

DATE ISSUED: September 5, 2001

REPORT NO. 01-180

ATTENTION: Honorable Mayor and City Council  
Docket of September 10, 2001

SUBJECT: Sewer Main Cleaning Services

### SUMMARY

Issue - How should the Metropolitan Wastewater Department (MWWD) ensure that all City of San Diego municipal sewer pipelines are cleaned during the next two years?

Manager's Recommendations - 1. Amend the FY 2002 Appropriations Ordinance to add 38 limited half year positions to the MWWD Wastewater Collections Division budget to expedite cleaning of sewer mains by City Forces. 2. Authorize MWWD to supplement the City's effort by advertising and awarding cleaning contracts for up to 550 miles of sewer lines in both FY 2002 and FY 2003, with the FY 2003 funding contingent upon satisfactory performance and Council approval of the FY 2003 Budget Request 3. Authorize the transfer \$ 4.295 million from the Sewer Revenue Fund Unallocated Reserve in order to execute the FY02 portion of recommendation No. 1 and 2.

Other Recommendations - None

Fiscal Impact - The total cost of this action in FY 2002 is \$ 4.295 million and will be funded from the Sewer Revenue Fund Unallocated Reserve. This action will result in a zero balance in the Unallocated Reserve for the remainder of FY 2002. The cost breakdown in FY2002 is \$2.1 million in contractual services, \$1.02 million in additional City staff costs and \$1.175 million in non personnel expense and outlay for heavy equipment. An additional amount of \$2.1 million in contractual services and \$ 2.1 million in City staff costs will be requested as part of the FY 2003 budget process.

### BACKGROUND

Protecting the water quality of our beaches and bays is an important goal for the City of San Diego. The City's MWWD is focused on preventing municipal sewerage system spills and minimizing these spills' collective impact upon our environment. An examination is being made of the Wastewater Collection Division (WWCD)'s sewer main cleaning activities. To date this examination has revealed that approximately one half of the City's Municipal Sewerage System

(System) has been maintained in a reactive manner. A history of spills in an area results in a preventive cleaning schedule being created for that area. No system-wide, sewer main preventive maintenance plan is in place. City Forces apply resources predominantly on troublesome portions of the System.

## DISCUSSION

The City's System roughly consists of 3000 miles of sewer lines. Approximately half of the lines are under a preventive maintenance cleaning program. During the next two years, MWWD proposes to clean the half of the system that is not currently under any cleaning schedule as well as to continue the current City cleaning program. Since portions of the system are cleaned with a frequency of greater than once a year, the total "cleaning miles" for the next two years is approximately 4500 miles. This mileage estimate provides a complete cleaning regimen for the entire System, including the non-Right-of-Way portions, while maintaining frequent cleaning service levels for problematic Right-of-Way pipe sections.

### City Forces Sewer Cleaning Activities

The City's Right-of-Way sewer cleaning activities comprise a large portion of the WWCD's overall sewer maintenance program. In evaluating how best to improve its System cleaning program, the WWCD has examined three alternatives to perform Right-of-Way cleaning work: using City forces to perform all the Right-of-Way work, three-quarters of the Right-of-Way work, or half of the Right-of-Way work. From this evaluation, it is recommended that City Forces provide sewer cleaning services for three-quarters of the two-year program requirements, or approximately 1700 miles per year. In order to achieve the aggressive goal of cleaning the entire system during the next two years, it is recommended that approximately 550 miles of sewer lines in right of way be cleaned by private contractor(s) during the next year. To maximize the ability of the contractors to participate in this effort, the 550 miles will be divided into several smaller contracts. The contract for cleaning of the first 150 miles of sewer lines has been prepared and is ready to be advertised for bids. The bid opening for the first contract is scheduled for mid October and the remaining three contracts will be advertised within the next 3 to 6 months.

City forces currently working in non-Right-of-Way areas are focused upon establishing short-term access for more than forty canyon-area sewer mains. It has been proposed to access, investigate, and clean one canyon sewer main each month on an ongoing basis. The Tecolote Canyon trunk sewer was accessed in July 2001. Activities were focused in Stevenson Canyon beginning in August 2001, and have been scheduled for San Clemente Canyon in September 2001. Where canyon access ways exist, equipment is set up at adjoining manholes through the use of conventional motive equipment. Where sensitive habitat does not allow for equipment placement using conventional means, All Surface Vehicles (ASVs) are utilized to transport cleaning equipment into the canyon and spoilage out. It is estimated that ten (10), three person crews ( 30 total positions ) will be required to access and clean the main sewer pipeline in forty canyon areas within a two-year time frame. A significant new investment in additional ASV motive equipment will also be required.

## Technical Support Activities

There will be significant technical support required for new non-Right-of-Way maintenance activities. It is recommended that six (6) limited supplemental positions be provided for the following technical support functions: engineering support for canyon pipeline repair, roadway repair, and project management; erosion control activities; environmental permitting activities; and public information and outreach. Technical support for main cleaning activities in the Right-of-Way will continue to be provided by existing City Forces.

## ALTERNATIVES

1. Provide all sewer main cleaning services for this two-year effort with City forces. This is not recommended because the procurement of additional, heavy motive equipment could significantly delay implementation of enhanced Right-of-Way main cleaning services. This recommendation would also require hiring of more than 16 additional limited positions beyond the request noted in this report, resulting in delays as this new, temporary staff becomes trained to perform sewer main cleaning duties.
2. Provide more than 550 miles/year of the pipeline cleaning services with private contractors. This alternative is not recommended due to existing capabilities of existing City forces' to provide these service level requirements at a significantly lower cost.

Respectfully submitted,

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Scott Tulloch  
Director  
Metropolitan Wastewater Department

Approved: George I. Loveland  
Senior Deputy City Manager

LOVELAND/TULLOCH/CJT:oc

Note: The attachment is not available in electronic format. A copy is available for review in the office of the City Clerk.

Attachments: Position cost calculations