

Pima County Wastewater Management Department

Quarterly Report
April ~ May ~ June 2007



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Regional Optimization Master Plan

During the months of April, May, and June, much progress was made on the Regional Optimization Master Plan (ROMP).

An Expression of Interest (EOI) advertisement resulted in the receipt of 26 responses from a variety of engineering consultants, financial firms, contractors and other service providers. The EOIs provide a variety of recommended strategies for project delivery and financial planning. The EOIs are being carefully reviewed and discussions about recommended strategies presented in the EOI process are planned.

Additional implementation and specific project identification in the ROMP program workshops took place during April, May and June and will continue into the next quarter. These efforts are expected to be completed in the coming months with the development of a detailed ROMP implementation schedule and financial plan which will be presented to the Board of Supervisors this fall.

An amendment to the consultant's contract to evaluate an alternative disinfection method has been executed. Performance testing of the new Ina expansion process train is being done in July and August to confirm if an enhanced chlorination methodology can replace UV disinfection. If it is found that enhanced chlorination can meet regulatory requirements, a substantial savings will be realized.



On May 21, a Public Open House that provided information about the ROMP and odor control activities was held at the Randolph Club House on Alvernon Way. In addition to the open house, a newspaper advertisement announcing the open house and outlining what ROMP is and why it is being required appeared in the May 20, edition of the *Arizona Daily Star*. Radio public service announcements also advertised the open house.

Odor Control

In spite of an unanticipated delay due to archeological findings at the Roger Road Plant site, PCWMD made great progress toward the implementation of the comprehensive odor control plan. The delay, which could have lasted more than a year, was shortened after cooperative planning and problem solving was conducted between PCWMD and Pima County Cultural Resources Office. The design plans for a biofilter to treat odorous gases generated in the Roger Road plant's biotowers called for the construction of the biofilters on a location that was found to be the site of significant archeological findings. Had excavation and mitigation been required, this unanticipated problem could have prolonged the completion of the odor control plan for more than a year. Instead, PCWMD's work with Cultural Resources Office has led to a plan to add an 18 – 24 inch layer of engineered fill on top of the archeological site. This plan - which will allow the department to proceed with the odor control project while leaving the buried archeological features intact - has been approved by the State Historic Preservation Office.

Although the delay in the biotowers odor control project has been a disappointment, the extra time it affords will allow the department to determine the degree of odor control that has been achieved at Roger Road with the other projects that have been implemented. If significant odor control has been achieved, the biofilter projects could be delayed.

Substantial or total completion of the following projects was achieved during the quarter covered in this report. With the exception of the biofilters to treat gases from the biotowers, any items not fully completed during April, May or June will be completed by the end of July.

Roger Road Primary Clarifiers

- Covering of weirs on six primary clarifiers
- Transfer of odor-causing gases from the clarifiers through a series of pipes to a carbon filter



Roger Road Headworks

- Erection of a large tent-like structure over headworks
- Transfer of odor-causing gases from the headworks through a series of pipes to a carbon filter



Conveyance System

- Installation of Vapor Phase Treatment System at the Santa Cruz Siphon Inlet
- Installation of Vapor Phase Treatment system at Prince Road and I-10



Roger Road Yard Structure Number 1

- Covering of Yard Structure Number 1
- Transfer of odor-causing gases from the yard structure through a series of pipes to a carbon filter



The Citizens' Involvement Committee continues to track the progress of the odor control plan and will prepare a final report to the Pima County Board of Supervisors.

Roach Control



A contract for a systematic two-year roach control program started in November 2005. By September, the contractor will have completed treatment of the entire system ahead of schedule. The department plans to repeat the two year program. The product that is being used is effective for two years and has shown excellent results. Quality checks in treated manholes have shown those manholes to be roach free. However, the department cannot spray for sewer roaches that leave the sewer system to take up residence outside the system. In addition, sometimes the public confuses other types of roaches with sewer roaches. Only the Americana Peripleneta can survive in the sewer, and the department can only deal with roaches that reside inside the sanitary sewer system. Wastewater Management Department personnel recommend professional services or do-it-yourself products for residents who have indoor or outdoor infestations.



Water Reclamation Facility Upgrades/Expansions

The construction of a 1 million gallon a day (mgd) expansion at the Avra Valley Water Reclamation Facility was completed in June. The expansion will be fully operational in July.



The construction of a 1 million gallon a day (mgd) expansion at the Corona de Tucson Water Reclamation Facility was completed in June. The expansion will be fully operational in July.



The newly-constructed 500,000 million gallon a day (mgd) expansion at Marana Water Reclamation Facility became fully operational in April.



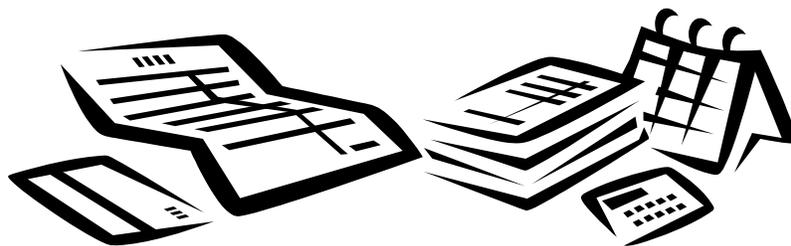
Sewer Line Rehabilitation

During the last quarter of the 2006/2007 fiscal year, PCWMD expended more than \$3.1 million dollars to rehabilitate 9,300 linear feet of sewer lines. These lines were largely located in residential neighborhoods. In addition to smaller rehabilitation projects, the Carrillo Sewer Rehabilitation project was also concluded in the last quarter of the 2006/2007 fiscal year. The Carrillo project cost \$3.7 million. The project rehabilitated or replaced very old pipes serving the historic Barrio Viejo neighborhood. Close coordination and communication with area businesses, residents, and the Carrillo School made disruptions from this complex project easier for the neighborhood to handle.



Sewer Outreach Subsidy Program

Due to the growing needs of the wastewater system, sewer user and connection fees have been increasing over the past three years. Although the additional funds are needed to fund systems operations and maintenance, rehabilitation of existing infrastructure, and increasingly stringent environmental standards, there was concern that the increases were causing hardship on the community's low-income residents. To assure that residents are not unduly burdened by the increasing rates, the Board of Supervisors voted to implement a program to assist low-income sewer customers with sewer bill subsidies. The Sewer Outreach Subsidy (SOS) Program was drafted and approved by the Board of Supervisors on May 1. With the assistance of the Pima County Community Action Agency, the program was launched July 1. The new program was reported in the local media and was discussed in the *Wastewater News*, a department newsletter that was sent out in the July bills. Through an intergovernmental agreement, Wastewater Management is entitled to three bill inserts a year. Although most sewer customers receive sewer bill inserts in their Tucson Water bills, a number of Wastewater Management's customers do not receive their water service or water bills from Tucson Water. Because the department wanted to assure that all our customers were aware of the SOS program, Wastewater Management paid all the water providers to mail July's insert to their customers. The SOS program was the featured article on the first page of the newsletter.



Arid West Water Quality Research Project

The \$5.5 million Arid West Water Quality Research Project (AWWQRP) was successfully concluded at the end of April, 2007 after 12 years of work and coordination between the EPA, Pima County and Western water/wastewater agencies. The purpose of the AWWQRP has been to develop scientifically supported water quality criteria, standards and uses for the ephemeral and effluent-dependent waters of the Arid West. The project has produced eleven major research reports and over sixty scientific papers and publications. Over the life of the Project, staff and scientists made literally hundreds of outreach presentations to regulators, agencies, community organizations, environmentalists and scientific groups.

The final publication for the AWWQRP has been a “User’s Guide”. The Arid West Water Quality Research Project User’s Guide incorporates the research and findings from the entire Project research into a compact “how to” manual for agencies, regulators and community members to develop appropriate water quality criteria, standards and uses for their individual circumstances.



The AWWQRP has received recognition and commendations from water quality organizations as well as state and federal water quality regulatory agencies across the Arid West. Requests for AWWQRP research publications and findings have come from water/wastewater agencies, regulators and environmental groups across the United States - with even a request from Environmental Canada! (the Canadian EPA) for the AWWQRP research on aluminum criteria. Through the Project, Pima County has achieved a leadership role in the critical issues of water quality and water reuse which has benefited not only the residents of Pima County, but also communities and ecosystems across the Arid West.

ISO and OHSAS Certifications

ISO (International Organization for Standardization) is recognized world-wide as a global network that identifies what International Standards are required by business, government and society, and develops those standards in partnership with the sectors that will put them to use, adopts them by transparent procedures based on national input, and delivers them to be implemented worldwide.

ISO standards ensure quality, ecology, safety, economy, reliability, compatibility, sustainability, interoperability, efficiency and effectiveness through good management practices. An ISO Certification demonstrates to regulatory agencies that the organization is proactive about reducing pollution and committed to continual improvement.

OHSAS 18001 is an Occupational Health and Safety Assessment Series for occupational health and safety management systems created to enable organizations to control occupational health and safety risks and to improve performances.

The Pima County Wastewater Management Conveyance Division will complete work on a Business Management System for ISO 9001 (Quality), ISO 14001 (Environmental), and OHSAS 18001 (Health & Safety) certification by early fall 2007. Work to attain these certifications was ongoing during the months of April, May, and June. The process required for certification requires the review of existing activities and a complete understanding of their impact on the environment, employee and public safety, and quality.

When completed, Pima County Wastewater Management will join only a few private companies and public enterprises throughout the world to achieve all 3 certifications. Research indicates that Pima County Wastewater Management will be the first in the world to achieve all 3 certifications at the same time. This achievement establishes a new benchmark for excellence, not only in the public sector, but in the private sector as well.

Community Relations

Spring is a busy time for the Community Relations Office. Staff was involved in such outreach events as Earth Day celebrations, Fiesta Grande, State of the County, and Public Works Day. During these events, Community Relations Office employees handed out program literature and give-away items and educated event participants about the sanitary sewer system, the treatment process, the department's odor control plans and the Regional Optimization Master Plan. Staff also presented information at neighborhood association meetings.

