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Ms. Esther Barajas-Ochoa, Office of Environmental Health Hazard Assessment
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Sacramento, California 95812-4010
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Regarding: *NOIL Glyphosate*

Ms. Barajas-Ochoa,

Please accept these comments 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).

As a Farm Advisor for the University of California Cooperative Extension working in El Dorado, Amador, Calaveras and Tuolumne counties, much of my work is to extend research based information from the University to local farmers and ranchers. My education includes a Master's of Science degree from U.C. Davis in Weed Science. As a trained weed scientist from one of the leading weed science programs across the nation, my extensive educational background gives me the confidence that I can speak on this topic with confidence and with merit.

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.

Glyphosate-based herbicides have been used successfully in California for over 40 years to help combat weeds. 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 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.

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) classification 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.

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

Sincerely,

Scott Oneto
Farm Advisor / Director