

Proposed Groundwater Standards

Wis. Admin. Code NR 140
Cycle 10



Glyphosate/Glyphosate AMPA

How is it used in Wisconsin?

Glyphosate is a broad-spectrum herbicidal active ingredient, applied to the leaves of plants to kill both broadleaves and grasses. It is a systemic herbicide that inhibits plant enzymes involved in the synthesis of amino acids. The biodegradation of glyphosate leads to aminomethylphosphonic acid (AMPA).

Glyphosate is one of the most widely used herbicides in agriculture, forestry, lawn care and industrial applications. For agriculture uses it is used on fruits, vegetables, nuts, and glyphosate-resistant field crops such as corn and soybeans. Nonagriculture uses include conservation land (land that could be used for agricultural production but has been set aside), pastures, rangeland, forests, turf grass, residential areas, non-food tree crops, rights of way, commercial areas, paved areas, spot treatments, parks, and wildlife management areas. Glyphosate was first registered with the U.S. Environmental Protection Agency in 1974.

What are some products that contain this substance?

Glyphosate is the active ingredient in more than 200 products sold in the state. It is most commonly sold under the trade name Roundup® for both agriculture and non-agriculture uses.

Who manufactures this substance?

Monsanto was the original manufacturer of glyphosate, but there are currently numerous glyphosate products available from numerous companies.

Why has this substance been recommended for establishment of groundwater standards?

Like other agricultural chemicals used across the state, extensive use increases the chance for an accidental spill and a potential impact to groundwater. A standard will help homeowners and state agencies make decisions about ongoing water use and potential public health concerns in the event it is detected in well water.

What are the proposed standards?

For glyphosate:

- Enforcement standard: 10,000 µg/L (micrograms per liter)
- Preventive action limit standard: 1,000 µg/L

For glyphosate AMPA:

- Enforcement standard: 10,000 µg/L
- Preventive action limit standard: 2,000 µg/L

Has this substance been detected above the proposed groundwater standards?

No. Because glyphosate and AMPA are difficult to analyze using existing laboratory equipment, and is not a mobile compound, testing by the Wisconsin Department of Agriculture, Trade and Consumer Protection (DATCP) has been limited in shallow field edge monitoring wells. Since testing began in 2019, no monitoring well samples have detected quantifiable concentrations of glyphosate or AMPA. Based on field edge monitoring results, no samples have been collected from private wells.

Where can I find more information?

- This and other pesticides:
https://datcp.wi.gov/Pages/Programs_Services/GroundwaterStdsPesticides.aspx
- Health-based standards:
<https://www.dhs.wisconsin.gov/water/gws.htm>
- NR 140 rule process:
<https://dnr.wi.gov/topic/Groundwater/NR140.html>

Who do I contact for questions?

DATCP Groundwater Specialist
(608) 224-4503
datcpgw@wisconsin.gov

This fact sheet provides general information for this pesticide ingredient. A groundwater quality standard has been proposed for this substance in accordance with state law (Wis. Stat. § 160).



Wisconsin Department of Agriculture, Trade and Consumer Protection
Division of Agricultural Resource Management | Bureau of Agrichemical Management
<https://www.datcp.wi.gov>

P-DARM321(06/2020)