On December 19, 2003, California Superior Court Judge Stephen J. Sundvold closed one chapter in the City of Santa Monica’s ongoing seven year struggle with Metyl tertiary-Butyl Ether (“MtBE”) contamination of its drinking water. On that day Judge Sundvold approved settlements between Santa Monica and various oil companies that the companies valued at more than $200 Million. Even as other chapters are being written, this is how the City got here.

During 1996 the lion’s share of the City of Santa Monica’s drinking water became unusable and so began the City’s worst and so far longest lasting environmental disaster. That year a significant amount of MtBE found its way into Santa Monica’s main public drinking water aquifer. Before long the City lost nearly 50% of its total water supply and nearly 70% of its ground water production to what is supposed to be a gasoline additive. The City went from relying on its own water resources for almost 80% of its water needs to just the opposite. The City now had to buy water from outside agencies at an additional annual cost of approximately $3 Million. In often parched southern California this was a crisis writ large. Drinking water had become a waste in every sense.

With a resident population of almost 90,000, which swells during workdays to beyond 250,000, the City could ill afford to be without a permanent water supply. In fact, since the early 1900’s a local and reliable water supply had saved the City more than once. During the early part of the last century ownership of a water supply allowed Santa Monica to resist being swallowed up by an expanding and surrounding City of Los Angeles. And the availability of local water let the City ride out the devastating aftermath of the 1994 Northridge earthquake with no interruptions in water service.

Yet to Santa Monicans the loss of their water supply to MtBE represented more. For a community that has long prided itself on its environmental awareness, and on numerous trend setting and award winning environmental programs, MtBE contamination hit a particularly raw nerve. In response, as much as any City could, the City vowed to restore its water supply at no cost to the public and to do its utmost to make sure that no other communities faced the same fate.

Setting this as a goal is one thing. Figuring out how to do it is much harder. At first it was often a lonely effort. In 1996 few people involved in supplying drinking water knew what MtBE was or how it got into drinking water. Then almost no MtBE drinking water standards existed. Little was known about the long term health effects of ingesting MtBE. To compound matters MtBE was just starting to be praised as the
solution to California’s infamous air pollution problems. During the mid 1990’s, as part of the 1990 Clean Air Act amendments, MtBE had been introduced into California’s gasoline supply to do just that.\textsuperscript{9} Not many in the regulatory community wanted to believe that the long sought after solution for cleaner air came at the expense of clean water.

Yet the City learned and then cobbled together a response. The City discovered that MtBE added to gasoline could leak from underground storage tanks at service stations or from pipelines. Once it escaped MtBE readily traveled through soil and reaching water, bonded almost completely with it. Under natural conditions, MtBE biodegraded slowly, if at all. Many current and former service stations and pipelines surrounded the City’s water wells, which provided numerous potential sources for any MtBE leaks.\textsuperscript{10}

Faced with many unknowns the City had no choice but to act on many fronts. In California the City aggressively pursued legislative initiatives.\textsuperscript{11} These led to research studies and to the establishment of primary and secondary drinking water standards for MtBE.\textsuperscript{12} Legislation required water agencies to test for and to report the presence of MtBE in drinking water. Also in California the City sponsored legislation, which ultimately led to a statewide ban on the use of MtBE in gasoline, and which took effect January 1, 2004.\textsuperscript{13}

The City partnered with federal and state environmental agencies and with other water agencies. The City convinced EPA and its California equivalents of the need for them to become involved. On a national level the EPA formed a “Blue Ribbon” committee to study MtBE and its potential impact on drinking water.\textsuperscript{14}

But still Santa Monica had to solve the problem of getting MtBE out of its drinking water and also of finding and holding responsible all who allowed MtBE to get into the drinking water in the first place. Believing that non-litigation approaches should be tried, the City first sought negotiated solutions. In 1997 the City entered into one such agreement with two oil companies.\textsuperscript{15} Unfortunately the agreement dissolved in early 2000.

Again the City sought the assistance of federal and state agencies, but this time enforcement was the goal. Among other orders, the EPA Region 9 and the Los Angeles Regional Water Quality Control Board issued parallel orders that required companies to reimburse the City for the City’s cost of purchasing “replacement” water from other sources.\textsuperscript{16}

Then in June 2000 the City sued a veritable who’s who of the oil industry in California state court.\textsuperscript{17} The lawsuit sought compensatory and punitive damages, and raised claims for strict liability, negligence, trespass, and nuisance. The City did not include any federal claims.

During early fall 2002 the first significant breakthrough occurred. ChevronTexaco and Exxon Mobil agreed to a joint settlement with the City.\textsuperscript{18} A few
months later Shell agreed to join with them. Other companies too then agreed to settle. As this is being written all but one company, Lyondell Chemical Company, has agreed to settle. The litigation against Lyondell Chemical Company continues. All total the court has now approved settlements that the companies have valued in their court filings at more than $200 million.

As significant as this is, and in the relatively early stages of MtBE contamination lawsuits it is unprecedented, the City is not yet home free. Several more years will pass before Santa Monica’s drinking water can be used. Before this happens, treatment technologies must be agreed upon. A treatment plant must be designed, built and permitted. Once operational, the plant will certainly have to run for several years and may have to run for decades, before all of the MtBE is removed from the City’s water supply. Current belief is that it will be perhaps another 3-5 years before the wells are placed back in use and the first water free of MtBE is delivered from a treatment plant to the public. Until that day arrives, the City will need to continue to purchase water from other sources, which the companies will also continue to pay for.

There are many lessons in this. First, the best of intentions, particularly when combined with misfeasance and malfeasance, can lead to disastrous results. MtBE was introduced into the nation’s fuel supply ostensibly to improve air quality, no doubt a laudable goal. Nonetheless at the regulatory level inadequate risk analysis occurred and the potential for MtBE to cause water contamination was not thoroughly examined. As bad as this was, worse was the fact that there were some, especially in the oil and chemical industries, who knew well the risks to water that existed if MtBE was added to gasoline. Yet for the most part they failed to warn appropriate governmental agencies, the public and even others in their industry of all of the risks. The industry failed to put in place adequate safeguards to protect against MtBE leaks. Second, perseverance and tenacity do matter. The public and its most precious natural resources can be protected, but those who serve the public must unflinchingly demand that this happen. Third, companies can act to protect their corporate interests and also can act to responsibly protect the public’s interest. These are not mutually exclusive. However, the longer they wait to do this, the riskier their odds. Delay is not always its own reward. As happened here, the longer the wait, the costlier the outcome. Ultimately MtBE wasted more than Santa Monica’s water. Corporate bank accounts too took a hit. By resisting early resolution, companies later paid exponentially more. Moreover, MtBE as a profit center has been now jeopardized or worse, a foolish outcome and one that was completely avoidable had different corporate choices been made.

Postscript

An update. Since this article was presented in 2004, some things have changed. Lyondell settled with the City for $3.5 Million, bringing to a close the lawsuit filed in 2000. The 2003 settlement agreement between the City of Santa Monica and Shell, Chevron and ExxonMobil proved unsatisfactory and for the parties, increasingly unworkable. Under that settlement agreement the parties were to work together to design, build and then operate a MtBE treatment facility with all costs being borne by the
companies, not the City. In the years following the 2003 settlement, delays and disputes arose over several matters and cleanup timelines slipped.

Because of these difficulties in 2006 the City and Shell, Chevron and ExxonMobil amended their 2003 agreement. Under the 2006 revised agreement, the companies paid the City an additional $132 Million in cash. In exchange the companies were relieved of all other obligations to fund a treatment facility’s costs. They also had no further say over how that facility was to be designed, constructed or operated.

Counting the 2006 amended settlement agreement, the City ended up recovering $252 Million in cash from the various companies it sued, by far the largest MtBE recovery received by any community and among the largest, if not the largest, cash recovery amount received by any city for resolving any kind of dispute, and certainly the largest by a modest sized city like Santa Monica.

Today, construction of a MtBE treatment facility is well underway. When completed, it will be the largest of its kind in the US. The treatment facility is scheduled to be completed in December 2010. When it comes on-line, the City will once again be able to use its primary drinking water supply without fear of MtBE contamination. Water will just be water again.

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1 This paper was first presented at the “Environmental Law Conference at Yosemite” sponsored by the State Bar of California Environmental Law Section, October 22, 2004. A 2010 postscript and update has been added to the original.

2 City of Santa Monica v. Shell Oil Co. et al., Case No. 01CC04331 (Superior Court, Orange County), Motion for Determination of Good Faith Settlement filed by ChevronTexaco Corp., Exxon Mobil Corp. and Shell Oil Co.

3 Before Santa Monica shut its drinking water wells, MtBE levels in one well alone exceeded 600 parts per billion (ppb). At that time the California “action level” for MtBE was 35 ppb.

4 MtBE has been used in gasoline in varying percentages since 1979. At first it replaced lead as an octane enhancer. During the 1990’s it gained wider use, and the percentage of it in gasoline increased, as it was used to meet requirements of the 1990 Clean Air Act amendments.

5 The City’s wells were closed in 1996 and remain closed today. As a result, the City purchases water (“replacement” water) from the Metropolitan Water District, which in turn gets most of its water from the Colorado River and from northern California.

6 Ironically, during ensuing years and continuing to this day, whenever various tests are conducted on the City’s aquifer, the City needs NPDES permits just to discharge its one time drinking water into storm drains, all because of the still high levels of MtBE in the aquifer.

7 In 1996 California left it up to individual water purveyors to decide whether they wanted to deliver MtBE contaminated water to the public, even if it exceeded the state “action level” of 35 ppb.
Then as now the scientific community is divided over how serious a human health threat MTBE poses. Some claim that it is a possible human carcinogen, while others disagree. Fewer disagree that MTBE’s strong odor renders MTBE laced water unmarketable to the general public even when small amounts are present in water.

As part of the 1990 Clean Air Act amendments, Congress mandated the use of oxygenates in so-called “reformulated gasoline” with the goal of reducing motor vehicle air pollution. For a variety of reasons, gasoline refiners and suppliers opted to use MTBE as their primary oxygenate in reformulated gasoline.

The City’s aquifer actually lies just outside of Santa Monica, within the City of Los Angeles, in the west Los Angeles area. Dozens of active and former gasoline service stations, each with underground storage tanks, are within a mile or two of the well field and lie within the aquifer’s capture zone. In addition, two major gasoline product pipelines traverse within a few hundred feet of the well field. When the well field was first developed during the 1920’s the area was largely farmland and ranches. Now it is highly urbanized.

For instance the City sponsored SB 521, which required the University of California to study whether MTBE presented a serious environmental risk and to report its findings to the governor. Other legislation set aside state funds so that water agencies could begin the treatment and the clean up of MTBE contaminated water supplies.

In response to legislative initiatives the California Department of Health Services established a “primary” maximum contaminant level (MCL) for MTBE of 13 ppb, and a “secondary” MCL of 5 ppb for taste and odor. These MCLs superseded the earlier “action level” of 35 ppb.

Pursuant to Executive Order D-5-99 in March 1999 then California Governor Gray Davis declared that MTBE posed a significant risk to the environment in California. He ordered the phase out of MTBE by December 31, 2002. This phase out deadline was later extended to December 31, 2003. Today MTBE can no longer be legally added to gasoline sold in California.

In November 1998 then US EPA Administrator Carol M. Browner appointed a Blue Ribbon Panel to look into the air and water quality concerns associated with the use of oxygenates in gasoline. The Panel issued its report in September 1999 and it concluded “that MTBE, due to its persistence and mobility in water, is more likely to contaminate ground and surface water than the other components of gasoline.” “Achieving Clean Air and Clean Water: The Report of the Blue Ribbon Panel on Oxygenates in Gasoline”, p. 2 (Sept. 15, 1999).

The agreement was with Chevron Products Co. and Shell Oil Products Co. Later Exxon joined the agreement. Under the terms of this agreement these companies reimbursed the City for the City’s added costs to buy replacement water, and the companies began to explore how to remove MTBE from the drinking water supply.

In September 1999 the EPA exercised its authority under section 7003 of the Resource Conservation and Recovery Act (“RCRA”), 42 U.S.C. section 6973, and issued a water replacement order to Shell Oil Company and various of its subsidiaries. EPA Docket No. RCRA-7003-09-99-007. Later orders were directed at other companies to participate and cooperate in water replacement. EPA Docket No. RCRA-7003-09-2000-0002. Other orders were issued which dealt with investigative concerns.

Those sued included, among others, Shell Oil Company, Chevron Corporation, Atlantic Richfield Company, Mobil Corporation, ExxonMobil Corporation, Tosco Corporation, Ultramar Inc., Texaco Refining and Marketing, Unocal Corporation and Lyondell Chemical Corporation.
City of Santa Monica v. Shell Oil Company et al., Case No. 01CC04331 (Orange County Superior Court).

18 The settlement was a “sliding scale” agreement and provided among other things, that these companies pay Santa Monica $30 Million and in addition agree to guarantee to pay for all costs related to the construction, operation and maintenance of a MtBE treatment facility.

19 In addition to the terms outlined above, n. 18, and some other provisions, Shell also agreed to pay the City another $62.5 Million.

20 These other settlements involved cash only payments to the City. In total these other companies have agreed to pay the City more than $26 Million.

21 See n. 2 above.