



MWD

METROPOLITAN WATER DISTRICT OF SOUTHERN CALIFORNIA

7-10

March 26, 1998

To: Board of Directors (Committee on Legislation—Action)
(Engineering and Operations Committee—Information)
(Special Committee on Water Quality, Desalination and
Environmental Compliance—Information)

From: *for* General Manager

Edward J. Moran III

Submitted by: Mark D. Beuhler
Director of Water Quality

Mark Beuhler

Subject: Support for AB 2439 and seek Amendments (Two-Stroke Engines)

RECOMMENDATION

It is recommended that your Board support AB 2439 (Bowen - Marina del Rey) and seek amendments.

EXECUTIVE SUMMARY

On October 9, 1997, Governor Pete Wilson signed into law a package of bills to address a number of health and environmental concerns regarding the use of methyl tertiary butyl ether (MTBE) and other oxygenates in California's gasoline. This legislation's primary focus was groundwater and it did not address contamination in surface water from watercraft. Legislation introduced on February 20, 1998 by Assemblymember Debra Bowen (D - Marina del Rey) in Assembly Bill 2439 would ban two-stroke engines greater than ten horsepower on lakes and reservoirs that provide drinking water supplies. Metropolitan staff recommends that your Board support AB 2439 and seek amendments to allow use of modern two-cycle engines that produce minimal pollution and to provide an enforcement mechanism for the new law.

DETAILED REPORT

Sampling of drinking water lakes and reservoirs where gasoline-driven recreational watercraft are allowed has detected low but persistent levels of MTBE. The preliminary results of an Association of California Water Agencies (ACWA) statewide survey of surface water reservoirs and waterways open to recreational activity indicate low levels of MTBE are present. MTBE at levels below the California Department of Health Services (CDHS) action level of 35 ug/L can cause unacceptable taste and odor in water. CDHS is considering a possible secondary drinking water standard of 5 parts per billion and has until July 1998 to set a secondary MTBE standard.

MTBE use and occurrence in drinking water were the subject of four significant bills passed by the legislature last year. While this legislation provided water utilities and regulatory agencies with important tools to protect groundwater supplies, it did not address two-stroke motorized watercraft which appear to be the primary source of surface water contamination.

East Bay Municipal Utility District's (EBMUD) Board of Directors will ban all gas-powered boats from San Pablo Reservoir by the year 2002 to avoid MTBE contamination. In addition, EBMUD has committed \$500,000 to change out engines in district watercraft and those operated by vendors at the reservoirs. In a decision to impose a "zero-emissions" policy at the Los Vaqueros Reservoir, Contra Costa Water District has also banned all recreational activities. Santa Clara Valley Water District's Board of Directors is also considering a ban or restriction of MTBE use on its reservoirs.

In 1996, the United States Environmental Protection Agency (USEPA) promulgated a rule requiring marine engine hydrocarbon emission reductions of 75 percent by 2006. To adhere to this new rule, manufacturers have introduced improved four-stroke designs and designs that would replace conventional two-stroke engines with a dramatically emission-improved direct injection two-stroke engine. Design elements of traditional two-stroke marine engines are responsible for inefficiencies in fuel combustion, higher fuel operating costs and higher emission rates than four-stroke and direct injection two-stroke engines.

Your Board adopted Metropolitan's existing Source Water Quality Protection policy principles on November 10, 1992, June 14, 1994, and January 10, 1995. The following additional policy principle was developed and adopted at the February 1998 Board Meeting:

- Support legislation that provides for the necessary controls on motorized recreational watercraft and fueling operations that may contribute to surface water contamination by MTBE and other gasoline additives.

AB 2439 (Bowen) would make it unlawful for any person to discharge unburned fuel and oil by the operation of watercraft propelled by a two-stroke engine with a power rating of greater than ten horsepower into any lake or reservoir that serves as a domestic water supply. Currently, there are no legislative restrictions on motorcraft used on drinking water reservoirs. Under the bill, use of two-stroke engines by both recreationalists and operating agencies would be prohibited at all Metropolitan-owned and operated facilities, including Lake Skinner and Eastside Reservoir, as well as all State Water Project reservoirs operated by the State's Department of Water Resources.

This bill, in its current form, does not recognize important developments in two-stroke engine technology. Direct injection two-stroke technology significantly reduces hydrocarbon emissions from outboard and personal watercraft. At higher horsepower, the new direct injection two-stroke engines may produce operating efficiencies and performance improvements that exceed the performance of four-stroke engines. Additionally, AB 2439 does not identify any specific enforcement mechanism for the new law.

Metropolitan staff recommends that your Board support AB 2439 and seek amendments to distinguish between the old two-stroke engines and direct injection two-stroke engines and to establish appropriate mechanisms for enforcement of the law.

EGD/ac

Attachment

CALIFORNIA LEGISLATURE—1997-98 REGULAR SESSION

ASSEMBLY BILL

No. 2439

Introduced by Assembly Member Bowen

February 20, 1998

An act to add Section 12974 to the Water Code, relating to water supplies.

LEGISLATIVE COUNSEL'S DIGEST

AB 2439, as introduced, Bowen. Water supplies: discharges.

Existing law permits water agencies, as defined, to construct and operate recreational facilities appurtenant to any lands, dams, reservoirs, facilities, or works owned or operated by the agency.

This bill would make it unlawful for any person to discharge unburned fuel and oil from the operation of watercraft propelled by a 2-stroke engine with a power rating of greater than 10 horsepower into any lake or reservoir that serves as a domestic water supply.

Vote: majority. Appropriation: no. Fiscal committee: no. State-mandated local program: no.

The people of the State of California do enact as follows:

- 1 SECTION 1. Section 12974 is added to the Water
- 2 Code, to read:
- 3 12974. It is unlawful for any person to discharge
- 4 unburned fuel and oil from the operation of watercraft
- 5 propelled by a two-stroke engine with a power rating of

AB 2439

— 2 —

- 1 greater than 10 horsepower into any lake or reservoir that
- 2 serves as a domestic water supply.

O

