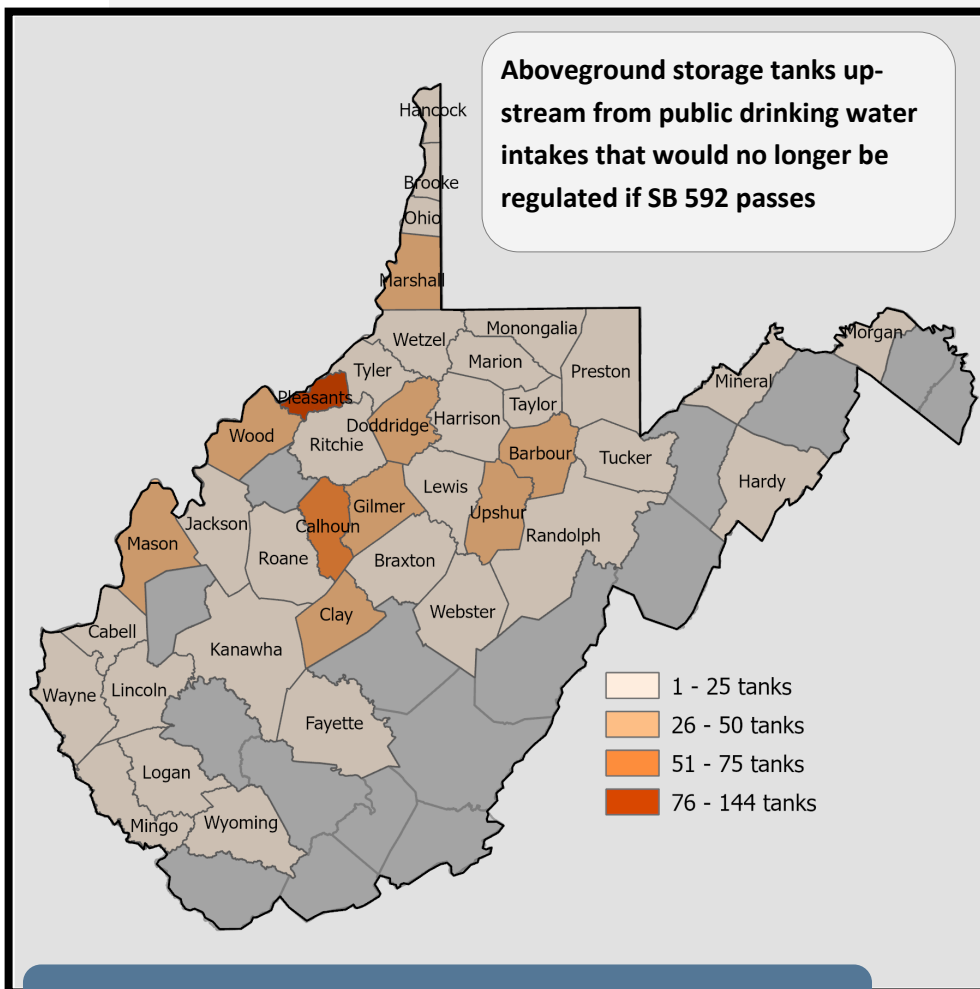


SB 592 would endanger drinking water quality across West Virginia.

PROTECTING DRINKING WATER FROM OIL AND GAS WASTE TANKS

Proper regulation of oil and gas waste tanks is needed to prevent leaks and releases into waterways that can contaminate drinking water. The intent of SB 592 is to remove regulations on approximately 700 aboveground storage tanks across 39 counties, which are currently regulated under the Aboveground Storage Tank Act. Of these tanks, 666 are oil and gas waste and transmission tanks that contain fluids harmful to human health. Many are upstream from, and close to, public drinking water intakes that draw water from rivers and streams.



System	Number of tanks
City of Belmont	128
Grantsville Municipal	52
Union Williams PSD	49
Clay-Roan PSD (Procious District)	41
Town of West Union	37
Buckhannon Water Board	31
Glenville Utility	29
Town of Belington	28
Covestro	27
Mason County PSD - Crab Creek	27
West Virginia American Water - Weston	22
Vienna	19
City of West Hamlin	19
City of Philippi	15

Public water systems across West Virginia may be impacted by leaks or spills from oil and gas tanks.

SB 592 intends to remove regulations from approximately 666 oil and gas production and transmission tanks, across 39 West Virginia counties.

Sources: Number of oil and gas waste tanks that would become unregulated derived from DEP's Aboveground Storage Tanks Database provided by DEP Cabinet Secretary in response to FOIA Request by Lucia Valentine, Lobbyist for the West Virginia Environmental Council, February 25, 2025*

SB 592 would endanger drinking water quality across West Virginia.

ZCC

A zone of critical concern, or ZCC, is the area alongside streams located upstream from a public water system's intake or well. Under the Aboveground Storage Tank Act, oil and gas waste tanks and other aboveground storage tanks in ZCCs must be inspected and maintained to protect nearby downstream drinking water sources from leaks or spills. ZCCs include upstream areas that would deliver contaminants to an intake or well within five hours.

It is important to regulate tanks in ZCCs

The raw water drawn by drinking water intakes can be contaminated by pollution in the immediate vicinity of the intake or well. But it can also be contaminated by a leak or spill that occurs upstream and is transported to the intake or well by a river or stream.

If pollution flows downstream to a surface water intake, the public water system can immediately become contaminated. This is what happened in 2014 when the chemical leak in the Elk River contaminated West Virginia American Water's system.

Pollutants in oil and gas waste tanks can contaminate public drinking water

Public drinking water systems are vulnerable to pollution from oil and gas waste tanks. This is because a portion of the pollution from these tanks is soluble and will dissolve in water.

Timeline

2014

- Thousands of gallons of chemicals leak from an aboveground storage tank into the Elk River, contaminating the water supply for 300,000 West Virginians.
- The Legislature passes the Aboveground Storage Tank Act to ensure that tanks are properly inspected and maintained.
- The Legislature also requires public water systems to take steps to minimize the risk of chemical contamination.

2020

- House Bill 4079 introduced but not placed on a committee agenda. This bill would have exempted oil and gas waste tanks in ZCCs from regulation.

2021

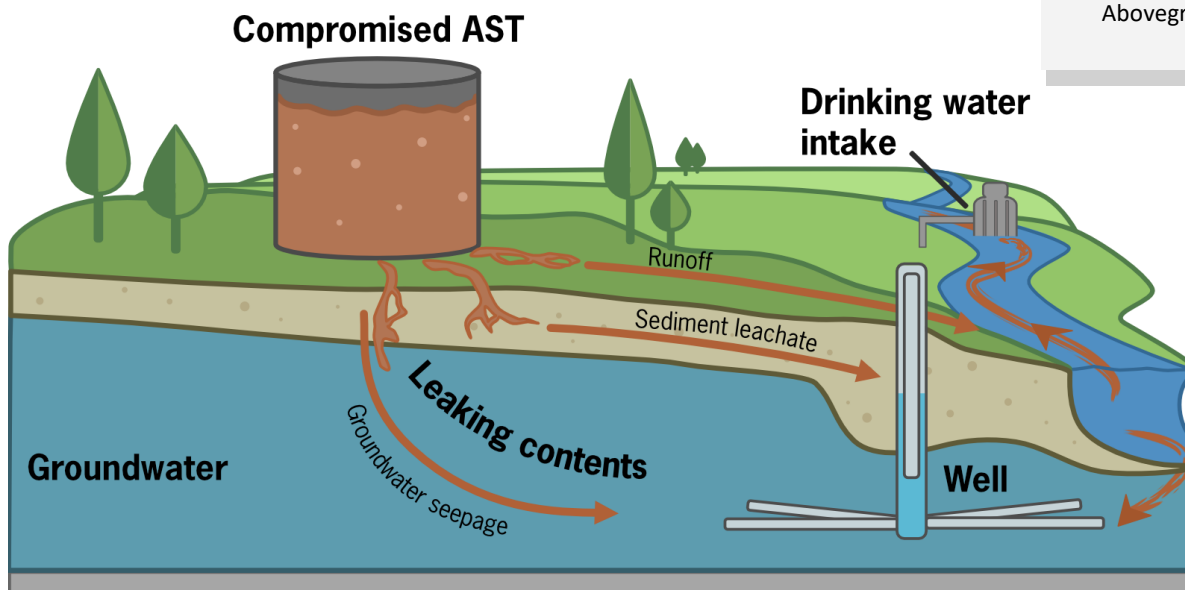
- House Bill 2598, which would have weakened protections under the Aboveground Storage Tank Act, passes the House but dies in the Senate.

2022

- House Bill 2598 and House Bill 4083 would have weakened protections under the Aboveground Storage Tank Act. Both bills fail.

2023 and 2024

- No bills introduced to weaken the Aboveground Storage Tank Act.



Oil and gas waste and transmission tanks contain a mixture of harmful chemicals.

Oil and gas waste tanks contain a mixture of produced water and crude oil, each of which contain pollutants that can contaminate drinking water and harm human health. It's not just table salt.

Oil and gas tanks contain a mixture of chemicals

Under the Aboveground Storage Tank Act, owners and operators must report the substances stored in each tank to DEP. Because oil and gas waste tanks store a mixture of produced water and crude oil, owners and operators report these substances in many different ways, including brine, crude oil, sodium chloride, or natural gas condensates.

Produced water is the fluid trapped in underground formations that is brought to the surface along with the natural gas. It is sometimes misleadingly referred to as "brine." But you wouldn't want to brine your turkey with it, because produced water contains a mixture of many substances, some of which are harmful to human health even in very small amounts.

In addition to produced water, these tanks also store crude oil and other petroleum products. The proportion of produced water to crude oil varies by tank. Crude oil also contains many different pollutants that are harmful to human health.



These pollutants harm human health at low concentrations

Only very small amounts of several of these pollutants are safe for human consumption.

Benzene: Anemia, decrease in blood platelets, increased risk of cancer

Toluene: Nervous system, kidney, or liver problems

Ethylbenzene: Liver or kidney problems

Xylenes: Nervous system damage

Radium 226 and Radium 228: Nervous system damage

Barium: Increase in blood pressure

Lead: Delays in physical or mental development in children. Kidney problems or high blood pressure in adults.

86% of the 666 oil and gas tanks self-report holding something other than just brine.

Changes to the definition of leaks and inspection requirements would put drinking water at risk.

In addition to deregulating oil and gas tanks upstream from, and near, public drinking water intakes, SB 592 would weaken tank inspection and reporting of leaking tanks.

Leaks from oil and gas ASTs are common

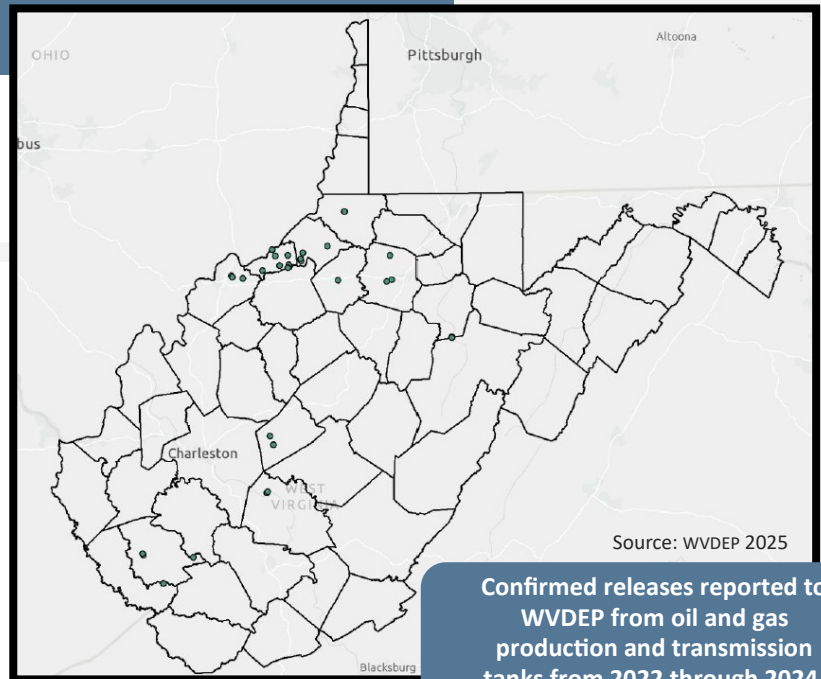
WVDEP data indicate that approximately 38% of all confirmed releases reported to the agency are from tanks associated with oil and gas production and transmission located within ZCCs. The intent of SB 592 is to deregulate these tanks.

Inspections by qualified professionals prevent releases to drinking water

Exempting oil and gas tanks within ZCCs as intended by SB 592 would remove the requirement for routine tank and secondary containment inspections to be completed by registered Professional Engineers and would instead allow tanks to be self-inspected and self-certified by the owner or operator. Third-party inspections by qualified professionals were not required prior to the Aboveground Storage Tank Act. Under this more lax system, a chemical leak from an aboveground storage tank into the Elk River contaminated the water supply for 300,000 West Virginians.

Leaky tanks must have oversight

SB 592 provides a new definition of leak, thus distinguishing it from a release. The bill defines a leak as “any spilling, emitting, discharging, escaping or leaching of fluids” from the tank into secondary containment rather than to the environment, which is a “release.” This new definition allows leaks to go unreported and unaddressed for up to a month. Depending on the secondary containment structure used, the leaked fluid could seep into the groundwater and result in contaminated drinking water.



Confirmed releases reported to WVDEP from oil and gas production and transmission tanks from 2022 through 2024.



A corroding oil and gas waste tank. Cited by DEP for lack of inspection of secondary containment and lack of corrosion prevention measures.

From 2015 to 2020, inspections conducted under the Aboveground Storage Tank Act found 1,938 violations at tanks that would become unregulated as intended by SB 592.

