



**Testimony in Support of SB 853  
Prohibits sale, purchase or use of the pesticide chlorpyrifos.**

**Committee on Environment and Natural Resources  
Oregon State Senate  
March 26, 2019**

Chairman Dembrow and Members of the Committee,

Thank you for the opportunity to testify. My name is Tyler Smith. I am a staff scientist at Earthjustice, the largest nonprofit, environmental law organization in the country. Earthjustice strongly supports **SB 853**, which would prohibit the use of chlorpyrifos in Oregon.

**EPA Proposed Banning Chlorpyrifos**

In 2015, EPA concluded that using chlorpyrifos on food does not meet the federal safety standard of a “reasonable certainty of no harm” and proposed a ban.<sup>1</sup> This ban would have eliminated nearly all uses of this pesticide across the country.

EPA’s conclusion is consistent with decades of scientific research. Indeed, almost 20 years ago, EPA banned residential uses of chlorpyrifos because studies indicated harm to children.<sup>2</sup> But at that time, EPA allowed the continued use of chlorpyrifos on our food and for other applications, such as pest control on turf grass at golf courses.

Now, after years of further study, EPA’s scientists have concluded that there is no safe use of chlorpyrifos.<sup>3</sup> They reviewed thousands of studies and examined the hundreds of ways that chlorpyrifos may be used under current law. They found that all of these uses result in unsafe levels of exposure — even when handlers follow directions on pesticide labels and wear personal protective equipment.<sup>4</sup>

In addition to finding that exposure to pesticide handlers was unsafe, EPA’s scientists also found that the continued use of chlorpyrifos on food can harm those who eat the food. The uses on food expose infants to 93 times what the agency considers safe and expose children 1 to 2

years of age to 140 times what the agency considers safe.<sup>5</sup> Moreover, according to agency, there is no safe level of chlorpyrifos in drinking water.<sup>6</sup>

### **EPA's Proposal to Ban Chlorpyrifos Followed a Rigorous Process**

EPA's conclusions followed years of careful study. The evidence that exposure to chlorpyrifos harms children<sup>7</sup> was reviewed again and again by EPA's scientists and by independent experts who serve on the agency's Scientific Advisory Panel. The agency and the Panel found that the weight of the evidence — that is, the best available science weighed and judged by experts — supports the conclusion that chlorpyrifos is a neuro-developmental toxicant. Specifically:

- In 2012, the Panel concluded that epidemiologic and animal studies “suggest that chlorpyrifos can affect neurodevelopment at levels lower than those associated with” acute poisoning.<sup>8</sup>
- In 2016, the Panel stated, “The Panel agrees that both epidemiology and toxicology studies suggest there is evidence for adverse health outcomes associated with chlorpyrifos exposures below levels that result in” acute poisoning.<sup>9</sup>
- In 2016, EPA wrote, “The agency agrees with the 2016 [Panel] (and previous [Panels]) that there is a potential for neurodevelopmental effects associated with chlorpyrifos exposure to occur at levels below” those associated with acute poisoning.<sup>10</sup>

In short, even low levels of exposure to chlorpyrifos can harm the developing brain.

The Panel praised a study of chlorpyrifos exposure in children conducted by scientists at Columbia University. The Panel stated, “the Columbia study is the most robust and appropriate for informing risk assessment”, “the Columbia study is epidemiologically sound”, and “the Columbia study was indeed quite strong and provided extremely valuable information.”<sup>11</sup>

The Panel also concluded that the results of the Columbia study were generally consistent with those reached by other scientists across the country. The Panel stated that, overall, epidemiologic studies have found “consistent associations relating exposure measures to abnormal reflexes in the newborn, pervasive development disorder at 24 or 36 months, mental development at 7-9 years, and attention and behavior problems at 3 and 5 years of age.”<sup>12</sup>

Yet, despite these studies and the conclusions of experts, in March 2017, the Trump administration announced that it would not finalize the proposed ban.<sup>13</sup> The administration did not present any new scientific evidence. It disregarded the best available science and left millions of people exposed to a toxic chemical.

### **Any Possible Federal Action to Ban Chlorpyrifos Has Been, and Likely Will Continue to be, Delayed by Litigation**

A coalition of environmental, health, labor, and civil rights organizations has sued the Trump administration, challenging its refusal to ban chlorpyrifos.<sup>14</sup> In August of last year, a federal appeals court ordered the administration to ban all uses of chlorpyrifos, but the agency appealed further.<sup>15</sup> The Ninth Circuit will hear oral argument in the case today.

To date, EPA still has not disputed the conclusion reached by its scientists and instead has based its legal argument on unrelated procedural issues. As the court observed in August, “The EPA presents no arguments in defense of its decision. Accordingly, the EPA has forfeited any merits-based argument.”<sup>16</sup>

There simply is no debate about the science of chlorpyrifos — except from the people who make money off chlorpyrifos. But unless Oregon takes action, chlorpyrifos will remain on the market and people here will remain exposed while the federal litigation continues. Given the options available to the Trump administration, it may take years to resolve all of the potential litigation even if the plaintiffs ultimately prevail.

### **Oregon Should Ban Chlorpyrifos Now**

Frankly, the three of us should not be here today. In 2015, EPA concluded that chlorpyrifos did not meet the federal safety standard and proposed to ban this toxic pesticide. The agency should have finalized the proposed ban, and that should have been the end of it.

Politics, pure and simple, stands in the way. It is only because the Trump administration has abandoned science and abdicated its responsibility to public health that Oregon and other states now must consider bills to prohibit the use of chlorpyrifos. But Oregon *should* take action.

**SB 853** would prohibit the use of chlorpyrifos and make this state a safer place for kids to live. I urge your support and am happy to answer your questions. Thank you.

## References

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<sup>1</sup> EPA wrote, “At this time, the agency is unable to conclude that the risk from aggregate exposure from the use of chlorpyrifos meets the safety standard of [a “reasonable certainty of no harm” contained in] section 408(b)(2) of the Federal Food, Drug, and Cosmetic Act (FFDCA). Accordingly, EPA is proposing to revoke all tolerances for chlorpyrifos.” Chlorpyrifos; Tolerance Revocations, 80 Fed. Reg. 69,080 (November 6, 2015), <https://www.federalregister.gov/documents/2015/11/06/2015-28083/chlorpyrifos-tolerance-revocations>.

<sup>2</sup> As EPA explained, “This action comes after completing the most extensive scientific review of the potential hazards from a pesticide ever conducted. This action -- the result of an agreement with the manufacturers -- will significantly minimize potential health risks from exposure to Dursban, also called chlorpyrifos, for all Americans, especially children.” EPA, Dursban Announcement (2000), <https://archive.epa.gov/epa/aboutepa/dursban-announcement.html>.

<sup>3</sup> EPA wrote, “[A]ll agricultural occupational handler scenarios, all primary seed treatment handler scenarios, and all secondary seed treatment (planter) scenarios are of concern with label-specified and maximum levels of personal protective equipment (PPE) or engineering controls[.]” EPA, Chlorpyrifos: Revised Human Health Risk Assessment for Registration Review 7 (2016), <https://www.regulations.gov/document?D=EPA-HQ-OPP-2015-0653-0454>.

<sup>4</sup> *Id.*

<sup>5</sup> *Id.* at 23.

<sup>6</sup> *Id.* at 24.

<sup>7</sup> For recent reviews of the evidence that chlorpyrifos harms children, *see* Irva Hertz-Picciotto, Jennifer B. Sass, Stephanie Engel, *et al.*, Organophosphate Exposures During Pregnancy and Child Neurodevelopment: Recommendations for Essential Policy Reforms, 15 *PLoS Medicine* e1002671 (2018), <https://journals.plos.org/plosmedicine/article/file?id=10.1371/journal.pmed.1002671&type=printable>; Maria Teresa Munoz-Quezada, Boris A. Lucero, Dana B. Barr, *et al.*, Neurodevelopmental Effects in Children Associated with Exposure to Organophosphate Pesticides: A Systematic Review, 39 *NeuroToxicology* 158 (2013), <https://www.sciencedirect.com/science/article/pii/S0161813X13001514>.

<sup>8</sup> EPA, Transmittal of Meeting Minutes of the FIFRA Scientific Advisory Panel Meeting held April 10-12, 2012 on “Chlorpyrifos Health Effects” 53 (2012), <https://www.epa.gov/sites/production/files/2015-06/documents/041012minutes.pdf>.

<sup>9</sup> EPA, Transmittal of Meeting Minutes of the April 19-21, 2016 FIFRA SAP Meeting Held to Consider and Review Scientific Issues Associated with “Chlorpyrifos: Analysis of Biomonitoring Data” 18 (2016), <https://www.epa.gov/sites/production/files/2015-06/documents/041012minutes.pdf>.

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<sup>10</sup> Chlorpyrifos; Tolerance Revocations; Notice of Data Availability and Request for Comment, 81 Fed. Reg. 81,049, 81,050 (November 17, 2016), <https://www.federalregister.gov/documents/2016/11/17/2016-27552/chlorpyrifos-tolerance-revocations-notice-of-data-availability-and-request-for-comment>.

<sup>11</sup> EPA, Transmittal of Meeting Minutes of the FIFRA Scientific Advisory Panel Meeting Held September 16-18, 2008 on the Agency's Evaluation of the Toxicity Profile of Chlorpyrifos 31, 32, 35 (2012), <https://www.regulations.gov/document?D=EPA-HQ-OPP-2008-0274-0064>.

<sup>12</sup> EPA, *supra* note 8 at 17.

<sup>13</sup> Eric Lipton, "E.P.A. Chief, Rejecting Agency's Science, Chooses Not to Ban Insecticide," *The New York Times* (March 29, 2017), <https://www.nytimes.com/2017/03/29/us/politics/epa-insecticide-chlorpyrifos.html>.

<sup>14</sup> The organizations are: Pineros y Campesinos Unidos del Noroeste, League of United Latin American Citizens, United Farm Workers, Farmworker Association of Florida, Labor Council for Latin American Advancement, Farmworker Justice, GreenLatinos, National Hispanic Medical Association, Learning Disability Association of America, California Rural Legal Assistance Foundation, Pesticide Action Network North America, and Natural Resources Defense Council. For more information, *see* Earthjustice, Groups Appeal EPA's Refusal to Ban Dangerous Pesticide (June 6, 2017), <https://earthjustice.org/news/press/2017/groups-appeal-epa-s-refusal-to-ban-dangerous-pesticide>.

<sup>15</sup> League of United Latin American Citizens et al. v. Wheeler (2018), <https://earthjustice.org/sites/default/files/files/chlorpyrifos%20opinion%208.9.2018.pdf>.

<sup>16</sup> *Id.* at 30.