



## Soil Contamination: A Farm Buyer's Primer

**Before you purchase a property, be sure you know what's in the soil. Everything from roadside pollution to illegal-drug contamination can affect your farm's usability.**

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It looks like you've found the perfect piece of property to start your small farm: a beautiful old farmhouse on top of a grassy hill, a great workshop off to the side with its own gas pump, a convenient location just off a major road, and even a year-round creek babbling along at the bottom of the hill.

But before you sign those papers, knowing what might be lurking in the soil on that property is vital to the health of your family and the future of your small farm.

There is very little virgin land to be found that is good for farming. Most arable land's potential was found years ago, so you can only hope that the farmers or tenants of yesteryear were as careful with your land as you will be.

Years of land use can result in the build-up of soil contaminants. That beautiful old farmhouse was almost certainly painted with lead-based paint whose dust could contaminate the area around the building. The convenient workshop probably housed pesticides, fertilizers and solvents that may, over time, have leaked or been spilled into the soil.

Street dust from busy roads can accumulate and cause severe soil pollution alongside. That old gas pump by the workshop represents the very real possibility that there might be petroleum pollution. And if any of those things have made it into the creek, there may be liability for neighboring lands to think about.

Buying a rural property has the potential to be just as hazardous to your financial future as soil pollutants are for the environment. While most properties will have had a small oil leak or pesticide spill at one time or another, there are some red flags that signal bigger problems and the need to ask questions before proceeding with a purchase.

Fortunately, as the buyer, you have the option of looking into the possible contaminants present and, if needed, the cost of remediating the property before you become liable. All states have disclosure laws requiring the seller to inform the buyer of anything that may affect the value of the property or the buyer's desire to purchase it.

This is most often information about structures, but it should also inform buyers of any known contamination or chemical accidents that may have occurred on the property. While disclosures will probably not be fully inclusive—no one is likely to know everything about their property's history—they are starting points. There are also additional sources for information about your potential property, including county records, pesticide-use reports and neighbors' testimonials.

If soil contamination falls above the Environmental Protection Agency's Maximum Contaminant Levels (MCL) for a pollutant, it's the responsibility of the seller to pay for remediation. For this reason alone, it's hugely important to assess the contamination levels of the soil before making a purchase.

Soil can be sampled and sent to registered laboratories for testing. You will need to let them know what you think might be present or at least why you are sending in the samples.

### Common Contaminants

Soil contaminants fall into two categories: deliberately applied and inadvertently applied or released. Deliberately applied contaminants include properly used pesticides, lead paint, fertilizers, fireproofing material and even dust-control materials.

Inadvertent contaminant applications include fuel-tank leakage, pesticide and fertilizer spills, drift from nearby roads, manure concentration, industrial effluent, and, an increasing problem in rural areas, byproducts from illegal methamphetamine labs.

The most common soil contaminants to expect are lead, petroleum hydrocarbons, arsenic and pesticides. With a good eye, some well thought-out questions and a little investigative work, you can learn a lot about the soil of your potential purchase.



To paraphrase the old saying, buy in haste, repent at leisure. Be thorough and persistent, and seek advice from legitimate agencies.

#### Fuel and Oil

Both lead and petroleum hydrocarbons can come from gasoline, fuel or automotive oils. Obvious warning signs to look for when touring a property are gas pumps and workshops that appear to have housed tractors and other machinery. Look for the age of the pump and whether it's still in use.

The EPA's Office of Underground Storage Tanks (OUST) is the federal agency that assesses contamination, determines required control measures and assists with funding. They confirmed 7,364 new cases of tank leakage in 2008 alone.

Older fuel-storage systems are much more likely to suffer from wear and may require expensive clean-up measures. Ask the seller or real estate agent if there has ever been suspicion of leakage or if the soil has been tested around the site.

If a case was reported to the state EPA office already, it should be stated in the disclosure, and treatment should already have begun. Take time to walk through any workshops, storage sheds, barns or garages, and look at their condition.

Keep an eye out for old pesticide and fertilizer containers: Are they neatly organized and clean looking, or are they haphazardly thrown into a corner with signs of spills and leaking? The order of a farmer's workspace can tell you a lot about the potential for accidental spillage or leakage on a scale large enough to be a problem.

Another thing to consider is the proximity to busy roads or highways. Dust and emissions from cars can drift onto the property and contaminate the land with lead. This is even more likely for land that has been adjacent to busy roads for a long time. Lead, an ingredient of gasoline for many decades, has a slow rate of degradation and can readily accumulate.

#### Lead Paint

Any painted structure that was built before 1978, when lead-based paint was banned for use in the United States, is likely to contain leaded paint that may have cracked, chipped and fallen into soil surrounding the building.

Was the structure well maintained or allowed to fall into disrepair in the past? These are again questions for the seller. If this information is unavailable, lead-paint test kits are available at most hardware stores for less than \$10. Soil samples can be tested for lead by a registered laboratory.