

SEWER AUTHORITY MID-COASTSIDE
Staff Report

Subject / Title

Review and Possibly Provide Direction on Recycled Water Pilot Plant Project

Staff Recommendation:

Review and Possibly Provide Direction on Recycled Water Pilot Plant Project

Fiscal Impact:

\$60,000 - \$75,000 in Pilot Plant rental costs. These costs will be funded from SAM reserves.

Discussion/Report:

In August 2009, SAM started a Recycled Water Pilot test utilizing Dow hollow-fiber membrane technology with Turboclone as a pre-filter and ultraviolet (UV) disinfection. The objectives set by the SAM Board in August 2009 for the pilot test were these:

1. Provide prospective customer with the opportunity for testing
2. Open dialog about customer water quality needs
3. Verify that membrane filtration technology is capable of continuously producing tertiary treated water compliant with Title 22 standards for recycled water unrestricted use under varying water quality of incoming SAM wastewater treatment plant secondary effluent
4. Verify membrane filtration operability

SAM has met all of these objectives as follows:

- Two customers, Ocean Colony Partners (OCP) and Nurserymen's Exchange received pilot plant effluent shipments by a truck provided by the Coastside County Water District (CCWD).
- As a result of the water quality sampling and analysis plan, which was developed for the Pilot Test in coordination with OCP and CCWD, staff was able to establish that chemical addition will be required with any tertiary treatment facility to meet OCP's water quality parameters for sodium and chloride concentrations.
- Staff verified that the pilot plant has been producing tertiary water compliant with Title 22 unrestricted use standards at all times during its operation
- Staff received an opportunity to operate a membrane filtration treatment unit and ensured successful operation

Because the objectives have been met, because of probable late-November rain, and, SAM recommends it discontinue the Pilot Plant rental, effective December 13, 2009, as originally planned. This recommendation is made despite the fact that additional information is always helpful and could greatly contribute to the full-scale facility design.

Meeting Date: November 18, 2009
RW Committee Agenda Item No: 5D

Staff discussed this recommendation with CCWD and OCP and found that they were in agreement with it, while the joint venture of Dow, Clean Filtration Technologies, and Applied Membranes that provided the Pilot Plant rental to SAM recommends continuing testing to collect more data under varying water quality and flow conditions.

There are no attachments to this staff report.