

**DATE ISSUED:** January 24, 2001

**REPORT NO.** 01-015

**ATTENTION:** Natural Resources and Culture Committee  
Agenda of January 31, 2001

**SUBJECT:** SANITARY SEWER SPILLS - STATUS REPORT

### SUMMARY

**THIS IS AN INFORMATION ITEM ONLY. NO ACTION IS REQUIRED ON THE PART OF THE COMMITTEE OR THE CITY COUNCIL**

### BACKGROUND

This is the fourteenth status report to the Natural Resources and Culture Committee on the subject of the City's sanitary sewer overflows (SSO's). The last report was provided to the Committee on April 12, 2000, and included information for the calendar year 1999 and the first quarter of 2000. These regular reports to the Committee are meant to provide information on the results of measures undertaken to prevent the incidence, volume, and impact of sewer spills.

### DISCUSSION

For the entire calendar year 2000 there were 364 sewer spills that resulted in a discharge of approximately 35,029,000 gallons. Included in this amount is the large spill occurring in February 2000 on the Alvarado Trunk Sewer that resulted in 34 million gallons being discharged to the Alvarado Creek, San Diego River, and ultimately the Pacific Ocean. When compared to 1999 the total number of spills has increased by 16%. However, those spills reaching bodies of public water have decreased by 21%, from 42 in 1999 to 33 in 2000. In addition, the number of beach closures associated with these spills declined to 14 in 2000 from 16 in 1999.

The increase in the number of spills during 2000 is entirely attributable to significant root infiltration problems associated with the prolonged period of dry weather since the heavy rainy season in 1998. There were 175 instances of spills caused by roots during the last year. Further, roots were a secondary or contributing cause in other spills resulting from blockages due to grease, rocks and debris. Other agencies in California have encountered similar increases in the number of root related problems. Additional efforts were undertaken to increase cleaning efforts and for the application of root herbicides to keep this situation from worsening.

Also showing a dramatic increase was the number of private sewer spills occurring within the City. Such incidents known to the City have increased to 161 in calendar year 2000. Formerly, there were 104 in 1999 and 29 in 1998.

The volume associated with the past year's spills was extremely large. Approximately 98.7% of the volume was attributable to just three spills occurring in the first quarter of the year. In January, 67,700 gallons spilled to Tecolote Creek due to vandalism in a canyon area. During February, a spill occurred on the Alvarado Trunk Sewer when it was damaged during a winter storm in a steep canyon and went undetected for one week, resulting in a spill of 34,000,000 gallons. Also, due to vandalism, 493,000 gallons spilled to San Diego Bay from the Encanto Trunk Sewer in March.

The Wastewater Collection Division has been undertaking a variety of measures to ensure that sewer spills are avoided and their impacts reduced should they occur. Over the past few years maintenance activities have substantially increased through the addition of staff and equipment with significant positive results. In addition, a competitive assessment has been undertaken during the last two years that entailed a full assessment of the Division's maintenance practices as well as the identification of best management practices in the industry that could be employed by the City to enhance its effectiveness. As a result of this effort, there were several findings and recommendations, including that the City maintains its infrastructure at a rate that exceeds most other agencies by as much as three to four times. Although there is a substantial maintenance effort, spill rates are not yet at an optimal level. To achieve a further reduction in sewer spills, it was identified that greater infrastructure improvements are necessary. This would include the repair, replacement, and rehabilitation of sewer mains at a greater rate than in past years.

Efforts have been initiated to undertake a more extensive assessment of the infrastructure in order to further prioritize sewer mains for improvement. Based on preliminary reviews it is estimated that the rate of main improvements could be in the range of 50 or more miles per year instead of the approximate 25 miles of mains currently identified for replacement annually. The impacts of these measures will be included in future budgets and supporting rate proposals.

A new section under the Wastewater Collection Division has been formed to carry out the accelerated capital improvement program implementation. This section includes reorganized engineering and planning units to provide immediate operational as well as pro-active planning and engineering support. The main function of these units will be to focus on spill reduction initiatives and related program enhancements such as: infrastructure planning; CIP program expansion and fast tracking; operation and maintenance optimization and planning; and outsourcing services for fast-track correction of known and probable future spill problem areas. Also, this section will be responsible for identifying and prioritizing necessary repairs as well as developing a master plan with a spill reduction focus on sewer collection system infrastructure improvements.

## CONCLUSION

For the calendar year 2000 the total number and volume of sewer spills have increased,

**although the number of spills to public water bodies of water and beach closures related to sewage spills have declined. Additional efforts are required to make further reductions in spills in the long term. It has been identified that increased maintenance will have limited impacts such that greater infrastructure improvements are required.**

**Respectfully submitted,**

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**David Schlesinger**  
**Metropolitan Wastewater Director**

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**Approved: George Loveland**  
**Senior Deputy City Manager**

- Attachments:**
- 1. Total and Public Water Sewer Spills by Number and Volume 1995 - 2000**
  - 2. Total Spills by Size - Number and Volume 1995 - 2000**
  - 3. Sewer Spills to Public Water (Volume and Number) 1995 - 2000**
  - 4. Total Number of Spills Resulting in Beach Closures**
  - 5. Sewer Spills by Cause 1995 -2000**