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"Mismanaging Chemical Risks: EPA's Failure to Protect Workers"

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Chairman Tonko, Ranking Member Shimkus, and members of the Subcommittee, thank you for the opportunity to share the views of the United Farm Workers of America ("UFW") and the experiences of the workers that we represent.

My name is Giev Kashkooli, and I serve as 2nd Vice President and the political and legislative director for the UFW, where I serve as the union's political and legislative director. I have worked with the union for over 20 years throughout California, New York, Washington, D.C., and Florida.

About the United Farm Workers

Founded in 1962 by Cesar Chavez, Dolores Huerta, and other early organizers, the UFW is the nation's first enduring and largest farm worker union. At the state and federal level, the UFW actively champions legislative and regulatory reforms that advance the health, safety and well-being of farmworker families and rural communities. Protecting both farm workers and consumers has been a hallmark of the United Farm Workers since the 1960s. Our founder Cesar Chavez asked, "What good does it do to achieve the blessings of collective bargaining and make economic progress for people when their health is destroyed in the process?"

The first time DDT was banned in the United States was not by the EPA, it was via a UFW contract with a grape grower in 1967. The UFW exposed the McFarland cancer clusters in the Central

Valley of California during the '80s and we continue to negotiate union contracts with pesticide protections. [1] A few years before his death, Cesar Chavez's last—and longest—public fast, of 36 days, in 1988 was over the pesticide poisoning of farm workers and their children. Since then, the UFW helped enact basic pesticide protections in California, Texas and Washington State during the '80s, '90s and early 2000s. They included posting in the fields, wait periods before re-entry and pesticide drift notifications near schools.

For decades, our union has been fighting to correct the historical inequities that penalized farm workers with weaker protections than workers in other industrial sectors. At the federal level and in the state of California, we have fought for laws and regulations that provide life-saving protections for farm workers and consumers. Among them:

- The Agricultural Worker Protection Standard (WPS)
- The Certification of Pesticide Applicators (CPA) rule
- California standards -- the first in the U.S. -- designed to prevent deaths and illnesses from extreme heat
- A California law -- another first -- that guarantees farm workers overtime pay after eight hours of work
- Pursuing bans on the use of nerve agent pesticides

Overview of the U.S. Farmworker Population

As you examine EPA's assessment and management of risks to agricultural workers from toxic pesticides, it's important that you understand the many challenges faced by farmworkers -- whose skilled work is integral to our food system -- and the impediments they continue to face in securing the legal right to a safe workplace. The reality that we see on in fields across the country is supported by the findings of the 2015-2016 National Agricultural Workers Survey (NAWS), conducted by the US Department of Labor. According to this survey, farmworkers are predominantly of Latino and/or indigenous ancestry, hailing from Mexico (69%) and Central

[1] See https://libraries.ucsd.edu/farmworkermovement/essays/essays/eleven/09%20-%20UFW%20FIGHTS%20HARVEST%20OF%20POISON.pdf

America (6%), while 1 percent are natives of South America, the Caribbean, Asia, and the Pacific Islands. Among all farmworkers, 6 percent identified as indigenous.[2] Nearly 70 percent identify as male (68%) and 32 percent, as female. Farmworkers are also relatively young, with two-thirds of the population (67%) under the age of 44:

- 14-19 years old (7%)
- 20-24 years old (11%)
- 25-34 years old (26%)
- 35-44 years old (23%)

In terms of family structure, among the 55 percent of farmworkers that reported having minors in their household:

- 53% had children younger than the age 6
- 65% had children ages 6-13, and
- 38% had children ages 14-17

At the national level, according to the Federal government's NAWS survey, 29 percent of farmworkers are U.S. citizens, 21 percent are legal permanent residents, while 49 percent are undocumented. And when it comes to language, 77 percent of farmworkers are most comfortable speaking in Spanish, 21 percent in English, and 1 percent in indigenous languages.

I share this, because there are as many as 2.5 million farmworkers across the U.S. who are exposed to pesticides in the process of cultivating and harvesting the food that reaches our tables, and tending to the ornamental plants that decorate our homes, yards and offices. And these are factors that influence a worker's ability to:

- speak out in the workplace about the hazards they face on the job without fear of retaliation
- access information about the chemicals that they are exposed to, directly or via a representative
- be adequately informed about pesticide safety and poisoning symptoms
- seek medical care when they feel ill

[2] Findings from the National Agricultural Workers Survey (NAWS) 2015-2016: A Demographic and Employment Profile of United States Farmworkers. Research Report No. 13. January 2018. Available at https://www.doleta.gov/naws/pages/research/docs/NAWS_Research_Report_13.pdf

- protect their children from take-home exposures

Most farmworkers are exposed on the job to pesticides. And many pesticides are associated with serious health effects. Unlike many of the other industrial chemicals that have been discussed today, pesticides are *designed to be toxic* to some species. It is therefore not surprising that many of these chemicals have turned out to be very toxic to humans. Indeed, farmworkers have one of the highest rates of chemical exposures among U.S. workers. Yet in connection with pesticide exposure, farmworkers are denied the health and safety protections provided by the Occupational Safety and Health Administration (OSHA), even though the impetus behind the establishment of OSHA in 1970 was the growing concern in Congress about "the occupational hazard presented by the misuse of pesticides."[3]

There is an ugly, race based history of Federal law excluding farm workers from the same basic labor protections and other workers, including the Fair Labor Standards Act (FLSA), federal child labor laws and the Food Quality Protection Act (FQPA), and the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA). In the 1930s, U.S. Representative J. Mark Wilcox stated very clearly the opposition to inclusion of agricultural workers in the Federal labor laws: "You cannot put the Negro and white man on the same basis and get away with it."

To the extent federal law offers farmworkers protections from pesticides on the job, and safeguards for their families from take-home exposures due to pesticide residues on their bodies, clothes and shoes, this protection comes from the U.S. Environmental Protection Agency (EPA). These crucial protections against pesticide misuse, injuries, illnesses, and death are codified in the Agricultural Worker Protection Standard (WPS)[4] and the Certification of Pesticide Applicators (CPA) rule.[5]

If farm workers in fields across the nation, and workers who handle and apply pesticides aren't adequately trained on the safe use of pesticides and protected from exposure, the health and safety of workers, families and communities across the country is at risk. These rules were strengthened to prevent farmworker poisonings and pesticide misuse that led to serious harm for hundreds of

[3] https://law.resource.org/pub/us/case/reporter/F2/520/520.F2d.1161.74-2062.html
[4] https://www.govinfo.gov/content/pkg/FR-2015-11-02/pdf/2015-25970.pdf
[5] https://www.govinfo.gov/content/pkg/FR-2017-01-04/pdf/2016-30332.pdf

homeowners and their families, and resulted in the tragic deaths of children. The “WPS” protects approximately 2.5 million workers and pesticide handlers, including hundreds of thousands of minors that labor in farms, fields, nurseries, greenhouses and forests. The “CPA” rule governs the training and certification requirements of nearly 1 million workers who apply Restricted Use Pesticides (RUPs) in, on, or around settings such as homes, schools, hospitals and industrial establishments. RUPs are the most toxic pesticides in the country, they are not available to the general public and can only be applied by certified pesticide applicators.

Recognizing the urgency to protect workers and broader public, for years, we urged the EPA to strengthen these rules and were gratified when it did so -- updating the WPS in 2015 and the CPA Rule in early 2017. Recently, we were heartened by House and Senate leadership, congressional appropriators and authorizing committees (House and Senate Agriculture, and House Energy and Commerce) for their bipartisan and unanimous support of S. 483, the Pesticide Registration Improvement Act of 2019 (“PRIA 4”). PRIA 4 provides the Environmental Protection Agency (EPA) with more resources to evaluate pesticide registrations and ensures the protection of farmworkers, pesticide applicators and consumers who are exposed to pesticides in agricultural, residential, and commercial settings. Since the bill became law last Friday, March 8, 2019, we plan to hold the EPA accountable to its implementation.

Beyond the statistics and acronyms, for our union, at the heart of these regulations are countless incidents of workers who have experienced pesticide poisoning, pregnant women who have suffered miscarriages, and parents whose children are dealing with learning disabilities and other health impairments. These safeguards are for a mother and daughter pair named Lucia, for Vicenta, for Aylin, and Bircmary who were working in a cabbage field when they noticed a strong odor and an odd taste in the back of their throats. Their lips began to numb up. Their skin became itchy and their eyes watered. They tell us that a headache set in quickly, followed by coughing and vomiting. They tried to continue working until Bircmary, a 37 year old mother of three kids, collapsed to the ground and started convulsing. This incident happened on May 5, 2017, in Kern County, California. We later found out that the women had been exposed to chlorpyrifos.

Chlorpyrifos Poses Risks of Concern To Workers And Agricultural Communities

Chlorpyrifos is acutely toxic. Prenatal exposures to chlorpyrifos are associated with lower birth weight, reduced IQ, loss of working memory, attention disorders, and delayed motor development. And what happened to Lucia, Aylin, Lucia, Vicenta and Bircmary is consistent with what we know about acute poisonings related to this pesticide. It's ability to suppress the enzyme that regulates nerve impulses in the body and cause convulsions. It can also cause respiratory paralysis, and, in extreme cases, death.

Chlorpyrifos is a Restricted Use Pesticide (RUP)[6], and one of two dozen organophosphate (OPs) pesticides that are widely used on crops like citrus, apples, broccoli and grapes. Alarmingly, this class of neurotoxic chemicals originally developed by the Nazis during World War II to serve as nerve gas agents. After the war, chemical companies repurposed the OPs to be used as pesticides, primarily as insecticides, for residential, commercial and agricultural uses. In the year 2000, residential uses of chlorpyrifos ended after EPA found unacceptable risks to kids. Somehow, it was unacceptable to expose kids to chlorpyrifos in their homes but it was acceptable for workers, kids and families in agricultural communities to bear the brunt of the exposure.

The Scientific Evidence About the Dangers of Chlorpyrifos is "Unambiguous"

The American Academy of Pediatrics has reported, "There is a wealth of evidence demonstrating the detrimental effects of chlorpyrifos exposure to developing fetuses, infants, children, and pregnant women." The American Academy of Pediatrics has noted that the scientific consensus about the harms of chlorpyrifos is "unambiguous."

The Center for Environmental Research and Children's Health at the University of California's Berkeley's School of Public Health found that children exposed to chlorpyrifos while their mothers were pregnant were associated with poorer intellectual development.

[6] https://www.epa.gov/sites/production/files/2017-10/documents/rup-report-oct2017.pdf

EPA's Own Risk Assessments of Chlorpyrifos Document Health Risks That Exceed EPA's Levels of Concern

In December 2014, the Environmental Protection Agency (EPA) released its revised human health risk assessment for chlorpyrifos and found that:

- the extensive body of peer-reviewed science correlated chlorpyrifos exposure with brain damage to children and that the brain damage occurred at exposures far below EPA's regulatory endpoint based on acute pesticide poisoning risks
- in treated drinking water, chlorpyrifos transforms to the more toxic chlorpyrifos oxon via the chlorination process and the primary source of risk comes from chlorpyrifos and chlorpyrifos oxon in drinking water in highly vulnerable watersheds, highly-cropped areas, and small watersheds where the land is agricultural and could be treated with chlorpyrifos
- acute poisoning risks of concern to workers from over 200 activities, including mixing and loading various pesticide formulations, airblast, aerial, and groundboom spraying, and re-entering fields after spraying to perform tasks like thinning, irrigating, and hand harvesting.

In November 2016, EPA released a revised human health risk assessment for chlorpyrifos that confirmed that there are no safe uses for the pesticide. EPA found that:

- All food exposures exceed safe levels, with children ages 1–2 exposed to levels of chlorpyrifos that are 140 times what EPA deems safe
- There is no safe level of chlorpyrifos in drinking water
- Pesticide drift reaches unsafe levels at 300 feet from the field's edge
- Chlorpyrifos is found at unsafe levels in the air at schools, homes, and communities in agricultural areas
- All workers who mix and apply chlorpyrifos are exposed to unsafe levels of the pesticide even with maximum personal protective equipment and engineering controls
- Field workers are allowed to re-enter fields within 1–5 days after pesticide spraying, but unsafe exposures continue on average 18 days after applications.

Personal Protective Equipment (PPE) is Inadequate to Protect Workers from Unsafe Levels of Chlorpyrifos

A bedrock principle of occupational hygiene is the "hierarchy of controls," which is used by the Occupational Safety and Health Administration (OSHA) and others to identify options for controlling exposures to occupational hazards. The hierarchy prioritizes elimination of the hazardous agent or substitution of a less hazardous agent. These are preferable to the implementation of engineering controls, which in turn are preferable to requiring personal protective equipment. For workers who are protected by OSHA, personal protective equipment is always the mitigation measure of last resort. When it comes to protecting workers from pesticides, EPA is in charge and the agency starts by considering personal protective equipment, then considers engineering controls, and never considers substitution with less toxic options or practices.

However, when EPA reviews a pesticide to determine whether it meets the statutory safety standards, it conducts a series of risk assessments addressing food, drinking water, drift and volatilization exposure to children, bystanders, and workers. As its standard approach in assessing worker risks, EPA identifies risk levels of concern to workers and determines whether workers will be exposed to levels of chlorpyrifos that exceed those risk levels. For pesticide handlers, if it finds risks of concern, EPA first tries to reduce the risks through the use of protective clothing and gear. If the risks of concern are not eliminated, EPA then considers requiring engineering controls, like closed mixing systems. If none of these strategies eliminates the risks of concern, EPA will consider reducing application rates or eliminating the application method. For risks of concern to field workers, EPA uses restricted re-entry intervals to keep field workers out of the fields until exposures will be reduced. Only if re-entry intervals cannot eliminate the risks of concern will EPA consider stopping the activity or the use of the pesticide. This is the inadequate and underprotective methodology that EPA has used to assesses worker risks from chlorpyrifos and the other organophosphates.

Workers are exposed when they handle pesticides and when they re-enter treated fields. EPA's 2016 Revised Risk Assessment for chlorpyrifos shows that workers are exposed to unsafe levels of the pesticide even with maximum protective equipment. Workers, their children, and other bystanders are exposed to chlorpyrifos through drift and volatilization, as well as on their food and

in the water they drink. Moreover, PPE cannot safeguard pregnant workers from exposures that can cause brain damage to their unborn children.

Chlorpyrifos has repeatedly been among the top pesticides causing acute pesticide poisonings of workers, their families, and others who live near places where it is applied. Year after year, chlorpyrifos has been identified as one of top five pesticides associated with poisonings in many states. California's pesticide exposure incident database contains 289 definite, probable, or possible chlorpyrifos exposure incidents from 2001 through 2013.

The actual incidence of chlorpyrifos poisonings is much higher due to under-reporting of pesticide incidents. EPA has acknowledged that "[u]nderreporting of pesticide incidents is a challenge," and assumes that only 25% of acute pesticide incidents are reported.[7] Farmworkers are deterred from reporting pesticide illnesses due to fear of retaliation, health care workers often lack the training to diagnose illnesses from pesticide exposures, and there is no national pesticide incident reporting system that could be utilized by clinicians and others who work with farmworkers.
In October 2015, EPA proposed to revoke all chlorpyrifos tolerances on our food, in response to the agency's scientific findings that chlorpyrifos is unsafe. Despite a series of findings that chlorpyrifos is unsafe, on March 29th, 2017, two days before Cesar E. Chavez's birthday, EPA reversed course and refused to ban food uses of chlorpyrifos. Instead, the agency said it will continue to examine chlorpyrifos tolerances as part of the pesticide registration review process to be completed by 2022.

EPA is Ignoring Science and The Law, And Congress Must Act

The UFW --along with farmworker, labor, civil rights, health and environmental organizations—are fighting in the courts for protections. In August 2018, as a result of our lawsuit and based on the overwhelming evidence that chlorpyrifos is unsafe for public health, and particularly harmful to children and farm workers, the 9th Circuit Court of Appeals ordered EPA to ban chlorpyrifos,

[7] Worker Protection Standard Revisions, 79 Fed. Reg. 15,444, 15,453, 15,459 (Mar. 19, 2014). Focus groups conducted by the Washington Department of Health revealed that 75% of the workers reported that they or someone close to them had become ill from pesticides at work and often they did not seek medical care because they could not afford losing wages, feared losing their jobs, didn't know worker's compensation would pay for the visit, or mistrusted the health care providers as being aligned with the employers. Washington State Department of Health, Learning from Listening: Results of Yakima Farmworker Focus Groups About Pesticides and Health Care (2004).

stating that ‘‘the time has come to put a stop to this patent evasion’’ of the law. To postpone the effectiveness of the court order, EPA asked the court to re-hear the case. Our attorneys at Earthjustice will be back in the 9th Circuit on March 26th, 2019 to urge the court to put an end to EPA's disregard for the developing brains of America's children and the health and safety of farmworker families and agricultural communities.

It has been nearly two years since EPA so blatantly ignored science and their duty to protect human health and the environment from this nerve agent pesticide. We are working to force EPA to comply with the law and protect our communities and children, and we urge Congress to intervene with legislative action.

EPA is Not Considering How Climate Change and The Risks Of Heat-Related Illness Associated with PPE Affect Farmworkers

Farm workers experience some of the highest rates of heat-related illness in the country. The risk of heat-related death in crop workers is 20 times higher than the risk in workers overall.[8] When workers apply pesticides, they must do so wearing any personal protective equipment required by EPA. The Agency has acknowledged that use of such equipment when working in hot temperatures increases the risk of heat-related illness. Yet EPA does not evaluate this risk when conducting occupational risk assessments for pesticides that assume varying levels of personal protective equipment.

EPA Makes Erroneous Assumptions About Pesticide Use And Farmworker Exposures

When it updated the WPS, EPA made clear that its pesticide risk assessments are premised on the assumption that pesticides will be used according to their respective labels, which includes a prohibition on direct spraying of workers and bystanders with pesticides. EPA's pesticide risk assessments and registration decisions do not take into account the inevitability that pesticides will be "misused" and people will be sprayed with these chemicals. This brings me to the importance of the Application Exclusion Zone (AEZ). The AEZ is a provision of the 2015 WPS and it requires

[8]See Larry L. Jackson & Howard R. Rosenberg, Preventing Heat-Related Illness Among Agricultural Workers, 15 J. Agromedicine 200 (2010) [attached as Exhibit 21] ("The crop worker fatality rate averaged 4 heat-related deaths per one million workers per year—20 times higher than the 0.2 rate for US civilian workers overall.").

the commonsense precaution that if someone is applying pesticides and sees workers or others around the equipment, they must avoid spraying them by suspending the application and resuming only after the non-trained and unprotected person leaves the area. The idea that pesticide applicators should avoid spraying pesticides when there are people in harm's way is an unquestionably sound policy from the standpoint of human health and human rights. Yet, pursuant to PRIA 4, the Trump Administration may reconsider and revise the AEZ. For the sake of workers and agricultural communities, we urge members of Congress to follow any revisions to the AEZ closely, to weigh in during the public comment period, and oppose any proposals that fail to protect workers and bystanders from occupational exposures and toxic drift.

Conclusion:

To protect children, farmworkers, agricultural communities and consumers from pesticide exposure and other hazards, we urge Congress to:

- Hold EPA accountable to the implementation of the Agricultural Worker Protection Standard (WPS) and the Certification of Pesticide Applicators (CPA) rule
- Ban all uses of chlorpyrifos by supporting H.R.230--The Ban Toxic Pesticides Act of 2019--a bill led by Congresswoman Nydia Velázquez that currently counts with 81 co-sponsors
- Urge the EPA Office of Chemical Safety and Pollution Prevention ("OCSPP") to prioritize review of the most toxic pesticides that are widely used on (organophosphates)
- Direct the EPA OCSPP to follow the hierarchy of controls when selecting options to reduce occupational risk from pesticides, and
- Direct the EPA OCSPP to assess the risk of heat-related illness associated with any and all personal protective equipment that the Agency assumes that workers will wear when conducting occupational risk assessments for pesticides

Thank you.