

We're all inhaling a toxic cloud of benzene from gas

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Link

<http://www.oregontoxics.org/benzene/resources>

Letter writers remind Statesman Journal readers almost daily how much cheaper gasoline would be if only Oregonians were allowed to pump it themselves.

However, no one ever mentions a long-term cost of self-serve gasoline: increased exposure to benzene, one of Environmental Protection Agency's 10-most-wanted carcinogens.

According to the state Department of Environmental Quality, Oregon's gasoline has one of the highest benzene levels in the country, probably because refineries to the north and south use Alaskan crude oil, which naturally is higher in benzene.

Oregon also has a high rate of breast cancer (Washington has the nation's highest rate), yet residents routinely are told that it has nothing to do with chemicals and more to do with better reporting methods and Vitamin D deficiencies because of cloudy weather.

According to Environmental Protection Agency, there is no safe level of benzene exposure. California gas stations all post signs warning pregnant women, the young, the old, the chronically ill and everyone in between that chemicals known to cause cancer or death are present.

I know because I designed and wrote the copy for them when I worked for a nonprofit back in the '80s BC (before children).

There is a direct link between benzene exposure and cancers of the blood and possibly bone, but few like to talk about it publicly.

Lisa Arkin, the executive director of Oregon Toxics Alliance, is an exception. She is eager to cite studies showing that children living within a couple of blocks of gas stations not using preventive measures to control vapors have a higher chance of developing leukemia.

She also works to get the word out that benzene is considered a genetic mutagen, making me glad that when I was working and pregnant in Los Angeles, I paid more to let someone else pump my gasoline.

The online journal Genetics and Molecular Research doesn't mince words. It cites a 1991 Grandjean and Anderson study, which found a "direct correlation between cancer and occupational exposure." The study reported that "lung cancer is the major cause of death among workers chronically exposed to petroleum derivatives (benzene is one)."

That's one chemical I don't want to pump weekly, or even monthly for those people driving hybrids.

A 2006 EPA rule reducing Oregon's benzene levels in fuel hasn't altered the benzene content significantly. So every day, gas-station workers and fuel-truck drivers inhale benzene from the fuel tanks and pumps, and get an extra shot at a shorter life by breathing in exhaust vapors from cars.

And some noisy Oregonians want self-serve to save a few cents per gallon?

No thanks.

Arkin said OTA does not support self-service gasoline for myriad reasons.

"At least gas station workers and fuel-truck drivers are ostensibly protected from their occupational hazards by OSHA (Occupation & Safety Health Administration), which covers benzene exposure," Arkin said. "It's bad enough to expose these workers. But the public isn't trained or protected. We don't support exposing more people to more risk factors."

Citing a Lane County Regional Air Protection Agency release, Arkin said 1 ounce of spilled gasoline causes as much fume or vapor release as driving a car 56 miles. It tracks easily on clothing and shoes into cars.

OTA has sought to limit benzene exposure since 2000, and it's making headway.

Last fall, it helped persuade Lane County commissioners to adopt a benzene-reduction policy. Cities such as Creswell and Corvallis are following suit.

The effort was part of a three-pronged campaign to help communities reduce residents' exposure to the cancer-causing agent benzene.

To start, OTA recommends that communities require all gas stations to use a dual-hose system for filling underground tanks. Many newer stations already employ this technology, but retrofitting and requiring older stations to comply is the organization's goal.

Dual-hose systems capture displaced vapor from filled fuel tanks, store it and return it to refineries to be reprocessed into product.

"That keeps vapors out of the air and also reuses them," Arkin said.

The second OTA goal is to urge gas-station attendants not to top off fuel tanks.

Many newer cars have vapor-lock systems that click off to allow room for vapors to expand into the neck of the tank. Topping off overrides this function and allows vapors to leak into the air. Drivers inhale quite a bit of fume along with the station workers.

Finally, OTA is urging "no idling" policies anywhere and everywhere.

Most gas-station attendants require that engines be turned off before tanks are filled, but that's not helping in the drive-through lines at banks, restaurants and schools.

An invisible cloud of benzene vapor from exhaust and fuel tanks is being inhaled by workers, drivers, passengers and passers-by alike. No one is spared. And if you think the vapor cloud just hangs in the air, think again.

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