

Case History - City of San Diego San Pasqual Wastewater Treatment Plant

During a collaborative field study with Koch Membrane Systems (San Diego, CA), *Accell*[®] was fed at 3 ppm to the influent of a Koch cellulose acetate membrane reverse osmosis (RO) system.

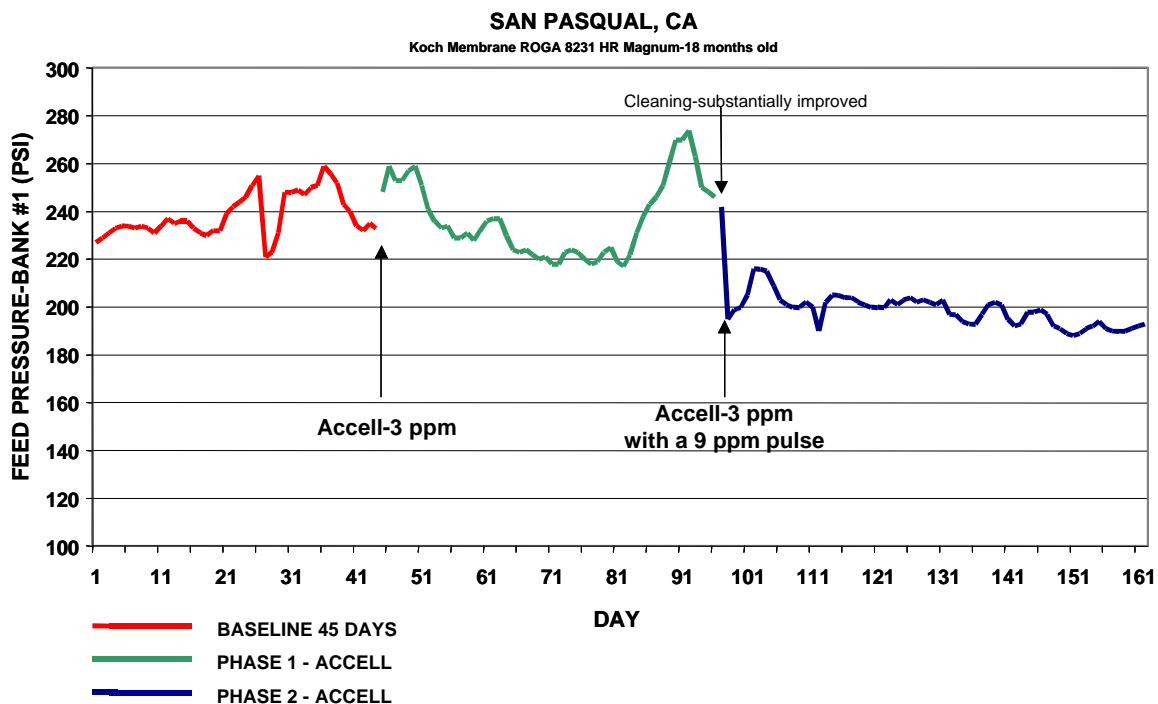
Analysis of the feed pressure data (see figure below), which were indicative to assess the extent of biofilm formation, led to the conclusion that the application of *Accell*[®] removes and prevents the formation of biofilm.

Biofilm Removal - Phase 1

- The scheduled cleaning cycle following 50 days of operation could be delayed by more than 20 days.
- The efficacy of the cleaning procedure improved substantially as stated by the operator.

Biofilm Prevention - Phase 2

- The addition of 3 ppm *Accell*[®] with an intermitted dose increase to 9 ppm for 6 h, not only prevented biofilm formation following the cleaning, it further improved the process operation over the next 50 days.



Accell[®] treatment of a RO membrane system offers the following benefits:

- Increase of the operational throughput of the installed membrane systems by reducing or eliminating the number of chemical cleaning cycles.
- Extension of the membrane lifetime by reducing or eliminating the number of chemical cleaning cycles.
- Decreased operating costs due to a reduction of pressure needed to achieve the desired throughput.