

Tampa Bay Times

<http://www.tampabay.com/opinion/columns/column-pesticide-curfew-too-dangerous-to-use-on-golf-courses-again/2317458>

Guest column: **Pesticide Curfew** too dangerous to use on golf courses again

By Nathan Donley, Special to the Times

Wednesday, March 22, 2017 9:02am

Even among the thousands of bright green golf courses across the nation that routinely douse their fairways with pesticides and fertilizers, the nasty Dow worm-killer known as "Curfew" has had a hard time finding suitors. The highly toxic, drift-prone fumigant — used to kill the microscopic worms called nematodes that nibble on turf roots — is used on golf courses in only five states, all in the south.

But as residents of Tampa's Forest Hills neighborhood know, Florida still allows it to be applied on golf courses like the Babe Zaharias course, that are surrounded by residential development.

Residents who last month turned out to question the Tampa Sports Authority's proposed use of Curfew this spring have good reasons to be concerned.

Even if you never set foot on a golf course, Curfew's highly toxic active ingredient — 1,3-Dichloropropene — makes it noteworthy. The Environmental Protection Agency, World Health Organization and many other regulatory agencies around the world have linked "1,3-D" to cancer in humans.

Inhaling the fumigant can cause lung, liver and kidney damage and can even be fatal. It is banned in Europe due to health concerns.

Ten years ago, neighbors of the Babe Zaharias golf course got a free lesson in the risks associated with Curfew.

For years, following Curfew applications, some residents complained of symptoms like increased heart rates and breathing trouble. As is often the case, no direct link could be proven between the symptoms and the pesticide's use. But residents raised

serious enough concerns that the course has not been treated with the pesticide since 2008.

But now Tampa Sports Authority officials are insisting a worm infestation leaves them no choice but to turn, once again, to Curfew.

Officials point to the fact that the EPA has stated the dose people would be exposed to should not, by itself, cause any harm.

But Curfew is a fumigant, meaning that it's injected into the ground as a liquid where it off-gases, infiltrating the soil and eventually making its way into the air that we breathe.

So, when measuring exposure to 1,3-D it is important to take into account all exposure sources in an area. And that's particularly relevant if you live in Hillsborough County, where in 2014 — the latest year data has been made available — the U.S. Geological Survey estimated that a whopping 1 million pounds of the chemical was applied, mainly on strawberry fields.

Floridians should also be aware that what is considered "safe" can depend on what state you live in. For instance, California, one of the largest users of 1,3-D, has a much different take than Florida on how it should be safely used.

Along with prohibiting use of the chemical on golf courses, California requires that when it's used in agriculture, there needs to be a 100-foot buffer from residences, and people cannot re-enter treated fields for seven days. California also restricts how much can be applied in any six-square-mile area.

These safety measures contrast sharply with those in Florida, where Curfew applications only require a 30-foot buffer from homes and there are no limitations on the combined use from multiple sources.

And despite an EPA analysis that found peak emissions from treated areas occur 72 hours after application, Florida allows the public to enter Curfew-treated courses just 24 hours after the pesticide is applied.

The unfortunate truth is that most golf courses are doused with so many pesticides that they are killing all of the natural predators of nematodes. In the process, they have created one of the most unhealthy ecosystems imaginable — a perfect climate for infestations by pests.

Clearly, fixing the problem instead of merely dumping more pesticides on it will take a long-term commitment to use alternative pest management strategies and restore the normal ecological balance.

That answer is not the short-term fix the Tampa Sports Authority is considering. But it is the only true solution.

And it would likely be supported by golfers. Research has shown that golfers do not perceive a quality difference between courses using conventional pest management and those that emphasize non-chemical management.

Regardless, assuring the health of families living near the golf course should come well before misguided efforts to keep fairways green.

Nathan Donley of Portland, Ore., is a senior scientist with the Center for Biological Diversity, an environmental group based in Tucson, Ariz., with offices in Florida and 10 other states.

Guest column: Pesticide Curfew too dangerous to use on golf courses again 03/22/17 [*Last modified: Friday, March 24, 2017 5:00pm*]