

TO: James L. App, City Manager
FROM: Joseph M. Deakin, Public Works Director
SUBJECT: Water & Wastewater Quality Issues
DATE: December 2, 2003, 2003

NEEDS: For the City Council to allocate additional funds for the continued monitoring and wastewater treatment facility assessment linked to a permit revision.

- FACTS:**
1. The City is actively developing a water quality strategy to address several interdependent issues concerning potable water and discharged wastewater effluent.
 2. On April 15, 2003, the City Council received and filed the administrative draft Water & Wastewater Quality Concerns – Water Quality Strategy, analyzing water quality, water uses, and wastewater effluent discharge quality. It analyzed and prioritized feasible alternatives for addressing wastewater effluent discharge compliance and source water quality needs.
 3. At the time, the City had just (on March 15, 2003) submitted the application for a renewed wastewater discharge permit (NPDES permit). The City anticipated that the NPDES permit would focus on Total Dissolved Solids (TDS, or salts) and acted proactively to determine alternatives to address more stringent TDS discharge limitations.
 4. The Regional Water Quality Control Board – Central Coast Region (RWQCB) is the authority for the City's NPDES permit issuance and enforcement. RWQCB staff and City staff have met periodically during the NPDES permit update, since March 2003, to discuss various issues to be reflected in the revised permit.

**ANALYSIS
AND**

CONCLUSION: TDS continues to be one of the major challenges for the City to resolve under the wastewater NPDES permit. RWQCB staff recommended the City staff study and monitor the sources of TDS increases.

The City Council authorized \$100,000 to hire Malcolm-Pirnie to develop and implement a TDS monitoring program. The monitoring program is now ready for implementation.

The RWQCB staff presented a draft NPDES permit that highlights continuing concern for TDS, but also would stringently impose new limitations found in the California Toxic Rule (CTR). Specific CTR concerns noted in the draft NPDES permit are:

- Copper
- Selenium
- Cyanide
- Trihalomethanes (THMs.)
- Bis(2-ethylhexyl) phthalate

The draft NPDES permit allows interim Maximum Contaminant Limit (MCL) levels for these constituents. In other words, the City will be allowed one to three years to effect treatment of the identified constituents. The RWQCB is also allowing a monitoring grace period in order to generate additional data relative to the CTR constituents. The grace period extends through January, 2004.

Monitoring and testing for CTR constituents is expensive and not anticipated in the previously funded TDS monitoring program. As a consequence, the remaining TDS monitoring program

funding (\$35,000) will be exhausted before the grace period expires. In addition, there is a need to comprehensively audit Wastewater Treatment Plant operations to determine if there are operational means to mitigate CTR constituent concentrations. [For example, the CTR constituent THM is a byproduct from chlorinating water, particularly water that contains organic loading. The plant audit will identify chlorination practices and chlorine concentration doses, and may uncover process modifications to reduce chlorine use, or otherwise mitigate THM byproduct formation.] It is worthwhile for the City to investigate current operations with the CTR constituent concerns in mind, since it is typically preferable to, in order of cost:

1. Change practices using current facilities
2. Modify existing facilities
3. Replace and/or add facilities.

The increased monitoring that needs to be estimated at \$75,000. If a more comprehensive source control/monitoring program is needed to satisfy RWQCB concerns, more funding beyond this amount will be necessary. The plant audit is estimated to cost \$100,000, and any facility modifications that are recommended will be over and above this amount. Using the remaining \$35,000 authorized by City Council (for TDS study) to offset these expenses, an additional \$140,000 needs to be allocated to complete the monitoring and plant audit.

POLICY

REFERENCE: National Pollution Discharge Elimination System; California Toxics Rule

FISCAL

IMPACT: In December 2001, the Council approved a series of sewer user fee increases to eliminate reoccurring operating deficits. Fixed amount of increases were scheduled for January 1, 2002, 2003 and 2004, with the rate for a residential customer topping out at \$40.86 per bi-monthly billing period.

In June 2003, the Council authorized the sale of \$8,000,000 in sewer lease revenue bonds to fund various collection improvements, mainly the Templeton Interceptor Sewer Main and various improvements to the Wastewater Treatment Plant. At this time, additional rate increases were imposed to cover the annual debt service on said bonds. First of all, the scheduled rate to \$40.86 per billing period was increased to \$43.72. Secondly, in addition to the annual CPI adjustment scheduled for July 1, 2004, an additional 1% will be added to the CPI adjustment. And lastly, the bi-monthly billing period rate would be increased by an additional 1% January 1, 2005.

In conclusion, it is unknown at this time whether or not the rate increases already adopted will be sufficient to cover the additional \$140,000 in monitoring and auditing costs. Results for the fiscal year ended June 30, 2003 indicate an operating gain of \$41,121 but when you adjust for other non-operating "cash flow" ins/outs, i.e. interest income, sale of surplus property, interest expense and bond principal, sewer operations experienced a negative "flow" of \$869,000.

Sewer user rates are currently being studied and recommendations will be forthcoming when the fiscal year 2005 budget is presented for Council consideration. It is anticipated that additional sewer user rate increases will be required to cover existing operations and the additional monitoring and plant auditing costs requested herein. Until the analysis is completed, the amount of the any increase is unknown.

- OPTIONS:**
- a. Adopt Resolution No. 03-xxx appropriating \$140,000 from the Wastewater Reserve Fund to the Sewer Operations Budget in order to continue CTR constituent monitoring and to conduct a Wastewater Treatment Plant audit.
 - b. Amend, modify or reject the above options.

Attachments:

- 1) Resolution

RESOLUTION NO. 03-

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF PASO ROBLES
APPROPRIATING \$140,000 FROM THE WASTEWATER RESERVE FUND TO THE SEWER
OPERATIONS BUDGET IN ORDER TO CONTINUE CTR CONSTITUENT MONITORING AND
TO CONDUCT A WASTEWATER TREATMENT PLAN AUDIT

WHEREAS, the City is actively developing a water quality strategy to address several interdependent issues concerning potable water and discharged wastewater effluent; and

WHEREAS, On April 15, 2003, the City Council received and filed the administrative draft Water & Wastewater Quality Concerns – Water Quality Strategy, analyzing water quality, water uses, and wastewater effluent discharge quality. It analyzed and prioritized feasible alternatives for addressing wastewater effluent discharge compliance and source water quality needs; and

WHEREAS, TDS (Total Dissolved Solids) continues to be one of the major challenges for the City to resolve under the wastewater NPDES permit. RWQCB (Regional Water Quality Control Board) staff recommended the City staff study and monitor the source of the TDS increase; and

WHEREAS, the City Council hired Malcolm-Pirnie to develop and implement a TDS monitoring program, which is now ready for implementation; and

WHEREAS, monitoring and testing for CTR constituents is expensive and not anticipated in the previously funded TDS monitoring program. In addition, there is a need to comprehensively audit Wastewater Treatment Plant operations to determine if there are operational issues that could assist with mitigating the CTR constituent concentrations; and

WHEREAS, an additional \$140,000 needs to be allocated for the staff to complete the monitoring and plant audit that would evaluate alternatives for moderating impacts of the draft revised NPDES permit.

THEREFORE, BE IT RESOLVED AS FOLLOWS:

SECTION 1. The City Council of the City of El Paso de Robles does hereby approve the appropriation of \$140,000 from the Wastewater Reserve Fund to the Sewer Operations Budget in order to continue CTR constituent monitoring and to conduct a Wastewater Treatment Plant audit

PASSED AND ADOPTED by the City Council of the City of Paso Robles this 2nd day of December 2003 by the following vote:

AYES:
NOES:
ABSTAIN:
ABSENT:

Frank R. Mecham, Mayor

ATTEST:

Sharilyn M. Ryan, Deputy City Clerk