



# ARVIN-EDISON WATER STORAGE DISTRICT

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September 24, 2015

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**Via Electronic Mail:** [P65Public.Comments@oehha.ca.gov](mailto:P65Public.Comments@oehha.ca.gov)

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**Re: NOIL Glyphosate**

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Ms. Barajas-Ochoa:

Please accept these comments from California's industrial, turf, and ornamental (IT&O) industry in opposition to the Office of Environmental Health Hazard Assessment's (OEHHA) intention to list glyphosate under the Labor Code provision of the Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65).

Glyphosate-based herbicides are vital tools for controlling weeds that are problems in turf and ornamental sites—like golf courses, nurseries, and lawns—as well as industrial sites, such as roadsides, canals, parks, schools, and right-of-ways. Glyphosate is a valuable tool for integrated pest management programs and can be used to reduce wildfire risk, and restore habitat and wildlife food production areas that have been taken over by noxious weeds like johnsongrass, poison ivy, Canada thistle, musk thistle, and yellow starthistle, among many other uses. The IT&O industry in California has been using glyphosate-based herbicides for over 40 years to help beautify and protect our rural and urban communities, keeping our water systems safe and in a natural state of balance, and helping our infrastructure systems—roads, parks, and landscapes, for example - function successfully. Many of these areas, such as ditch banks, steep hillsides and other non-crop areas are not accessible with heavy equipment or mowers, and use of glyphosate reduces the risk of injury for IT&O workers who otherwise must frequently re-enter the area to maintain mechanical control of tall growing vegetation. Additionally, many of the glyphosate uses are on municipal property, and many municipalities prohibit the use of Proposition 65 listed chemicals. Prohibitions such as these should only take place after sound scientific reviews.

Glyphosate-based herbicides have been evaluated in laboratory and field studies for behavior in the environment and potential impact to non-target organisms. The results of these studies indicate that application of glyphosate-based herbicides in accordance with label directions do not pose an unreasonable risk of adverse effects to wildlife and the environment. Because of glyphosate's effectiveness and favorable environmental characteristics, several glyphosate formulations have been used by conservation organizations to protect and restore wildlife

habitats, especially those that have been taken over by invasive species of plants or weeds that threaten native plants and wildlife. Many of these plant species are so aggressive and grow so fast that they crowd out native plants and the wildlife that depend on them.

*Arundo donax* (giant reed) is a tall perennial grass that typically forms dense stands on wetlands and other areas. It has invaded central California River valleys in San Luis Obispo and Monterey counties, the San Francisco Bay Area, the Sacramento and San Joaquin River valleys and is also increasing in the North Coast region. *Arundo donax* is threatening California's riparian ecosystems by outcompeting native species, such as willows, for water. Not only does *Arundo donax* invade areas and take away natural wildlife habitat, it uses a tremendous amount of precious water and clogs rivers, streams and flood control channels.

Glyphosate is used extensively to fight this invasive species across California because it is highly effective against the weed and is approved for use in aquatic situations, as labeled by the EPA, and CA DPR. Glyphosate is used for many other difficult to control aquatic weeds like: Cattails, bulrush, water primrose, and water hyacinth. Without this tool in aquatic situations the industry would have limited alternatives, such as mechanical removal that has a high financial cost and more environmental detriments, or more costly, more toxic and less available chemical alternatives to glyphosate.

Specific glyphosate herbicides are also used throughout the world to control emerged and floating vegetation in water. In the United States, some glyphosate herbicides are registered for application to emerged vegetation in water; in other countries, other glyphosate brands have approval for aquatic uses. Only a very few herbicides have the environmental and toxicological properties that make them suitable for application over water. Because glyphosate is approved for the control of unwanted vegetation in aquatic environments, including sources used for drinking water, it is expected that the glyphosate might occasionally be detected in surface water.

Although glyphosate and its major metabolite aminomethylphosphonic acid (AMPA) have occasionally been detected in surface waters, glyphosate historically has not been included among herbicides that cause concern in water supplies. Since glyphosate and AMPA can readily be removed from water by conventional drinking water treatment methods (which include sand filtration and chlorination), it is highly unlikely that it would be detected in finished drinking water (Jönsson et al., 2013; Speth 1994). Additionally, because glyphosate binds tightly to most soils, it has a low potential to move through soil to contaminate groundwater (U.S. EPA 1993).

Glyphosate-based herbicides have a long history of safe use. They present a low risk to human health and animals and are unlikely to leach into groundwater from the soil. So far, no other herbicide alone combines all of these characteristics, which is why glyphosate-based herbicides are used extensively to control weeds in a wide variety of agricultural, industrial and domestic situations and is so much demanded by farmers, large and small, all around the world.

Regulatory authorities and independent experts around the world have reviewed numerous long-term carcinogenicity and genotoxicity studies and agree that there is no evidence that glyphosate causes cancer, even at very high doses, and that it is not genotoxic. Glyphosate-based herbicides are among the most thoroughly tested in the world. Their history of safe use is supported by one of the most extensive worldwide human health, crop residue and environmental databases ever compiled on a pesticide product.

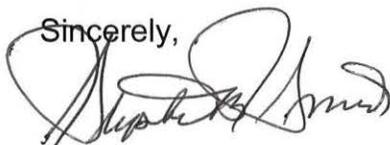
The International Agency for Research on Cancer's (IARC) misclassification of glyphosate should not be used by OEHHA to list glyphosate under Prop 65. It is based on a limited hazard identification approach and does not consider real-world use and exposure, which is a key element of the thorough risk assessments conducted by regulators. The IARC classification also overlooked decades of thorough and robust analysis by regulatory agencies, including a multi-year assessment just completed on behalf of the pesticide regulatory authority in the European Union. Another registration review is currently underway by the U.S. EPA.

In addition, during the IARC review, relevant scientific data were excluded and/or dismissed as not contributing to reach the conclusion, including the recently completed review conducted on behalf of the European Union and many independent studies. No link between glyphosate and an increase in cancer is identified when the full data set is included in a full review.

In the U.S., the E.U. and most other countries worldwide, no herbicide can be used until it has been thoroughly reviewed and approved for its intended use. No regulatory agency in the world considers glyphosate to be a carcinogen. In fact, the U.S. EPA has placed glyphosate in its most favorable category for carcinogenicity. Glyphosate's history of safe use is supported by decades of data from more than 800 scientific studies – many conducted by independent researchers.

As an industry, we support all of the safe and labeled uses of glyphosate in agriculture and the industrial, turf, and ornamental business, and we strongly disagree with OEHHA's intention to list glyphosate under Prop 65.

Sincerely,



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California's Office of Environmental Health Hazard Assessment (OEHHA) recently announced its intention to add glyphosate to the state's Proposition 65 (Prop 65) list. Prop 65, also known as the Safe Drinking Water and Toxic Enforcement Act of 1986, was approved by California voters in 1986 and requires the state to publish a list of "chemicals known to the state to cause cancer." Monsanto strongly disagrees with this listing.

OEHHA's **sole basis** for proposing to include glyphosate on Prop 65 list is the classification of glyphosate as a Category 2A "probable carcinogen" earlier this year by the International Agency for Research on Cancer (IARC). Specifically, because IARC stated there was "sufficient evidence" of carcinogenicity in animals, OEHHA is proposing to use its authority under the California Labor Code to rush through a decision to add glyphosate to the Prop 65 list, as it has done with many other chemicals. OEHHA does not conduct any new research or studies as part of this process.

Monsanto has joined with others in the industry to voice strong disagreement with the IARC classification as well. IARC did not present any new research or data; it did not consider the total weight of scientific evidence available on glyphosate; and it selectively used data points and made basic errors in data interpretation.

**Key Messages:**

- For more than 40 years, glyphosate-based herbicides have been a valuable tool for weed control for landscaping and lawn care professionals, farmers and other users in California. All labeled uses of glyphosate are safe for human health and the environment and supported by one of the most extensive worldwide human health databases ever compiled on an agricultural product. Our goal is to ensure that any potential listing will not affect the availability of glyphosate in California.
- No regulatory agency in the world considers glyphosate to be a carcinogen. Regulatory agencies around the world have concluded that all labeled uses of glyphosate are safe for human health and the environment. In the United States, the EPA has placed glyphosate in its most favorable category for carcinogenicity. Glyphosate's history of safe use is supported by decades of data from more than 800 scientific studies – many conducted by independent researchers.
- As it has with hundreds of other substances over the years, including aloe vera, the California Office of Environmental Health Hazard Assessment (OEHHA) recently announced its intention to list glyphosate under the strict provisions of Proposition 65.
- The **sole basis** of OEHHA's intention to list is the classification of glyphosate earlier this year by the International Agency for Research on Cancer (IARC). OEHHA interprets Prop 65 to allow it to simply accept the IARC classification without further scrutiny or review. OEHHA does not evaluate the weight or quality of the evidence considered by IARC.
- Monsanto and others in the industry strongly disagree with the IARC classification. The IARC classification overlooked decades of thorough and robust analysis by regulatory agencies, including a multi-year assessment just completed on behalf of the regulatory authority in the European Union. Another registration review is currently underway by the U.S. EPA. The IARC classification is based on a limited hazard identification approach and does not consider real-world use and exposure, which is a key element of the thorough risk assessments conducted by regulatory agencies.
- For more information about glyphosate safety, please visit [monsanto.com/glyphosate](http://monsanto.com/glyphosate).