

David L. Smith

Different gas stations, different risks

The argument in support of a gas station at the former Boyle's Market on the border of Ossipee and Effingham centers on the claim that gas stations are safer than ever. Or, in the words of the applicant's agent, Mark McConkey, they are practically "fail-proof."

Last year, the "fail-proof" claim and DES's approval of permits for the underground storage tanks (USTs) helped persuade Effingham's ZBA to grant McConkey's client, Meena LLC, relief from the town's prohibition against new gas stations in the Groundwater Protection District. It's an argument that continues to be used as a rationale for the ZBA approval, even though it only tells part of the story.

Gas station equipment is better than it used to be, thanks to regulations mandating improved environmental protections. Double-walled tanks, automated alarms and related improvements in USTs have lowered risk, and there have been improvements above ground as well, including automatic shut-off valves for hoses.

Despite that, DES' latest gas station Environmental Fact Sheet (2020) reminds us that regulators and equipment designers have not succeeded in eliminating all groundwater contamination risks. Each year DES publishes data showing spills and leaks continue to be a fact of life. In Carroll County alone, there have been nine spills of more than 10 gallons in recent years, including a 2020 spill in Bartlett that released 45 gallons.

So, here's the rub: While the risk of a major gas leak or spill has been lowered, it is not zero and that makes where a gas station is located a critical factor.

Consider two new gas stations, both with state-of-the-art tanks and technology. Both have experienced operators and on-site personnel trained in DES' best management practices. We can assume the risk of a contamination event at both sites has been lowered, but is not zero.

Let's further assume that one station is situated in the kind of location DES recommends (which is away from drinking water sources) and the other is the Meena LLC property, a former gravel pit with highly transmissive soils sitting atop the region's drinking water supply and adjacent to dozens of residential wells and a tributary that empties into Ossipee Lake.

The risk of a major gas spill is identical for both stations — reduced, but not zero. But if a major spill were to occur, the results would be quite different. A major spill at the first site could likely be contained and

mitigated, while the environmental impact at the Meena LLC site would likely be catastrophic, with gasoline entering the aquifer and migrating to private wells and beyond.

As we said, what Mr. McConkey told the ZBA last year about the equipment and permits was only half the story. The other half concerns the high level of risk embedded in

a worst-case scenario in which the location will determine the level of environmental damage.

DES has something to say about locations in its aforementioned Environmental Fact Sheet. It advises that even in an age of improved gas station equipment, the "likelihood" of spills, leaks and contaminants in stormwater runoff means towns should "consider restricting the siting of gas

stations as they would any other land use that is likely to contaminate groundwater."

Further: "If the municipality's zoning ordinance prohibits the location of certain high-risk land uses in wellhead protection areas, aquifer protection areas, or other areas of high-value groundwater, gas stations should be considered for inclusion in the list of prohibited land uses."

The state doesn't mandate these protections in the same way that it regulates USTs. Instead, it delegates responsibility to the towns, 109 of which have created groundwater ordinances. That includes Effingham, where gas stations are prohibited in aquifer protection areas like the former gravel pit where the applicant proposes to pump gas — the site the ZBA last year said was suitable for a gas station because "the tanks are fail-proof and DES issued permits."

Since that ruling, more than 850 people have viewed Dr. Bob Newton's video about why the Meena LLC site is the "worst possible location" for a gas station. Additionally, the site plan application has been determined to be a Development of Regional Impact (DRI) affecting ten communities, some of which plan to exercise their abutter status and take a figurative "seat at the table" when Effingham's planning board begins deliberations on April 7.

As Effingham planners prepare for that hearing, we hope they will consider the example of how two new gas stations can present the appearance of having the same low risk to the public's health and safety while actually having a much higher level of risk based on location.

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