Recommendation

This is a request to the Town of Fairview to halt the practice of herbicide spraying along the edges of the roads. The town began spraying KILLZAII 3 recently along the road edges in an effort to stop grass from growing on the edge of the road surface. The Active ingredient in KILLZAII 3 is Glyphosate,N-(phosphonomethyl)glycine, in the form of its isopropylamine salt – the same ingredient that is found in Roundup.

The town should immediately halt this spraying for the following reasons:

- 1. The vast majority of blacktop road failures are not on the edge.
- No evidence exists that the spraying extends the life of the blacktop. There are 18+ year old blacktop roads in town with no grass related edge degradation and they have not been sprayed until the past year.
- 3. More edge related failures were noted in areas where there was <u>no grass</u> on the edge and the soil was washed away. The grass serves a purpose.
- 4. In many cases, the road edge appears to have degraded first, and the grass simply grew into the void.
- 5. Killing the grass exposes the voids to additional moisture and freeze/thaw cycles, which accelerates degradation.
- 6. This chemical Glyphosate was recently classified as a "probable carcinogen" by the International Agency for Research on Cancer (<u>link</u>)
- 7. Use of the chemical Glyphosate has been shown to lead to the eventual development of stronger weeds that are resistant to the spraying, which often leads to increased spraying or the use of more toxic products.
- 8. Though Bermuda grass is the most aggressive grass, the Glyphosate chemicals were sprayed on all types of vegetation including wildflowers and buffalo grass, which do not spread horizontally. "Kills All" should not be our standard approach to any issue.
- 9. This is an annual cost that we don't need to incur.
- 10. If the town staff feels there are areas with aggressive grass intrusion then only those specific areas should be sprayed with a less problematic product such as 20% vinegar, EcoSMART, Monterrey Herbicidal soap, Scythe, or Racer.

World's most popular weed-killer labeled 'probable carcinogen'

By Tribune wire reports

MARCH 22, 2015, 12:55

One of the world's most popular weed killers – and the most widely used kind in the U.S. - has been labeled a probable carcinogen by the International Agency for Research on Cancer.

The decision was made by IARC, the France-based cancer research arm of the World Health Organization, which considered the status of five insect and weed killers including glyphosate, which is used globally in industrial farming.

The glyphosate-containing herbicide Roundup is a mainstay of industrial agriculture.

The U.S. Environmental Protection Agency, which makes its own determinations, said it would consider the French agency's evaluation.

The French agency has four levels of risks for possible cancer-causing agents: known carcinogens, probable or possible carcinogens, not classifiable and probably not carcinogenic. Glyphosate now falls in the second level of concern.

The new classification is aimed mainly at industrial use of glyphosate. Its use by home gardeners is not considered a risk. Glyphosate is in the same category of risk as things like anabolic steroids and shift work. The decision was published online Thursday in the journal, Lancet Oncology.

According to the French agency, glyphosate is used in more than 750 different herbicide products and its use has been detected in the air during spraying, in water and in food. Experts said there was "limited evidence" in humans that the herbicide can cause non-Hodgkins lymphoma and there is convincing evidence that glyphosate can also cause other forms of cancer in rats and mice. IARC's panel said glyphosate has been found in the blood and urine of agricultural workers, showing the chemical has been absorbed by the body.

The French agency's experts said the cancer risks of the weed killer were mostly from occupational exposure.

"I don't think home use is the issue," said Kate Guyton of IARC. "It's agricultural use that will have the biggest impact. For the moment, it's just something for people to be conscious of."

Associated Press

Copyright © 2015, Chicago Tribune

From Howard Garrett:

Glyphosate is touted as a "low toxicity" chemical and "safer" than other chemicals by EPA and industry and is widely used in food production and on lawns, gardens, parks, and children's playing fields. However, IARC's new classification of glyphosate as a Group 2A "probable" carcinogen finds that glyphosate is anything but safe. According to IARC, Group 2A means that the chemical is probably carcinogenic to humans based on sufficient evidence of carcinogenicity in experimental animals. The agency considered the findings from an EPA Scientific Advisory Panel report, along with several recent studies in making its conclusion. The agency also notes that glyphosate caused DNA and chromosomal damage in human cells. Further, epidemiologic studies have found that exposure to glyphosate is significantly associated with an increased risk of non-Hodgkin's Lymphoma (NHL).

"With the cancer classification on top of the documented weed resistance to glyphosate and water contamination resulting from its use, continued reliance on glyphosate is irresponsible from a public health and environmental perspective," said Jay Feldman, executive director of Beyond Pesticides. "We have effective sustainable organic management systems that do not utilize glyphosate and it's time that EPA and USDA recognized its responsibility to move away from hazardous and unnecessary pesticides," he continued.

Ironically, EPA in 1985 originally classified glyphosate as 'possibly carcinogenic to humans' based on tumors in laboratory animals, but changed its classification to evidence of non-carcinogenicity in human years later, most likely due to industry influence, allowing the chemical to be the most widely used pesticides in the U.S. USDA has contributed to its growth by deregulating crops, including the vast majority of corn and soybeans, that are genetically engineered to be tolerant to the chemical. In recent years, weeds have exhibited resistance to glyphosate and its efficacy has been called into question. Additionally, the U.S. Geological Survey (USGS) routinely finds glyphosate in U.S. waterways especially in the Midwestern states and the Mississippi River valley. Ecological data also reports that glyphosate and glyphosate formulated products are toxic to aquatic organisms, and is extremely lethal to amphibians.

But the U.S. regulatory agencies have ignored questions about its hazards and its necessity in crop production. Last year, cotton growers applied for an emergency exemption for the use of propazine on three million acres of cotton because glyphosate was no longer effective. Now that IARC has classified the world's most widely used herbicide as a probable human carcinogen, EPA must quickly reevaluate its widespread use and registration status.

New Release - April 1, 2015

The Environmental Protection Agency on Wednesday more than doubled the number of U.S. states where Dow AgroSciences' controversial new herbicide can be used. The EPA approved Enlist Duo on Oct. 15 with a series of restrictions aimed at addressing potential environmental and health hazards. At that time it said the herbicide could be used in six states – Illinois, Indiana, Iowa, Ohio, South Dakota and Wisconsin. The regulatory agency added nine more on Wednesday, all key farming states: Arkansas, Kansas, Louisiana, Minnesota, Mississippi, Missouri, Nebraska, North Dakota and Oklahoma. Enlist Duo was developed by Dow AgroSciences, a unit of Dow Chemical, as an answer to severe weed resistance problems that are limiting crop production around the country.

More than 84 million acres of farmland are infested with <u>glyphosate-resistant weeds</u>, and the problem continues to climb each year, Dow's U.S. crop protection commercial leader, Susanne Wasson, said in a statement.

Enlist Duo is designed to be used with genetically engineered corn and soybeans, which have been altered to tolerate being sprayed with Enlist Duo. The specialty crops and the herbicide are to be sold as a branded "Enlist Weed Control System." Like the popular Roundup Ready system developed by rival Monsanto Co, farmers who plant Enlist crops can spray over the crops in their fields with Enlist herbicide and kill weeds but not the crops.

Enlist Duo combines an herbicide component known as 2,4-D with glyphosate, the active ingredient in Monsanto's Roundup.

The EPA is currently evaluating a weed resistance management plan for glyphosate as well.

A coalition of U.S. farmer and environmental groups filed a lawsuit in October seeking to overturn the EPA's approval of Enlist Duo, claiming the EPA did not adequately analyze the impact of 2,4-D.

Past communication on the issue (Fall 2014) – Westbrook and Holmgren:

Thanks for the quick response Aron. First, I still question the need for the spraying and what it accomplishes. Lakewood Drive was last repaved in October of 1996. I do not recall any spraying along the road edges in the past 18 years. I see grass growing on the edge of the asphalt, but I do not see any evidence of road damage.

The road damage is in the center where the cars are and on the edges where there is no grass. The lack of grass has allowed the soil to wash away and the edge to collapse. This is why I think killing the grass will do more long-term harm than good.

Typical of most of the street – the grass abuts the asphalt with no damage from the grass, but now the grass has been sprayed and killed.



In areas where there was no grass and the soil has washed away there are problems:



The bottom line is that I think the town can save money by not spraying, and it will yield no negative effects to the roads. And it will remove a negative environmental and health effect.

Second, I'll address the herbicide being used.

Glyphosate,N-(phosphonomethyl)glycine is sold under several name brands. KillzAll, which certainly has a poorly chosen name, is one. The most familiar name of this type of chemical is Roundup. Monsanto is the largest manufacturer of the chemical and has been pushing for its approval and defending it for decades.

There have been hundreds of studies on this chemical and I'm a skeptic on both sides. Some studies use an unrealistically high concentration and have shown severe issues in laboratory animals. Discounting those and sticking to the scientifically peer reviewed studies I see a few alarming items. Most of those studies only look at the main chemical and not the fillers in the bottle and the effects that combination might have. More comprehensive studies have shown it's not as safe as the manufacturer would like us to believe.

From an environmental standpoint, the use of Roundup has been shown to result in chemical resistant superweeds. Just like overuse of antibiotics has led to resistant bacteria, the same thing is occurring in plants. Native grasses killed by spraying will eventually be replaced with invasive plants, which will be resistant to the spray.

Also, Monsanto continues to taint the evidence. On two occasions, the United States Environmental Protection Agency (EPA) has caught scientists deliberately falsifying test results at research laboratories hired by Monsanto to study glyphosate. In the first incident involving Industrial Biotest Laboratories, an EPA reviewer stated after finding "routine falsification of data" that it was "hard to believe the scientific integrity of the studies when they said they took specimens of the uterus from male rabbits". In the second incident of falsifying test results in 1991, the owner of the lab (Craven Labs), and three employees were indicted on 20 felony counts, the owner was sentenced to 5 years in prison and fined \$50,000, the lab was fined \$15.5 million dollars and ordered to pay \$3.7 million dollars in restitution. Craven laboratories performed studies for 262 pesticide companies including Monsanto.

In 1996, Monsanto paid a \$50,000 fine and agreed to "cease and desist" promoting glyphosate (Roundup) as "safe" after New York's attorney general sued it for false advertising.

Monsanto acknowledged then that EPA approval "is not an assurance or finding of safety" because U.S. regulations are based on a cost-benefit analysis, which balances the potential of "any unreasonable risk to man or the environment" against the "the economic, social, and environmental costs and benefits of the use of any herbicide."

Monsanto's current tactic is to flood the agencies and government with insiders to suppress negative evidence. See the list below.

NAME	MONSANTO JOB	US GOVT JOB
Toby Moffett	Monsanto Consultant	US Congessman
Dennis DeConcini	Monsanto Legal Counsel	US Senator
Margaret Miller	Chemical Lab Supervisor	Dep. Dir. FDA, HFS
Marcia Hale	Director, Int'l Govt. Affairs	White House Senior Staff
Mickey Kantor	Board Member	Sec. of Commerce
Virginia Weldon	VP, Public Policy	WH-Appt to CSA, Gore's SDR
Josh King	Director, Int'l Govt. Affairs	White House Communications
David Beler	VP, Gov't & Public Affairs	Gore's Chief Dom. Policy Advisor
Carol Tucker-Foreman	Monsanto Lobbyist	WH-Appointed Consumer Adv
Linda Fisher	VP, Gov't & Public Affairs	Deputy Admin EPA
Lidia Watrud	Manager, New Technologies	USDA, EPA
Michael Taylor	VP, Public Policy	Dep. Commiss. FDA
Hillary Clinton	Rose Law Firm, Monsanto Counsel	US Senator, Secretary of State
Roger Beachy	Director, Monsanto Danforth Center	Director USDA NIFA
Islam Siddiqui	Monsanto Lobbyist	Ag Negotiator, Trade Rep

The bottom line is that I don't think the spraying is cost effective or even effective at all. It may cause more problems than it solves. The risks are too high. I request that spraying be abandoned. As an alternative, residents should be notified well in advance of upcoming sprayings and allowed to opt out. As you can see, this would probably be difficult to manage, but we have a right to not be subjected to spraying of herbicides that are not necessarily as safe as the manufacturer would like you to believe.

Regards,

Paul Westbrook (town answers in red)

- 1. What chemical was sprayed on our property? The Brand Name of the herbicide used is KILLZAII 3. The Active ingredient is Glyphosate,N-(phosphonomethyl)glycine, in the form of its isopropylamine salt.
- 2. What was the intent of the spraying operation?
 - 1. If it was to prevent degradation of the asphalt, then it created the opposite effect. Actually we have lost 2' or more of the edges of many of our roads over the years due to the encroachment of grasses onto and underneath the pavement. The potholes are mostly in the middle of the street. This is the second e-mail I have seen in recent weeks in which you have alluded to potholes. We made some asphalt repairs on your street a few months ago, and in response to your first email looked for potholes on your street and could not find any. I will be happy to make repairs to any potholes, if you could be more specific as to the location. The areas where there is little grass along the edge is where the asphalt is damaged as the dirt washes away and it breaks off. Erosion is not typically an issue with this type of street. Spraying the edges of this type of road is a basic standard maintenance practice. The grass keeps the soil in place which protects the edge.
- 3. Why weren't residents notified of the herbicide application? We did not notify anyone since in this heat the herbicide dries almost immediately. In the future I will give you notice. (update

May 29th, 2015 – our street and my property was recently sprayed again and no notice was given)

- 1. Many of us walk our dogs along the street and we tend to walk right on the asphalt grass edge.
- 4. What was the cost of the spraying? A rough estimate off the top of my head would be about \$30 for your street, less than \$1,500 for all the streets in the entire town. (update May 29th, 2015 – the town staff is planning to spray several times per year.)
- 5. Are other streets planned to be sprayed? Virtually every asphalt street with bar ditch type drainage was sprayed well over a month ago. Your street was missed and when I went out there looking for potholes in response to your first email, noticed, and had my people spray it.

Aron 7. Holmgren

Public Works Manager Town of Fairview 972-562-0522 x5013 469-628-4712 Cell phone aholmgren@fairviewtexas.org