

To: Oregon Department of Agriculture

From: Chlorpyrifos Stakeholder Group Members Lisa Arkin, Beyond Toxics and Martha Sonato, PCUN

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Subject: Protecting Oregonians and the Environment from Chlorpyrifos Exposures

As members of Chlorpyrifos Stakeholder Group, we are responding to the request to propose measures that the Agency can adopt to accomplish the goals of protecting public health by eliminating and reducing risks from exposure to the organophosphate Chlorpyrifos. The documents sent to the Stakeholder Committee focused on mitigation of exposure risks. However, we want to be clear that the risk of harm from chlorpyrifos exposure is too great to merely limit. Chlorpyrifos is an outdated and hazardous organophosphate chemistry now banned in Hawaii, California and New York as well as the European Union. California's Scientific Review Panel on Air Toxicants determined that Chlorpyrifos poses unacceptable developmental neurotoxicological effects demonstrated to occur at levels substantially below the level that causes 10% inhibition of red blood cells and which inhibits the enzyme acetylcholinesterase critical for neurological functions.<sup>1</sup> The European Union determined that this insecticide poses danger at the genotoxic and neurological level<sup>2</sup> and subsequently banned the import of food or crop imports containing detectable residues of chlorpyrifos.

We would like to stress that canceling the registration of chlorpyrifos in Oregon would not only prevent risks to children, farm workers and by-standers, it would also provide the incentive and opportunity for Oregon to advance less-toxic integrated pest management practices.

The decision to ban or phase-out chlorpyrifos in other states and countries was based on evidence that this pesticide causes serious health effects in children and other sensitive populations at lower levels of exposure than previously understood. Thus, reducing or "mitigating" exposure risks is an entirely insufficient response to protect public health and ensure that chlorpyrifos uses are not escaping from the application site into the environment.

We urge the Oregon Department of Agriculture to adopt rules that sequentially phase-out all chlorpyrifos uses along with instituting immediate regulations to end the most ultra-hazardous application methods and uses as recommended below.

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<sup>1</sup> Scientific Panel Review on Toxic Air Contaminant Findings on Chlorpyrifos, August 15, 2018.

<sup>2</sup> European Food Safety Authority, "Statement on the available outcomes of the human health assessment in the context of the pesticides peer review of the active substance chlorpyrifos-methyl." July 31, 2019.

# Chlorpyrifos Risk Mitigation Measures

## **Phase-Out** of all applications

- by 1/1/2021–greenhouses, shading nets/tubes, turf and golf courses
- by 1/1/2022–for all food crops, nursery products (ornamental plants), Christmas trees, grass seed fields
- by 1/1/2024–for trunk/bark applications, soil treatments and granular applications for in-furrow seed grown for seed crops
- by 1/1/2025–for seed treatments for pre-planting

## **Restrict Application Methods until Phase-Out**

- by 6/1/2020–no aerial spray applications
- by 1/1/2022–no airblast or foliar sprays applications
- by 1/1/2023–no chemigation applications

## **Enforce Buffer Zones until Phase-Out** – to protect vulnerable populations

- 1000 ft from property line of sensitive sites include homes, farmworker housing (including outdoor kitchens, toilets and sinks), or other residential buildings, schools, daycare centers, nursing homes, and hospitals
- 500 ft from all surface water and domestic drinking water intakes\*

\*See Report “Chlorpyrifos Monitoring Results In Oregon’s (PSP) Watersheds: 2013-2019.” Water quality reports confirm that chlorpyrifos is detected in Oregon waterways. Reducing frequency of detections or concentration levels is not enough; we must ensure that chlorpyrifos is not entering surface waters to protect drinking water quality for people and wildlife.

## **REI Intervals until Phase-Out** – to protect workers and by-standers\*

- 4 days for all crops
- 4 days for golf courses and turf
- 4 days for nursery crops and Christmas trees
- 4 days for greenhouses, shading nets/tubes

\*Modeled after the Lorsban Advanced Label for apples, figs, pears, cherry, peach, plum

**Pre-Harvest Interval until Phase-Out** - established to ensure that the total amount of pesticide residues absorbed through food consumption or dermal absorption will not exceed the acceptable daily intake

- Christmas Trees - 7 days
- No uses on food crops

### **Restricted Use Pesticide (RUP) Designation until Phase-Out**

- RUP designation on all products regardless of size and quantity of packaging
- Applications made by a licensed applicator only; No supervision of a certified or non-licensed employee allowed

### **Notification**

- Pesticide applicators making an application of a Class 1B pesticide must notify residents and businesses on properties with adjoining boundaries no less than 8-hours prior to the application of a Class 1B pesticide. Notification can be in writing, by text or by phone.
- Farm workers working on the property that will have an application will be notified no less than 8-hours prior to the application of a Class 1B pesticide.

### **Worker Protections/Precautions**

- No uses when the temperature is 80 degrees Fahrenheit or above
- Require the use of a thermal wind meter for checking local weather conditions at the site of the application (temperature, wind and humidity).
- Applicator must have cell phone contact during the application and check-in with a responsible person such as the property owner or business owner every 30 minutes

### **Record Keeping Requirements until Phased-Out**

- Records must be filled out within 12 hrs of application
- Records must be kept for 7 years
- Records must be turned into ODA by 12/31 of every year for accountability

### **Personal Protective Equipment (PPE)**

All mixers, loaders, applicators and handlers must be provided by the employer and must wear at all times: • Coveralls • Chemical-resistant gloves • Chemical-resistant apron when mixing or loading or exposed to the concentrate • Chemical-resistant footwear plus socks • Chemical-resistant headgear for overhead exposure • A NIOSH-approved particulate, dust and mist

filtering respirator with powered air purifying respirator or Elastomeric particulate respirator with any N, R, or P filter.