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METROPOLITAN WATER DISTRICT OF SOUTHERN CALIFORNIA

Sarah E. Duff
EXECUTIVE SECRETARY

July 19, 1994

(Engineering and Operation Committee
Information)
(Special Committee on Water Quality
and Environmental Compliance--Information)

To: Board of Directors

From: General Manager

Subject: Status of Metropolitan's Waste Minimization Program

Report

Congress established a significant new policy pertaining to hazardous waste management with the passage of the Hazardous and Solid Waste Amendments (HSWA) in 1984 to the Resource Conservation and Recovery Act (RCRA) ratified in 1976. Congress declared that the reduction or elimination of hazardous waste generation at the source takes precedence over the management of hazardous waste after generation. Congress's national policy declared that, when feasible, the generation of hazardous waste be reduced or eliminated as expeditiously as possible by hazardous waste generators. Congress further stated that pollution not reduced at the source be recycled in an environmentally sound manner when feasible. Thus, a hierarchy of hazardous waste management options was established in descending order of preference: prevention, recycling, treatment, and disposal into or on land or water.

The United States Environmental Protection Agency (EPA) specifies that waste minimization consists of (1) source reduction, and (2) environmentally sound recycling. Source reduction is defined as any practice which reduces the amount of any hazardous substance or hazardous material otherwise released to the environment, and reduces potential hazards to the public and the environment. Examples of source reduction techniques include equipment or technology modifications, process or procedure modifications, reformulation of products, substitution of raw materials, and improvements in housekeeping, maintenance, training, or inventory control.

Metropolitan is committed to managing hazardous waste in a manner that protects employees, the public, and the environment. As part of this commitment, it is Metropolitan's policy to minimize the generation of hazardous waste through source reduction strategies including housekeeping improvements, training, inventory control, and through sound environmental recycling and reuse practices.

Metropolitan's Environmental Compliance Division continues to seek and research recycling opportunities for Metropolitan's generated hazardous waste. Recycling reduces long term environmental liability and provides measurable cost savings. In the years of 1991, 1992, and 1993 Metropolitan recycled 103, 118, and 171 tons of routinely generated hazardous waste, respectively. The sharp increase of recycled hazardous waste is attributable to the recovery of elemental mercury, a result of Metropolitan's Type-M Meter Replacement Project and the overall increase of hazardous waste generated and recycled due to Metropolitan's numerous special projects including the Domenigoni Valley Reservoir Project.

Hazardous waste that is currently being recycled at off-site venues include: lubricant oils, elemental mercury, drained oil filters, fluorescent bulbs, auto batteries, parts cleaner solvents, paints, elemental silver from photo-chemicals, soils contaminated with hydrocarbons, empty metal drums, gasoline, and diesel fuel. Of the hazardous waste routinely generated by Metropolitan 47 percent is recycled, 13 percent is treated, 42 percent is incinerated, and 2 percent is landfilled (mainly asbestos containing materials). In continuing to seek and research environmentally sound and economical recycling options for hazardous waste, Metropolitan realized a savings of approximately \$4,500 on the State Board of Equalization's Hazardous Waste Disposal Fee Return for fiscal year 1993.

In 1993, due to Metropolitan's Type-M Meter Replacement Project, an estimated 50,000 pounds of elemental mercury was recycled. The mercury was recycled at Bethlehem Apparatus Company, Inc., a permitted mercury recycler, located in Hellertown, Pennsylvania. In recycling the mercury, Metropolitan received a credit amount of \$.25 per pound. The total credit realized by Metropolitan was approximately \$12,500.

Additionally in 1993, Metropolitan removed sediment sludge from the floor of the San Joaquin Reservoir, of which 110 tons of dewatered sediment sludge was recycled as compost constituents. The dewatered sediment sludge was shipped to Recyc Inc., a composting firm, located in Corona, California. The total cost savings realized by Metropolitan by recycling versus land disposal was approximately \$23,405.

Currently, a pilot program to recycle non-hazardous "green waste" products such as grass trimmings, weeds, and tree shrubs as composting constituents at a composting facility is in development. In addition, fluorescent light ballasts that contain polychlorinated biphenyls (PCBs) may now be recycled. The PCB capacitor and contaminated asphalt component is thermally destroyed, and the metal carcass is recycled. This

process produces 80 percent less air and ash pollution due to whole ballast incineration and the valuable metal commodities are recycled.

Another part of this program is the ongoing water treatment sludge recycling program that was implemented at the Mills Plant. Total cost savings to date are approximately \$50,000. Further details of this program will be the subject of a separate letter to your Board.

In the upcoming months, staff will develop protocols to evaluate Metropolitan's hazardous waste generation activities in an effort to further improve housekeeping, maintenance, training and inventory control. Results of the evaluations will be submitted as recommendations for implementation to the identified Metropolitan generators of the hazardous waste.

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
General Manager

By 

Roberta L. Soltz
Director of
Environmental Compliance

Concur:



John R. Wodraska
General Manager

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