	
Mandatory Facilities		
Significant	Annually	
Non-significant	Once every three years	
Conditional Facilities		
Significant	Annually	
Non-significant	Once every three years	
Facilities with Pretreatment Permits	Once every two years	
Facilities with Zero Discharge	Once every two years	
Facilities with Vehicle Service	Once every two years	
Facilities with Food Service	Once every three years	

The Program's
Database Inventory
Of Facilities
Requiring An
Inspection Was Not
Complete Or
Accurate And
Overstated The
Number of
Facilities Subject to
Inspection By 370
Percent

The ESD needs to make sure its inventory of facilities requiring an inspection is complete and accurate to identify, eliminate, and prevent illegal discharges into the storm sewer system. Such an inventory of facilities is essential if the Program is to meet its Permit requirements and operate efficiently and effectively. The ESD recognizes this point and has stated in its Plan that, "The sheer number of facilities requiring inspection means that managing and tracking the data for these facilities is crucial to the ongoing efficacy of the inspection program." We determined the Program's Industrial Facility Database (Database) is not complete or accurate and thus cannot be relied upon to effectively manage the Program. Specifically, as of January 2000, the Program's Database contained 8,583 facilities. However, over 74 percent of these facilities should not have been included in the Database because they are not relevant to inspection assignments. Based on our review, we determined the Database should have only contained 2,322 active facilities. Exhibit 2 below compares the number of facilities in the Database to the number of facilities that should be in the Database as of January 2000.

Exhibit 2 Comparison Of The Number Of Facilities In The Industrial Facility Database To The Number Of Facilities That Should Have Been In The Industrial Facility Database As Of January 2000

Status	Facility Category	Number Of Facilities
Current Number Of Facilities In The Industrial Facility Database		8,583
Should not be in database	Food Service	(1,997)
Should not be in database	No Future Inspections	(3,591)
Should not be in database	Duplicates	(250)
Should not be in database	No Longer in Business in San Jose	(552)
Should be in database	State-Listed Notice Of Intent (NOI)	24
Should be in database	Pretreatment	105
Should be in database	Zero Discharge	Unknown
Number Of Facilities That Should Be In The Industrial Facility Database		2,322

As shown in Exhibit 2, the Program's Database overstated the number of facilities subject to inspection by 370 percent  $(8,583 \div 2,322)$ .

The Database Unnecessarily Included 1,997 Food Service Facilities According to the Plan, the Program is responsible for inspecting food service facilities to ensure compliance with urban runoff requirements. To satisfy this inspection requirement, the Regional Board has allowed the Program to rely on the Santa Clara County Health Department's (County) routine food service facility inspections. Accordingly, the Program neither provides the County with information on these food service facilities nor determines if the County actually inspects them. Thus, the Program should not include food service facilities in its Database.

We found that the Program maintains information on nearly 2,000 food service facilities in its active database. We also found that the Program does not use this information for any purpose. As a result, the Program overstated its workload by needlessly including these facilities in its active database.

Thus, the Program should either remove these facilities from its database or transfer them to an inactive status.

The Database Unnecessarily Included 3,591 Facilities That Did Not Require Future Inspections To ensure the Program's database is not encumbered with information that is not relevant, needlessly taking up computer storage space, and causing scheduling errors, Program staff need to remove facilities that inspectors have identified as no longer requiring inspections. These are facilities inspectors have determined are no longer in business in the City of San Jose or whose operations do not impact storm water runoff. As of January 2000, of the 8,583 facilities listed in the database, 3,591 (42%) of them did not require a future inspection.

By continuing to include these facilities in the database, the Program is more susceptible to reassigning them for inspection in subsequent years. This can cause inspectors to waste time dealing with these facilities. From a sample of 100 inspection records, we found three cases in which a previous inspector noted the facility did not require future inspections, but Program management still assigned the facility for an inspection in a subsequent year.

When combined with food service facilities, these two categories of facilities alone accounted for 5,588 facilities or 65 percent of the 8,583 in the Program's Database as of January 2000. These 5,588 facilities unnecessarily utilize computer memory, can cause confusion for Program management and inspectors, and unnecessarily consume Program resources.

The Database Contained 233 Duplicate Facilities Based on our review of the database as of January 2000, we identified 233 different sites listed more than once with different tracking numbers (Facility Numbers). Together, these 233 duplicated sites resulted in 250 unnecessary facility records in the database. In some cases the names of the duplicate entries were very similar and shared the same address. For example, the database contained the following entries under three different Facility Numbers, but the same address.

Business Name	Facility Number	Address
JJ CARBURATOR CO	23163	1854 S 7 <sup>TH</sup> ST. – Bldg. A1
J J CARBURATORS	17445	1854 S 7 <sup>TH</sup> ST. – Bldg. D
J. J. CARBURETOR CO.	22795	1854 S 7 <sup>TH</sup> ST. – Bldg. A

This business is a vehicle service facility with a two-year inspection frequency. It was inspected in May 1998 under

Facility Number 22795 and inspected one year later in June 1999 under Facility Number 23163. According to the Database, an inspector has not as yet inspected this same business tracked under Facility Number 17445. Of the three Facility Numbers shown above, two (17445 and 22795) were scheduled for inspection in 1999-00. As such, one facility that the Program should inspect every two years has or will be inspected four times in two years.

We noted other cases where the business names were different but the address was the same and the businesses were obviously located at the same site. For example, the Program's Database contained two different business names under two different Facility Numbers, but were located at the same address.

Business Name	Facility Number	Address
MINH'S EXXON	17304	2290 Alum Rock Av.
ALUM ROCK CHEVRON	23326	2290 Alum Rock Av.

Both businesses were categorized as vehicle service facilities that generally carry a two-year inspection frequency. Program management assigned inspectors to inspect both businesses in 1999-00.

The Program's
Database Contained
552 Facilities That
Were No Longer In
Business In San Jose

The Program's Database includes facilities no longer in business in San Jose. We determined this by comparing the Program's Database to the City's Business License Database. We identified 552 facilities that are no longer in business, but are still listed in the Program's Database as of January 2000, as active businesses requiring inspections. Most of these businesses were vehicle service facilities with two-year Program inspection frequencies. Furthermore, Program management needlessly assigned 533 of these facilities for inspection in 1999-00.

The Program's
Database Was
Missing 24 Notice Of
Intent Facilities

Although the State Board has a list of Notice of Intent (NOI) filers on its website, the Program still does not have all of the State Board-listed NOI filers in its database. The State Board requires specific industry categories to obtain authorization for continued and future storm water discharge. These facilities submit an NOI with the State Board and are required to do so because they are the most likely to contribute to urban runoff pollution.

Therefore, the Program should have these NOI facilities in its Database to ensure that inspectors inspect them. Based on a

comparison of the State Board's NOI list with the Program's Database, we determined that as of January 2000, the Program did not include 24 facilities that had filed an NOI with the State. For example, AC Freight Systems, located at 725 N 7<sup>th</sup> Street, filed an NOI with the State Board and is on the State's NOI list. The company has had a business license to operate in the City of San Jose since 1991. However, the facility is not included in the Program's Database and no inspector has inspected it. We took the following pictures on March 17, 2000 to confirm that the facility was still in operation.





The Database Did Not Include All Pretreatment And Zero-Discharge Facilities The Permit requires and the Program reported in its 1998-99 Annual Report to the City Council and Regional Board that it inspected all Pretreatment and Zero-Discharge facilities every two years.<sup>2</sup> However, we found that the Program did not include all of these facilities in its Database. As a result,

<sup>&</sup>lt;sup>2</sup> The Program is responsible for inspecting all Pretreatment and Zero-Discharge facilities located in the City Of San Jose.

Program management did not assign these facilities for inspection.

Pretreatment facilities are businesses that meet federal inspection criteria due to the type of their industrial discharge into the Sanitary Sewer System. The ESD Source Control Unit routinely inspects these facilities to ensure their waste does not contain unauthorized pollutants before it is discharged into the Sanitary Sewer System. Because Source Control Inspectors are already inspecting these facilities for Sanitary Sewer violations, the Program has relied on them also to conduct urban runoff inspections when they visit these Pretreatment facilities. However, because the Program did not have a complete inventory of Pretreatment facilities in its Database, it did not assign these facilities to Source Control Inspectors. As a result, neither Program inspectors nor Source Control Inspectors are doing urban runoff inspections at numerous Pretreatment facilities.

Unlike Pretreatment facilities, Zero-Discharge facilities are businesses that were once included in the Pretreatment Program but are now exempt. Therefore, Source Control Inspectors no longer inspect these facilities for Sanitary Sewer violations. However, because Source Control Inspectors are familiar with Zero-Discharge facilities, the Plan specifies that they will still conduct urban runoff inspections at these facilities.

As part of the annual facility assignment process, Program staff utilizes the Program Database to assign facilities requiring an inspection during the fiscal year. Program staff should accordingly assign Pretreatment and Zero-Discharge facilities to the Source Control Inspectors for inspection. Once Source Control Inspectors conduct their inspections, they should complete inspection reports and submit them to the Program for inputting into its Database.

We found, however, that the Program Database management used to assign the Pretreatment and Zero-Discharge inspections was incomplete. Specifically, the Program's Database was missing 105 of the 213 Pretreatment Facilities (49 percent) that were in Source Control's database. Further, the Program Database did not contain Zero-Discharge facilities because neither the Program nor Source Control has maintained an inventory of these facilities. As a result, the Program did not assign numerous Pretreatment and Zero-Discharge facilities to Source Control Inspectors to conduct inspections for urban runoff discharge.

Database Errors Also Caused The Program To Overstate Its 1999-00 Workload Assignments The Program overstated its 1999-00 inspection workload because Program management used the flawed information in its Database to schedule inspection assignments for 1999-00. As a result, the Program overstated its 1999-00 inspection workload by almost 103 percent. Based on our analysis, we determined that instead of the 2,866 facility assignments the Program scheduled for 1999-00, only 1,414 facilities actually required an inspection. We determined the number of facilities actually requiring an inspection in 1999-00 by eliminating duplicate and closed facilities. We then included facilities due for inspection by comparing their inspection frequency with the date of their last inspection. Exhibit 3 below compares the number of facility assignments Program management assigned for inspection, to the number of facilities that actually required an inspection in 1999-00.

Exhibit 3 Comparison Of The Number Of Facility
Assignments Program Management Scheduled For
An Inspection To The Number of Facilities That
Actually Required An Inspection In 1999-00

Inspection Frequency	Number Of Facility Assignments Scheduled For Inspection	Number Of Facilities Actually Requiring An Inspection	Difference	Percentage Difference
1-Year	288	161	127	79%
2-Year	436	269	167	62
3-Year	545	82	463	565
Blank*	1,178	663	515	78
To Be Determined *	418	239	179	75
No Future	1	0	1	
Total	2,866	1,414	1,452	103%

<sup>\* &</sup>quot;Blank" and "To Be Determined" facilities are those facilities Program inspectors have not as yet inspected and assigned an appropriate inspection frequency.

The 2,866 facility assignments for 1999-00, shown in Exhibit 3, included 1,373 facilities (48%) that were either 1) listed more than once with the same Facility Number, 2) closed, 3) not due for an inspection, and 4) listed more than once with different Facility Numbers. In addition, the list of 2,866 facility assignments shown in Exhibit 3 does not include 490 facilities that Program management did not assign for inspection in 1999-00, but should have. We included these 490 facilities in

the 1,414 facilities shown in Exhibit 3 as actually requiring an inspection.

As shown in Exhibit 3, the assigned inspections exceeded the actual inspections required in 1999-00 by 103 percent. The largest disparity was in the three-year inspection frequency category where the number of facilities assigned for inspection (545) exceeded the actual number of facilities needing an inspection (82) by 463 facilities, or 565 percent.

Program Processes And Data System Limitations Contribute To Database Problems The Program has used the City's Business License Database to update its Database only twice in the past six years. The Program only used the Business License Database to add facilities to its Database, not to identify those businesses no longer operating in the City of San Jose. As a result, the information in the Database is often outdated. This is evidenced by the high number of facilities that inspectors found were no longer in operation when they attempted an inspection. For example, of the 129 assigned inspections in 1999-00 that we sampled, 39 percent of the facilities were no longer in operation at the address shown in the Program's Database when the inspector arrived to conduct an inspection. In addition, the Program's updating process has resulted in some facilities being listed in the Database numerous times under different tracking numbers.

Data system limitations have also contributed to errors in the Database. We noted that the Database system cannot distinguish slight differences in business names and addresses. This makes it difficult for Program staff when they are trying to update the Database to identify those facilities that are already included. Half of the duplicate facilities in the Database were the result of Program staff updating the Database with the Business License information in 1998.

In addition, Database system limitations do not allow Program staff to develop a facility historical profile and/or the status of any previously identified violations.

It should be noted that the ESD recognizes that its Database system is limited and in October 1999 initiated a Request for Proposal process to explore alternate data systems for the Program's Database.

While an improved Database system will help alleviate some of the Program's Database problems, the ESD also needs to develop written procedures that mandate the consistent and routine updating of the facilities listed in its Database. Specifically, Program procedures should address not just adding facilities to the Database, but also removing facilities when appropriate. In addition, the Program will not meet its Permit requirement of inspecting all pertinent facilities until it improves its coordination with the Source Control Unit. In our opinion, the Program needs to ensure that its Database is routinely updated and that it contains complete and accurate information. This will help to improve the efficiency and effectiveness of the Program's facility inspections and provide management with more timely, reliable, and accurate Program information.

We recommend that the ESD:

## Recommendation #1

Establish specific data management procedures to ensure that the Industrial Facilities Database:

- Is routinely updated, utilizing the business license number as a primary identifier,
- Contains all appropriate facilities located in the City of San Jose,
- Includes facilities that have filed an NOI with the State Board, and
- Contains all Pretreatment and Zero-Discharge facilities.

## Recommendation #2

Acquire a data system that more adequately meets Program needs.

Poor Scheduling Of Inspections Created Widely Fluctuating Inspector Workloads And Over \$100,000 In Unnecessary Expenditures In 1998-99

The Program's success depends on utilizing its resources in an effective and efficient manner. Given the number of facilities requiring inspection, the Program must ensure inspectors are given adequate time to complete their assignments without having to unnecessarily rely on the help of others. We determined that Program inspectors conducted over 45 percent of their facility inspections during the last quarter of the year and needlessly used inspectors from the Source Control Unit to help with the Program's workload at a cost of over \$100,000.

The Inspection Schedule Was Not Balanced We found that Program inspectors conducted a disproportionate share of their inspections at the end of the year. For example, during 1998-99 the seven Program inspectors conducted an average of only three facility inspections per month during the first quarter. However, by the fourth quarter each inspector averaged 33 inspections per month. Still for the entire year, each Program inspector inspected an average of only 18 facilities per month. Exhibit 4 below shows that Program inspectors conducted the majority of their 1998-99 inspections during the last quarter.

Exhibit 4 1998-99 Actual Program Inspections By Month For The Seven Program Inspectors

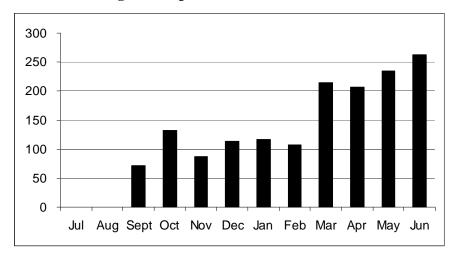


Exhibit 5 below shows the number of facility inspections the seven inspectors conducted each month. In total there were 2,753 inspections for 2,713 facilities. To clearly identify only those inspections Program inspectors conducted, we subtracted all desk reviews and inspections Source Control Inspectors conducted. The seven Program inspectors conducted 1,545 inspections with each inspector averaging 18 inspections per month.

**Exhibit 5** 1998-99 Program Inspections

1998-99	Total Program Inspections	Source Control Inspections And Desk Reviews	Actual Inspections For The Seven Inspectors	Average Monthly Inspections Per Program Inspector
July	2	(2)	0	0
August	1	(1)	0	0
September	74	(2)	72	10
October	232	(100)	132	19
November	148	(61)	87	12
December	178	(65)	113	16
January	150	(33)	117	17
February	170	(63)	107	15
March	331	(117)	214	31
April	445	(239)	206	29
May	576	(341)	235	34
June	446	(184)	262	37
Total	2,753	(1,208)	1,545	18

The unbalanced workload shown above is largely due to management not assigning inspections soon enough and the discretion management gave inspectors to schedule their inspections. We found that Program management assigned over 96 percent of the cases for inspection in the latter part of September 1998. Thus, for all intents and purposes, nearly three months of the fiscal year were gone before inspectors knew which facilities they were expected to inspect during 1998-99. According to Program staff, the first three months were spent organizing the previous year's inspection data and generating documents to assign the inspections.

In addition to the late assignment of inspections, Program management allowed inspectors to determine when and if they conducted inspections. Moreover, Program management did not receive reports with which to monitor the inspectors' progress in meeting their inspection workloads. These problems not only significantly affect the workload balance and impact the timing of inspection assignments for the current year, but also cause a ripple effect for the following year. Specifically, because of late assignments, Program management spends a considerable amount of time at the beginning of each fiscal year compiling data from inspections completed during the previous fiscal year – most of which occurred in the last quarter. This causes Program management to repeat the cycle

of not assigning inspections in a timely manner, which in turn, causes another end-of-the year inspection workload imbalance.

The Program
Unnecessarily Spent
\$100,000 On
Inspections In
1998-99

As a consequence of poor inspection scheduling, the Program had to use 20 inspectors from the Source Control Unit to inspect 806 facilities, most of which were vehicle service facilities. Of the 806 facilities inspected for urban runoff pollution, only 51 (6%) of them were Pretreatment facilities for which Source Control Inspectors were responsible. Thus the use of Source Control Inspectors caused the unnecessary use of over \$100,000 in Storm Sewer Fee funds to cover the cost of Source Control urban runoff inspections.<sup>3</sup>

Our analysis indicates that the Program's annual inspection workload is well within the capabilities of its existing staff. Exhibit 6 below shows the total number of facility inspections conducted during 1998-99, including the 806 inspections Source Control Inspectors handled.

Exhibit 6 1998-99 Total Facility Inspection Workload

1998-99	Total Program Inspections	Average Monthly Inspections Per Program Inspector
July	2	0
August	1	0
September	72	10
October	132	19
November	99	14
December	150	21
January	136	19
February	141	20
March	283	40
April	398	57
May	529	76
June	408	58
Total	2,351	28

As Exhibit 6 above demonstrates, the Program's seven inspectors needed to average 28 inspections per month in order to complete all necessary inspections. However, because of poor inspection scheduling, these seven Program inspectors averaged only 18 inspections per month in 1998-99, but were

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<sup>&</sup>lt;sup>3</sup> The Storm Sewer Operating Fund 446, funded through revenues from Storm Sewer Fees, supports the Urban Runoff Program.

able to complete as many as 37 inspections per month (Exhibit 5). Thus, in our opinion, with proper scheduling Program inspectors should be able to conduct the 28 inspections per month needed to complete the Program's annual inspection workload.

In order to manage the inspectors' time more efficiently, ensure that all assigned inspections are conducted, and utilize Program funds in the most efficient manner, the Program needs to make changes in the scheduling and monitoring of inspections. In our opinion, the Program needs to ensure the workload is properly balanced throughout the year and that managers track the status of all inspections on a periodic basis.

We recommend that the ESD:

### Recommendation #3

Schedule inspections to balance the workload throughout the year and develop periodic reports allowing managers and supervisors to assess progress in meeting inspection goals.

The Program Spent Over \$120,000 For Inspection Services It Did Not Receive In 1999-00 The Program must operate efficiently and effectively given that its funding source, the Storm Sewer Operating Fund 446, has limited resources. In 1999-00 the City implemented a new storm sewer rate structure for funding of Fund 446 and projected the new structure would generate \$13.3 million in revenue. The ESD noted that the \$13.3 million in projected revenues would not be sufficient to maintain current service levels, particularly in urban-runoff activities. Furthermore, the projected \$13.3 million in Fund 446 revenues for 1999-00 has not been realized. The ESD's Rates and Funds Report for April 2000 estimated that Fund 446 revenues will be \$700,000 below the projected level.

Despite its limited funding resources, the Program spent over \$120,000 in 1999-00 for the Source Control Unit even though Source Control Inspectors did not conduct any urban runoff inspections in 1999-00. Source Control Inspectors spent all of their time in 1999-00 conducting work that the Treatment Plant Operating Fund (Fund 513) should support.

Every year the City Council approves the total number of positions that the Storm Sewer Operating Fund 446 can support for urban runoff activities. The ESD then determines how the

monies will be spent for the Program including the use of Source Control Inspectors for urban runoff inspections. This is accomplished by allowing Source Control staff, primarily inspectors, to charge a set percentage of their annual salary to Program funds (Fund 446). This percentage generally ranges from 5 to 40 percent. The City's payroll system will continue to use a set percentage of Program monies to partially pay for Source Control Inspectors' salaries until the ESD modifies the payroll calculation. As a result, the Program may continue to pay for Source Control Unit inspection services it does not receive.

Given its limited funding resources, Fund 446 can ill-afford to pay \$120,000 to support activities for which it does not receive any services or benefits. In our opinion, the ESD should transfer \$120,000 from Fund 513 to Fund 446 to reimburse the Program for Source Control inspection services it did not receive in 1999-00.

We recommend that the ESD:

## **Recommendation #4**

Transfer \$120,000 from the Treatment Plant Operating Fund (Fund 513) to the Storm Sewer Operating Fund (Fund 446) to reimburse the Program for Source Control inspection services it did not receive in 1999-00 and develop a procedure to pay for Source Control services based upon actual inspections conducted.

Program
Management Did
Not Properly
Assign Inspections;
Consequently
Inspectors Did Not
Conduct All
Required
Inspections But Did
Conduct
Inspections That
Were Not Required

According to the Plan, Program inspectors should inspect significant facilities annually and non-significant facilities once every three years. In its 1998-99 Annual Report, the Program reported that it inspected all significant facilities. However, we found that Program inspectors did not conduct all required inspections, but did conduct inspections that were not required.

Our review of the Program's Database for 1998-99, revealed that Program inspectors failed to inspect 52 significant facilities requiring annual inspections. Moreover, Program inspectors have not inspected 30 of these facilities since 1996-97. In addition, Program management failed to assign 27 of these same 52 facilities for an inspection in 1999-00. For example, Accuracy Tooling, located at 7011 Realm Drive, is listed in the Program's Database as a facility requiring an annual inspection. However, Program inspectors have not inspected this facility

for almost three years. We took the following picture on May 18, 2000 to confirm the facility was still in operation.



While Program inspectors did not inspect more significant facilities, they spent considerable time inspecting non-significant facilities more often than required. We identified 64 non-significant facilities that inspectors inspected in 1998-99 and that Program management assigned for inspection in 1999-00. Program management assigned these same facilities for inspection in 1999-00 even though they were not due for an inspection until 2001-02. This inspection scheduling error is compounded by the fact that inspectors inspected 5 of these 64 facilities in 1997-98 as well. As a result, inspectors will inspect these five facilities three years in a row when they should have been inspected only once in three years.

For example, inspectors inspected Fox Electronics, located at 686 N. King Road (pictured below), in October 1997, February 1999, and are scheduled to inspect it again in 1999-00.



As a result of data system limitations, in 1999-00 Program managers continued the practice of not assigning Program inspectors to inspect all of the significant facilities, while assigning non-significant facilities that did not require an inspection. Based on our review of the facilities scheduled for inspection during 1999-00, we determined that Program managers did not assign inspectors to 24 of the facilities requiring annual inspections. Moreover, Program managers again assigned facilities with two and three-year inspection cycles to be inspected more often than required. Exhibit 7 below compares the actual required workload with the assigned workload for 1999-00, excluding all duplicate Facility Numbers.

Exhibit 7 Comparison Of The Number Of Facilities Actually Due For Inspection To The Number Of Assigned Inspections In 1999-00

Inspection Frequency	Number Of Facilities Actually Due For Inspection	Number Of Facilities Assigned For Inspection	Over Assigned/ (Under Assigned)
1-Year	161	137	(24)
2-Year	269	382	113
3-Year	82	298	216
Blank	663	1,134	471
To Be Determined	239	345	106
No Future	0	1	1
Total	1,414	2,297	883

As Exhibit 7 illustrates, Program management did not assign inspectors to the most significant facilities that required inspections. As a result, potential sources of pollutants are not identified and remedied while Program resources are misdirected to less significant facilities and activities. In our opinion, Program management needs to ensure that inspectors annually inspect all significant facilities and that Program resources are used to optimize Program efficiency and effectiveness.

We recommend that the ESD:

## **Recommendation #5**

Assign inspectors to ensure that required inspection frequencies are met.

Inspectors Did Not Properly Document The Results Of Their Inspection Activities Accurate documentation and reporting is vital to ensure information in the Program's Database is accurate and complete. This issue is significant enough that SCUVRPPP developed an inspection report and process that all member programs should use to ensure consistency in documenting inspection activities. However, we found that inspectors 1) erroneously counted non-inspection activities, such as desk reviews, as inspections; 2) did not consistently provide facilities with compliance dates to correct identified violations; and 3) made errors in completing their inspection reports.

Inspectors
Erroneously
Counted Activities
As Inspections

The Plan requires the Program to report to the City Council and the Regional Board the number of inspections it conducted. However, we found that the information the Program provided to the City Council and the Regional Board was not accurate because inspectors erroneously counted all of their activities, including non-inspection activities, as facility inspections. For instance, in its 1998-99 Annual Report, the Program reported that it conducted 2,714 inspections. However, 402 of those reported inspections were only desk reviews of documents. As part of the desk review, inspectors determined that among other things, the facility had already been inspected that year. In addition to the desk reviews, it appears the actual number of inspected facilities is fewer still because the number of inspections the Program reported included facilities that inspectors inspected more than once. This occurred because the Program's Database listed the same facilities numerous times under different Facility Numbers.

For example, an inspector visited AB Manufacturing located at 6280 San Ignacio Avenue on May 7, 1999 and counted the visit as two inspections of two separate facilities because the facility was listed under two different Facility Numbers, 19208 and 25446. This situation also occurred with Neves Custom Cabinets located at 1775 Monterey Road that also had two different Facility Numbers. This duplicate listing caused an inspector to inspect the same facility twice - on March 12, 1999 and March 17, 1999. The inspector counted these as two inspections of two separate facilities.

According to the Program Supervisor, inspectors should track their daily activities and not count desk reviews as facility inspections. However, Program inspectors lack written procedures and specific guidance on how to report desk reviews and facilities listed more than once in the Database.

Inspectors Did Not Consistently Provide Facilities With Compliance Dates To Correct Identified Violations When inspectors detect violations, they should give the facility a compliance date by which time it must correct any identified violations. The compliance date is a critical first step in an enforcement action because it informs the facility when it must correct violations and establishes a standard for measuring facility compliance.

Although the compliance date is a critical component of effective enforcement action, we found a significant number of inspection reports that did not specify a date by which the facility was to correct any identified violations. For example, in 22 of the 36 inspection reports we reviewed for 1999-00 in which the inspector noted a violation, the inspector did not provide the facility with a specific compliance date. Instead, the inspectors provided no compliance dates in 11 cases, an "immediate" timeframe in 9 cases, and an "on-going" timeframe in 2 cases.

The Program's procedures do not describe the use of the terms "immediate" and "on-going." The use of these terms appears to vary according to the individual inspector and situation. For example, when asked about the use of these terms, different program inspectors provided the following definitions:

• "Immediate generally means right now while I'm standing here or before I leave, but no later than [the] end of the day."

- "Immediate or immediately are subjective terms and mean different things depending on the case and the inspector."
- "On-going means it is not a one time action. That the company/business is responsible to keep up on the action required."
- "[On-going] generally means that a violation may not be apparent, but it is used to document concern regarding future activity/behavior."

Specific compliance dates are critical to managing an enforcement action. Compliance dates provide the facilities with timeframes and deadlines for completing required tasks and resolving all violations. Without such deadlines, facilities do not have a specific timeframe by which to address the violations and inspectors do not have a standard by which to measure the facilities' performance.

Inspectors Made Errors When Completing Their Inspection Reports Proper documentation of inspections is important to classify facilities, track compliance, establish a history of inspection activity, and compile facility information the Program uses to report to the Regional Board and City Council. However, we found errors in 61 of the 100 reports we reviewed from the Program files. Of these 61 inspection reports, 31 percent showed inconsistencies in classifying facilities for the purposes of requiring NOI permits and assigning inspection frequencies. Furthermore, 57 percent of these inspection reports were missing inspection dates, compliance dates, and/or violation numbers.

Without complete and accurate inspection reports the Program will not have reliable information for assessing and monitoring inspections and managing the Program.

In our opinion, the Program needs to develop comprehensive written procedures on completing inspection reports and documenting inspection activities. In addition, Program management should periodically review inspection files throughout the year to ensure adherence with these new procedures.

We recommend that the ESD:

#### **Recommendation #6**

Develop written procedures that provide inspectors with specific guidance on how to report desk reviews and identify facilities listed more than once in the database.

#### Recommendation #7

Develop written criteria for determining compliance dates and provide facilities with clearly defined compliance dates for correcting violations.

Inspectors Did Not Properly Follow-up On Identified Violations Program inspectors are required to identify, investigate, and correct illegal discharges to the City storm sewer system. To that end, inspectors conduct facility inspections to determine the existence of discharges or potential discharges that are illegal under local ordinances. Once identified, inspectors should either direct the facility to take corrective action or require the facility to provide information on how it intends to correct the problem. If the facility fails to comply, the Program can impose enforcement sanctions. Based on our review, we determined that 1) inspectors conducted limited follow-up visits to verify compliance, 2) did not require facilities to provide information on how they intended to correct violations, and 3) did not, as a practice, take enforcement actions against facilities that were not in compliance.

Inspectors Rarely Followed Up To Ensure Violations Were Addressed Based on our review of 1998-99 inspection reports, we determined that Program inspectors rarely conducted follow-up visits to ensure violations had been addressed. Additionally, Program inspectors generally did not receive any information from facilities on the corrective actions that the facilities had taken. Our analysis of the Program's Database for all 1998-99 inspections, showed that inspectors did not conduct follow-up inspections in almost 94 percent of the cases where they noted violations. Of the 583 facilities in which inspectors noted violations in 1998-99, only 33 (6%) were re-inspected for a total of 40 follow-up inspections. Program inspectors conducted only six of these follow up inspections.

4 Thus, even though Program inspectors performed the vast majority of these facility inspections, they conducted only six of the 40 follow-up inspections.

<sup>&</sup>lt;sup>4</sup> Source Control Inspectors conducted the other 34 follow-up inspections.

We reviewed 29 inspection reports for 1998-99 where inspectors identified at least five violations and found that inspectors did not conduct follow-up inspections in 25 cases (86%). We also reviewed 36 cases for 1999-00 where inspectors identified violations and found that in 35 cases (97%), inspectors did not conduct any follow-up inspections.

In-lieu of on-site visits to verify that facilities correct violations, inspectors can require that facilities submit reports on any corrective actions taken. However, of the 29 inspection reports for 1998-99 that we reviewed, we found that inspectors asked only 13 facilities to provide information on their corrective actions. Of these 13 facilities, only four responded to the request for information, while two other facilities that were not asked to respond voluntarily provided information on their corrective actions.

Of the 36 inspections in 1999-00 that we reviewed where inspectors identified violations, inspectors re-inspected only one facility and required only six facilities to submit a report on any corrective actions taken. However, none of these six facilities had submitted the required reports as of the end of our fieldwork.

Inspectors Did Not Use Enforcement Actions Inspectors have not used any enforcement actions to compel facilities to correct violations identified during facility inspections. According to the Supervisor of the Program inspectors, the Program prefers to help facilities achieve compliance by providing information that will help them establish the best management practices for their business. In addition, the Program prefers to use an escalating enforcement system. According to the Supervisor, instead of bringing facilities into full compliance, inspectors bring facilities into compliance "little by little." However it appears that inspectors do not ensure that facilities comply with even the modest requirements they do impose.

As was noted previously, of the 13 cases in 1998-99 where the inspector required the facility to submit a written report on how they addressed the identified violations, only four facilities responded. Despite this low response rate, inspectors took no action against the non-responsive facilities and merely closed the cases. Similarly, in 1999-00, none of the six facilities that inspectors required to submit a written report have done so and the Program had not taken any action against those facilities as of the end of our fieldwork.

We also noted many instances where inspectors identified the same violations at the same facility year after year. In our review of 61 cases from 1994-95 to 1998-99, we found ten instances in which an inspector noted the same violation that an inspector had previously noted at the same facility. For example, inspectors noted the same violation at the same facility in 1994-95, 1997-98, and 1998-99. Even though inspectors continued to find the same waste storage, handling, and disposal violations, they did not use any enforcement actions to compel the facility to correct the violations. Instead, inspectors merely kept noting the same violations in their inspection reports.

Without adequate follow-up and use of appropriate enforcement actions, the Program cannot ensure that facilities are correcting identified violations. In addition, the Program sends the wrong message to those facilities with violations. Namely, that timely compliance with federal, state, and local environmental codes and regulations is not important.

In our opinion, the Program needs to develop written procedures to ensure that inspectors follow-up on identified violations and use available enforcement actions.

We recommend that the ESD:

#### **Recommendation #8**

Develop written procedures to ensure that Program inspectors follow-up on identified violations and when necessary use available enforcement actions.

There Was No
Indication Of
Supervisory Review
Of Inspector
Activities

Appropriate management controls require, among other things, continuous and qualified supervision to ensure proper review and approval of employees' activities. Specifically, assignment, review, and approval of employees' work should result in the proper processing of their activities, including 1) following approved procedures and requirements;

2) detecting and eliminating errors, misunderstandings, and improper practices; and 3) discouraging wrongful acts from occurring or from recurring. We found little evidence that Program management was adequately supervising Program inspectors.

Based on our review of the Program's Database and the case files, we found no indication that any supervisors or other managers had reviewed the inspection reports. This lack of supervisory review is further evidenced by Program inspectors 1) not inspecting all of the significant facilities; 2) waiting until the end of the year to inspect almost half of the assigned facilities; 3) misrepresenting the total number of distinct facilities they actually inspected; 4) not properly documenting the results of their inspections; 5) providing very limited follow-up to ensure inspected facilities address all identified violations; and 6) not using appropriate enforcement actions to compel facilities to correct identified violations.

According to the Supervisor of the Program inspectors, he reviews all inspection reports before the case is closed and holds weekly group meetings with the inspectors to discuss general issues about the Program and about specific cases. However, we saw no documentation of any supervisory review for any of the cases we examined.

The Program has no process or written procedures in place to ensure supervisors periodically review the work of the inspectors. The Program does not generate management reports to provide supervisors or managers with information on specific cases or on the status of the Program's inspection workload. The last time the Program produced such a report was in April 1998. This was too late in the fiscal year for Program management to make any meaningful adjustments to the Program's inspection workload.

Information for 1999-00 inspections has been more difficult to analyze and impossible to consolidate for management purposes. The supervisor did not review the inspection reports for 1999-00, and the information in these inspection reports was not put into the database until the end of April 2000, less than three months before the end of the fiscal year. This lack of structure leads to inefficiencies and errors. In our opinion, the Program needs to establish written procedures to ensure adequate and timely supervisor review of the inspection reports and develop routine reports to assess the status of the workload.

We recommend that the ESD:

#### **Recommendation #9**

Develop written procedures that ensure adequate management review and oversight of the inspectors' activities and reports to improve Program efficiency and effectiveness and ensure inspector compliance with Program procedures.

# Program Efficiency And Effectiveness Is Essential

It is imperative that the Program operate as efficiently and effectively as possible given 1) the limited impact that facility inspections can have on reducing the flow of metals to the South Bay and 2) the City Council's desire to not unnecessarily increase Storm Sewer Fees.

The reduction of metals in the Bay is a high Program priority. The Permit requires that the Santa Clara Valley Urban runoff Pollution Prevention Program (Regional Program) develop a strategy to reduce copper and other metals in storm water. As part of the permit strategy, the Regional Program has developed a comprehensive set of activities that are intended to reduce the quantity of pollutants including metals entering the storm drains. These activities include inspections of industrial and commercial facilities. However, Regional Program studies have shown that of all urban sources, excluding the three water pollution control plants in Santa Clara County, the automobile was a significant source of these metals. Moreover, the studies determined that industrial sources subject to storm water regulations contributed only four percent of the total watershed copper load. In addition, runoff from industrial facilities was estimated to contribute only six percent of the total watershed load of nickel, and minor amounts of other metals.

Furthermore, during the rate restructuring process in 1999 the Administration requested the City Council to approve a rate structure that would increase revenues for the Storm Sewer Operating Fund. However, the City Council approved a revenue-neutral rate structure and directed the Administration to conduct a thorough review of the Storm Sewer Program and report back to the Council on additional efficiencies.

Given the City Council's stated desire to not increase Storm Sewer Fees, the fact that the Program addresses a relatively small percentage of the major pollutants entering the storm sewer system, and the Program's lack of demonstrated effectiveness, the ESD needs to completely revamp this Program before requesting Program related increases in Storm Sewer Fees.

We recommend that the ESD:

#### Recommendation #10

Not seek an increase in Storm Sewer Fees for the Program until it has revamped the Program and significantly improved its effectiveness and efficiency.

#### **CONCLUSION**

The Industrial and Commercial Inspection Program needs to make dramatic changes in the way it is managed and its resources utilized. These changes are needed in order to meet storm water requirements and the City Council's direction that it optimize its current resources before seeking any Program related Storm Sewer Fee increases. Program efficiency and effectiveness is critical in view of the relatively small impact the Program can have on controlling the major pollutants that enter the San Francisco Bay. To improve the Program, the ESD needs to make substantial improvements to its Database, enhance its assignment and scheduling processes, assign and follow-up on compliance dates for correcting identified violations, take corrective action when necessary, and significantly improve its managerial and supervisory oversight of the inspectors' work and of the Program as a whole.

# RECOMMENDATIONS

We recommend that the ESD:

#### **Recommendation #1**

Establish specific data management procedures to ensure that the Industrial Facilities Database:

- Is routinely updated, utilizing the business license number as a primary identifier,
- Contains all appropriate facilities located in the City of San Jose,
- Includes facilities that have filed an NOI with the State Board, and
- Contains all Pretreatment and Zero-Discharge facilities. (Priority 3)

#### **Recommendation #2**

Acquire a data system that more adequately meets Program needs. (Priority 3)

**Recommendation #3** Schedule inspections to balance the workload throughout

the year and develop periodic reports allowing managers and supervisors to assess progress in meeting inspection

goals. (Priority 3)

**Recommendation #4** Transfer \$120,000 from the Treatment Plant Operating

Fund (Fund 513) to the Storm Sewer Operating Fund (Fund 446) to reimburse the Program for Source Control inspection services it did not receive in 1999-00 and develop a procedure to pay for Source Control services based upon

actual inspections conducted. (Priority 2)

**Recommendation #5** Assign inspectors to ensure that required inspection

frequencies are met. (Priority 2)

Recommendation #6 Develop written procedures that provide inspectors with

specific guidance on how to report desk reviews and identify facilities listed more than once in the database.

(Priority 3)

**Recommendation #7** Develop written criteria for determining compliance dates

and provide facilities with clearly defined compliance dates

for correcting violations. (Priority 3)

**Recommendation #8** Develop written procedures to ensure that Program

inspectors follow-up on identified violations and when necessary use available enforcement actions. (Priority 3)

**Recommendation #9** Develop written procedures that ensure adequate

management review and oversight of the inspectors' activities and reports to improve Program efficiency and effectiveness and ensure inspector compliance with

**Program procedures.** (Priority 3)

Recommendation #10 Not seek an increase in Storm Sewer Fees for the Program

until it has revamped the Program and significantly improved its effectiveness and efficiency. (Priority 3)

# SEP 0 6 2000 CITY AUDITOR



# Memorandum

TO: Gerald A. Silva

City Auditor

FROM: Carl W. Mosher, Director

Environmental Services

SUBJECT: SEE BELOW

DATE: September 6, 2000

Approved

Kay Winer

Date

9/6/00

SUBJECT: RESPONSE TO AN AUDIT OF THE WATERSHED PROTECTION DIVISION'S INDUSTRIAL AND COMMERCIAL INSPECTION PROGRAM

The Administration has reviewed the City Auditor's report entitled "An Audit of the Watershed Protection Division's Industrial and Commercial Inspection Program" and concurs with its recommendations.

# **BACKGROUND**

Runoff from urban areas is the leading cause of water quality impairments in California and the nation. It is caused by rainfall, snowmelt, or irrigation water that moves over and through the ground. As the runoff moves, it picks up and carries away pollutants and deposits them into lakes, rivers, wetlands, ground water, and other inland or coastal waters. Urban pollutants are considered the main reason that 40 percent of our rivers, lakes, and estuaries are not clean enough to meet basic uses such as fishing or swimming.

# Examples of urban pollutants are:

- Excess pesticides and fertilizers from urban lawns and parks;
- Oil, grease, heavy metals, and chemicals from roofs, streets, parking lots, and industrial sites;
- Sediment from improperly managed construction sites and eroding streambanks.

The Urban Runoff Management Plan describes all of the programs that the City will implement to ensure that dischargers either prevent pollution or reduce it to the maximum extent practicable. This Plan was developed as a condition of the 1995 Stormwater Permit, which was issued to San Jose and 14 other local governments and agencies whose land mass drains to south San Francisco Bay. Plan elements include Illicit Connections/Illegal Dumping; Commercial/Industrial Discharger Inspections; Monitoring; New Development and Construction; Public Streets, Roads and Highways Operation and Maintenance; Residential Outreach and Education; Storm Drain System Operations and Maintenance; and Water Utility Operation and Maintenance. This Audit focuses on one Plan element, Commercial/Industrial

Discharger Inspections, which is handled within the Enforcement Section of the Environmental Services Department.

#### **DISCUSSION**

The Audit focuses on the need for an improved data base system and improved procedures and supervision within the Enforcement Section of the Watershed Protection Division, Environmental Services Department. The Enforcement Section is responsible for two of the Plan elements listed above: Industrial/Commercial Facility Inspections and Illicit Connections/Illegal Dumping Inspections. Its 1999-00 adopted budget accounts for \$980,607 of the Storm Sewer Operating Fund's \$12.4 million annual budget.

The following improvements are intended to resolve issues highlighted in the Audit:

- ESD is coordinating with the General Services and Information Technology departments to issue an RFQ to obtain a consultant to design a new data base system. This task was begun earlier but was suspended during the Audit in order to benefit from its findings and recommendations.
- A recently completed reorganization within the Watershed Protection Division is intended to address the supervisory oversight and management issues.
- An administrative citation ordinance was adopted that allows the City to issue citations for illegal discharges into the storm sewer system. Staff have begun assessing civil penalties of \$500 for violations associated with discharging contaminated water into the City's storm sewer system or for failing to implement adequate Best Management Practices to prevent such discharges. This new process is expected to be an effective tool for ensuring compliance by commercial and industrial facilities.

Our response to specific recommendations is presented below.

#### Recommendation #1

Establish specific data management procedures to ensure that the Industrial Facilities Database:

- Is routinely updated, utilizing the business license number as a primary identifier.
- Contains all appropriate facilities located in the City of San Jose
- Include facilities that have filed an NOI with the State Board, and
- Contains all Pretreatment and Zero-Discharge facilities. (Priority 3)

The Administration concurs with this recommendation. The current database has been updated using business license information received to date, including the facilities that have currently filed an NOI (Notice of Intent) with the Regional Board. Information regarding 584 facilities that should have filed NOIs was referred to the Board in June, and the 24 NOI facilities noted in the Audit (page 15) have now been inspected. The task of updating the database with the

Pretreatment and Zero-Discharge facilities as well as the establishment of data management procedures and practices will be undertaken as part of the RFQ process discussed above. This past year was the first year that information regarding NOIs was available directly from the Board. This was also the first year that the Board had a mechanism available to process referrals of non-NOI filers.

Wherever appropriate, the Facilities Inspection Program (Program) relies upon other governmental units to perform some of the inspections. For example, the County Health Department, which handles inspection of food service facilities, has also agreed to inspect those facilities for urban runoff. Because those facilities required inspection, City staff kept the name of those facilities in the database. This did cause inflated numbers in the database, however, and have now been removed. When the new database is being constructed, these facilities, together with those industries not requiring future inspections, will maintained on a secondary or inactive list, since the City still is responsible for determining whether the inspections have been performed.

# Recommendation #2

Acquire a data system that more adequately meets Program needs. (Priority 3)

The Administration concurs with this recommendation. The Environmental Services Department in conjunction with the General Services and Information Technology departments is developing an RFQ to acquire a data system and data management procedures/practices that will meet the needs of the Program. This work was begun previously but was suspended during the Audit to incorporate all new findings and recommendations.

#### Recommendation #3

Schedule inspections to balance the workload throughout the year and develop periodic reports allowing managers and supervisors to assess progress in meeting inspection goals. (Priority 3)

The Administration concurs with this recommendation. Inspector work areas (jurisdictions) have been redefined and assignments have been adjusted accordingly. Over 300 assignments were given out during the months of July and August. The remaining assignments will be given out in increments of 200 per month minimum. Progress will be assessed through periodic queries of the database system and the production of tracking reports that are being designed.

#### Recommendation #4

Transfer \$120,000 from the Treatment Plant Operating Fund (Fund 513) to the Storm Sewer Operating Fund (Fund 446) to reimburse the program for Source Control inspection services that it did not receive in FY 1999-00 and develop a procedure to pay for Source Control services based upon actual inspections conducted. (Priority 2)

The Administration concurs with this recommendation. The Environmental Services Department is currently in the process of transferring the appropriate amount of funds from Fund 513 to Fund 446 for services not received. Several of the Source Control Inspector personal

services costs are annually charged to the Urban Runoff Program (Fund 446) for services that are to occur throughout the fiscal year. In order to ensure that each fund is charged appropriately, staff will annually, prior to close of each fiscal year, review allocation of inspections to determine the actual costs for the use of Source Control Inspectors services and transfer the appropriate amounts accordingly.

#### Recommendation #5

Assign inspectors to ensure that required inspection frequencies are met. (Priority 2)

The Administration concurs with this recommendation. Inspection frequency information is being verified from industry files and the current database to ensure that all of the significant facilities are assigned and inspected prior to assigning the non-significant facilities for inspection. Those facilities noted in the Audit on page 26 have been inspected. In addition, inspection of those facilities identified on pages 24 and 25 has been assigned and should be completed by September 15. Duplicate industries and facilities have been removed from the database to prevent inappropriate assignments.

### Recommendation #6

Develop written procedures that provide inspectors with specific guidance on how to report desk reviews and identify facilities listed more than once in the database. (Priority 3)

The Administration concurs with this recommendation. An Enforcement Response Guide, a procedure on how to appropriately complete a Facilities Inspection Form, and procedures on database entry of information taken from the Facility Inspection Reports have been prepared. Each of the inspectors has participated in the development of these documents and each has received training related to the contents of these documents.

#### Recommendation #7

Develop written criteria for determining compliance dates and provide facilities with clearly defined compliance dates for correcting violations. (Priority 3)

The Administration concurs with this recommendation. These criteria are contained in the procedure related to the Facilities Inspection Form (see response to Recommendation #6).

#### Recommendation #8

Develop written procedures to ensure that Program inspectors follow up on identified violations and when necessary use available enforcement actions. (Priority 3)

The Administration concurs with this recommendation. Procedures to ensure follow-up and enforcement are contained in the documents discussed in the response to Recommendation #6.

# Recommendation #9

Develop written procedures that ensure adequate management review and oversight of the inspectors' activities and reports to improve Program efficiency and effectiveness and ensure inspector compliance with Program procedures. (Priority 3)

The Administration concurs with this recommendation. Procedures have been established and a reorganization has been undertaken to ensure adequate supervisory and management review and oversight of the inspection program. Reports will be developed using database queries and will be built into the format of the new data system.

## Recommendation #10

Not seek an increase in Storm Sewer Fees for the Program until it (ESD) has revamped the Program and significantly improved its effectiveness and efficiency. (Priority 3).

The Administration concurs with this recommendation. It should be noted however that the Industrial and Commercial Inspection Program represents approximately 5% of the overall expenses related to the Storm Sewer Operating Fund, and would not be a driver in any proposed rate increase. The programs related to the Storm Water NPDES permit, along with the costs of operating and maintaining the City's storm sewer system, are funded by the Storm Sewer Operating Fund (Fund 446). An Efficiency Study is analyzing the use of resources by examining program components and activities, assessing whether these are conducted in the most efficient manner, and identifying opportunities for improvement. The results of the Efficiency Study and the Audit will lay the foundation for further improvements in the overall program. The Department will not seek an increase to any storm water related fees until such time that appropriate information has been thoroughly analyzed.

# CONCLUSION

The Administration would like to thank the City Auditor and his staff for their cooperative effort and constructive work performance during this Audit. We look forward to working with the Finance Committee and City Council as we move forward with these critical programs.

CARL W. MOSHER, Director

Environmental Services Department

Attachments

#### **APPENDIX A**

# DEFINITIONS OF PRIORITY 1, 2, AND 3 AUDIT RECOMMENDATIONS

The City of San Jose's City Administration Manual (CAM) defines the classification scheme applicable to audit recommendations and the appropriate corrective actions as follows:

Priority Class <sup>1</sup>	Description	Implementation Category	Implementation Action <sup>3</sup>
1	Fraud or serious violations are being committed, significant fiscal or equivalent non-fiscal losses are occurring. <sup>2</sup>	Priority	Immediate
2	A potential for incurring significant fiscal or equivalent fiscal or equivalent non-fiscal losses exists. <sup>2</sup>	Priority	Within 60 days
3	Operation or administrative process will be improved.	General	60 days to one year

higher number. (CAM 196.4)

The City Auditor is responsible for assigning audit recommendation priority class numbers. A recommendation which clearly fits the description for more than one priority class shall be assigned the

For an audit recommendation to be considered related to a significant fiscal loss, it will usually be necessary for an actual loss of \$25,000 or more to be involved or for a potential loss (including unrealized revenue increases) of \$50,000 to be involved. Equivalent non-fiscal losses would include, but not be limited to, omission or commission of acts by or on behalf of the City which would be likely to expose the City to adverse criticism in the eyes of its citizens.

(CAM 196.4)

The implementation time frame indicated for each priority class is intended as a guideline for establishing implementation target dates. While prioritizing recommendations is the responsibility of the City Auditor, determining implementation dates is the responsibility of the City Administration. (CAM 196.4)

# Appendix B

# Environmental Services Department Statement of Benefits of Commercial and Industrial Inspection Program

Runoff from urban areas is the leading cause of water quality impairments in California and the nation. It is caused by rainfall, snowmelt, or irrigation water that moves over and through the ground. As the runoff moves, it picks up and carries away pollutants and deposits them into lakes, rivers, wetlands, ground water, and other inland or coastal waters. Urban pollutants are considered the main reason that 40 percent of our rivers, lakes, and estuaries are not clean enough to meet basic uses such as fishing or swimming.

# Examples of urban pollutants are:

- Excess pesticides and fertilizers from urban lawns and parks;
- Oil, grease, heavy metals, and chemicals from roofs, streets, parking lots, and industrial sites;
- Sediment from improperly managed construction sites and eroding streambanks.

The Urban Runoff Management Plan describes all of the programs that the City will implement to ensure that dischargers either prevent pollution or reduce it to the maximum extent practicable. This Plan was developed as a condition of the 1995 Stormwater Permit, which was issued to San Jose and 14 other local governments and agencies whose land mass drains to south San Francisco Bay. Plan elements include Illicit Connections/Illegal Dumping; Commercial/Industrial Discharger Inspections; Monitoring; New Development and Construction; Public Streets, Roads and Highways Operation and Maintenance; Residential Outreach and Education; Storm Drain System Operations and Maintenance; and Water Utility Operation and Maintenance. This Audit focuses on one Plan element, Commercial/Industrial Discharger Inspections, which is handled within the Enforcement Section of the Environmental Services Department.

The specific benefits of the Commercial/Industrial Inspection Program are:

- Inspect to ensure that no pollutants are running off the work site;
- Educate owners, managers, and employees of targeted businesses and industry about how to prevent pollution of the Bay and streams through development and publication of Best Management Practices;
- Enforce regulations among the small proportion that flaunt the rules; and
- Train employees at work with the expectation that these same environmental behaviors will then be practiced at home.

Appendix B Statement of Benefits Page 2

ESD recently has forwarded to the Regional Water Quality Control Board the 1999-2000 Annual Report for the Urban Runoff Management Plan, which satisfies requirements of the City's NPDES permit for discharge of storm water to local water bodies. Statistics contained in this report related to the Industrial/Commercial Discharger Inspection Program have been updated to reflect findings and recommendations of the Audit.