



To: Chief Executive Officers

From: Mark Batty
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Environment and Waste

Organisation: All Councils

Date: 16 August 2018

Subject: Glyphosate

IN BRIEF:

Operational Area:	Planning and Community Development / Parks and Gardens
Key Issues:	<ul style="list-style-type: none">• Renewed concerns have been raised about human exposure to glyphosate following the August 2018 California Superior Court decision that Roundup contributed to a pest control manager's cancer.• The national regulator for agricultural chemicals, The Australian Pesticides and Veterinary Medicines Authority (APVMA) conducted a comprehensive review of the IARC assessment report and other relevant scientific material. This review concluded that the scientific weight-of-evidence indicates that exposure to glyphosate does not pose a carcinogenic or genotoxic risk to humans.• In light of the US court's decision, APVMA has restated that Glyphosate is registered for use in Australia and approved products containing glyphosate can continue to be used safely according to label directions.• APVMA will continue to track and consider any new scientific information associated with safety and effectiveness of glyphosate, including the information available from other regulators.
Action required:	For noting

Glyphosate is a broad-spectrum, non-selective, post emergent, systemic herbicide that kills or suppresses all plant types (except those genetically modified to be resistant to glyphosate). Glyphosate acts by disrupting the shikimic acid pathway, which is unique to plants, to prevent biosynthesis and kill the plant.

Products containing glyphosate that are registered for use in Australia are formulated as solutions, granules, aerosols and gels and are generally applied using ground or aerial equipment. Councils use glyphosate for weed management in natural areas, spot spraying in parks and gardens and weed spraying on kerbs, footpaths and medians.

Concerns regarding glyphosate use were raised in 2016 following the assessment of the International Agency for Research on Cancer (IARC) that classified glyphosate in a group of chemicals that is 'probably carcinogenic to humans'.

The Food and Agriculture Organisation of the United Nations and World Health Organisation held a Joint Meeting on Pesticide Residues in May 2016 to re-evaluate glyphosate. The [summary report](#) of the meeting stated that:

Glyphosate is a broad-spectrum systemic herbicide. Several epidemiological studies on cancer outcomes following occupational exposure to glyphosate were available. The evaluation of these studies focused on the occurrence of non-Hodgkin lymphoma (NHL). Overall, there is some evidence of a positive association between glyphosate exposure and risk of NHL from the case-control studies and the overall meta-analysis. However, it is notable that the only large cohort study of high quality found no evidence of an association at any exposure level.

Glyphosate has been extensively tested for genotoxic effects using a variety of tests in a wide range of organisms. The overall weight of evidence indicates that administration of glyphosate and its formulation products at doses as high as 2000 mg/kg body weight by the oral route, the route most relevant to human dietary exposure, was not associated with genotoxic effects in an overwhelming majority of studies conducted in mammals, a model considered to be appropriate for assessing genotoxic risks to humans. The Meeting concluded that glyphosate is unlikely to be genotoxic at anticipated dietary exposures. Several carcinogenicity studies in mice and rats are available. The Meeting concluded that glyphosate is not carcinogenic in rats but could not exclude the possibility that it is carcinogenic in mice at very high doses. In view of the absence of carcinogenic potential in rodents at human-relevant doses and the absence of genotoxicity by the oral route in mammals, and considering the epidemiological evidence from occupational exposures, the Meeting concluded that glyphosate is unlikely to pose a carcinogenic risk to humans from exposure through the diet. The Meeting reaffirmed the group acceptable daily intake (ADI) for the sum of glyphosate and its metabolites of 0–1 mg/kg body weight on the basis of effects on the salivary gland. The Meeting concluded that it was not necessary to establish an acute reference dose (ARfD) for glyphosate or its metabolites in view of its low acute toxicity.

Following the [IARC assessment](#), the Australian Government regulator of agricultural and veterinary (agvet) chemical products, The Australian Pesticides and Veterinary Medicines Authority (APVMA), conducted a comprehensive review of the IARC assessment report and other relevant scientific material. APVMA's [final regulatory position](#) released in March 2017 states that the scientific weight-of-evidence indicates that:

- exposure to glyphosate does not pose a carcinogenic or genotoxic risk to humans
- there is no scientific basis for revising the APVMA's satisfaction that glyphosate or products containing glyphosate:
 - would not be an undue hazard to the safety of people exposed to it during its handling or people using anything containing its residues
 - would not be likely to have an effect that is harmful to human beings
 - would not be likely to have an unintended effect that is harmful to animals, plants or things or to the environment
 - would be effective according to criteria determined by the APVMA by legislative instrument, and
 - would not unduly prejudice trade or commerce between Australia and places outside Australia.
- there are no scientific grounds for placing glyphosate and products containing glyphosate under formal reconsideration
- the APVMA will continue to maintain a close focus on any new assessment reports or studies that indicate that this position should be revised.

APVMA has made the following statement on its [website](#) following the Californian Superior Court decision:

APVMA is aware of the August 2018 decision in the Californian Superior Court concerning glyphosate.

*Glyphosate is registered for use in Australia and APVMA approved products containing glyphosate can continue to be used safely according to label directions. Australian law requires appropriate warnings on product labels, which include relevant poisons scheduling, first aid, and safety directions detailing personal protective equipment when handling and using products containing glyphosate. The APVMA reminds all users of the importance of following **all** label instructions.*

As the national regulator for agricultural chemicals, we continue to track and consider any new scientific information associated with safety and effectiveness of glyphosate, including the information available from other regulators.

WALGA will provide further information to the sector if it becomes available.

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