

MINUTES OF THE SENATE COMMITTEE ON ENERGY AND NATURAL RESOURCES.

The meeting was called to order by Chairperson Senator David Corbin at 8:10 a.m. on February 3, 2000 in 245-N of the Capitol.

All members were present except:

Committee staff present:

Raney Gilliland, Legislative Research Department
Mary Ann Torrence, Revisor of Statutes Office
Lila McClafin, Committee Secretary

Conferees appearing before the committee:

Dr. Ron Hammerschmidt, Kansas Department of Health and Environment, (KDHE)
Mary Jane Stattelmann, Assistant Secretary, Department of Agriculture
Bill Fuller, Kansas Farm Bureau
Charles Benjamin, Sierra Club Kansas Chapter & Kansas Natural Resource Council
Ken Peterson, American Petroleum Institute
Tom Palace, Petroleum Marketers & Convenience Store Association of Kansas

Others attending:

See attached list.

With a motion and a second the minutes of January 27, 2000 were approved as corrected.

SB 469—Prohibition of sales of motor vehicle fuels containing MTBE.

Fiscal note was distributed.

Dr. Ron Hammerschmidt, KDHE, presented testimony for information purposes. He said Kansas is ahead of most states in that KDHE laboratories have detected and identified MTBE in the waters of the state. He thought there may be a problem with enforcement if the bill were to pass, it is their understanding that the United States Environmental Protection Agency's current interpretation of the federal Clean Air Act prevents states from controlling or prohibiting the use of MTBE in gasoline. **SB 469** raises some concerns because it would become effective in a very short time frame and industry may be unable to comply that quickly. It would require the addition of enforcement staff to work with the Department of Agriculture inspectors to verify compliance. He included with his testimony an item from Kansas Environmental News dated April 1999, and a news release, dated January 21, 2000 from Sharon Watson, titled "KDHE Responds to Concerns Over MTBE" (Attachment 1). He responded to questions. Attending with Mr. Hammerschmidt were Gary Blackburn, Bureau of Environmental Remediation, Jan Sides, Bureau of Air and Radiation, and Karl Mueldener, Bureau of Water.

Mary Jane Stattelmann, Assistant Secretary, Kansas Department of Agriculture, supported the bill because it would protect the waters of the state from pollution and it also provides an opportunity for ethanol to become the oxygenate of choice, which would increase marketing opportunities for Kansas grains (Attachment 2). Ms. Stattelmann responded to several questions about ethanol.

Bill Fuller, Kansas Farm Bureau, said they supported the bill based on their farm and ranch members' commitments to protecting water quality and increasing the utilization of ethanol (Attachment 3).

Charles Benjamin, Sierra Club and Kansas Natural Resources Council supported the ban on MTBE, but, he did not think promoting ethanol production was the answer (Attachment 4). He disturbed an article from the New York Times 6/19/99 titled "Lawsuits Are Prompting Calls for Changes to Clause in Nafta" by Timothy Pritchard.

CONTINUATION SHEET

MINUTES OF THE SENATE COMMITTEE ON ENERGY AND NATURAL RESOURCES.

Jere White, Executive Director, Kansas Grain Sorghum Producers Association and Kansas Corn Growers Association submitted written testimony in support of **SB 469** (Attachment 5).

Ken Peterson, Kansas Petroleum Council, opposed the bill. He said any significant change in a refining process requires about a four year lead time to make the necessary changes. At the present time, the Clean Air Act requires all states, except California, to get EPA's approval before imposing controls on fuel characteristics or components different from what EPA has already imposed. If the legislation were to pass Kansas would likely need to obtain a waiver from EPA (Attachment 6). He responded to several concerning would the price of fuel be increased if MTBE was band; how long MTBE has been in use; and what kind of time would be needed by the industry to make the appropriate changes if it were band?

Tom Palace, Petroleum Marketers & Convenience Store Association of Kansas, offered brief remarks from a neutral position. He said the National Blue Ribbon Panel and EPA are already closely looking into this issue. He would be happy to provide some national information on this subject.

The meeting adjourned at 9:02 a.m. The next scheduled meeting is Tuesday, February 8, 2000.

**SENATE ENERGY & NATURAL RESOURCES
COMMITTEE GUEST LIST**

*Please Sign in
Black Ink*

DATE: 2-3-2000

NAME	REPRESENTING
Ron Hamnerstein	KDHE
Karl Mueckler	KDHE
JAN SIDES	KDHE
Chuck Layman	KDHE
Gary Blackburn	KDHE
Tom Bruno	MGA
Ken Peterson	KS Petroleum Council
Charles Benjamin	KNRC/KS Sierra Club
SUSIE KING	Conoco Inc.
JOHN C. BOTTENBERG	KS ETHANOL PRODUCERS
Mark Goodwin	Hein & Weir
Bill Fuller	KS, Tim Bureay
Ed Rome	LWVK
BOB TOTTEN	KS Contractors Association



KANSAS
DEPARTMENT OF HEALTH & ENVIRONMENT
BILL GRAVES, GOVERNOR
Clyde D. Graeber, Secretary

Testimony Presented to
Senate Committee on Energy and Natural Resources

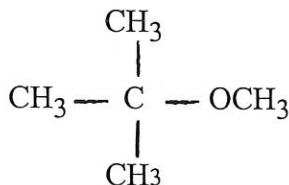
February 3, 2000

by
Kansas Department of Health and Environment

Senate Bill 469

Introduction

My name is Ron Hammerschmidt, Director of the Division of Environment, Kansas Department of Health and Environment. I am here today to provide the agency's current information on contamination of groundwater by MTBE, our responses to the known contamination of public water supplies and to provide brief testimony on Senate Bill 469, which would prohibit the sale of motor vehicle fuel containing methyl tertiary-butyl ether (MTBE).



Summary/Background

The fuel additive MTBE has been used nationally both as an oxygenate to improve air quality and as an octane enhancer since the late 1970s. Recent news reports about MTBE have created concern for Kansas residents. The reports conveyed the message that groundwater contamination had not been investigated and the remediation of sites had gone unaddressed. While this may be true in California or other states, it is not the case in Kansas. We are ahead of most states in that KDHE laboratories first detected and identified MTBE in Kansas water

samples as early as 1985. MTBE was identified as a potential health hazard by the department. Groundwater samples collected by the Bureau of Environmental Remediation have been routinely analyzed for MTBE at sites where gasoline releases occurred since 1991.

Since 1996, the KDHE labs and Bureau of Water have routinely monitored for MTBE in public water supplies. The compound has been detected in 18 of the state's 1,122 public water supplies, with most detected levels being below EPA's recommended level of 20 ug/l. The department considers any detection of MTBE at a water supply as a reason for investigation and corrective action to protect individuals from exposure and possible health risk. Actions can range from requiring the affected water well to be shut down, or -- in severe cases -- building treatment systems to remove MTBE from the water. Based on current test results, no public water supplies in Kansas are delivering water with greater than 20 ppb of MTBE in the water. At this time, the department currently has 3 treatment systems with one additional system under construction at public water supplies in use across the state. There are 44 systems treating MTBE contamination (the 4 mentioned above are included in the 44.) Mr. Gary Blackburn, Bureau of Environmental Remediation; Jan Sides, Bureau of Air and Radiation; and Karl Mueldener, Bureau of Water, are here to answer specific questions on the programs within their bureaus. For your review, we have attached an article from the agency newsletter of April 1999 and a recent press release on MTBE.

As previously noted the compound MTBE is used as both an octane enhancer and oxygen source for improvement of air quality. Since the state has not been required to use reformulated fuel (RFG), the primary distribution of MTBE in fuel has been for octane enhancement, that is an anti-knock agent. The release of fuel from spills and leaking tanks led to the contamination of groundwater across the state. The upgrading of tanks in recent years has slowed the number of releases; but we have remaining problems. There will be a continuing need for octane enhancers and oxygen sources such as MTBE in order to meet the needs of automobiles. These compounds include benzene, ethylbenzene, various ethers, toluene, xylene, ethanol, and other organic compounds containing oxygen, such as tertiary amyl methyl ether (TAME) and ethyl tertiary butyl ether (ETBE).

Potential Problems

KDHE understands that the United States Environmental Protection Agency's (USEPA) current interpretation of section 211(c)(4) of the federal Clean Air Act (42 USCA 7545(c)(4)) prevents States from controlling or prohibiting the use of MTBE in gasoline. According to USEPA, a waiver from this prohibition can be granted only by a formal demonstration to the USEPA that the control or prohibition is necessary to achieve a national primary or secondary ambient air quality standard. KDHE cannot testify as to whether the EPA would actively seek enforcement of this interpretation if Kansas were to implement SB 469. California, which has used reformulated fuels for some time, will break some new regulatory ground with their MTBE ban.

Senate Bill 469 raises some practical concerns because it would become effective in a very short time frame and industry may be unable to comply so quickly. The implementation of the bill will require close cooperation between KDHE charged with the enforcement of the bill and the Weights and Measures Program of the Kansas Department of Agriculture. KDHE enforcement

DIVISION OF ENVIRONMENT

of the law will require the addition of enforcement staff to work with the Department of Agriculture inspectors to verify compliance. While we have no opposition to working with Department of Agriculture, there will be a need for additional resources. The increased cost of these compliance programs will depend upon the expected scope and stringency of the enforcement programs.

Technical issues related to Senate Bill 469 involve additional research into what analytical protocols for analysis of MTBE in fuel are available and if the methods are certified (certified so that results will stand up in court if necessary). If we have to certify an appropriate analytical method, the process could require an additional 6 to 12 months before enforcement actions could be completed.

Some inspections will be performed at the station while other activities would be performed at refineries and bulk terminals. The refineries and bulk stations may be located within Kansas and surrounding states. Enforcement across state lines typically is problematic and may pose some unique challenges.

Conclusion

The Department of Health and Environment has not taken a position on Senate Bill 469. The department has identified a number of MTBE contaminated sites across the state. We anticipate additional sites will be discovered in Kansas requiring cleanup of MTBE and or other constituents of gasoline.

attachments:

Article, from *Kansas Environmental News*, April 1999
KDHE News Release, January 21, 2000

DIVISION OF ENVIRONMENT

Forbes Field, Building 740
(785) 296-1535

Printed on Recycled Paper

Topeka, KS 66620-0001
FAX (785) 296-8464

Findings of Kansas MTBE Investigation

The Kansas Department of Health and Environment (KDHE) Storage Tank Section has included Methyl tert Butyl Ether (MTBE) as a chemical of concern for UST sites since 1991. At that time, MTBE was not considered to be a chemical of concern by EPA because little was known about its health effects. The decision to require analyses for MTBE resulted from the compound being frequently discovered in groundwater samples obtained from UST sites which were analyzed by KDHE's laboratory. As data was collected, it became clear that MTBE plumes were very common and were usually found further down-gradient of the typical Benzene toluene ethyl benzene xylene (BTEX) plume. The philosophy of the Kansas UST program has been that all water consumed by the public should be below detection levels for all petroleum constituents, regardless of what data was available about the health effects of the compound. As a result, KDHE has considerable data related to the occurrence of MTBE at over 900 UST sites, sixty of which are in active remediation.

Until recently, many believed that the use of MTBE-enhanced gasoline was limited to air quality non-attainment areas, so few expected to find MTBE contamination to be widespread. The data from Kansas confirms that the compound has been used as an octane booster for many years. Analytical data from 818 of the sites, being monitored in Kansas, revealed that MTBE contamination was present at 88% of the sites. A survey of data confirms that MTBE is present at sites where fuel has not been stored since before 1989.

The Question of False Positives

Several articles have raised the question of false positives with GC methods for detecting MTBE. The initial review of the Kansas data does not reveal an appreciable difference in the percentage of sites where MTBE was discovered using method 8021, a GC method, as compared to sites where method 8260, a GC/MS method, was used. KDHE is currently working on additional confirmation of the 8021 results, however, our data indicates that MTBE was detected at over 90% of the 161 sites where samples were analyzed by method 8260.

Database Survey Results

A survey of 700 sites where MTBE was initially detected, revealed that 27% of the sites have decreased to non-detect levels over the sampling period without active remediation. An evaluation of 60 MTBE remedial sites reveals that most of the traditional technologies are somewhat effective in reducing MTBE concentrations. Kansas has observed many different types of remedial efforts involving soil vapor extraction, air sparging, pump and treat, and Oxygen Release Compound with varying levels of success. A reduction of MTBE to non-detect was achieved at 43% of the sites, with a 90% reduction attained at 23% of the sites. MTBE concentration reductions ranging between 50% and 90% were observed at 12% of the sites and 10% of the sites demonstrated less than a 50% reduction. The

concentration of MTBE actually increased at 12% of the sites. The increased MTBE concentration could be the result of an unidentified source.

Sixty six percent of the sites undergoing site remediation experienced a MTBE reduction of greater than 90%. Of sites utilizing a combination of AS/SVE technology, 80% of the sites had a greater than 90% reduction. These preliminary statistics are based on limited evaluation of the technologies and the duration of remediation was not considered. However, when compared to a 27% reduction in monitored only sites; it appears that conventional remedial technologies are successful in reducing MTBE concentrations. KDHE will continue to evaluate efforts to perform MTBE remediation to determine which methods are most effective.

Kansas Case Incident Studies

The Kansas Storage Tank Program has always considered protecting public and private water supply wells as the primary driving force for most remediation at UST sites. Despite these efforts, several public wells have been impacted by MTBE. Significant levels of MTBE were recently discovered in two public water supply wells serving a small western Kansas community. The sources of the contamination were gasoline releases which occurred from three service stations located nearby. The MTBE spread over eight tenths of a mile down-gradient to impact the public wells. Despite the fact that the contaminant plume was well defined by a series of zero line monitoring wells, MTBE had migrated under those wells and reached the public wells at a concentration of 1050 ug/l. A 250 gpm tray air stripper was installed at the City's water treatment plant as a temporary measure to reduce MTBE concentrations. Even though no MCL had been established for MTBE, a treatment goal for the temporary system was set at less than 40 ug/l.

The next phase of the MTBE remediation project consisted of the design and installation of a permanent long term treatment system at the public water plant. Two packed air stripping towers, six feet in diameter and 33 feet tall were selected for the project. The manufacturer indicated that each tower would be capable of reducing the highest anticipated contaminant concentrations to non-detect levels to provide redundancy for long term operation. The water treatment demand was 300 gpm during colder months and 450 gpm during the summer. The system successfully treats the influent concentrations of 200-800 ug/l MTBE to below 5 ug/l.

Active source remediation has been underway since 1997 with limited success. MTBE concentrations ranging up to 77,000 ug/l had been encountered in the groundwater near the source. The leading edge of the BTEX and MTBE plume has been defined with a series of down gradient monitoring wells. Additional investigation involved installation of several deeper (70 foot) monitoring wells between the source areas and the

(Continued on next page)

public wells. Groundwater data confirmed an extensive MTBE plume. The deeper monitoring wells also confirmed that MTBE had migrated at depths below the shallow wells across the base of the aquifer. A deep monitoring well encountered an MTBE concentration of 1600 ug/l located near a shallow monitoring well which produced a MTBE concentration of 5 ug/l.

In order to minimize the treatment period for the Public Water Supply wells, a more aggressive remedial approach was taken at the sites. Remediation consisting of soil removal and land farm treatment of the contaminated soil was performed within the source areas. After the existing soils of limited permeability were removed, the remaining excavations were filled with washed sorted rock. A cap of clean, low permeability soil was installed to allow a combination of AS/SVE to be utilized. The previous remedial efforts had been hampered by a confining layer which was present immediately above the groundwater which prevented SVE/AS from being effective. Additionally, ORC was installed across the toe of the plume in an attempt to enhance bioremediation of the MTBE near the impacted public wells. The ORC treatment has not been evaluated to determine its effectiveness in the treatment of MTBE.

"Diving Plumes"

With a specific gravity of 0.740, MTBE contamination should be found near the top of the aquifer. Although MTBE is found at the top of the aquifer near the source, it has also penetrated to the base of the aquifer where the higher permeability materials are located. Since observing this phenomena, several other instances where MTBE has been observed to migrate to the base of the aquifer have been documented. The high solubility of MTBE has enabled it to move rapidly through the groundwater, resulting in large plumes that follow the natural or induced groundwater gradient. Unlike BTEX plumes that radiate down-gradient from the source area and stabilize within a few hundred feet, MTBE has been documented to extend over one mile down-gradient from the source area. An important factor to consider when addressing MTBE sites is not to rely too heavily on shallow monitoring wells especially where deeper, more permeable zones could act as a migration pathway. Since this portion of the aquifer is typically utilized for public and private water wells, there should be increased concern.

Conclusions

It is evident that there is more to learn about the behavior of MTBE in the environment and its effects on human health. The data collected by KDHE indicates that MTBE is likely to be discovered in any region even though fuel oxygenates may not have been required. Staff at KDHE are continuing to collect data and to evaluate which remedial methods are effective in remediating MTBE sites.

Greg Hattan & Gary Blackburn - Bureau of Environmental Remediation

FOCUS ON . . . the Southeast District Office

The Southeast District Office (SEDO) is located in the state office complex in Chanute. The district includes Lyon, Coffey, Anderson, Linn, Greenwood, Woodson, Allen, Bourbon, Elk, Wilson, Neosho, Crawford, Labette, Chautauqua, Montgomery, and Cherokee counties.

The SEDO is served by a talented and hardworking staff. Environmental sections include air, remediation, water, and waste with staff in each of these sections, and the office has two support staff.

District efforts focus on inspections, complaints, and providing technical service. This district has a variety of facilities and environmental conditions which makes for interesting and challenging opportunities. Facilities include a nuclear power plant, refinery, cement kilns, a hazardous waste incinerator, two coal-fired power plants, several Subtitle D landfills, turkey farms, and a wide variety of small industry.

Environmental conditions present unique challenges. There is very little groundwater, which creates problems with water quality and quantity, especially for small communities. Formation of Public Wholesale Water Supply Districts has helped. In addition to the four existing PWWSDs, there are three in the developmental stage. Rainfall creates inflow/infiltration problems for the high number of small wastewater treatment plants. Tight clay soils cause problems for individual septic systems and the numerous small streams make siting of confined animal facilities difficult. Historic mining of coal, lead, and zinc, and oil field activity cause a variety of problems from illegal waste disposal to illegal sewage discharges and water quality issues.

Public concerns are varied. One concern is that southeast Kansas is a net importer of both hazardous and solid waste. The burning of hazardous waste and waste fuel has elevated the level of concern about air quality and subsequent health implications. With most of the drinking water coming from surface water, water quality is always an area of concern.

With the variety of facilities and environmental conditions, team work and staff communication is absolutely essential. SEDO staff make a strong effort to support each other, the Topeka office and most importantly, the residents of southeast Kansas.

David Stutt, District Environmental Administrator

For Immediate Release
January 21, 2000

Contact: Sharon Watson
785-296-1529

KDHE Responds to Concerns Over MTBE

Recent news reports about the gasoline additive MTBE is causing undue alarm for Kansas residents. The Kansas Department of Health and Environment (KDHE) has received many questions about how methyl tertiary-butyl ether (MTBE) is contaminating the state's water supply. Some news reports have left the impression that this issue is going unaddressed. That is not the case in Kansas.

Kansas is ahead of many states in that KDHE laboratories first detected MTBE in Kansas water samples as early as 1985. Since 1996, the KDHE labs have routinely monitored MTBE compounds in public water supplies while monitoring volatile organic compounds, commonly called VOCs. KDHE staff began studying how to remove MTBE from the water, and treatment systems were successfully designed and put into place in 1997. These were developed by consulting engineers along with KDHE staff. The systems have led to a 94-100 percent reduction of MTBE contamination from public water supply systems.

MTBE is an octane enhancer and is used to make gasoline burn cleaner and produce less air pollution. It is soluble in water and has been found in soil and groundwater near leaking storage tanks, along with benzene, toluene, and other contaminants.

Even though there is no regulatory standard established for MTBE in terms of an unsafe level in drinking water or human exposure, in 1997 EPA issued a health advisory level for MTBE at 20-40 ppb (parts per billion). KDHE considers any detection of MTBE at a water supply a reason for investigation and possible corrective action to protect individuals from

exposure and possible health risk. Actions can range from requiring the affected well to be shut down, blending it with other wells, or in severe cases, building treatment systems to remove MTBE from the water. At this time, no water supplies are delivering water with greater than 20 ppb of MTBE in the water, based on current test results.

Since 1996, 27,935 water samples from public water supplies have been tested for MTBE and the compound has been detected 101 times. The latest round of sampling has shown 18 of the state's 1,122 public water supplies have had some detect of MTBE in one or more of their sources since 1996. Detected levels of MTBE range from 0.5 to 90 ppb. As part of an a petroleum storage tank release investigation, MTBE was detected at levels significantly higher than 90 ppb at one water supply. A treatment system was designed and installed in response to this problem and has effectively removed the MTBE from the water system.

To date, KDHE has installed treatment systems to remove MTBE at three public water supplies and is planning to install a fourth treatment system. In contrast to recent news reports, the treatment systems have been very effective in removing the contaminant. The treatment units are either granular activated carbon or air strippers which are common technologies used for removal of other petroleum compounds from water. The treatment units are paid for by the Underground Storage Tank Trust Fund, and have been installed with minimal cost to the affected water supplies.

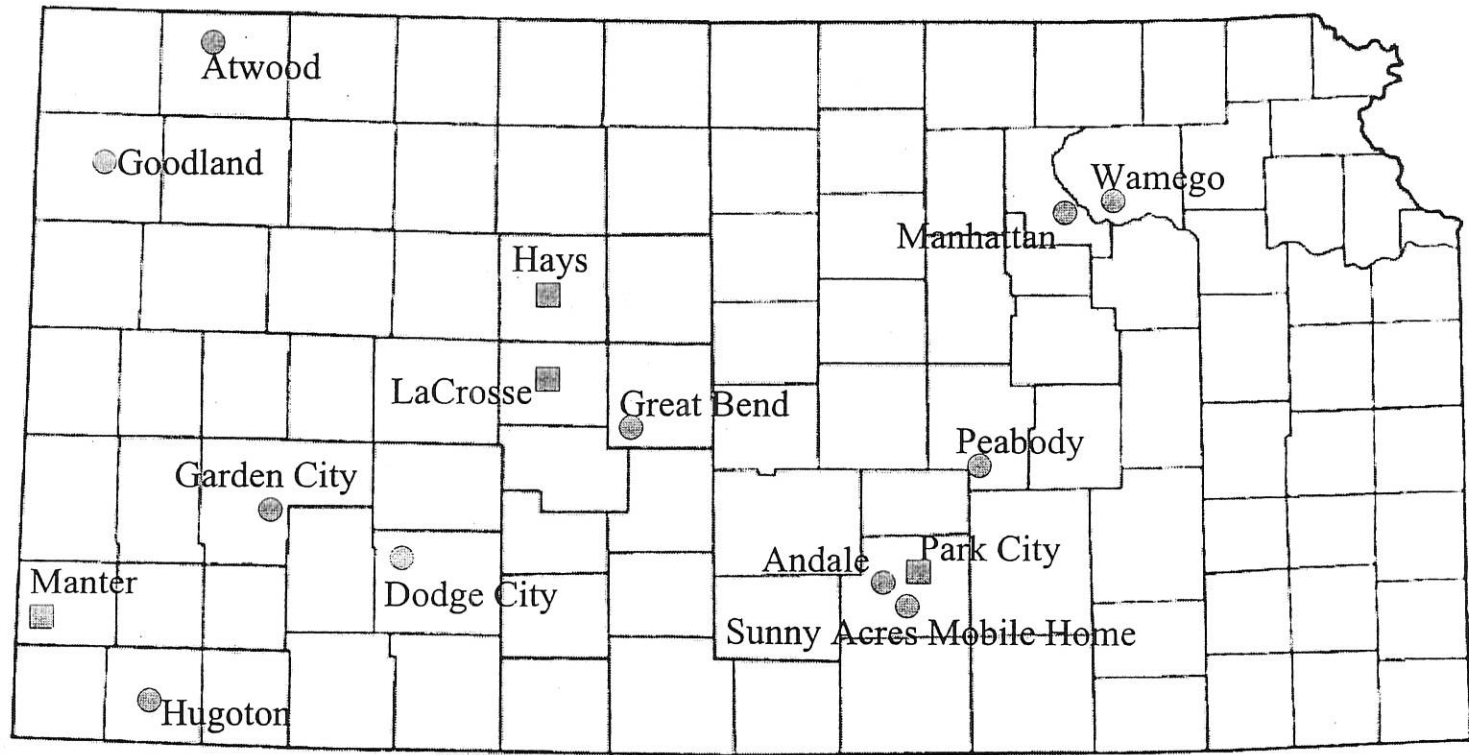
Water treatment is only part of an overall clean up project undertaken to eliminate MTBE from the soil and groundwater. KDHE has worked with owners of the underground storage tanks (USTs) to ensure that all active tanks have been upgraded to the new standards which went into effect in December of 1998. These requirements for USTs will dramatically reduce the number of releases in the future. Additionally, owners of USTs are required to perform routine testing of

tanks to detect and eliminate releases quickly.

When releases are discovered, the extent of contamination is determined and clean up efforts are undertaken to eliminate the type of impacts other states are seeing. Those actions include additional monitoring of public and private water supplies in the areas where releases are detected.

1-9
159

MtBE Impacted Public Supply Wells



■ Active Treatment System

● Impacted Public Supply Well

STATE OF KANSAS

BILL GRAVES, GOVERNOR
Jamie Clover Adams, Secretary of Agriculture
109 SW 9th Street
Topeka, Kansas 66612-1280
(785) 296-3558
FAX: (785) 296-8389



KANSAS DEPARTMENT OF AGRICULTURE

Senate Energy & Natural Resources Committee

February 3, 2000

Testimony Regarding SB 469

Mary Jane Stattelman, Assistant Secretary

Chairman Corbin and members of the Senate Energy and Natural Resources Committee, I am Mary Jane Stattelman, Assistant Secretary of the Kansas Department of Agriculture. I am here today in support of SB 469, not only because it protects the state's waters from pollution, but it also provides an opportunity for ethanol to become the oxygenate of choice, which will increase domestic marketing opportunities for Kansas grain sorghum and corn.

Much has been said and written in the past year about the prevalence of MTBE in the nation's waters, including Kansas waters. You have heard from the Kansas Department of Health and Environment (KDHE) about the extent of MTBE contamination in Kansas. Further, an EPA blue ribbon panel has recommended the phaseout of MTBE in the nation's fuel supply because of environmental concerns.

As you know, KDA routinely tests motor fuel quality in retail channels under the Weights and Measures law. KDA tests approximately 2000 samples per year. These samples are analyzed for oxygenates, including MTBE. Between 1996 and February 1999, 34% of these samples contained MTBE with a detection rate ranging from 0.1 to 15.4 volume percentage. While this bill places enforcement authority with KDHE, KDA is ready to provide KDHE with

retail sampling results to supplement any sampling done at the terminal to enforce the MTBE prohibition.

The Committee may also be aware that current Weights and Measures regulations have adopted the NIST H-130 fuels section, which requires that a pump be labeled with the predominate oxygenate if the fuel contains at least 1.5 mass percent oxygenate. Depending on the level of threat posed by MTBE to the state's waters, a response less than that outlined in SB 469 could be to enhance the NIST H-130 standard to require fuel labeling at lower levels. This approach lets the consumer make the choice with her pocketbook or his wallet.

Both of these options enhance environmental protection and are an opportunity for agriculture. Removal of MTBE from the market opens a window of opportunity for ethanol, which has served well for the past 10 years as the oxygenate of choice in certain areas, including Chicago and Milwaukee.

During calendar year 1999, Governor Graves served as Chair of the 23-state Governors' Ethanol Coalition. Last October, the GEC completed a study, "The Fate and Transport of Ethanol-Blended Gasoline in the Environment," that clearly shows ethanol's friendliness toward the environment. The study concludes that:

Because biodegradability decreases with increased chemical branching, highly branched oxygenated organic compounds, including MTBE, will have a higher residence time in the environment. In contrast, the structural characteristics of ethanol favor rapid biodegradation.

Microorganisms capable of metabolizing ethanol are widely distributed in the environment and relatively rapid rates of ethanol biodegradation have been measured under aerobic and anaerobic conditions.

Ethanol is a short-lived compound in surface waters and subsurface aquifers.

One of the primary purposes of this study was to include its results in a package submitted by the GEC to California state officials, as Gov. Gray Davis' phaseout of MTBE proceeds and opportunities for ethanol use in California expand. KDA Assistant Secretary Greg Krissek represented Gov. Graves in presenting this, and other information from the GEC, at the California Energy Commission hearings in Sacramento last November. Just last month, the California Environmental Policy Council gave ethanol a clean bill of health for the environment, paving the way for it to replace MTBE as an oxygenate in California gasoline.

The California gasoline market holds the potential for using over 200 million bushels of feed grains for ethanol production, which some economists estimate could raise the price of corn by as much as 20 cents per bushel. Gasoline marketers in the northeastern United States have also started to substitute ethanol for MTBE with similar market opportunities available for expanded ethanol use.

Chairman Corbin, we would be happy to pursue further any technical specifics you require as the committee deliberates this legislation, whether it concerns our Weights and Measures program for fuel quality or activities related to the development of markets for ethanol.



PUBLIC POLICY STATEMENT

SENATE COMMITTEE ON ENERGY AND NATURAL RESOURCES

**RE: SB 469 – Prohibiting sales of motor-vehicle fuel
containing MTBE.**

**February 3, 2000
Topeka, Kansas**

**Presented by:
Bill R. Fuller, Associate Director
Public Policy Division
Kansas Farm Bureau**

Chairman Corbin and members of the Senate Committee on Energy and Natural Resources, we certainly appreciate this opportunity to express support for SB 469. The bill prohibits sales in Kansas of motor-vehicle fuel containing MTBE. My name is Bill Fuller. I serve as the Associate Director of the Public Policy Division for Kansas Farm Bureau.

Farm Bureau support for SB 469 is based on our farm and ranch members' commitments to protecting water quality and increasing the utilization of ethanol.

Kansas Farm Bureau member-adopted policy encourages additional efforts to prevent contamination of groundwater and surface water in Kansas. KFB policy contains statements calling for protecting, enhancing, improving and protecting water quality.

Recent news reports have identified methyl tertiary-butyl ether (MTBE) as a pollutant in several groundwater sources in Kansas. MTBE is an octane enhancer and is used to make gasoline burn cleaner and produce less air pollution. It is very soluble in water and has been found in soil and groundwater

Senate Energy & Natural Resources

Attachment: 3

Date: 2-3-2000

near leaking storage tanks. We are fortunate that the Kansas Department of Health and Environment is ahead of many states in detecting, monitoring and developing treatment systems to remove MTBE from public water supplies. However, the fact remains that MTBE pollutes water and is present at a number of sites in Kansas.

We believe Kansas has a good alternative to MTBE. The grain rich state of Kansas produces an abundant supply of ethanol. This renewable product protects air quality, reduces the severe water quality risk and provides another market for Kansas grain. Record low grain prices are causing economic stress in farm country. Additional grain marketing opportunities result in stronger grain prices. This would be good for the Kansas economy.

We appreciate this opportunity to express our support for SB 469 that would achieve the desirable goals of protecting water quality and increasing the utilization of ethanol.

Thank you!

Testimony in Support of S.B. 469
On behalf of the Kansas Natural Resource Council and
the Kansas Chapter of Sierra Club

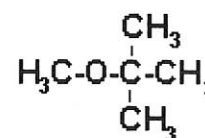
by
Charles Benjamin, Ph.D., J.D.
Attorney at Law
410 Boulder St.
Lawrence, KS 66049



MTBE
(methyl tertiary butyl ether)

Office of Underground Storage Tanks

MTBE



MTBE in drinking-water sources is of concern because it is a possible human carcinogen and it has low taste and odor thresholds which can make a water supply nonpotable even at low concentrations. Although there is no established drinking-water regulation, USEPA has issued a drinking-water advisory of 20 to 40 micrograms per liter ($\mu\text{g/L}$) on the basis of taste and odor thresholds. This advisory concentration is intended to provide a large margin of safety for noncancer effects and is in the range of margins typically provided for potential carcinogenic effects.



MTBE FAQ 4:
What are the health effects of MTBE?

Office of Underground Storage Tanks

MTBE is a *potential* human carcinogen. Although tests on rats have demonstrated that MTBE can cause cancer in animals, no studies have yet been completed to determine if MTBE causes cancer in humans. Preliminary data suggests that *if* MTBE does cause cancer in humans, the dosage required is much higher than the levels at which MTBE can be tasted or smelled in drinking water.

Non-cancer effects of exposure to (or ingestion/inhalation of) MTBE include: headaches, eye irritation, nose and throat irritation, cough, nausea, dizziness, and disorientation.

Mr. Chairman, members of the Committee, because of the potential human health effects of MTBE, as described by the EPA (reprinted from their web site above), we support this bill. However, we hasten to point out that there are probably a lot worse things in gasoline than MTBE. Leaking underground storage tanks or pipelines should be dealt with as just that.

We sympathize with the plight of family farmers in Kansas and elsewhere. However, promoting ethanol production as a substitute for MTBE is not the answer. So far as we can determine ethanol production is a net energy loser. Supporting ethanol at this time further promotes the corporate corn economy and encourages further environmental degradation - including soil erosion and the use of increasing amounts of atrazine (a known carcinogen and endocrine disrupter that is harmful to human health and the ecosystem of our surface waters).

The KNRC/Sierra Club position on this issue is that we support a total life cycle analysis of alternative gasoline additives and formulations. We would also like to see the federal and state governments take measures to promote increasing the fleet average fuel economy, encourage mass transit and sound urban planning to reduce the need for and usage of the automobile in major urban areas where the worst air quality problems exist.

Thank you for your time and attention.



WRITTEN TESTIMONY

TO: Kansas Senate Energy and Natural Resources Committee
FROM: Jere White, Executive Director
DATE: 3 February 2000
SUBJECT: Senate Bill No. 469

The Kansas Corn Growers Association and Kansas Grain Sorghum Producers wish to submit this testimony in support of S.B. 469, a bill that would eliminate the use of MTBE in Kansas.

We agree that MTBE appears to pose serious threats to the groundwater of Kansas. We also believe that there might be a need for a threshold that could provide for a level of minor content of MTBE in Kansas, while the federal government sorts through its response to this issue. For instance, the small amounts that might be related to residues in pipelines should be considered.

In previous discussions related to MTBE and the labeling of it on Kansas fuel pumps a few years back, the oil industry had tried to blow off MTBE as a non-issue because it wasn't really used much in Kansas. Experience in other states would indicate that a failing storage tank leaking fuel with MTBE is a concern, regardless of the prominence in sales. The fact is that we currently have groundwater detections of MTBE in Kansas.

MTBE should be of particular concern to our state in our metropolitan areas, such as Wyandotte and Johnson Counties. While the role that Reformulated Gasoline (RFG) will play in those markets is unsure, there likely will be a fuel issue that remains. MTBE has been used for both octane and oxygen. But ethanol can be used for the same purposes. Some would suggest that eliminating the oxygen requirement in RFG is a solution. However there is a sound reason why the federal Clean Air Act requires gasoline in some areas to be blended with an oxygenate such as MTBE or ethanol. The U.S. Environmental Protection Agency credits reformulated gasoline with significant clean air improvements in many of America's cities. Eliminating the oxygenate requirement is not the answer. Ethanol is.

Ethanol is a domestically produced, renewable resource made from corn, grain sorghum and other agricultural feedstocks. It provides the clean air benefits of an oxygenate without the negative environmental and health effects of petroleum-based MTBE. The State of California recently confirmed that ethanol does not have negative environmental issues associated with its distribution and use.

Contrary to what some in the petroleum industry would have you believe, the U.S. Department of Agriculture and other sources indicate that ethanol could successfully replace MTBE nationwide by 2004 - with negligible effects on gasoline prices and no disruption in supply.

Because of this tremendous potential, expanding the ethanol market is one of the top priorities of the KCGA, NGSPA and our national affiliates. Growing value-added markets such as ethanol is especially important at a time when farmers are facing near-record low commodity prices.

Replacing MTBE with ethanol is good for farmers, good for consumers and good for the environment.

P.O. BOX 446, GARNETT, KS 66032-0446 • PHONE (785) 448-6922 • FAX (785) 448-6927

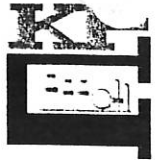
www.ksgains.com/corn • jwhite@kanza.net

Senate Energy & Natural Resources

 PRINTED ON RECYCLED PAPER •  PRINTED WITH CORN

Attachment: 5

Date: 2-3-2000



Testimony on Senate Bill 469, MTBE Ban in Motor Fuel

**Offered by the Kansas Petroleum Council
To the Senate Environment Committee
February 3, 2000**

Mr. Chairman and members of the Committee, my name is Ken Peterson. I am director of the Kansas Petroleum Council, a trade association that represents several refiners who supply motor fuel to all parts of our state. I appreciate the opportunity to offer these comments on Senate Bill 469, legislation to ban the use of MTBE in motor fuel starting July 1 of this year, a mere five months from now.

The issue of MTBE is quickly attracting national attention. Local and national news stories have generated a lot of public debate. The EPA's blue ribbon panel report on MTBE, as well as California's decision to phase out the use of MTBE, have increased interest in the issue at the federal and state government level. Discussions about MTBE are going on within the refining and fuel supply industry as well.

Because a uniform national policy surrounding MTBE is still evolving, we believe that a state-focused ban is premature at this time. The July 1 deadline is too short for companies to react. Even in states where bans have been considered and debated – and this issue is especially intense in California and New England - all allowed MTBE to be phased out over a period of years. In 1999, Iowa restricted the amount of MTBE in their gasoline with the knowledge that no MTBE was in their current gasoline supply. Refiners were not affected in Iowa. They would be in Kansas.

In the most widely publicized case, the Governor of California issued an executive order to ban MTBE over a period of three years, eight months – or until December 31, 2002, and that was after almost 14 months of prior study and public debate. The California phase-out takes into account current usage of MTBE and the changes that refineries must make to switch to another option.

Based on a survey of several refiners who provide fuel in Kansas, we found that MTBE is used in limited amounts by some as an octane booster for premium gasoline. If a ban is enacted, suppliers using MTBE in Kansas would have to find a replacement. The options are few.

Fuel suppliers will need time to adjust to an MTBE ban. Any significant change in a refining process requires about a four-year lead time to make the necessary changes. In July of 1999, a blue ribbon panel established by the EPA to study MTBE and other oxygenates pointed out that MTBE is an integral component of gasoline both as an

Senate Energy & Natural Resources

Attachment: 6

Page 2

oxygenate and an octane enhancer. Changes or reductions in the use of MTBE must be implemented with sufficient time, certainty and flexibility to allow fuel suppliers to maintain the stability of supply system and gasoline prices, the panel concluded.

A state prohibition on MTBE use is not an ideal approach. Fuel suppliers believe the policies governing the use of MTBE should be set nationally, not locally. A resolution of this complex issue will likely require negotiation on several key issues between the industry and other major interests. A switch from MTBE requires considerable time for refineries to make the necessary changes in facilities and operations.

Kansas should not become an island on the MTBE issue, an exception that would create hardships not only for fuel suppliers but for consumers as well. Supply interruptions and price spikes are almost one of the inevitable results if this legislation becomes law.

We would prefer that the federal government set fuel performance standards. Refiners would develop the best ways to meet them, and that may or may not include oxygenates.

Finally, a word on the legal aspects of an MTBE ban. The Clean Air Act requires all states, except California, to get EPA's approval before imposing controls on fuel characteristics or components different from what EPA has already imposed. Since the EPA has imposed controls applicable to oxygenates for both RFG and conventional fuel, Kansas will likely need to obtain a waiver from EPA. Maine and the blue ribbon panel have already recognized the Clean Air Act arguments and requirements.

While well-intended on a variety of fronts, we encourage the Kansas Legislature to reject an MTBE ban.

Thank you.