

February 18, 1999

To: Board of Directors (Communications and Legislation Committee--Action)

From: General Manager _____

Submitted by: Mark D. Beuhler _____
Director of Water Quality

Subject: Methyl Tertiary Butyl Ether (MTBE) Policy Principle

RECOMMENDATION

It is recommended that the Board adopt the following policy principle:

Support legislation and other mechanisms that will eliminate methyl tertiary butyl ether (MTBE) in gasoline as soon as possible.

EXECUTIVE SUMMARY

Recent events suggest that MTBE should be eliminated from gasoline to protect drinking water supplies. These events include (1) the conclusion of a study conducted by the University of California that MTBE be phased out of gasoline, (2) recent findings that wells in the South Tahoe area have become contaminated even though their underground gasoline tanks were not leaking, (3) the implementation of an MTBE standard for drinking water in California, (4) the Board's policy on Eastside Reservoir that encourages the elimination of MTBE, and (5) the U.S. Environmental Protection Agency's (USEPA) apparent willingness to consider options to the use of MTBE. The recommended policy principle will enable Metropolitan to support a phaseout of MTBE as soon as possible in both state and federal legislation.

DETAILED REPORT

The use of MTBE in gasoline has clearly resulted in cleaner air in California and across the country. Unfortunately, it has had the unintended consequence of contaminating both groundwater and surface water. Over time, MTBE's value as an oxygenate in fuel in California is decreasing as modern gasoline engines and reformulated gasoline are implemented.

Recent events suggest that Metropolitan should take a stronger stance on whether MTBE should be eliminated in gasoline. These events include:

1. The recently published report by the University of California (November 1998), which recommends that MTBE use in gasoline in California be phased out over the next several years.

2. The recent assessment by the South Tahoe Public Utility District that they have had to shut down more than one-third of their drinking water wells without a single demonstrated case of leaking underground gasoline storage tanks. This is significant because leaking underground tanks are generally considered the major source of MTBE contamination in groundwater. If ensuring that underground tanks do not leak does not prevent MTBE contamination of groundwater, it may be necessary to eliminate the use of MTBE in gasoline (see the attached article).
3. The State of California implemented a new secondary standard for MTBE of 5 parts per billion in December, 1998. If MTBE is detected in Metropolitan's water (the detection limit is 3 parts per billion), we and our member agencies receiving that Metropolitan water will have to inform our consumers through our annual water quality reports of the presence of MTBE in their drinking water.
4. Metropolitan's policy on boating at Eastside Reservoir (February 1999) encourages the elimination of MTBE in gasoline.
5. The USEPA has convened a Blue Ribbon Panel to assess the use of MTBE in gasoline. The panel will make recommendations to the Agency's Administrator Carol Browner on MTBE by July, 1999. Those recommendations could include the need to provide options to the use of MTBE in gasoline. Metropolitan's Director of Water Quality Mark Beuhler represents the water industry on that panel.

The Clean Air Act requires the use of an oxygenate in gasoline to promote cleaner burning air. It is important that phaseout of MTBE be given a careful consideration of what, if any, oxygenate would replace MTBE. Alternatives include other ether-based oxygenates, ethanol, and possible use of reformulated gasoline instead of an oxygenate to ensure clean air.

Currently introduced federal and state MTBE-related legislation are as follows:

- ❑ Federally, Senator Feinstein has recently introduced three bills related to MTBE. S. 266 amends the Clean Air Act as it relates to California State regulations on reformulated gasoline; S. 267 amends the Solid Waste Disposal Act to require the USEPA to give highest priority to petroleum contaminants in drinking water when issuing corrective action orders; and S. 268 relates to the use of personal watercraft engines and labeling requirements. Congressman Bilbray has introduced H.R. 11 which is similar to S. 266.
- ❑ State MTBE legislation evolves around four bills: SB 192 authored by Senator Don Perata (Alameda) sets up labeling requirements for gasoline stations and bans MTBE use after December 1, 1999; SB 201 by Senator Richard Mountjoy (Monrovia); SB 272 authored by Senator Tim Leslie (Tahoe City); and AB 129 by Assembly Member Rico Oller (San Andreas) issue an immediate ban on MTBE.

Staff will continue to work with the Board, member agencies, and associations such as Association of California Water Agencies (ACWA), Association of Metropolitan Water Agencies (AMWA), American Water Works Association (AWWA), and others to identify state and federal legislation that would phase out MTBE. Amendments to the Clean Air Act would be difficult, but other legislative options may be viable. It is also possible that the USEPA could develop an administrative fix to the MTBE problem. Staff will also prepare briefing packets and other

materials so that Board members and member agency managers can raise this issue with their legislators as appropriate.

MDB/mi

Attachment 8-13A

Attachment 8-13A

1/29/1999 Tahoe Daily Tribune

Report: Problem not solved by upgrading storage tanks

By Andy Bourelle
Tribune Staff Writer

California Gov. Gray Davis will be making a decision on the future of MTBE use in the state by early March.

One of the information sources he will be using to make that decision is a report released this week from the State Water Resources Control Board's Panel on the Leak History of New and Upgraded Underground Storage Tank Systems.

South Lake Tahoe resident Jim Jones, who is chair of the South Tahoe Public Utility Board of Directors, served as one of panel members representing water agencies.

According to Jones, upgrading underground storage tank systems is not the solution to keeping MTBE - methyl tertiary butyl ether - from damaging groundwater sources.

"The report finds that some of the apparent causes of MTBE leaks from fuel systems are due to faulty system installation, poor maintenance, poor facility operation practices and upgrades that do not fully comply with regulatory requirements," Jones said. "In other words, this panel has determined that even new fuel systems and upgraded systems will not guarantee that MTBE stays out of groundwater."

The panel was formed in December 1997 by then-California Gov. Pete Wilson.

Davis will be making his decision as a result of 1997 California legislation, which required the University of California to research the health and environmental effects of MTBE. Public hearings are schedule for February, and Davis is expected to consider the University of California report, public testimony and the panel's findings to make his decision.

"This report has been, or shortly will be, delivered to Gov. Gray Davis for his consideration as he decides what his action will be on MTBE," Jones said. It is evident that the recommendations in this report will take years, if not decades, to implement. This report therefore supports the conclusion, I believe, that the only way to adequately protect groundwater from MTBE contamination is to remove MTBE from gasoline now."

MTBE reaches Alpine Co.

By Andy Bouelle
Tribune Staff Writer

The South Tahoe Public Utility District's problems with the controversial fuel additive MTBE have spread to Alpine County.

The district - which provides sewer and water service to most of South Shore's residents - discovered MTBE this month in Harvey Place, a 100-acre irrigation reservoir in eastern Alpine County. The district transports its recycled water through a pipeline 26 miles to the reservoir, where the water is used to irrigate more than 2,000 acres of ranch land.

The levels of MTBE - methyl tertiary butyl ether - detected in the reservoir are below 1 part of the additive per billion parts water, well below any state or federal health guidelines.

Still, officials are concerned.

"One of our biggest concerns is what does this do to our beef cattle - and the hay produced with this in the ground," said Herman Zellmer, the chair of the Alpine County Board of Supervisors. "What happens then? That's a big concern of our ranchers."

How did the MTBE get there? It's a long story.

Several South Shore gas stations have plumes of MTBE coming from their facilities. In their clean-up efforts, the stations pump contaminated water out of the ground, treat it with a carbon filtration system and pump the clean water into the sewer system.

However, the MTBE can have "breakthroughs" in the filtration system.

Lisa Dernbach, associate engineering geologist of the Lahontan Regional Water Quality Control Board, said it is sometimes a "guessing game" as to when a breakthrough can occur.

"It's like an oil filter in a car. It only has a certain amount of life," she said. "At some point it just won't filter."

Dernbach said several South Shore remediation efforts - including those at the USA Gas Station at the "Y," South Lake Tahoe's Beacon and Tahoe Tom's - have experienced breakthroughs.

It is avoidable, however. Lahontan has been in charge of the clean-up efforts at the Meyers Beacon for months, and the board - using an air-stripping tower rather than a carbon-filtration system - has had no problems.

The gas stations with remediation efforts under way are required by STPUD to obtain a special permit to release the treated water into its sewer system. Because of the recent problems, STPUD will be more strict in its permitting process, according to STPUD Information Officer Dawn Forsythe.

"Double treatment, better testing, more frequent testing," she said. "They've got to prove to us their systems can adequately remove the MTBE."

Dernbach said Lahontan officials are looking into whether the agency has the authority to fine the parties responsible for the breakthroughs.

"We're fully supportive of the district and all the regulations they are putting on their pump-and-treat systems," Dernbach said.

In recent summers, several researchers have found traces of MTBE at various levels in Lake Tahoe. Those levels decline and disappear in the fall. STPUD officials hope the results will be similar for Harvey Place, and the MTBE will have dissipated before summer when the ranchers use the water.

"We're going to be watching it very closely over the winter months," Forsythe said.

Although Alpine County is concerned about the problem, Zellmer said county officials don't blame the district.

"I don't think there is anyone upset with (STPUD)," he said.

The Alpine County Board of Supervisors plans to hold a public hearing on the issue Tuesday morning, and Zellmer said the board likely will petition California legislators for a ban of the additive.

"Another concern we have is not just for Alpine County. This is a problem statewide," Zellmer said. "Our concern is we need to stop (the use of MTBE). There is no way it can be used in our gasoline without being a danger to someone somewhere."

MTBE is a synthetic chemical oxygenated fuel additive used extensively in California gasoline to reduce air pollution. However, it is classified by the U.S. Environmental Protection Agency as a possible cancer-causing agent. California has set a taste and odor threshold of 5 parts per billion for MTBE-contaminated water, because it smells and tastes like turpentine.

STPUD's water system supplies about 30,000 people through about 12,500 connections, and at times, because of tourism, the total population served is as high as 60,000. Since September 1997, STPUD has closed more than one-third of its drinking water wells because of the threat of MTBE contamination.

STPUD required water-usage restrictions for much of the 1998 summer. To date, MTBE-related costs for the district are about \$1.5 million. STPUD filed a lawsuit in November 1998 against several major oil companies and local gasoline providers. It could take up to two years before the suit goes to trial.