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MPWMD

Henrietta Stern, Project Manager
 Monterey Peninsula Water Management District
 P.O. Box 85
 Monterey, CA 93942-0085

Subject: Water loss in distribution main from Sand City Desalination Plant

Dear Ms Stern:

Although 10% is the accepted standard for unaccounted municipal water system losses in the United States, there are several factors that make up this percentage that are not applicable to the 800'+/- distribution line that connects the Sand City Desalination Plant to the Cal-Am system main.

According to most water suppliers, the greatest unaccounted for water loss is attributable to backlog or errors in meter readings. Other factors include uses through fire hydrants, construction site "tap-ins", theft, street cleaning, and service connection leaks. The 800' +/- connection between the Desalination Plant and the Cal-AM system will not have any meters, hydrants, hose-bibs, service connections, or other means of drawing water other than very small amounts for sampling purposes.

A recent survey completed in Mount Vernon, New York by Flow Metrix, Inc. analyzed 105 miles of water main distributing 10 MGD. Only 255 gpm loss was attributed to actual main leaks (i.e. not service connections, valve, or hydrant leaks.) This equates to 0.00046 gpm per foot of pipe, or 0.4 gpm for 800 feet of pipe. Over a year this would equate to 210,240 gallons, or 4.8 AFY or 1.6% of the 300 AFY through pipe losses in the 800' connection between the Desalination Plant and the Cal-Am main.

Cal-AM will be metering the amount of water being introduced at their distribution main in Olympia Street, and this is the point where 300 AF is to be delivered over a 365 day period. If the plant is calibrated to produce 305 AFY, the amount delivered at the Cal-Am meter should theoretically read 300 AF. Plant production can be increased or decreased with relative ease as the 365 day metering period approaches, to fine tune the actual annual delivery quantity of water.

I hope this clarifies your concerns regarding actual delivery quantity as it relates to plant production. Please feel free to contact me if you have any questions.

Sincerely,

Richard Simonitch, PE
 Vice President, Engineering Manager