

Ongoing Coverage: [Latest on the Chemical Leak & Water Emergency](#)
[Accident Reports & Road Closures](#)

[Valentine's Day Children's Book Drive](#)

[School Delays & Cancellations](#)

Chemical Leak

8:00 PM WED JANUARY 29, 2014

Found Formaldehyde Begs Basic Questions, Expert Says

By [GLYNIS BOARD](#) ([PEOPLE/GLYNIS-BOARD](#))

Marc Glass is a principal researcher in charge of evaluation and remediation of environmental contamination in soil and water for the environmental consulting firm Downstream Strategies. He's been testing water samples for private residents affected by the Elk River chemical spill. While his results haven't turned up any traces of formaldehyde, it is something they've been testing for.



<http://mediad.publicbroadcasting.net/p/wvpr/files/201401/formald.jpeg>
Enlarge image (<http://mediad.publicbroadcasting.net/p/wvpr/files/201401/formald.jpeg>)

[Listen](#)

3:18

How long did the Freedom tank leak?

Glass says the MCHM process of breaking down starts pretty quickly. The half-life is approximately 14 days—meaning about half of the chemical compound will have

broken down into other products (like formaldehyde and formic acid) in about two-weeks' time.

"But the more breakdown products you find," Glass says, "the longer ago it makes you feel the spill started."

That's the big question burning in Glass's mind: What kind of a time frame are we really talking about? Glass says it shouldn't be difficult to find out. He says it should be a simple matter to reconcile the inventory for Freedom Industries to compare what they purchased to what they sold or used.

"I think we should start looking at that and I think we should start looking at a much longer term than just a few hours or days prior to the spill. I think we should for starters look at maybe a three-year period."

What are the adverse health effects?

Glass says the Environmental Protection Agency, under the guidance of the Centers for Disease Control, has determined that small exposures to formaldehyde, about one part per million in drinking water, is not expected to cause adverse health effects.

"They further determine that they don't think that ten parts per million consumed in drinking water for a day, or five parts per million for 10 days is expected to cause any adverse health effects. That's why the concentration and the amount of time that somebody's had exposure to that is relevant to assessing the health impacts."

That's not the only question Glass has.

What other chemicals should we be testing for?

"I'm also curious about what's in the soil at the site because this was released from a tank and went across or through soil prior to getting into the Elk River. So maybe there were other contaminants."

Glass points out that the Freedom site is a storage place that's had products stored for decades. So accidental spills and releases could be present in the soil. He says if those *are* present in the soil and you put a solvent like MCHM into the mix, you risk mobilizing contaminants.

"So I'd really like to get a characterization of that site vertically and horizontally to

know really what we should be looking for,” Glass says.

Glass says it’s frustrating to have so many unanswered questions when he’s asked by residents if the water is safe. He says basic information key to safeguarding the community is simply out of reach.

TAGS: [Chemical leak \(/term/chemical-leak\)](#) [Downstream Strategies \(/term/downstream-strategies\)](#) [Marc Glass \(/term/marc-glass\)](#) [formaldehyde \(/term/formaldehyde\)](#) [Energy & Environment \(/term/energy-environment\)](#)

Related Content:



Chemical Leak

[West Virginia Official: People Are Inhaling Formaldehyde \(/post/west-virginia-official-people-](#)



Water Crisis

[State Health Officials, Water Company Say Reports of Formaldehyde Are 'Misleading'.](#)
