

**MWD**

METROPOLITAN WATER DISTRICT OF SOUTHERN CALIFORNIA

November 11, 1993

(Engineering and Operations Committee--
Information)

To: Board of Directors (Special Committee on Water Quality and
Environmental Compliance--Information)

From: General Manager

Subject: Water Treatment Residual Beneficial Use Pilot Study

Report

Water treatment residual (sludge) generated at Metropolitan's water treatment plants has been traditionally disposed to local sanitary sewers or landfills. Sludge disposal costs have increased dramatically in recent years. For example, the cost of disposal for the Mills Plant sludge has increased at an average annual rate of 80 percent over the past six years. Additionally, the Skinner Plant monofill is near its design capacity and must be expanded in the near future to continue to accept sludge. The estimated expansion cost is \$5 million.

Disposal of sludge to landfills has also become increasingly undesirable because of more stringent regulations associated with this type of disposal. For example, the California Integrated Solid Waste Management Act of 1989 specifies that counties must divert 25 percent of their waste stream from landfills by year 1995, and 50 percent by year 2000. Increasing costs, more restrictive regulations, plus the fact that no benefits are derived from landfilling, prompted Metropolitan to investigate cost-effective and environmentally sound alternatives to landfill disposal.

Additionally, proposed new drinking water regulations may increase the amount of sludge generated at Metropolitan's filtration plants, possibly exacerbating this problem in the future.

Metropolitan listed the sludge on the California Waste Exchange. The California Waste Exchange is a listing of wastes that have no further use to the waste generator, but which another firm may find useful. In addition, Metropolitan has contacted cement manufacturers, soil composters, landscaping firms and waste recycling brokers as part of the effort to find beneficial uses for the sludge.

The most promising firm contacted, Recyc Inc., is a composting firm located in Corona, California. Metropolitan has entered into a pilot agreement with Recyc Inc. to haul and recycle our sludge from the Mills Filtration Plant into compost material. The current cost of landfill disposal for Mills Plant sludge is \$34.50/ton including a cost of \$10/ton for Metropolitan's loading and hauling costs. Recyc Inc. is loading, hauling, and recycling the same sludge at total cost of \$18/ton. Since the amount of sludge at Mills Plant is approximately 1,000 tons, potential cost savings realized by Metropolitan is estimated at \$26,500.

Next year, staff intends to expand this program to the Diemer Plant, where current landfill tipping fees are \$24/ton but are expected to rise to \$60/ton. Also staff is continuing to investigate other uses for the sludge that are both environmentally and economically beneficial.

This pilot study was a cooperative effort between Environmental Compliance, Operations, Water Quality and Administrative Services Divisions.

Board Committee Assignments

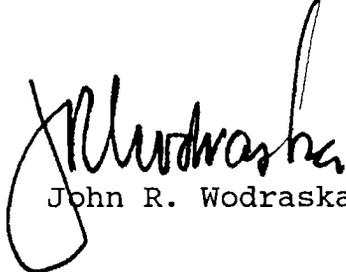
This letter is referred for information to:

The Engineering and Operations Committee because of its authority to review performance of programs to recycle disposable materials pursuant to Administrative Code Section 2431 (b); and

The Special Committee on Water Quality and Environmental Compliance because of its authority to study and advise on environmental compliance requirements pursuant to Administrative Code Section 2551 (d).

Recommendation

For information only.



John R. Wodraska

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