

Mattapoissett Board of Health
16 Main St.
Mattapoissett, MA 02739

July 23, 2001

re: elevated MTBE concentrations in a Mattapoissett stormwater discharge pipe

Honorable Board Members:

The Buzzards Bay Project has documented elevated MTBE (methyl tert-butyl ether) concentrations in a stormwater discharge pipe serving Route 6 at Tub Mill Brook (see attached map, station TMB3). The concentration in the discharge was 3.5 micrograms per liter (parts per billion). The laboratory's report is attached.

This work was undertaken in a joint Buzzards Bay Project-Coalition for Buzzards Bay initiative to identify problematic stormwater discharges emanating from state highways in the Buzzards Bay watershed. Although the observed MTBE concentrations are modest (our laboratory's detection limit is 2 micrograms per liter), the finding is significant for these reasons.

- ! The Buzzards Bay Project analyzed stormwater from five discharge pipes along Route 6 and 195 in the Buzzards Bay watershed for organic hydrocarbons. This was the only site with detectable MTBE in the discharge.
- ! MTBE is an additive to gasoline. One of the reasons that this site was selected for monitoring was that previously an obvious odor of gasoline was detected at this discharge pipe by Buzzards Bay Project staff.
- ! MTBE may enter storm drains via surface runoff of spilled gasoline, but the absence of other hydrocarbons (see laboratory report) in the stormwater may be an indication of a possible groundwater gasoline spill. That is because MTBE is readily soluble in groundwater, whereas gasoline is not.

While the observed MTBE concentrations are not cause for immediate concern, it does suggest additional monitoring of this site is warranted. This week we will attempt to collect samples during a dry period at the mouth of the pipe and in Rt. 6 catch basins to determine if this problem is persistent. We will apprise you of these results when we receive them.

Sincerely,

Dr. Joe Costa,
Executive Director

cc. Nick Nicholson, Water Department