



**LEGISLATIVE ASSEMBLY**  
FOR THE AUSTRALIAN CAPITAL TERRITORY

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STANDING COMMITTEE ON ENVIRONMENT AND TRANSPORT AND CITY SERVICES  
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## Submission Cover Sheet

### Nature in Our City

**Submission Number:** 53

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## Pesticide Free Playgrounds

"Playgrounds are a recognised priority in the Better Suburbs program. They were listed by the community as a top five feature "

Minister Fitzharris

[Better Suburbs Citizens' Forum to help plan Canberra's future 23.5.18](#)

Playgrounds and parks are a publically valued amenity in the ACT

The precautionary principle must be applied to the use of pesticides in public spaces, particularly parks and playgrounds and in particular with the widely used glyphosate based herbicides (GBH).

There are major concerns about the effects of GBH formulations including the effect of "inert" ingredients.

A GBH does not become safe upon contact with the soil.

Twenty five countries and 50 US cities or municipalities have banned or restricted the use of GBH.

Pesticide free parks are being created by many authorities internationally.

Parents should be able to make an informed choice of whether they choose to expose their own children to pesticide sprayed playgrounds.

### **Applying the precautionary principle in relation to dangerous chemicals.**

The history of the process of banning of DDT in the US in 1972 and later in Australia in 1987 and the history of the controversy about the link between tobacco and population health give a valuable perspective on the glyphosate discussion. The Australian Government was 15 years behind the US in applying the precautionary principle to DDT.

Though there are assessments that indicate the GBH are safe, there are major concerns about the effects of GBH formulations. The simplistic assertions that it is safer than table salt and less toxic than caffeine avoid the complexities of the effects of this widely used chemical.

### **Safety Evaluation and Risk Assessment of the Herbicide Roundup and Its Active Ingredient, Glyphosate, for Humans**

It was concluded that, under present and expected conditions of use, Roundup herbicide does not pose a health risk to humans.

<https://www.sciencedirect.com/science/article/pii/S0273230099913715>

This **Statement of Concern** is directed to scientists, physicians, and regulatory officials around the world. We highlight changes in the scope and magnitude of risks to humans and the environment stemming from applications of glyphosate-based herbicides (GBHs). The objectives of this statement are to: 1) demonstrate the need for better monitoring of GBH residues in water, food, and humans; (2) identify limitations or weaknesses in the way the EPA, the German Federal Institute for Risk Assessment, and others have previously assessed the potential risks to humans from exposure to GBHs; and (3) provide recommendations on data needs and ways to structure future studies addressing potential health risks arising from GBH exposures.

<https://ehjournal.biomedcentral.com/articles/10.1186/s12940-016-0117-0>

### **Does the World's Top Weed Killer Cause Cancer? Trump's EPA Will Decide (2017)**

In December 2016 the U.S. [Environmental Protection Agency](#) EPA convened a panel of outside scientists to peer-review the agency's long-standing conclusion that glyphosate is unlikely to cause cancer.

The transcript of the US EPA's scientific advisory panel meeting on Glycophate research runs to 1,300 pages. Reading the document is the only way to know that four of the six reviewers charged with evaluating the crucial epidemiological data lambasted the EPA.

Several panelists asserted that while glyphosate probably doesn't initiate cancer by causing gene mutations, it appears to promote malignancies by spurring tumor growth.

<https://www.bloomberg.com/news/features/2017-07-13/does-the-world-s-top-weed-killer-cause-cancer-trump-s-epa-will-decide>

### **Major Pesticides Are More Toxic to Human Cells Than Their Declared Active Principles (2014)**

Despite its relatively benign reputation, Roundup was among the most toxic herbicides and insecticides tested. Most importantly, 8 formulations out of 9 were up to one thousand times more toxic than their active principles. Our results challenge the relevance of the acceptable daily intake for pesticides because this norm is calculated from the toxicity of the active principle alone. Chronic tests on pesticides may not reflect relevant environmental exposures if only one ingredient of these mixtures is tested alone.

Published online 2014 Feb 26. doi: [10.1155/2014/179691](https://doi.org/10.1155/2014/179691)

<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3955666/>

### **The Effect of Glyphosate on Potential Pathogens and Beneficial Members of Poultry Microbiota In Vitro**

A reduction of beneficial bacteria in the gastrointestinal tract microbiota by ingestion of glyphosate could disturb the normal gut bacterial community.

<https://link.springer.com/article/10.1007/s00284-012-0277-2>

### **Glyphosate does not become inert in contact with the soil.**

It stops being able to kill plants effectively.

Because glyphosate rapidly binds to soils, it has little or no herbicidal activity ("killing power") once it touches soil p4 (Sprankle et al. 1975a; Hance 1976; Nomura & Hilton 1977).

The advice on waiting 6 weeks to plant some grains identifies the residual activity of this poison.

### **Glyphosate CT Broadhectare Herbicide MSDS**

BARLEY, CEREAL RYE OR TRITICALE: DO NOT apply less than 6 weeks prior to sowing as crop injury may occur, **particularly under dry, cold conditions.** (*Indicating its persistence in Canberra weather*)

[http://www.nufarm.com/Assets/21006/1/GLYPHOSATECT\\_label.pdf](http://www.nufarm.com/Assets/21006/1/GLYPHOSATECT_label.pdf)

### **Surefire Weedpro 540 Bio Herbicide - Glyphosate 540g/L MSDS**

Environmental Fate:

Breakdown in soil and groundwater:

Glyphosate is moderately persistent in soil, with an estimated average half-life of 47 days.

**Reported field half-lives range from 1 to 174 days.** It is strongly adsorbed to most soils, even those with lower organic and clay content.

Breakdown in water:

In water, glyphosate is strongly adsorbed to suspended organic and mineral matter and is broken down primarily by microorganisms. Its half-life in pond water ranges from 12 days to 10 weeks.

Glyphosate remains active on foliage.

Glyphosate may be translocated throughout the plant, including to the roots. It is extensively metabolized by some plants, while remaining intact in others.

<http://www.pctrural.com.au/getattachment/d2cbb0d9-a68b-43ad-9c12-dbf5fdb86bcc/Surefire-WeedPro-540.aspx>

Playground tanbark is often sprayed with glyphosate.

Do the ingredients in a glyphosate based herbicide bind to tan bark or remain active?

The ingestion by children of soil and other natural materials is developmentally normal.

Can the ACT Government assure the public that playground and park materials when sprayed with GBH or other pesticides and then ingested by young children will not result in possible harm?

## **Twenty five countries and 50 US cities or municipalities have banned or restricted the use of glyphosate based products.**

The following countries have issued outright bans on glyphosate, imposed restrictions or have issued statements of intention to ban or restrict glyphosate-based herbicides, including Roundup, over health concerns and the ongoing Roundup cancer litigation:

The list is of around 25 nations and 50 US cities or municipalities

<https://www.baumhedlundlaw.com/toxic-tort-law/monsanto-roundup-lawsuit/where-is-glyphosate-banned/>

### **Glyphosate - Restrictions and Bans Around the World**

Published on Feb 6, 2017

A list of the locations where glyphosate is restricted or banned.

[https://issuu.com/pan-uk/docs/glyphosate\\_restrictions\\_and\\_bans\\_ar](https://issuu.com/pan-uk/docs/glyphosate_restrictions_and_bans_ar)

## **Recommendation 1**

**The ACT government reviews its use of pesticides in public parks and playgrounds and trials the use of non toxic alternatives.**

## **Pesticide free parks are being explored by many authorities.**

The City of Seattle has committed to reducing the use of herbicides, insecticides, and fungicides in all City landscapes. Together, 6 City departments manage over 110,000 acres of public land, of which 12,000 acres are highly developed and managed grounds including greenhouses, specialty gardens, roadsides and medians, golf courses, and hundreds of miles of electrical transmission right-of-way, plus over 1700 acres of greenbelts, open spaces and urban forest lands. The goals of the pesticide reduction program are to eliminate the use of the most potentially hazardous herbicides and insecticides and to continuously seek strategies to reduce overall pesticide use.

<https://www.seattle.gov/parks/about-us/policies-and-plans/pesticide-reduction>

<http://capitolhillcodistrict.org/another-reason-to-visit-cal-anderson-park-its-pesticide-free/>

Nearly two decades after Seattle officials promised to use more eco-friendly methods to kill weeds on city lands, Department of Parks and Recreation employees are [still spraying parks and golf courses with hazardous pesticides](#), the Seattle Times reports.

<http://projects.seattletimes.com/2017/investigation/pesticides-in-parks/>

The City of Eugene has 10 pesticide-free neighborhood parks located throughout the City's park system.

<https://www.eugene-or.gov/633/Pesticide-Free-Parks-Program>

The PFP pilot program began with Greenwise maintaining five Evanston parks without the use of pesticides during a one-year test season. The parks are Ackerman, Burnham Shores, Eiden, Perry, and Trahan. (2014)

<https://www.iamgreenwise.com/about-us-3/pesticide-free-parks/>

RENO, NV - The Reno City Council has approved a Pesticide-Free Parks program for 12 Reno parks. The two-year pilot program was the result of community concern about pesticide use, and the Neighborhood Advisory Boards were utilized to choose ten of the 12 designated parks. (2015) <http://www.kolotv.com/home/headlines/City-of-Reno-Introduces-Pesticide-Free-Parks-Program-329295281.html>

<https://www.northernstar.com.au/news/thumbs-up-to-council-for-going-chemical-free/3204324/>

### **Pesticide Use in Montgomery Parks**

Montgomery Parks began implementing segments of the pesticide use restrictions law beginning on July 1, 2016. [Bill 52-14 Pesticides – Notice Requirements – Cosmetic Pesticide Use Restrictions](#) was enacted by Montgomery County Council October 2015 and was adopted into County Code Ch. 33B Pesticide Use.

Through this program, Montgomery Parks is embracing new ways to manage weeds and pest issues in our parks while continuing to protect and conserve our valuable natural and cultural resources. We are committed to balancing the demand for recreation with the need for conservation as we work to manage a sustainable park system that meets the needs of current and future generations.

<https://www.montgomeryparks.org/about/parks/pesticides/>

### **Pesticide-free parks in Calgary**

Worried about exposure to pesticides at Calgary's parks? The City provides several pesticide-free parks for you and your family to enjoy.

<http://www.calgary.ca/CSPS/Parks/Pages/Planning-and-Operations/Pest-Management/Pesticide-free-parks-in-Calgary.aspx>

### **Portland Parks and Recreation 2004-2007 Pesticide Free Parks Trial Program Summary, Overview, Assessment and Evaluation November 6, 2007**

<https://www.portlandoregon.gov/shared/cfm/image.cfm?id=198108>

## **Recommendation 2**

**The ACT Government creates pesticide free parks supported by an online capacity to locate these parks.**

**Public notification of spraying allows people to make an informed choice.**

### **Calgary, Canada**

#### **Pesticide and herbicide spraying in your community**

The City currently applies some herbicides to control dandelions and other broad leaf weeds. We apply herbicides regularly to sport fields, as they have a high use and too many broad leaf weeds can cause safety issues and threaten the health of the turf.

For other areas, we apply at a lower frequency. Parks with high weed-density will usually have a herbicide application approximately every four years.

The City takes the health and well-being of citizens and green spaces seriously, so all herbicides and pesticides are carefully chosen and applied to be the least toxic to off-target plants and animals. Furthermore, all pesticides and herbicides are fully certified by both the federal and provincial governments.

[Notification and application signs](#) will be posted in the community before, during and after any necessary applications. Herbicide is not applied within 30 metres of a playground unless the entire area is closed to the public and school sites do not receive applications while students are in attendance. There are also a variety of [pesticide-free parks in Calgary](#).

Last year we successfully piloted some alternative weed management techniques, including [using goats](#) to manage Canada thistle and different methods of [dandelion control](#). We will continue using the techniques the year.

Herbicide applications are scheduled to take place in the following communities during the week of June 18, 2018.

<http://www.calgary.ca/CSPS/Parks/Pages/Planning-and-Operations/Pest-Management/Pesticide-and-herbicide-spraying-in-your-community.aspx>

### **Pesticide Application Notifications**

The below table includes a schedule of upcoming pesticide applications. The list is updated to provide at least 48-hour notice for applications.

<https://www.montgomeryparks.org/about/parks/pesticides/>

### **Compulsory notification of pesticide use - NSW Government EPA**

Certain pesticide users must give notice that they are planning to use pesticides. This includes applying them in places such as public parks and near schools and applies to aerial applications from an aircraft or remotely piloted aircraft. The EPA regulates notification of pesticide use to protect human health and the environment.

Organisations that must notify of pesticide use

- **Public authorities**, including State government departments, local councils, county councils and electricity network State owned corporations must give the public notice that they intend to use pesticides in outdoor public places such as parks and ovals and in public places near sensitive places such as childcare centres and hospitals. From 1 July 2018 this will also include NSW universities.
- **Property managers and strata managers** who engage a pest management technician must give residents notice that they intend to apply pesticides in the common areas of multiple occupancy residential complexes.
- **Pest management technicians** must display a pesticide use notice while applying pesticides in common areas of multiple occupancy complexes and, if applying pesticides on properties adjacent to sensitive places, must notify the owner or manager of the sensitive place in advance.

The EPA regulates compulsory notification of pesticide use under Part 5 of the Pesticides Regulation 2017

Why there is a requirement to notify

Notification is based on the principle that people have a basic right to know when they may be affected by pesticide use, to make informed decisions about their contact with pesticides and reduce their exposure to pesticides if they wish. For example

- parents with young children may choose to delay a visit to the playground if they know pesticides have been applied that day
- people responsible for sensitive places can make informed decisions to reduce the risk of exposure by vulnerable people in their care
- residents aware that a pesticide application is about to take place in a common area can choose to close their windows or take in their washing

Notifying the community is now internationally recognised as best practice in pesticides management.

### **Recommendation 3**

**The ACT government reviews public notification system to ensure parents and carers can make informed choices about the use of public spaces**

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**Recommendation 1**

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**Recommendation 2**

**The ACT Government creates pesticide free parks supported by an online capacity to locate these parks**

**Recommendation 3**

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Matthew Armstrong

29.6.2018