EXHIBIT 01

UNITED STATES COURT OF APPEALS FOR THE NINTH CIRCUIT

LEAGUE OF UNITED LATIN AMERICAN CITIZENS; PESTICIDE ACTION NETWORK NORTH AMERICA; NATURAL RESOURCES DEFENSE COUNCIL; CALIFORNIA RURAL LEGAL ASSISTANCE FOUNDATION; FARMWORKER ASSOCIATION OF FLORIDA; FARMWORKER JUSTICE; GREENLATINOS; LABOR COUNCIL FOR LATIN AMERICAN ADVANCEMENT; LEARNING DISABILITIES ASSOCIATION OF AMERICA; NATIONAL HISPANIC MEDICAL ASSOCIATION; PINEROS Y CAMPESINOS UNIDOS DEL NOROESTE; AND UNITED FARM WORKERS,

Petitioners,

v.

ANDREW WHEELER, Administrator, United States Environmental Protection Agency, and UNITED STATES ENVIRONMENTAL PROTECTION AGENCY,

Respondents.

STANDING DECLARATIONS

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Petitioners,

v.

ANDREW WHEELER, Administrator, United States Environmental Protection Agency, and UNITED STATES ENVIRONMENTAL PROTECTION AGENCY,

Respondents.

DECLARATION OF BEVERLEY JOHNS

I, BEVERLEY JOHNS, declare and state as follows:

- I am the President of the Illinois chapter of Learning Disabilities
 Association of America ("LDAA"). I have been actively engaged with LDAA for over 30 years.
- 2. For 35 years, I have been a special education teacher and administrator. I worked in the public schools with children with learning disabilities and significant behavioral problems for 35 years. The vast majority of these children lived in agricultural areas where they were exposed to pesticides. I now teach at a college and consult with the public schools.

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- 3. In 1976, my husband and I bought a home in a subdivision in Jacksonville, Illinois. Agricultural fields were right behind our home, where corn and soybeans were grown. The farmers sprayed pesticides heavily for years.
- 4. My husband has a rare type of blood cancer, Waldenstrom macroglobulinemia. Another man who lived two houses down from us had the same type of cancer. He has since died. After my husband was diagnosed, I researched the linkage between pesticides and cancer and became concerned that the pesticide spraying at the nearby farm may have been the cause of my husband's cancer. Ever since, I have tried to minimize my and my extended family's exposure to pesticides.
- 5. I am also very concerned about the impact of pesticides on children. I understand that studies have found linkages between pesticides and learning and behavioral disabilities in children. In my work, I have seen the long-term effects of learning and behavioral disabilities on children and their families. Some of the students have had lifelong learning problems, have struggled with mental health problems such as depression or obsessive compulsive disorders, have struggled to keep jobs, have had a number of health problems, and unfortunately some have died early because of a variety of illnesses such as heart problems and cancer.
- 6. I have advised my niece and friends and other relatives to limit their children's exposures to chemicals that can cause learning disabilities. LDAA has identified specific products, such as toys with plasticizers, that should be avoided.

It is much harder with food. While my niece tries to buy organic foods, others

cannot afford to. And even my niece can't control what her children eat at school

or their friends' houses. They also can't prevent their children from being exposed

to pesticides, like chlorpyrifos, in their drinking water. The teachers I have worked

with and currently work with also express concern over what their students eat and

the effects of the food on their ability to learn and function.

7. It is frightening for parents to lack control over the chemicals their

children encounter. Chemicals associated with learning disabilities, like

chlorpyrifos, are taking their toll on our children. A lot of innocent people, and

innocent children in particular, are being exposed. They and their families are

suffering from the consequences of learning and behavioral disabilities that could

have been avoided.

8. I am proud to be a member and elected official of LDAA because I

want to work to prevent exposures to toxic chemicals that cause learning

disabilities.

Pursuant to 28 U.S.C. § 1746, I declare under penalty of perjury that the

foregoing is true and correct to the best of my knowledge.

Executed on this 4th day of November 2019, in Jacksonville, Illinois.

/s Beverly H Johns

Beverly H Johns

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Respondents.

DECLARATION OF ANNE KATTEN

I, ANNE KATTEN, declare and state as follows:

1. I am the Director of the Pesticide & Worker Safety Project at the California Rural Legal Assistance Foundation ("CRLAF"). My job responsibilities include working to bring to light and reduce agricultural work hazards and pesticide exposures faced by California's agricultural workers and other rural residents. To accomplish these goals I maintain an ongoing dialogue with Cal OSHA and local, state and federal pesticide regulatory officials to encourage more thorough investigations and stricter enforcement of existing laws and regulations, advocate for improvements in regulations, and increased use of safer and more sustainable pest control

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alternatives. I also provide technical assistance to attorneys from my organization, other organizations and the private bar who are providing legal representation to farmworkers, and other workers or community members who were injured or harmed on the job or at home by pesticides or other workplace or environmental hazards. I also assist legal services programs and community organizations with developing outreach materials, accessing and understanding pesticide and work safety laws and regulations and public records and responding to pesticide poisoning incidents.

- 2. I submit this declaration based on my personal knowledge and based on my training and expertise as an industrial hygienist who focuses on exposures to pesticides to farmworkers, farmworkers' families, and rural communities from agricultural uses. This declaration is submitted in support of the lawsuit, in which CRLAF is a plaintiff, challenging USEPA's decision to postpone action on the proposal to rescind all food tolerances for the pesticide chlorpyrifos for years.
- 3. I earned a Bachelor's of Science from UC Berkeley in Plant Pathology and a Masters of Public Health specializing in industrial hygiene. I joined CRLAF in 1990 as a researcher and began my current position of Pesticide and Work Safety Project Director in 1998. I have been working in my current position for 19 years, advocating to protect workers from pesticide poisoning and other workplace hazards.
- 4. CRLAF is a 501(c)(3) non-profit civil legal aid organization that was founded in 1981 and provides free legal services and policy advocacy for California's rural

poor. CRLAF's mission is to achieve social justice and equity in partnership with farm workers and all low-wage workers and their families in rural communities through community, legislative and legal advocacy. By engaging in community education and outreach, impact litigation, legislative and administrative advocacy, and public policy leadership at the state and local level, CRLAF aims to improve working and living conditions for farm workers and other low-wage workers.

- 5. CRLAF has long advocated for more comprehensive protection of agricultural workers and other rural residents from exposure to organophosphates and other pesticides which pose high acute toxicity and chronic toxicity risks.
- 6. Consistent with CRLAF's mission, CRLAF is deeply concerned about the double standard which has allowed continued extensive use of chlorpyrifos in agriculture over the past 15 years while in contrast residential uses were ended in 2002 due to evidence of neurodevelopmental harm to children. Allowing continued agricultural use of chlorpyrifos shows a troubling disregard for protection of the brains and intellectual potential of farmworker children.
- 7. California Department of Pesticide Regulation publications document that about one million pounds of chlorpyrifos are applied annually to California fields and chlorpyrifos has been found repeatedly in air monitoring conducted in agricultural regions of California as well as in household dust, urine and blood samples of pregnant women and children, surface water and food.

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- 8. Over the past 15 years, while this double standard has been in effect the body of evidence linking even low levels of prenatal and childhood exposure to chlorpyrifos to neurodevelopmental effects including but not limited to loss of working memory, attention deficits and intelligence decrements has continued to grow as more epidemiology and animal toxicology studies are completed and published. This body of evidence includes very compelling findings from the CHAMACOS study of farmworker women and children in the Salinas Valley of California.
- 9. Given this overwhelming body of evidence of harm posed by exposure of pregnant woman and children to chlorpyrifos and evidence that farmworker families face the higher levels of exposure because they are in direct contact with treated plants as well as exposure through air and food, we welcomed the USEPA's proposal in 2015 to revoke all food tolerances and were extremely disappointed when EPA announced in March of 2017 that it would postpone action on this proposal for as many as five more years.
- 10. As part of my job, I provide technical assistance to attorneys and community outreach workers working for my own organization and other organizations that are representing fieldworkers, pesticide applicators and rural residents who have been impacted by pesticide exposure and sometimes I meet directly with these impacted individuals. I am aware of many incidents where farm workers and low-wage workers and their families have suffered acute illness which sometimes

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results in prolonged anxiety and disability as a result of exposure to chlorpyrifos, most commonly by drift. Between 2004-2014 the California Department of Pesticide Registration documented illness in 246 individuals to chlorpyrifos in 84 separate incidents¹. Over two thirds of these reported illnesses were due to pesticide drift and 17 percent resulted from exposure to pesticide residues. Several incidents stand out in my mind among multiple incidents of pesticide poisoning from drift of chlorpyrifos.

- 11. In May 2017, 37 workers in Kern County harvesting cabbage became ill after they began smelling a strong chemical odor. Tests confirmed that the pesticide had drifted a half mile from a tangerine orchard to the cabbage field.
- 12. In July 2007, the pesticide chlorpyrifos drifted from a walnut orchard across a road to a grape vineyard where a number of farm workers were pulling grape leaves. When the pesticide drifted, a number of workers became ill. The vineyard owner transported ten workers to the hospital for treatment, with one going home first to shower and then going to the hospital. Of these 11 farm workers, three of them had been vomiting. Later in the day, an additional 17 farm workers went to the hospital for treatment. Of these 17, two had previously been vomiting. Ten of the workers' clothes also tested positive for the pesticide. In total, 28 field workers experienced symptoms relating to chlorpyrifos exposure.
 - 13. CRLAF is very concerned that the delay of revocation of tolerances and

 $^{^1\} http://www.cdpr.ca.gov/docs/whs/pdf/chlorpyrifos_cases_reported.pdf$

cancellation of food crop chlorpyrifos registrations will result in continued harm to the

health and intellectual potential of California children, especially children of farm

workers and other rural residents who live and go to school near to agricultural fields

where chlorpyrifos continues to be used. The longer this action is delayed, the greater

the number of farmworker children and other children in rural California who will be

put at risk.

Pursuant to 28 U.S.C. § 1746, I declare under penalty of perjury that the

foregoing is true and correct.

Executed this 16th day of October 2019, at Sacramento, California.

s/ Ann<u>e Katten</u>

Anne Katten

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Respondents.

DECLARATION OF BRUCE GOLDSTEIN

I, BRUCE GOLDSTEIN, declare and state as follows:

1. I am the President and Chief Executive Officer of Farmworker Justice ("FJ"), a national nonprofit advocacy and education organization whose mission is to support farmworkers in their efforts to improve their living and working conditions, including their occupational health and safety. FJ's activities include educating the public, government officials and lawmakers about the adverse health impacts to farmworkers and their families from exposure to pesticides, and the need to reduce their exposure to such toxins. For decades, FJ has worked with farmworkers and community-based organizations across the U.S. to help workers and their families

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understand these occupational hazards and prevent pesticide-related illnesses and injuries. We also assist legal services programs and community organizations with developing outreach and training materials.

- 2. I submit this declaration based on my personal knowledge and based on more than 30 years' experience as a farmworker advocate.
- 3. I graduated from the New York State School of Industrial and Labor Relations at Cornell University in 1977, and from the School of Law of Washington University in St. Louis, Missouri in 1980. I was first admitted to the bar in 1980 and practiced law in St. Louis and southern Illinois from 1980 to 1988, when I began working as a staff attorney at Farmworker Justice.
- 4. During my 31 years at Farmworker Justice, I have engaged in extensive training, education, policy analysis advocacy and litigation for the benefit of farmworkers. I have also supervised staff who have engaged in these activities, and continue to do so. A substantial part of our work has been focused on protecting farmworkers and their family members from pesticide poisoning and other workplace hazards.
- 5. FJ has long advocated for more comprehensive protection of workers from exposure to pesticides, particularly the highly toxic organophosphates such as chlorpyrifos. FJ has submitted numerous and extensive comments during the Environmental Protection Agency's registration review process for chlorpyrifos and

other pesticides, and during the agency's rulemaking process for worker protection regulations regarding pesticides.

- 6. FJ helped prepare comments that were submitted to EPA on January 5, 2016, on behalf of a large coalition of farmworker unions, farmworker advocates, and environmental advocates. The comments supported EPA's proposed rule to revoke all food tolerances of chlorpyrifos. *See* 80 Fed. Reg. 69,080 (Nov. 6, 2015).
- 7. In November 2016, EPA published its Revised Human Health Risk
 Assessment of chlorpyrifos, which found, among other things, that there are no safe
 levels of the pesticide in food or water, that unsafe exposures to farmworkers continue
 on average 18 days after applications, and that workers who mix and apply
 chlorpyrifos are exposed to unsafe levels even when using protective gear and
 engineering controls.
- 8. Consistent with its mission, FJ was pleased with EPA's findings, and we were hopeful that farmworkers' exposure to chlorpyrifos would soon end. FJ submitted comments to EPA on January 17, 2017, along with other farmworker and environmental advocates, urging EPA to revoke all food tolerances of chlorpyrifos.
- 9. We were outraged when the EPA announced on March 29, 2017 that it would not ban any current uses of chlorpyrifos, despite the overwhelming evidence that the pesticide harms children, workers and the environment. We were similarly outraged by the EPA's final decision not to ban current uses of chlorpyrifos made on

July 18, 2019 in response to litigation brought by Earthjustice, FJ and other organizations. FJ has been and remains very concerned that continued use of chlorpyrifos puts thousands of farmworkers and their families at risk for serious injury

or illness every day.

harassment.

10. EPA's failure to adequately assess and constrain the risks of chlorpyrifos results in adverse health impacts among workers and their families, and contamination of their communities. FJ will continue to provide technical assistance to farmworkers and farmworker advocates to help farmworker communities avoid exposure to chlorpyrifos and prevent adverse health effects. FJ will devote its scarce resources to protect workers from chlorpyrifos, through legal support, research, and advocacy on their behalf. If fewer people were exposed to chlorpyrifos, FJ could devote more time and resources to other important issues impacting farmworkers, including other

Pursuant to 28 U.S.C. § 1746, I declare under penalty of perjury that the foregoing is true and correct.

workplace hazards, substandard wages, discrimination in the workplace, and sexual

Executed this 21st day of November 2019 in Washington, D.C.

<u>/s Bruce Goldstein</u> BRUCE GOLDSTEIN

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UNITED STATES COURT OF APPEALS FOR THE NINTH CIRCUIT

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Respondents.

DECLARATION OF DIANA PEREZ

I, DIANA PEREZ, declare and state as follows:

- 1. I am the Washington State Director of the League of United Latin American Citizens ("LULAC"). I am also the founder of the Southwest Washington LULAC Council and a board member of National LULAC. I have been a LULAC member since 2009.
- 2. As a LULAC member, I have advocated for a state-level pesticide bill that would protect farmworkers and others in agricultural areas from drift. I have also taken on trying to get a ban of the pesticide chlorpyrifos in Washington State, and I have tried to get my LULAC counterparts in other states, particularly in

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Oregon and California, to do the same. California successfully banned chlorpyrifos. I communicate information about our state-level work in addressing local issues and concerns, and represent the interests of Washington Latino communities to the national LULAC organization.

- 3. Obtaining a statewide ban on chlorpyrifos is one of the Washington LULAC State Board's top three priorities. Banning chlorpyrifos has also been identified in the top 10 needs for legislative action during a 2019 People of Color Legislative Summit in Vancouver, WA. We set our priorities through Council input and through our community work. Washington LULAC is made up of Councils that are located in southwest Washington and in the eastern part of the state, the Tri-Cities and Yakima, which are largely agricultural areas. We have a lot of input from agricultural communities, as well as partner Latino organizations, and we are working on raising the awareness of the dangers of chlorpyrifos specifically. During our annual gathering in Toppenish, WA this past year we spoke at length about environmental justice and the dangers associated with chlorpyrifos. We believe banning chlorpyrifos is the best action to take for the sake of our children's health.
- 4. We have a heavy agricultural landscape in Washington and a large farmworker population. I have seen and heard of a lot of abuse and exploitation of immigrant farmworkers who come here and are not aware of their rights and are

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not educated about the dangers of the pesticides they are exposed to, including through spray drift. I have seen how some local citizens do not get hired for these jobs because they make more of a demand for their rights. It is important to me that the people who are handling our food are treated well, healthy and aware of what they are being exposed to, and that the people who are going to consume the food are not in harm's way. I am also very concerned about the effects of pesticides, and chlorpyrifos specifically, on younger children in these communities. We have a lot of families that are exposed to pesticides through the agricultural industry. Research has shown the dangers associated with brain development.

- 5. I am concerned about my own exposure to neurotoxic pesticides like chlorpyrifos through the food that I eat. I like to buy local food from Washington farms and businesses, but I worry about what chemicals may be on the produce. I am particularly worried about chlorpyrifos because I know that it was banned from household use many years ago. If chlorpyrifos is not safe enough for me to clean with, then why is it on the food that I eat?
- 6. As a LULAC member, I want to advance the civil rights and health of our Latino population, and specifically immigrant communities. We do education programs to families and students about pesticides and neurotoxicity, but there is a huge learning curve for all of us. Our whole community, not just immigrants, are

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at a disadvantage in not knowing about chlorpyrifos and the risks associated with it. The data and history of chlorpyrifos show how dangerous this pesticide is and it is ridiculous that young children and families can be exposed to the long-term consequences of its use on our food.

Pursuant to 28 U.S.C. § 1746, I declare under penalty of perjury that the foregoing is true and correct to the best of my knowledge.

Executed on this 16th day of October, 2019, in Vancouver, Washington.

*s/Diana Perez*DIANA PEREZ

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UNITED STATES COURT OF APPEALS FOR THE NINTH CIRCUIT

LEAGUE OF UNITED LATIN AMERICAN CITIZENS; et al.,

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v.

ANDREW WHEELER, Administrator, United States Environmental Protection Agency, and UNITED STATES ENVIRONMENTAL PROTECTION AGENCY,

Respondents.

DECLARATION OF DR. ELENA RIOS

I, DR. ELENA RIOS, declare and state as follows:

- 1. I am the President and Chief Executive Officer of the National Hispanic Medical Association ("NHMA"). I am also the founder of NHMA, which was incorporated in 1994. I am submitting this declaration to describe NHMA's interests in this litigation and in obtaining a nationwide ban on chlorpyrifos.
- 2. NHMA is a national, non-profit organization representing the interests of 50,000 Hispanic physicians and other health care professionals. NHMA's mission is to empower Hispanic physicians and health care professionals to

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improve the health of Hispanic and other underserved populations. NHMA works collaboratively with Hispanic state medical societies, medical students, residents, and other public and private sector partners. NHMA also serves as a resource, providing expert information to federal agencies, Congress, and the White House in order to strengthen public policies affecting the health of Hispanic communities across the nation.

- 3. As a network of concerned physicians and health care professionals, NHMA recognized early on the importance of programs and policies to protect the health of Hispanic populations and the need to lend our voices for improving the health and lives of Hispanic communities. NHMA has long advocated to improve the health and well-being of Hispanics and other underserved communities. We place a particular emphasis on protecting women and children and communities that suffer from poor health and multiple stressors.
- 4. We have identified reducing exposures to toxic pesticides as a priority. Many Hispanics and Hispanic communities face public health hazards from toxic pesticides used in agriculture. People employed in agriculture are directly exposed to toxic pesticides in their work. Some of our members diagnose and treat farmworkers for acute pesticide poisonings. The workers place trust in our members who speak Spanish and are aware of pesticide risks so they can effectively diagnose and treat people who are experiencing poisoning symptoms.

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- 5. Farmworkers can bring home residues of toxic pesticides on their clothing and expose their children. Toxic pesticides also drift from the fields where they are applied to schools, homes, and other places where children live, learn, and play. Our members who are pediatricians or OB-GYN physicians and other health care providers working with children and pregnant women work to protect their patients from these hazards or reduce the harmful consequences when their patients suffer from exposures. NHMA has worked to educate its members on the risks posed by toxic pesticides and diagnosis and treatment.
- 6. NHMA also works on behalf of its members to address the problem at its source and reduce or eliminate these toxic exposures. NHMA has testified on Capitol Hill and submitted comments to federal agencies on the risks posed by toxic pesticides. It has submitted comments to the Environmental Protection Agency ("EPA") and attended meetings with EPA to present scientific evidence of the harm that chlorpyrifos and other organophosphate pesticides cause to people through acute poisonings and to children from low-level exposures that cause neurodevelopmental harm. Our members have patients who suffer from autism, attention deficit disorder, and other learning disabilities that are associated with exposure to chlorpyrifos and other organophosphates. They see first-hand the damage that chemical exposure can cause and the impacts on the individual

children, the families, and communities that deal with these impediments to learning.

- 7. At our annual conference in the spring of 2017, our young physicians chapter sponsored a session that addressed chlorpyrifos. At this session, we provided information to our members to enable them to identify the risks posed by chlorpyrifos and to be a voice for protections for their patients. At this conference, in communications with our members, and through our networks, we provide our members with information about public policy proceedings where they can submit comments or testimony. Many of our members provide information to government decision makers, drawing on their experiences with their patients or their medical backgrounds. Some of our members who are early in their medical careers raised concerns about speaking out in areas where they could face retaliation and welcome NHMA taking positions on their behalf to eliminate exposures to chlorpyrifos.
- 8. At a conference of the League of United Latin American Citizens in the summer of 2017, one of our members Dr. Jaime Estrada, an accomplished and Texas-based pediatrician, participated in a panel on toxic pesticides, raising concern about the risks of chlorpyrifos to the developing brains of children and farmworker health.

9. NHMA joined this lawsuit as a petitioner because it is indefensible

that EPA would expose Hispanic communities to chlorpyrifos when the evidence

the harm that it causes is so overwhelming. It is particularly indefensible for EPA

to allow pregnant women to be exposed to chlorpyrifos when such exposures can

cause longlasting damage to their children's brains. We urge the court to put an

end to EPA's delays and order EPA to ban chlorpyrifos.

Pursuant to 28 U.S.C. § 1746, I declare under penalty of perjury that the

foregoing is true and correct to the best of my knowledge.

Executed on this 21st day of October 2019, in Washington, D.C.

s/ Elena Rios, MD

DR. ELENA RIOS

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Petitioners,

v.

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Respondents.

DECLARATION OF ERIK NICHOLSON

I, ERIK NICHOLSON, declare and state as follows:

- I am the National Vice President of the United Farm Workers
 ("UFW"). I have worked at UFW for the past seventeen years.
- 2. UFW is the nation's largest farm workers union. Since 1962, UFW has worked to protect and expand farm workers' rights and to protect the health of farm workers and their families, including by limiting their exposure to toxic pesticides.

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- 3. UFW currently has more than 27,000 members. UFW members include current, seasonal, and retired farm workers, as well as family members.
- UFW has a long history of advocating for better protections from 4. dangerous pesticides. To educate farm workers, rural communities, elected officials, and the public about the dangers of pesticide exposure, UFW prepares and disseminates papers describing the health hazards associated with certain pesticides, the inadequacies of existing protections, and the government's failure to monitor for violations or enforce rules when violations occur. UFW also advocates for legislative and regulatory reforms to protect farm workers and their families from dangerous pesticides. These efforts have achieved some success. For example, UFW established the first comprehensive health care plan for farm workers and their families. UFW also negotiated the first farm worker labor contracts with provisions to prevent pesticide exposure, such as a ban on pesticide spraying while workers are in the field, prohibitions against the use of especially dangerous pesticides, and requirements that workers have access to protective clothing, washing stations, and clean drinking water. These labor contracts also included provisions mandating medical monitoring for workers exposed to neurotoxic pesticides, including organophosphate pesticides like chlorpyrifos.
- 5. In my position as National Vice President, I coordinate UFW's efforts to implement national policies that provide adequate protection from dangerous

pesticides and otherwise promote farm worker health and safety. I communicate with UFW's members regularly, during house visits, on farms, at membership meetings, and through social media.

- 6. Unlike most people, UFW's members work in an industry that intentionally introduces toxins—that is, dangerous pesticides—into the workplace. UFW has members who mix and apply pesticides to crops—including apples, pears, cherries, and peaches—and members who prune, thin, and harvest crops contaminated with pesticide residues. The workers can bring home residues of toxic pesticides like chlorpyrifos on their clothing and bodies, which then expose their family members to the pesticides. UFW has advocated for showers, workplace uniforms, and places to remove and store contaminated clothing. While we have achieved some success, many of our members still work in places that lack such protections or facilities. Their family members are at risk of hazardous exposures.
- 7. UFW also has members who live and work very close to areas where pesticides are applied. Sometimes the farm worker housing is located within a few feet of the fields or orchards. When pesticides are sprayed in the air, they often drift and settle on or near this farm worker housing, exposing UFW members and their families to the pesticides. Farm worker families are exposed to pesticide drift at other places they frequent, including schools, churches, hospitals, day care, and

play fields. UFW has advocated for buffer zones and other restrictions on pesticide use to reduce pesticide drift. While small buffer zones are in place for chlorpyrifos, they are insufficient. For example, two years ago, on Cinco de Mayo, chlorpyrifos drifted ¼ mile from where it was applied and poisoned workers at another farm. UFW staff immediately went to the farm to provide assistance to the sickened workers.

- 8. Many UFW members and their families, including children, have experienced symptoms associated with acute and chronic pesticide poisoning, including dizziness, fatigue, headache, nausea, nosebleeds, and memory loss. Some of our members suffer from long-term neurological damage or have children who have autism, attention deficit disorders, or other learning disabilities. I am aware that exposure to chlorpyrifos and organophosphates has been associated with a greater incidence of such learning disabilities. Our members face an increased risk of pesticide poisonings and their children of having learning disabilities because of their exposures to chlorpyrifos.
- 9. I am aware that chlorpyrifos is identified as the cause of pesticide poisoning incidents every year. Because of its widespread use and the risks it poses, UFW has made it a priority to advocate to obtain a ban on chlorpyrifos. In 2007, we were plaintiffs in a lawsuit filed in California challenging EPA's determination to reregister chlorpyrifos. *United Farm Workers v. Administrator*,

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EPA, No. 07-3950. We have since participated in the registration review process along with our allies by submitting comments on EPA's risk assessments and on its 2015 proposal to ban all uses of chlorpyrifos. In 2016, we petitioned EPA again with our allies to suspend and cancel chlorpyrifos uses that pose unacceptable uses to workers. EPA identified these unacceptable risks in 2014, but continues to authorize the uses associated with them. We have met with EPA decision-makers, including the Administrator, urging the agency to act quickly to ban chlorpyrifos.

- 10. We have been extremely disappointed at EPA's slow pace in limiting chlorpyrifos use. More than a decade ago, EPA obtained a ban on homeowner uses that put children at risk. EPA failed to afford farm worker children comparable protection. These children were forgotten, left behind for years before EPA even acknowledged its obligation to protect them from pesticide drift.
- 11. We were heartened when EPA released its 2014 human health risk assessment acknowledging the extreme risks posed by chlorpyrifos to children from neurodevelopmental harm, to workers from workplace exposures, and to drinking water supplies across the country. We were also relieved when EPA proposed in 2015 to ban chlorpyrifos upon founding it unsafe and proposed to make the ban effective six months after it became final. At long last, our members would no longer be exposed to this dangerous pesticide on a regular basis, through multiple pathways. They would be comforted in knowing their families would not

be consuming this poison in their food or drinking water, or exposed to it in the air they breathe. We believed that 2017 would be the last year this pesticide would be sprayed on our crops drift onto our homes, and contaminate our food and water.

12. And then in March 2017, the EPA Administrator Pruitt did the unthinkable. He refused to ban this pesticide, not because he found it safe, but because he didn't want to act. Then, in July 2019, new EPA Administrator Andrew Wheeler denied our objections and again left chlorpyrifos on the market without finding it safe. These decisions are indefensible. It puts UFW's members and their families at risk of pesticide poisonings and neurodevelopmental damage. Instead of being free of chlorpyrifos at work, at home, at school, at church, and at the dinner table last fall, UFW members and their families continue to live, work, and attend school in places where exposure to chlorpyrifos is likely. Every month that chlorpyrifos continues to be used in agriculture, UFW members and their families will be exposed to it through their work, drift and volatilization, their food, and/or their drinking water. EPA is putting UFW members at risk of acute pesticide poisonings from such exposures. It is also putting the children of UFW members at risk of damage to their brains and learning disabilities. It is unconscionable to put the families that work to help put food on our tables at risks of such egregious harm.

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13. UFW has brought this lawsuit because subjecting our members to these harms has to end. UFW is also investing its resources to obtain a ban on chlorpyrifos in California. If EPA had done its job and followed the law, we would not need to pursue a state ban and piecemeal protections from this

dangerous pesticide.

Pursuant to 28 U.S.C. § 1746, I declare under penalty of perjury that the

foregoing is true and correct to the best of my knowledge.

Executed on this 10th day of October 2019, in Richland, Washington.

<u>s/ Erik Nicholson</u> ERIK NICHOLSON

UNITED STATES COURT OF APPEALS FOR THE NINTH CIRCUIT

LEAGUE OF UNITED LATIN AMERICAN CITIZENS; et al.,

Petitioners,

v.

ANDREW WHEELER, Administrator, United States Environmental Protection Agency, and UNITED STATES ENVIRONMENTAL PROTECTION AGENCY,

Respondents.

DECLARATION OF ESTEBAN ORTIZ

- I, ESTEBAN ORTIZ, declare and state as follows:
- 1. I am over the age of 18 and have personal knowledge of the statements in this declaration.
- 2. I am submitting this declaration in support of the lawsuit, in which GreenLatinos is a petitioner, challenging the United States Environmental Protection Agency's ("EPA's") decision to leave chlorpyrifos tolerances in place without finding that the pesticide is safe.

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- 3. I currently live in Richland, Washington, and I have been a member of GreenLatinos since 2015. As a member of GreenLatinos, I speak with decision makers about issues that affect the Latino community at the local level.
- 4. Prior to moving to Washington, I worked as an Outreach Coordinator at the Migrant Farmworker Law Center at Indiana Legal Services, Inc. My work took me all over the state and I spoke with farmworkers about their concerns and advocated for better training and protections for them. Farmworkers and their families lack information about the pesticides used around them and the harms associated with those pesticides due to language barriers, a lack of cultural competency, and a lack of resources to provide adequate information to farmworkers. I continue to work with farmworkers in my new position with United Farmworkers in Washington.
- 5. I also come from a family of farmworkers and worked on a farm as a youth. Many members of my family still work on farms in Ohio and live in agricultural communities. Like the farmworkers that I have worked with, my family members are not provided information about the pesticides that are used in their area and how they may be exposed to those pesticides. They also don't feel like they can ask questions about what pesticides are being used on the farms they work at. When I visited my mom and talked to her about advocating for farmworkers, she mentioned how she and her whole family never once complained

about lost wages, safety trainings done in only English and not Spanish, lack of restrooms in the fields, or about pesticides. The only thing they were ever told was not to be present working in the fields when the airplanes would spray the fields with pesticides. No signs were ever posted about the time to stay off the fields. The dangers that pesticides would have on them was never explained in a language they could understand, and safety training was not required regarding any pesticides or hazards.

- 6. I fear that my family may be exposed to chlorpyrifos while at work, in and around their homes, and on their food and in their drinking water. I know that chlorpyrifos has damaging, long-term effects on people, and I support a ban on the pesticide. I am also concerned that chlorpyrifos is on the food I eat, and I am outraged that EPA refused to ban the use of this pesticide on food when they know it causes harm to people.
- 7. I want EPA to do its job and protect my family, as well as the farmworkers I work with and their families, by acting on the recommendations of EPA's own scientists and ban the use of chlorpyrifos on food. I support this lawsuit and GreenLatinos' ongoing efforts to get this dangerous pesticide out of our food, drinking water, and air.

Pursuant to 28 U.S.C. § 1746, I declare under penalty of perjury that the foregoing is true and correct to the best of my knowledge.

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Executed on this 4th day of December 2019, in Richland, Washington.

s/Esteban Ortiz ESTEBAN ORTIZ

NO. 19-71979

UNITED STATES COURT OF APPEALS FOR THE NINTH CIRCUIT

LEAGUE OF UNITED LATIN AMERICAN CITIZENS; et al.,

Petitioners,

v.

ANDREW WHEELER, Administrator, United States Environmental Protection Agency, and UNITED STATES ENVIRONMENTAL PROTECTION AGENCY,

Respondents.

DECLARATION OF GERARDO RIOS

I, GERARDO RIOS, declare and state as follows:

- 1. I am over the age of 18 and have personal knowledge of the statements in this declaration.
 - 2. This declaration is being submitted in support of a lawsuit, in which the United Farm Workers ("UFW") is a petitioner, challenging the United States Environmental Protection Agency's ("EPA's") decision to leave chlorpyrifos tolerances in place without finding that the pesticide is safe.
 - 3. I am currently a member of the UFW and have been a member of the union for almost 22 years since we signed our first contract in Washington

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State. I am the General Secretary of the worker board at my company and have volunteered and participated in many efforts to improve the lives of farm workers because I believe in a safe and just working environment for all farm workers.

- 4. I live in Sunnyside, WA, a rural community, with my wife. Here we raised our 4 daughters and are now grandparents to 7 children.
- 5. I am currently employed as a tractor operator at a wine grape vineyard. I am a licensed pesticide applicator and my main job involves mixing insecticides, herbicides, and fungicides and applying them to the fields. I have been a farm worker for over 37 years and have worked in the fruit tree industry including nectarines, peaches, apples, cherries, and now in grapes.
- 6. I have been exposed to pesticides in the past while mixing and apply chemicals to the fields as part of my job. I have inhaled chemicals when my mask has come off during the mixing process.
- 7. My wife was also exposed to pesticides at an apple orchard where we both were employed in Washington many years ago. She began having an allergic reaction that we believe was related to her inhaling the pesticide particles in the air while working. Since then, she has suffered from allergies on a regular basis.

- 8. I have been a farm worker my entire adult life and I like what I do.

 However, I worry about the effects of pesticides on myself and my family. I do

 my best to protect myself and my family from the harmful effects of pesticide

 exposure, however there is only so much I can do to protect us and I don't have

 very much information about what the dangers are of different pesticides.
- 9. I have recently learned a little bit about the pesticide chlorpyrifos. It worries me that in the state of Washington over 200,000 pounds of this dangerous pesticide is used each year. I don't know if I have ever been exposed to this chemical, but I worry about it being used in the area where I live and work. I also worry that residues from this pesticide could be on the food that my family and I eat which could result in health problems.
- 10. I do the best I can to protect myself and my family from dangerous pesticides, however I can only do so much. I hope that the EPA would be mindful of the dangers of chlorpyrifos and do something to eliminate its use and protect farm workers and our families and communities.

Pursuant to 28 U.S.C. § 1746, I declare under penalty of perjury that the foregoing is true and correct to the best of my knowledge.

Executed on this 15th day of October 2019, in Sunnyside, WA.

s/ Gerardo Rios GERARDO RIOS

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NO. 19-71979

UNITED STATES COURT OF APPEALS FOR THE NINTH CIRCUIT

LEAGUE OF UNITED LATIN AMERICAN CITIZENS; et al.,

Petitioners,

V.

ANDREW WHEELER, Administrator, United States Environmental Protection Agency, and UNITED STATES ENVIRONMENTAL PROTECTION AGENCY,

Respondents.

DECLARATION OF DR. JAIME ESTRADA

I, DR. JAIME ESTRADA, declare and state as follows:

- 1. I am a pediatric hematologist-oncologist. I practiced my specialty in San Antonio, Texas from 1992 through the end of 2017 when I retired.
- 2. I graduated from the Universidad Michoacana de San Nicolas de Hidalgo in Morelia, Mexico in 1974, and completed a residency in pediatrics at Cardinal Glennon Memorial Hospital in St. Louis, Missouri in 1980, followed by a clinical and research fellowship in pediatric hematology and oncology at the MD Anderson Hospital and Tumor Institute in Houston, Texas which I completed in August, 1983. I earned an MS in Biomedical Sciences with special emphasis in

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oncology during this fellowship. I then held a position as assistant professor of pediatrics, department of hematology and oncology at the School of Medicine, University of South Florida in Tampa, Florida until June of 1992.

- 3. After I moved to San Antonio in July, 1992, I saw a need for medical services in pediatric hematology and oncology in South Texas including heavily agricultural areas in the Rio Grande Valley. In 1994, I started an outreach clinic in Laredo, Texas, which still continues, and in 1996, I started a clinic in the Rio Grande Valley, first in Weslaco, Texas, at Knapp Medical Center, and then in McAllen, Texas, at the McAllen Medical Center two years later. I would travel to see patients at these clinics and bring them to San Antonio for diagnosis and to begin treatment when needed. At the time, I knew that these children were exposed to pesticides and wondered about the role that pesticide exposures played in their medical conditions. I closed the McAllen clinic in 2005 once a local clinic opened that provided needed medical services in pediatric hematology and oncology on a 24/7 basis.
- 4. In the course of treating patients with cancer and blood disorders, I often see the effects in families of neurocognitive and psychomotor delays on their children. These types of delays and impairments also impact any pediatric practitioner, regardless of specialty. Parents often report that their children do not like to take their medications and that they are difficult to control at home and at

school. Poor academic progress is a common complaint. Children who experience hyperactivity and attention deficit disorders are a challenge to deal with and manage for families and practitioners.

- 5. I have been an advocate for access to comprehensive, cost-effective healthcare in Texas for many years. I founded Texas Doctors for Social Responsibility in 2014 to enable doctors in Texas to come together and enhance their voices and impact on public policies affecting medical care.
- 6. I have been a member of the National Hispanic Medical Association ("NHMA") since 2004. I support NMHA's efforts on behalf of the health of Hispanics populations in our country, including NMHA's efforts to reduce exposure of farmworkers and their families to neurotoxic pesticides like chlorpyrifos.
- 7. On July 5, 2017, I participated in a panel on "Protecting our Children, Farmworkers, and Communities from the Most Toxic Pesticides" at the 88th Annual LULAC National Convention and Exposition in San Antonio, Texas.
- 8. I preparation for this, I researched the published scientific studies on chlorpyrifos, including the Columbia study (Rauh VA, Perera FP, Horton MK, et al. Brain anomalies in children exposed prenatally to a common organophosphate pesticide. Proc Natl Acad Sci U S A. 2012;109(20):7871–7876) which found a strong correlation between prenatal exposure to high levels of chlorpyrifos and

subsequent serious cognitive and psychomotor delays in children. The goal of the presentation to the LULAC members was to educate them about the neurodevelopmental harm caused by exposure to this pesticide.

9. I strongly believe that a top priority of our public health system should be to eliminate children's exposures to chemicals like chlorpyrifos that can cause serious long-term neurocognitive conditions. Pregnant women who work in the fields are currently exposed to levels of chlorpyrifos that can cause such long-term harm to their children. Farmworkers exposed to chlorpyrifos in the fields may bring home residues of the pesticide in their clotting and expose their children. I strongly support NHMA's participation in this legal case to ban chlorpyrifos to protect farmworker families and their children so that the neurocognitive conditions they are at risk from exposure to this pesticide can be eliminated.

Pursuant to 28 U.S.C. § 1746, I declare under penalty of perjury that the foregoing is true and correct to the best of my knowledge.

Executed on this 11th day of October 2019, in San Antonio, Texas.

s/ Jaime Estrada, MD
DR. JAIME ESTRADA

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NO. 19-71979

UNITED STATES COURT OF APPEALS FOR THE NINTH CIRCUIT

LEAGUE OF UNITED LATIN AMERICAN CITIZENS; et al.,

Petitioners,

v.

ANDREW WHEELER, Administrator, United States Environmental Protection Agency, and UNITED STATES ENVIRONMENTAL PROTECTION AGENCY,

Respondents.

DECLARATION OF JAVIER CEJA

I, JAVIER CEJA, declare and state as follows:

- 1. I am over the age of 18 and have personal knowledge of the statements in this declaration.
- 2. This declaration is submitted in support of the lawsuit, in which Pineros y Campesinos Unidos del Noroeste ("PCUN") is a petitioner, challenging the delay by the United States Environmental Protection Agency ("EPA") in responding to petitioners' objections after EPA denied a petition to ban chlorpyrifos.

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- 3. I am a founding member of PCUN, and I have been a member for over 31 years.
- 4. I currently live in Woodburn, Oregon. Woodburn is a small, agricultural town that is surrounded by farms and fields.
- 5. Based upon my personal knowledge and experience, I am very concerned about the use of dangerous pesticides, including chlorpyrifos, in the fields that I work in and live near.
- 6. I have been a farmworker for more than 50 years. I have worked as a farmworker in Oregon and California with various vegetable crops, fruit trees, grapes, and ornamentals. I am currently working on a grass seed farm.
- 7. My wife is also a farmworker, and we are both exposed to pesticides at work. I fear that we are also exposed to dangerous pesticides through spray drift and on our food.
- 8. I don't know the names of all the chemicals that are used on the farm that I work in because the growers almost never tell us what they are using. The chemicals are very powerful and they smell terrible. I have seen people in the fields come into contact with these pesticides and get rashes, headaches, and sometimes faint.
- 9. I don't know which pesticides are used around the area that I live in because they don't tell us what they are spraying or what the effects could be. I

sometimes see crop dusters spraying pesticides on fields when I am outside and I am afraid that I am being exposed to dangerous pesticides through drift.

- 10. I am currently in remission from cancer and I have to go in for regular check-ups. My cousin who is also a farmworker got cancer too. I don't know how I got cancer, but I have heard that pesticides can cause cancer and I think that may have been the cause.
- 11. I am aware that chlorpyrifos is a very toxic chemical and I believe that it should not be used on food. I am concerned about the presence of chlorpyrifos on the food that my family and I eat, especially since we are already exposed to pesticides in other ways. I would feel much safer for myself and my family if I know that chlorpyrifos was not allowed to be used on food at all.
- 12. I support PCUN's efforts in working to get chlorpyrifos banned. I believe that EPA's delay in responding to PCUN's objections while allowing the use of chlorpyrifos to continue causes harm to me and my family.

Pursuant to 28 U.S.C. § 1746, I declare under the penalty of perjury that the foregoing is true and correct, to the best of my knowledge, information, and belief.

Executed this 7th day of November 2019, at Woodburn, Oregon.

/s Javier Ceja
Javier Ceja

NO. 19-71979

UNITED STATES COURT OF APPEALS FOR THE NINTH CIRCUIT

LEAGUE OF UNITED LATIN AMERICAN CITIZENS; et al.,

Petitioners,

v.

ANDREW WHEELER, Administrator, United States Environmental Protection Agency, and UNITED STATES ENVIRONMENTAL PROTECTION AGENCY,

Respondents.

DECLARATION OF JENNIFER SASS

I, Jennifer Sass, declare as follows:

- I am a Senior Scientist for petitioner Natural Resources Defense Council ("NRDC").
- 2. NRDC is a non-profit organization whose mission is to restore balance between the way we live and the world we live in. Among NRDC's priorities is eliminating the use of toxic pesticides from our food system. Protecting the public from the substantial adverse health effects caused by exposure to toxic chemicals, including pesticides like chlorpyrifos, is central to NRDC's mission and goals.

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- 3. NRDC currently has approximately 376,300 members. NRDC members reside in each of the 50 states and the District of Columbia. NRDC members may be exposed to chlorpyrifos in the foods they eat, the water they drink, from contaminated air resulting from pesticide drift and residues taken home on clothing. Children face particularly high exposures because of the foods they eat, their higher water consumption per pound of body-weight, and the activities they engage in, like putting their hands in their mouths, that put them into contact with pesticide residues.
- 4. NRDC has long devoted extensive resources to protecting people from toxic pesticides. I have spent a substantial amount of time on these activities since I started working at NRDC in January 2001. I have advanced degrees in Anatomy and Cell Biology, with specific expertise in developmental biology, neurobiology, molecular biology, and environmental health. In my position with NRDC, I am responsible for reviewing the science underlying many of the federal regulations of industrial chemicals and pesticides. I have published fifty articles in peer-reviewed scientific journals, including many pertaining to pesticide hazards and regulations. On numerous occasions, I have provided testimony and scientific briefings on behalf of NRDC to Congress relevant to pesticide harms. Over the last two decades, I have also provided written and oral testimony to the Environmental

Protection Agency ("EPA"), on the registration of dozens of pesticides during EPA's registration process on behalf of NRDC.

- 5. I represented NRDC for over a decade as an active member of the EPA/U.S. Department of Agriculture ("USDA") Pesticide Program Dialogue Committee ("PPDC"), a stakeholder committee that provides feedback to the EPA Office of Pesticide Programs on various issues related to pesticide regulatory, policy, and program implementation issues. Through my years of work on the PPDC, from 2001 to 2013, I also served on issue-specific PPDC workgroups to provide more in-depth perspectives and advice on pesticide issues. I was also a member of the EPA/USDA Committee to Advise on Reassessment and Transition ("CARAT") from 2001 until the committee disbanded in 2003. The purpose of CARAT was to provide advice on strategic approaches for pest management planning, transition, and tolerance reassessment for pesticides as required by the Food Quality Protection Act ("FQPA").
- 6. NRDC has been extensively engaged in advocacy and scientific analysis to obtain revocation of chlorpyrifos tolerances. In addition to the 2007 Petition, we submitted comments on EPA risk assessments and the proposed revocation rule and provided comments to Scientific Advisory Panels.
- 7. In this declaration, I provide background about the pesticide chlorpyrifos and the significant human health risks that it poses, particularly to

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children. I also describe the petition that NRDC and Pesticide Action Network

North America ("PANNA") submitted to EPA in September of 2007, which asked

EPA to ban food uses for chlorpyrifos and revoke all tolerances (maximum residue
levels allowed on food) for chlorpyrifos. I describe the EPA Administrator's

March 29, 2017 Order denying that petition, and the harm that is being caused

during EPA's ongoing delay in taking effective and enforceable action to protect
people, especially children, from chlorpyrifos.

BACKGROUND ON CHLORPYRIFOS

- 8. Chlorpyrifos is one of the most widely used insecticides in the United States. It is used on various food and feed crops. According to 2015 U.S. Geologic Service data the most recent data publicly available approximately five to seven million pounds of chlorpyrifos are applied annually in U.S. agriculture, with widespread use on corn, orchards and grapes.
- 9. Chlorpyrifos is an organophosphate pesticide. Organophosphates (also referred to as organophosphorus pesticides or OPs) are modified from a class of chemicals originally developed as World War II nerve agents. They kill insects by over-stimulating the nervous system, ultimately leading to its collapse.
- 10. For the same reason that they are effective pesticides, OPs can cause dangerous, disabling and even deadly effects to the human nervous system.

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11. One key nervous system effect of OPs is known as "cholinesterase" inhibition," in which the pesticide interferes with the function of one of the body's proteins, an enzyme called cholinesterase. Cholinesterase is necessary to degrade one of the nervous system's key messengers, acetylcholine, in a timely manner. When OPs are in the system, the cholinesterase enzyme cannot do its job to degrade acetylcholine. Acetylcholine is a neurotransmitter protein that carries messages from the brain and spinal cord out to muscle cells and other cell receptors where it activates skeletal muscles, inhibits heart muscle, and aids in memory formation, learning, attentiveness, and other critical nervous system functions. OP exposure leads to a build-up of acetylcholine and prolonged overactivation of acetylcholine receptor cells. The result of OP exposure can vary in people depending on the dose and duration of exposure. Effects can include headaches, nausea, dizziness, restlessness, muscle twitching, weakness, tremor, poor coordination, confusion, difficulty breathing, vomiting, and diarrhea. At very high exposures, more serious effects such as convulsions, respiratory paralysis, and death have been reported. Poisoning can occur through any route of exposure, including inhalation, ingestion, eye contact, and absorption through the skin.

CHILDREN ARE ESPECIALLY SENSITIVE TO HARM FROM CHLORPYRIFOS EXPOSURE.

12. Children are especially sensitive to harm from chlorpyrifos exposure.

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- 13. Per pound of body weight, children eat, drink, and breathe more than adults. For example, EPA's Exposure Factors Handbook reports that the average bottle-fed newborn drinks 52 milliliters of water per kilogram body weight per day (mL/kg-day) and the highest five percent of bottle-fed babies drink 232 mL/kg-day, whereas a one-year old drinks half that amount (23 mL/kg-day average and 71 mL/kg-day at the top five percent). The average adult drinks half that amount again (13 mL/kg-day average and 40 mL/kg-day at the top five percent).
- 14. Infants, toddlers, and young children are more likely to play on the ground and engage in more frequent hand- to-mouth contact than adults, and therefore have higher rates of dermal and oral exposure from pesticide-contaminated objects, dust, or soil. EPA's Exposure Factors Handbook reports that during indoor activities babies, six to twelve months old put their hands to their mouths an average of 19 times per hour, and five percent of babies do it 52 times per hour, whereas adults do it rarely.² These age-related activities mean that infants

¹ U.S. EPA. Exposure Factors Handbook 2011 Edition (Final). U.S. Environmental Protection Agency, Washington, D.C., EPA/600/R-09/052F, 2011. <u>See</u> Chapter 3, Table 3-1 on drinking water ingestion rates by age.

https://cfpub.epa.gov/ncea/risk/recordisplay.cfm?deid=236252

² U.S. EPA. Exposure Factors Handbook 2011 Edition (Final). U.S. Environmental Protection Agency, Washington, D.C., EPA/600/R-09/052F, 2011. See Chapter 4, Table 4-10 on indoor hand-to-mouth frequency by age.

http://cfpub.epa.gov/ncea/risk/recordisplay.cfm?deid=236252

and young children are much more likely to have greater chlorpyrifos exposures than adults, when adjusted for body weight.

15. In addition, infants and children are especially susceptible to chemical toxicity compared with adults. Children's bodies have immature detoxification mechanisms compared with adults, and chemical assault during development of critical target organs and systems can cause disruptions that are then hard-wired into the developing system.³ For example, extensive research on lead and mercury demonstrates that during neural development the nervous system is acutely vulnerable to neurotoxic assault, and exposures may result in long-term or permanent destruction or dysfunction to systems including learning, memory, and intelligence. For example, doses of lead or mercury with no obvious effect on adults can cause permanent measurable brain damage in exposed children. This can also be true for the developing immune system, endocrine system, and reproductive system. For this reason, studies on adults, including adult laboratory animals, will usually under-predict risks to fetuses, infants, and children. The scientific consensus is that prenatal and early life developmental stages are a particularly vulnerable period, and toxic chemical exposures during this time are

³ Huen K, Harley K, Brooks J, et al. Developmental Changes in PON1 Enzyme Activity in Young Children and Effects of PON1 Polymorphisms. *Environmental Health Perspectives*. 2009;117(10):1632-1638. Available at: https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2790521/

more likely to cause more severe and longer-lasting harm than exposure during adulthood.⁴

THE FOOD QUALITY PROTECTION ACT

16. Because infants and children are especially sensitive, the National Academy of Sciences' landmark 1993 report, "Pesticides in the Diets of Infants and Children," made the scientific case to overhaul of EPA's pesticide program to assure the safety of children, citing OPs as one of the classes of pesticides of

⁴ National Research Council. 1993. Pesticides in the Diets of Infants and Children. Washington, DC: The National Academies Press. Bennett D, Bellinger DC, Birnbaum LS, Bradman A, Chen A, Cory-Slechta DA, Engel SM, Fallin MD, Halladay A, Hauser R, Hertz-Picciotto I, Kwiatkowski CF, Lanphear BP, Marquez E, Marty M, McPartland J, Newschaffer CJ, Payne-Sturges D, Patisaul HB, Perera FP, Ritz B, Sass J, Schantz SL, Webster TF, Whyatt RM, Woodruff TJ, Zoeller RT, Anderko L, Campbell C, Conry JA, DeNicola N, Gould RM, Hirtz D, Huffling K, Landrigan PJ, Lavin A, Miller M, Mitchell MA, Rubin L, Schettler T, Tran HL, Acosta A, Brody C, Miller E, Miller P, Swanson M, Witherspoon NO; American College of Obstetricians and Gynecologists (ACOG); Child Neurology Society; Endocrine Society; International Neurotoxicology Association; International Society for Children's Health and the Environment; International Society for Environmental Epidemiology; National Council of Asian Pacific Islander Physicians; National Hispanic Medical Association; National Medical Association. Project TENDR: Targeting Environmental Neuro-Developmental Risks The TENDR Consensus Statement. Environ Health Perspect. 2016 Jul 1;124(7):A118-22. doi: 10.1289/EHP358; Grandjean P, Landrigan PJ. Neurobehavioural effects of developmental toxicity. Lancet Neurol. 2014 Mar;13(3):330-8. doi: 10.1016/S1474-4422(13)70278-3; Grandjean P, Landrigan PJ. Developmental neurotoxicity of industrial chemicals. Lancet. 2006 Dec 16;368(9553):2167-78. Review.

concern.⁵ This report was widely cited as the catalyst for the enactment of the unanimously passed Food Quality Protection Act (FQPA), which significantly overhauled the pesticide regulatory framework.

- 17. The FQPA recognizes that the previous law insufficiently protected infants and children. It therefore mandates that EPA use an additional ten-fold safety factor in its assessments to address toxicity to infants and children and gaps in information on toxicity or exposure.
- 18. The FQPA requires EPA to protect children from aggregate exposures to each pesticide. Whereas EPA previously assessed exposure to a pesticide in various foods individually, it must now aggregate all the routes by which children are exposed to each pesticide. EPA must therefore evaluate children's exposures to chlorpyrifos through consuming foods with residues of chlorpyrifos, drinking water contaminated with chlorpyrifos, and drift from fields.
- 19. The FQPA also requires EPA to evaluate the cumulative effects of people's exposure to all pesticides that share a common mechanism of toxicity.

 Because all the OPs attack the human nervous system in essentially the same way,

 EPA has determined that they share a "common mechanism of toxicity," as

⁵ Pesticides in the Diets of Infants and Children (Washington, D.C.: National Academy Press, 1993).

described in the FQPA. Therefore, EPA spent a decade developing a cumulative risk assessment for the OPs.

- 20. Because of the high risk that OPs pose to people, and especially to children, EPA took protective measures to cancel almost all the residential uses of the OPs in 2000. This resulted in a significant and measurable reduction in poisonings to children from roach baits, residential foggers or "bug bombs," and other homeowner uses.
- 21. However, the cancelations left children living in agricultural areas at direct risk from all the agriculture uses that remained, and led to continuing contamination of our food supply and waterways including sources of drinking water.

Children of farmworkers and those living in agricultural communities are heavily exposed to pesticides, including chlorpyrifos. Children in agriculture communities may come in contact with pesticides through residues on their parents' skin and clothing, contaminated soil in their play areas, pesticide-laden dust tracked into their homes, drift from chlorpyrifos applications, contaminated air and drinking water, residues on produce, and even breast milk. Furthermore, these children may accompany their parents to work in the fields or help by working themselves, thus

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experiencing high or occupational levels of exposure.⁶ Children of farmworkers are also exposed to pesticides prenatally, when pregnant women are exposed to pesticides during their work.

Despite Evidence Of Harm, EPA's Previous Evaluation Allowed Chlorpyrifos

To Remain On The Market

22. In 2001, EPA completed the chlorpyrifos aggregate assessment, called an Interim Reregistration Eligibility Decision ("IRED"), which revised but retained many of the pre-existing food tolerances (allowable residue limits on food). In its 2002 comments on the IRED (Docket ID No. OPP-34203G), NRDC challenged the scientific limitations of the IRED, identified evidence of harm, and highlighted that there is inadequate evidence to establish an exposure level at which infants and children will not suffer any developmental harm due to chlorpyrifos exposure, i.e. a "no observable adverse effect level" or NOAEL. EPA never responded directly to NRDC's comments or other comments submitted by other public interest

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⁶ Engel SM, Bradman A, Wolff MS, Rauh VA, Harley KG, Yang JH, Hoepner LA, Barr DB, Yolton K, Vedar MG, Xu Y, Hornung RW, Wetmur JG, Chen J, Holland NT, Perera FP, Whyatt RM, Lanphear BP, Eskenazi B. 2016. Prenatal organophosphorus pesticide exposure and child neurodevelopment at 24 months: an analysis of four birth cohorts. Environ Health Perspect 124:822-830.

⁷ 66 Fed. Reg. 57,073 (Nov. 14, 2001) Organophosphate Pesticide; Availability of Chlorpyrifos Interim Risk Management Decision Document. IRED at 64-68.

advocates, including Pesticide Action Network and the New York Attorney General.

23. In 2006, EPA completed the cumulative risk assessment for all OPs, including chlorpyrifos, and reaffirmed the chlorpyrifos IRED without change, despite new, significant published studies that had emerged during this time showing harm to the developing brain of children. Without addressing the comments by NRDC and others, the Agency concluded that chlorpyrifos uses would be eligible for reregistration and tolerances with a few limitations on some uses.⁸

2007 Petition To EPA To Cancel Chlorpyrifos And Revoke All Tolerances

24. In 2007, I coauthored the "Petition to Revoke All Tolerances and Cancel All Registrations for the Pesticide Chlorpyrifos" (the "2007 Petition"), which was submitted to EPA. That document was submitted to EPA on behalf of PANNA and NRDC on September 12, 2007. The 2007 Petition focused on scientific evidence of the long-lasting effects to children from early life

⁸ Memo from Debra Edwards to Jim Jones, re: Finalization of Interim Reregistration Eligibility Decisions (IREDs) and Interim Tolerance Reassessment and Risk Management Decisions (TREDs) for the Organophosphate Pesticides, and Completion of the Tolerance Reassessment and Reregistration Eligibility Process for the Organophosphate Pesticides, July 31, 2006.

chlorpyrifos exposure, as well as exposures through air contamination from pesticide drift and volatilization.

25. The 2007 Petition presented a robust body of scientific information laying out the human health risks associated with chlorpyrifos, and those risks particularly relevant to children and infants, which is sufficient to justify EPA revoking all tolerances and cancelling all registrations for chlorpyrifos. That evidence is described in more depth in the 2007 Petition.

26. Scientific evidence that has emerged since 2001 and since we submitted the 2007 Petition further supports the revocation of all tolerances and cancellation of all registrations for chlorpyrifos.

Children Have Long-Lasting Effects From Early Life Exposure To Chlorpyrifos

27. EPA found that different types of studies including animal toxicology to human epidemiology examining the impact of early-life chlorpyrifos exposure consistently show that prenatal exposure to chlorpyrifos, including some studies that show that levels too low to trigger effects in adults cause adverse neurodevelopmental and neurobehavioral effects.

28. Animal studies show that the animals exposed prenatally to chlorpyrifos suffer neurodevelopmental adverse effects, including some recent studies correlating such effects with exposures below levels that caused ten percent

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or more cholinesterase inhibition in the pregnant adult rat. The effects caused by chlorpyrifos during neurodevelopment in test rodents are associated with impaired learning and working memory as the rodents mature, demonstrating persistent functional effects.⁹

- 29. Human population studies strengthen the evidence that exposure to chlorpyrifos during pregnancy can cause lasting neurodevelopmental harm, even at doses too low to cause cholinesterase inhibition to the pregnant mother. Multiple epidemiologic studies in diverse populations spanning urban and agricultural settings have shown significant links between lasting deficits in brain development and function and prenatal exposure to OPs generally and to chlorpyrifos specifically.¹⁰
- 30. A team of Columbia University researchers have an important, ongoing longitudinal study that began in 1997. It includes mothers and their

⁹ Levin ED, Addy N, Baruah A, Elias A, Christopher NC, Seidler FJ, Slotkin TA. Prenatal chlorpyrifos exposure in rats causes persistent behavioral alterations. Neurotoxicol Teratol. 2002 Nov-Dec;24(6):733-41.

¹⁰ Muñoz-Quezada MT, Lucero BA, Barr DB, Steenland K, Levy K, Ryan PB, Iglesias V, Alvarado S, Concha C, Rojas E, Vega C. Neurodevelopmental effects in children associated with exposure to organophosphate pesticides: a systematic review. Neurotoxicology. 2013 Dec;39:158-68.

González-Alzaga B, Lacasaña M, Aguilar-Garduño C, Rodríguez-Barranco M, Ballester F, Rebagliato M, Hernández AF. A systematic review of neurodevelopmental effects of prenatal and postnatal organophosphate pesticide exposure. Toxicol Lett. 2014 Oct 15;230(2):104-21. doi:10.1016/j.toxlet.2013.11.019. Epub 2013 Nov 26. Review.

children who were born between February 1998 and May 2002.¹¹ The study provides a unique opportunity for the researchers to measure the public health impact of the EPA ban on the sale of chlorpyrifos products for residential uses, announced in June 2000. Researchers measured a dramatic drop in exposure levels in the children born after the ban took effect. Residential air samples decreased three-fold and newborn infant plasma cord blood levels at birth decreased over five-fold among women and their babies in the study.¹²

31. The Columbia University researchers have been following and reporting on the progress of the children born into the study. At age three, the researchers reported that based on performance in standardized tests the children with the highest levels of chlorpyrifos at birth were five times more likely to have delayed development of physical movement like dexterity and fine motor control, and 2.4 times more likely to have delayed mental development, compared with the

¹¹ Whyatt RM, Barr DB, Camann DE, Kinney PL, Barr JR, Andrews HF, Hoepner LA, Garfinkel R, Hazi Y, Reyes A, Ramirez J, Cosme Y, Perera FP. Contemporary-use pesticides in personal air samples during pregnancy and blood samples at delivery among urban minority mothers and newborns. Environ Health Perspect. 2003 May;111(5):749-56.

¹² Rauh VA, Garfinkel R, Perera FP, Andrews HF, Hoepner L, Barr DB, Whitehead R, Tang D, Whyatt RW. Impact of prenatal chlorpyrifos exposure on neurodevelopment in the first 3 years of life among inner-city children. Pediatrics. 2006 Dec;118(6):e1845-59.

Also, see comments to EPA from Dr. Dale Hattis. Table 35. April 16, 2016. Doc ID: EPA-HQ-OPP-2016-0062-0121.

children with the lowest levels at birth. ¹³ Adverse neurobehavioral effects include attention problems, attention-deficit/hyperactivity disorder (ADHD) problems, and long-lasting developmental disorder problems.

- 32. The Columbia University researchers reported that at age eleven, arm tremors (measured using standardized tests involving drawing specific spiral shapes) in the children with highest chlorpyrifos exposures (as measured in the cord blood at birth). This suggests that prenatal chlorpyrifos exposure may cause an even broader scope of effects, including latent or long term development of fine motor control that may not become obvious for over a decade or more.
- 33. Adverse consequences appear to extend into late childhood and adolescence. Forty of the children in the Columbia University study were examined at six to eleven years old using magnetic resonance imaging to look at brain structures. In the twenty children with the highest prenatal chlorpyrifos exposure, the researchers observed unusual thinning and deformed areas in the outer areas of the brain, called the cortex, in regions specific for social cognition

Rauh VA, Garfinkel R, Perera FP, Andrews HF, Hoepner L, Barr DB, Whitehead R, Tang D, Whyatt RW. Impact of prenatal chlorpyrifos exposure on neurodevelopment in the first 3 years of life among inner-city children. Pediatrics. 2006 Dec;118(6):e1845-59.

¹⁴ Rauh VA, Garcia WE, Whyatt RM, Horton MK, Barr DB, Louis ED. Prenatal exposure to the organophosphate pesticide chlorpyrifos and childhood tremor. Neurotoxicology. 2015 Dec;51:80-6. 0

and emotional control. ¹⁵ The twenty low-exposure children did not have these structural brain alterations.

- 34. A study of Chinese infants by a collaboration of scientists from the University of Michigan and a children's hospital and medical university in China reported similar findings to those of the Columbia University team. The Chinese infants exposed prenatally to chlorpyrifos had poorer reflexes, grasping, and locomotion skills when compared to unexposed infants. ¹⁶ The authors suggest these delays in early motor skills may possibly lead to later life developmental delays in both physical and mental abilities.
- 35. The Childhood Autism Risks from Genetics and Environment study showed that applying OPs in agricultural fields within 1.5 kilometers of the home of a woman while she is pregnant is associated with an increased incidence of autism spectrum disorders in the prenatally exposed child, and the risk was most elevated for chlorpyrifos.¹⁷ Chlorpyrifos was the most abundant and widely used of all the pesticides reported in the study.

¹⁵ Rauh, V. A., Perera, F. P., Horton, M. K., Whyatt, R. M., Bansal, R., Hao, X., ... Peterson, B. S. (2012). Brain anomalies in children exposed prenatally to a common organophosphate pesticide. Proceedings of the National Academy of Sciences of the United States of America, 109(20), 7871–7876.

¹⁶ Silver MK, Shao J, Zhu B, Chen M, Xia Y, Kaciroti N, Lozoff B, Meeker JD. Prenatal naled and chlorpyrifos exposure is associated with deficits in infant motor function in a cohort of Chinese infants. Environ Int. 2017 Sep;106:248-256.

¹⁷ Shelton JF, Geraghty EM, Tancredi DJ, Delwiche LD, Schmidt RJ, Ritz B, Hansen RL, Hertz-Picciotto I. Neurodevelopmental disorders and prenatal

36. In 2018, I was part of a team of eight scientists that co-authored an article reviewing the available evidence on chlorpyrifos health harms, including epidemiology, toxicology, and mechanistic data. The article was published in well-respected medical journal, Plos Medicine. Based on our review of the most recent evidence, we concluded that "Compelling evidence indicates that prenatal exposure at low levels is putting children at risk for cognitive and behavioral deficits and for neurodevelopmental disorders." The authors recommend that "governments phase out chlorpyrifos and other OP pesticides, to protect children."

Scientific Advisory Panels agree that cholinesterase inhibition is not a protective endpoint.

37. Based on the large and convincing body of scientific evidence from high quality animal toxicology and human epidemiology studies, the EPA's Scientific Advisory Panels (SAP), building on findings made by the SAP in 2008, in 2012 and in 2016 agreed that relying on a threshold of no higher than ten percent cholinesterase inhibition as a NOAEL level does not account for

residential proximity to agricultural pesticides: the CHARGE study. Environ Health Perspect. 2014 Oct;122(10):1103-9. Erratum in: Environ Health Perspect. 2014 Oct;122(10):A266.

¹⁸ Hertz-Picciotto I, Sass JB, Engel S, Bennett DH, Bradman A, Eskenazi B, Lanphear B, Whyatt R. Organophosphate exposures during pregnancy and child neurodevelopment: Recommendations for essential policy reforms. PLoS Med. 2018 Oct 24;15(10):e1002671. doi: 10.1371/journal.pmed.1002671. Available at https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6200179/pdf/pmed.1002671.pdf

neurodevelopmental effects and is not sufficiently protective of the American population. The SAPs' largest concern was for prenatally exposed children, where long-lasting and possibly permanent deficits in learning, working memory, and anti-social behavior was reported.

38. In the 2016 review, "[t]he 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 [ten percent cholinesterase inhibition] (i.e., toxicity at lower doses)." The SAP recommended that EPA continue to work to account for that neurodevelopmental impacts in children from prenatal exposures occur even at levels below those that cause detectable cholinesterase inhibition in the pregnant mother.

EPA Finds Food Residue Exposure Alone Is Unsafe

39. In the 2016 assessment, EPA found that food exposures for young children (one to two years old) were up to 140 times greater than EPA's target risk threshold. Food exposures for pregnant women were found to be 62 times greater than the target risk threshold to protect against harm to the developing brain.

¹⁹ 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". July, 2016. Report and other meeting materials available at: https://www.epa.gov/sap/meeting-materials-april-19-21-2016-scientific-advisory-panel p.20

EPA's exposure analysis identified ten food crops where more than 25 percent are grown with chlorpyrifos.²⁰ Regular residue testing performed by the USDA (and summarized in EPA's food exposure analysis) routinely finds residues on these crops and others.²¹

- 40. Children face significant risk from chlorpyrifos residues in the diet because USDA testing finds chlorpyrifos residues on the top fruit consumed by children apples make up approximately 36 percent of non-juice related daily fruit intake even after washing. ²² ²³ Similarly, chlorpyrifos residues are found on other fruits popular with children: peaches/nectarines, citrus (even peeled), grapes, berries, and melon (even under the rind).
- 41. In the most recent USDA pesticide residue testing data available (2015), chlorpyrifos residues were found on twelve different types of fruits and vegetables, which was 71 percent of the seventeen crops tested.²⁴

²⁰ Experts Support EPA Proposed Ban on Chlorpyrifos. January 17, 2017 Jennifer Sass, https://www.nrdc.org/experts/jennifer-sass/experts-support-epa-proposed-ban-chlorpyrifos

²¹ EPA: Toxic Pesticide on Fruits, Veggies Puts Kids at Risk. January 06, 2017 Miriam Rotkin-Ellman and Veena Singla, https://www.nrdc.org/experts/miriam-rotkin-ellman/epa-toxic-pesticide-fruitsveggies-puts-kids-risk

²² Herrick KA, Rossen LM, Nielsen SJ, Branum AM, Ogden CL. Fruit Consumption by Youth in the United States. Pediatrics. 2015;136(4):664-671. doi:10.1542/peds.2015-1709.

²³ USDA Pesticide Date Program.

²⁴ USDA 2015. Pesticide Date Program, Annual Summary, Calendar Year 2015.

EPA Finds Drinking Water Exposure Alone is Unsafe

- 42. In its 2014 and 2016 assessment, EPA calculated that many of the legally permitted uses of chlorpyrifos result in drinking water contamination levels that exceed EPA's levels of concern.²⁵
- 43. In its 2014 assessment, EPA found that children would be exposed to unsafe levels of chlorpyrifos from drinking water contamination alone, even before considering additional daily routes of exposure including food.
- 44. For its 2016 Refined Drinking Water Assessment, EPA performed additional analyses to assess potential chlorpyrifos drinking water exposures based on national and regional modeling information as well as real-world water monitoring data. All analyses showed that drinking water concentrations across the country exceed the drinking water level of concern, presuming that there is no food exposure. The assessment confirmed the Agency's previous findings that "the majority of estimated drinking water exposures from currently registered uses, including water exposures from non-food uses, continue to exceed safe levels even taking into account more refined drinking water exposures."
- 45. Unsurprisingly, EPA also found that higher concentrations of chlorpyrifos and the more potent chlorpyrifos-oxon are likely to be found in areas

²⁵ 80 Fed. Reg. 69,079, 69,083 (Nov. 6, 2015)

with higher agriculture uses of chlorpyrifos. Thus, agricultural communities, including farmworkers and their families, are more likely to have their drinking water contaminated by chlorpyrifos.

EPA's Failure To Revoke All Chlorpyrifos Tolerances And Cancel
Registrations For Food Uses Is Causing Harm To NRDC And Its Members

- 46. On March 29, 2017, then-EPA Administrator Scott Pruitt denied the 2007 petition (the "Pruitt Order"), because he chose to engage in "further evaluation of the science" on the "adverse neurodevelopmental effects to occur from current human exposures to chlorpyrifos" before finalizing the proposed revocation of chlorpyrifos tolerances. He indicated that this further evaluation would take place during the registration review process, which has a statutory deadline of October 1, 2022.
- 47. On July 19, 2019, EPA Administrator Andrew Wheeler denied NRDC and others' objections to the 2007 petition denial and again refused to ban chlorpyrifos.
- 48. Because of EPA's failure to ban chlorpyrifos, NRDC members and their children are being exposed to unsafe levels of chlorpyrifos on food, in drinking water, and in pesticide drift and volatilization, and will continue to be as long as the chlorpyrifos registrations and food tolerances remain in effect.

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- 49. In addition, EPA's failure to revoke chlorpyrifos tolerances and end food uses of chlorpyrifos has led NRDC to devote extensive resources to compiling and disseminating information about the risks of chlorpyrifos. Drawing on the frequent detection of residues on fruits consumed regularly by children in government surveys, NRDC compiled and prepared information for the public in the form of online articles, media briefing information, and fact sheets to help parents and others understand what EPA's assessment means for their family. For example, NRDC highlighted the fact that many fruits that kids regularly eat, including apples, peaches, and strawberries, have chlorpyrifos residues in the fruit even after they are washed and peeled. NRDC also pointed out that chlorpyrifos residues are also routinely found on imported fruits like peaches, grapes, and melons.
- 50. EPA's failure to enact the proposed tolerance revocations has resulted in state-based efforts to eliminate or reduce risk to their residents. NRDC has spent significant resources advocating along with partners for a ban on chlorpyrifos in California. These efforts have resulted in designation of chlorpyrifos as a restricted use pesticide, formal listing as a toxic air contaminant, a proceeding

²⁶ EPA: Toxic Pesticide on Fruits, Veggies Puts Kids at Risk. NRDC Expert blog, by Miriam Rotkin-Ellman and Veena Singla. January 6, 2017. https://www.nrdc.org/experts/miriam-rotkin-ellman/epa-toxic-pesticide-fruitsveggies-puts-kids-risk

which added chlorpyrifos to the Proposition 65 list of reproductive chemicals that may require warnings to the public, initiation of the cancelation process, and a settlement agreement which will phase out virtually all use of the chlorpyrifos by then end of 2020. NRDC has provided technical analyses to inform California scientific bodies, regulators, and policy makers of the risks posed by chlorpyrifos, particularly in California's agricultural communities, and the need for a ban NRDC has also provided expert testimony, technical support, and political advocacy for state-level bans in Maryland and New York.

51. This investment of resources would not be necessary if EPA had complied with its obligations and revoked chlorpyrifos tolerances because it cannot find the pesticide safe.

Pursuant to 28 U.S.C. §1746, I declare under penalty of perjury that the foregoing is true and correct, to the best of my knowledge.

Executed this 25th day of November 2019, in Washington, D.C.

/s Jennifer Sass JENNIFER SASS, PH.D

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NO. 19-71979

UNITED STATES COURT OF APPEALS FOR THE NINTH CIRCUIT

LEAGUE OF UNITED LATIN AMERICAN CITIZENS; et al.,

Petitioners,

v.

ANDREW WHEELER, Administrator, United States Environmental Protection Agency, and UNITED STATES ENVIRONMENTAL PROTECTION AGENCY,

Respondents.

DECLARATION OF JOSE CRUZ

I, JOSE CRUZ, declare and state as follows:

- 1. I am over the age of 18 and have personal knowledge of the statements in this declaration.
- 2. This declaration is being submitted in support of a lawsuit, in which the United Farm Workers ("UFW") is a petitioner, challenging the United States Environmental Protection Agency's ("EPA's") decision to leave chlorpyrifos tolerances in place without finding that the pesticide is safe.

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- 3. I am a member of the United Farm Workers union. I have been a member for about 19 years. I am a member of the worker board and have a great deal of protections under my union contract. However, other farm workers do not benefit from the same protections and I believe that all farm workers should have health and safety standards at work.
- 4. I live in Sunnyside, Washington and have two young daughters, ages 8 and 10.
- 5. I have been a farm worker for 20 years and currently work as a pesticide applicator at a vineyard. My job involves mixing pesticides and spraying them onto the fields. We apply lots of different types of pesticides, but I am not sure what the name of each pesticide is.
- 6. I have been exposed to pesticides while at work on two occasions.

 Once I was involved in an accident when a coworker left a sprayer on and I was sprayed by a pesticide. I don't remember what chemical I was sprayed with. My face was not fully protected and I got the pesticide on my skin. On another occasion, several coworkers and I were exposed to aerial drift when a dusting plane was spraying pesticides on a neighboring field. We began to inhale the pesticides that were drifting onto the field where we were working and workers started getting concerned and told the supervisor. A few workers began to feel sick after inhaling the pesticides.

7. I have a lot of concern about my exposure to pesticides, as I come in contact with pesticides on a regular basis at work. I have been mixing and applying pesticides for many years and I have spoken with other farm workers that I know personally who have gotten sick after long time exposure to pesticides in the fields. I worry that I might get sick because of my contact with pesticides.

8. I don't know whether I have ever been exposed to chlorpyrifos, but it does worry me because it is a very dangerous and toxic pesticide. I would feel much better knowing that this pesticide wasn't being applied to the food that I feed my family or being sprayed near my home or my work.

9. I feel that the EPA is putting farm workers and their families in danger by not prohibiting the use of chlorpyrifos. They are ignoring our health and safety by allowing us to be exposed to this dangerous pesticide. If this pesticide was banned from use in our communities we would all be much safer.

Pursuant to 28 U.S.C. § 1746, I declare under penalty of perjury that the foregoing is true and correct to the best of my knowledge.

Executed on this 15th day of October 2019, in Sunnyside, WA.

s/ Jose Cruz JOSE CRUZ

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NO. 19-71979

UNITED STATES COURT OF APPEALS FOR THE NINTH CIRCUIT

LEAGUE OF UNITED LATIN AMERICAN CITIZENS; et al.,

Petitioners,

v.

ANDREW WHEELER, Administrator, United States Environmental Protection Agency, and UNITED STATES ENVIRONMENTAL PROTECTION AGENCY,

Respondents.

DECLARATION OF JUDY FISHMAN

I, JUDY FISHMAN, declare and state as follows:

- I have been a member of the Natural Resources Defense Council since
 1999, and I support NRDC's efforts to protect the public from exposure to harmful pesticides.
 - 2. I am 74 years old and live in Los Angeles, California.
- 3. My husband and I have three grown children and five grandchildren between the ages of six and eighteen. They live in Los Angeles and San Francisco, CA.

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- 4. I am aware that chlorpyrifos and other organophosphate pesticides are widely used and can have negative impacts on our physical health and our mental health. I am concerned about the health impacts caused by chlorpyrifos, and the overall impacts of exposure to chlorpyrifos and other pesticides.
- 5. I am very concerned about my grandkids who eat a lot of fruit and are still growing. As much as their parents try, my grandchildren do not eat just organic food. I am concerned that my grandchildren are putting substances in their bodies that are going to cause them health and cognitive issues for a lifetime. I am concerned about how these pesticides may stay in their bodies during puberty that will affect their children and future generations.
- 6. I am concerned about all kids being exposed to pesticides on food because eating organic food to avoid pesticides isn't an option for most children. If kids eat in schools, other homes, restaurants, any place outside the home, they are not eating organic the bulk of the time.
- 7. I am concerned about the widespread use of chlorpyrifos and other pesticides. There is no way for me to detect if it is on what I'm eating and what my grandchildren are eating. Even if we try to eat healthily, by eating fruits and vegetables, we can guess that we are eating food with chlorpyrifos and other pesticides.

- 8. I have a Master's degree in Educational Psychology with a specialty in Parent Education and Child Development. I worked as an Educational Therapist and ran parent education programs for ten years. I helped found the Children's Nature Institute, an environmental education program that taught our youngest children and served thousands of inner city kids during the 30 years it was in Los Angeles.
- 9. In my work, I saw what inner-city kids ate when we bused them to our programs. While most of it was unhealthy, when it was healthy, it was foods that were likely affected by chlorpyrifos like apples, grapes, strawberries. These kids need all the help they can get to eat healthy and to thrive in this world. Many of the kids we served were already challenged by poverty, developmental delays, lack of school readiness and toxic stress. Some were homelessness, in foster care or being raised by teen parents. Most had poorly educated parents struggling with poverty and some were affected by the opioid crisis. Adding another problem, such as developmental issues, on top of what they are already dealing with has a much more profound effect on their lives.
- 10. I am concerned that like other pesticides, chlorpyrifos is getting into our food chain, including food my family and I eat. Once in the food chain, it is there permanently. It could take years to get rid of it, if ever.

11. I am concerned because chlorpyrifos is a drift pesticide (making it even more toxic and pervasive), and that it's in schools and homes in farming areas such as the California Central Valley. It is negatively affecting children's development

and therefore the future of our country.

12. Chlorpyrifos has been proven to lower the IQ of our children who need

math, science, and cognitive skills to function in our rapidly changing world. I am

concerned that the impact of chlorpyrifos on children's neurodevelopment is

undermining our future economy and the health of our country. I am concerned

that chlorpyrifos is making our population more vulnerable.

13. I am aware that the Natural Resources Defense Council petitioned the

U.S. Environmental Protection Agency to ban chlorpyrifos in 2007. I am also

aware that the NRDC has been part of several lawsuits about that petition. I am

aware that the NRDC has filed objections to EPA on chlorpyrifos, and that EPA

denied those objections.

14. I believe that EPA cannot wait any longer to take action on chlorpyrifos.

Pursuant to 28 U.S.C. §1746, I declare under penalty of perjury that the

foregoing is true and correct, to the best of my knowledge.

Executed this 31st day of October 2019, at Los Angeles, CA.

s/Judy Fishman

JUDY FISHMAN

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NO. 19-71979

UNITED STATES COURT OF APPEALS FOR THE NINTH CIRCUIT

LEAGUE OF UNITED LATIN AMERICAN CITIZENS; et al.,

Petitioners,

v.

ANDREW WHEELER, Administrator, United States Environmental Protection Agency, and UNITED STATES ENVIRONMENTAL PROTECTION AGENCY,

Respondents.

DECLARATION OF KARLA PINEDA-SANTOS

I, KARLA PINEDA-SANTOS declare and state as follows:

1. I currently serve as Interim Executive Director of the Labor Council for Latin American Advancement ("LCLAA"), prior to this position I was LCLAA's Director of Operations, a position I held for ten years. LCLAA was founded in 1972 out of the need to improve workers' rights and increase the influence of Latino workers in the political process by educating, organizing and mobilizing Latinos within and outside of the labor movement. I am submitting this declaration to describe LCLAA's interests in this litigation and in obtaining a nationwide ban on chlorpyrifos.

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- 2. In my capacity as Director of Operations, I supported the executive director with the general administration of the organization. I also supported the programmatic work of the organization, such as planning events, conferences, worker delegations, briefings and meetings related to specific issues that impact workers, such as pesticides exposure, environmental protection standards, equal pay, sexual harassment and other issues. During my time with LCLAA, I have helped plan and support LCLAA member delegations to meet with members of Congress in relation to pesticides exposure and shed light on their concerns to the harmful impact of pesticides on farmworker families and the nearby area residents who are exposed to drift.
- 3. As a mother of two, I have concerns about the produce that my children consume and whether they will experience any negative health effects where pesticides have been used on the fruits and vegetables that they eat, particularly where these chemicals might have leached into the produce or where residue remains on the food.
- 4. LCLAA represents the interests of more than 2 million Latino workers in the American Federation of Labor-Congress of Industrial Organizations (AFL-CIO), The Change to Win Federation, Independent Unions and all its membership. As part of our mission, we focus on raising awareness about occupational and environmental health and safety issues that disproportionately impact Latino and

immigrant workers, including farmworkers and pesticide applicators. Among our membership, we have many individuals who live and work in agricultural communities and they and their families are exposed to harmful pesticides.

- 5. Through our members, I have learned that farmworkers experience nefarious symptoms because of exposure to chlorpyrifos, including rashes, blisters, nausea, and stinging in the eyes, as well as far more serious health impacts such as infertility and neurological disorders. Their children and their families are exposed to toxic pesticides through spray drift, as well as in their food and drinking water. This should not happen. All people should be afforded basic protections from harmful pesticides, including chlorpyrifos.
- 6. Our members expect us to act on their behalf to obtain protections for them and their families. In June 2017, LCLAA joined other petitioners in a lawsuit challenging EPA's denial of the 2007 Petition to ban chlorpyrifos.
- 7. In July 2017, LCLAA's members came to Washington, DC to urge the Senate to support a bill that would ban food uses of chlorpyrifos. This action was an attempt to raise awareness about the unique experiences of farmworkers and their families and the regular exposure to pesticides that they experience. Our members were able to share their personal stories and above all, highlight the harm that these chemicals have inflicted in themselves, their kids, and people close to them.

- 8. LCLAA was able to shed light on stories such as the one shared by farmworker Mily Trevino-Sauceda, who was working on a citrus farm in Blythe, California, when an overhead plane sprayed the fields and all the workers in it with toxic pesticides. One of her fellow farmworkers, an expectant mother, was rushed to the hospital. The baby survived, but the mother lost her life that day.
- 9. Another unfortunate story that LCLAA highlighted was that of Florida farmworker Reina Lemus de Zelaya and her family, who spoke about her family's experience and that of farmworkers that labor in farms, nurseries and greenhouses across the state of Florida. Reina didn't realize the harms of pesticides during her time working the fields of Florida. She had yet to hear the stories of rashes, stinging eyes, blisters, nausea, headaches, respiratory problems, asphyxia, and even death that so many farmworkers routinely share. She worked the fields through all stages of her pregnancy and even brought her baby to work, keeping her in a stroller by her side. That daughter, unlike Reina's other children, suffers from asthma, illness, and learning disabilities.
- 10. These stories from California and Florida echo the conditions of labor camps in North Carolina, where farmworkers were coming home to shared rooms and due to exhaustion, laying down in the same clothes they wore while in the fields. Pesticides take longer to break down when they are indoors and if

farmworkers have pesticide residues on their clothes and shoes, they are exposing their children and families to harmful chemicals.

- 11. We are particularly concerned about farmworker health and safety because unlike LCLAA members who traditionally rely on the Department of Labor (DOL) and the Occupational Safety and Health Administration (OSHA) to protect them from chemical exposure, farmworkers and pesticide applicators rely on the Environmental Protection Agency (EPA) to establish minimum protections from pesticide exposure via the Agricultural Worker Protection Standard (WPS) and the Certification of Pesticide Applicators (CPA) rule.
- 12. The continued use of chlorpyrifos, especially when combined with EPA efforts to weaken basic protections for farmworkers and pesticide applicators, is alarming and undermines the health and safety of farmworkers and rural communities.
- 13. Our members remain concerned about their exposure to chlorpyrifos, a toxic chemical that is harmful to all people and to children in particular. I understand that EPA found that people may be exposed to chlorpyrifos through their drinking water, and that people who live in agricultural areas may be at more risk of drinking water contamination. I also understand that EPA's proposal to ban chlorpyrifos was based on unsafe drinking water exposures. I am also aware that the U.S. Department of Agriculture has detected unsafe levels of chlorpyrifos on

fruits and vegetables. LCLAA members and their families may be exposed to chlropyrifos through food and drinking water. Members that live in rural areas or that work on or near farms may also be exposed to chlorpyrifos through spray drift and occupational exposures.

- 14. On September 21, 2016, LCLAA, along with other petitioners in this lawsuit, submitted a Petition for Emergency and Ordinary Suspension of Chlorpyrifos Uses that Post Unacceptable Risks to Workers and Petition to Cancel All Uses of Chlorpyrifos to the United States Environmental Protection Agency ("EPA"). We also submitted comments to EPA after the agency released its 2016 revised human health risk assessment, which found that chlorpyrifos is unsafe is nearly every way that it is used.
- 15. In March 2017 the then-EPA Administrator Scott Pruitt acted against the findings and recommendations of the agency's own scientists and refused to ban chlorpyrifos, thus leaving our members at disproportionate risk from this toxic pesticide. On June 5, 2017, LCLAA joined the other petitioners in filing objections with EPA and filing a lawsuit challenging the petition denial. Now that EPA has denied our objections, we are bringing this lawsuit to challenge the agency's refusal to ban chlorpyrifos. We respectfully ask the Court to order EPA to stop delaying and act to ban chlorpyrifos.

Pursuant to 28 U.S.C. § 1746, I declare under the penalty of perjury that the foregoing is true and correct, to the best of my knowledge, information, and belief.

Executed this 2nd day of December 2019, in Washington, DC.

___s/<u>Karla Pineda-Santos</u> ____ Karla Pineda-Santos

NO. 19-71979

UNITED STATES COURT OF APPEALS FOR THE NINTH CIRCUIT

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ANDREW WHEELER, Administrator, United States Environmental Protection Agency, and UNITED STATES ENVIRONMENTAL PROTECTION AGENCY,

Respondents.

DECLARATION OF MARGARET REEVES

I, MARGARET REEVES, declare and state as follows:

- I am a senior scientist at Pesticide Action Network of North America ("PANNA"). I am also a PANNA member.
- 2. I have a Ph.D. in Agricultural Ecology from the University of Michigan (1991), and I spent two years of post-doctoral research in Agronomy at Ohio State University (1991-1993). Before joining PANNA in 1996, I spent about nine years in Central America, teaching and conducting research in tropical agricultural ecology. I worked with university colleagues and Non-Governmental Organizations to improve productivity of low-input, ecologically sound

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agricultural methods. I have published articles, in both Spanish and English, in professional and popular/educational journals.

- 3. I also have a long-standing interest in working on behalf of people at risk of exposure to dangerous pesticides. I've been an advocate for farmworkers since the early 1980s when I volunteered in the Ann Arbor, MI support group for the Ohio-based Farm Labor Organizing Committee. Since coming to PANNA in 1996, I have continued to support the work of farmworker unions and work with members of farmworker communities in California to document exposure to harmful pesticides and to improve workplace and public health policies to better protect against such exposures.
- 4. As a senior scientist, I conduct research to support the organization's advocacy campaigns seeking stricter regulation of dangerous pesticides, better enforcement of existing regulations, and stronger incentives for less toxic alternatives. For example, I work with rural communities to collect data about pesticide exposure. I also monitor peer-reviewed scientific literature to keep abreast of the health hazards associated with exposure to specific pesticides. I educate the public about my research findings by writing reports and contributing to PANNA's blog. In addition, I share my findings during regular conference calls and other communications with PANNA's allies, including grassroots community groups and farmworker unions. Many of these organizations lack the resources to

hire staff scientists and, therefore, rely on my research and PANNA's expertise to educate their members about the risks of pesticide exposure, as well as the substance and adequacy of existing state and federal regulations governing pesticide use.

PANNA'S MISSION AND ACTIVITIES TO REDUCE AND ELIMINATE EXPOSURE TO TOXIC PESTICIDES

- 5. PANNA is a non-profit advocacy and education organization that was founded in 1982 and is dedicated to preventing harm to the public from pesticides. PANNA focuses on two related goals: (1) protecting people from exposure to dangerous pesticides; and (2) promoting a shift to less toxic alternatives. PANNA is the North American branch of the Pesticide Action Network, an international coalition of hundreds of public interest organizations in more than 90 countries. The network challenges the global proliferation of pesticides, defends basic rights to health and environmental quality, and works to ensure the transition to a just and viable society.
- 6. The total number of PANNA members and supporters is about 114,000. In 2019 to date, PANNA members took nearly 19,000 PAN-facilitated actions urging their state and national representatives to ban chlorpyrifos because of their concerns about the serious human health and environmental effects of organophosphate pesticides in general, and chlorpyrifos in particular. These members have expressed particular concerns about exposure of their children to

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pesticides. PANNA and its members, are very concerned that EPA is failing to protect people, including PANNA members, in rural communities from chlorpyrifos and other organophosphate pesticides.

HARM FROM CHLORPYRIFOS

- 7. Chlorpyrifos and other organophosphates are nerve toxin insecticides. They cause numerous acute poisonings every year. Acute pesticide poisoning refers to adverse health effects associated with exposure to pesticides that occur immediately or shortly following the exposure. Acute effects from chlorpyrifos exposures include irritation of eyes, nose and throat; skin irritation; respiratory difficulty; headache; exhaustion; blurred vision; stomach cramps and vomiting; excessive salivation; tremors, staggering gait and dizziness; numbness; chest tightness; and excessive sweating. These effects may be of short duration, last days or weeks, or, in some cases, lead to long-term effects such as chronic neurological problems. Acute effects often lead to temporary job loss and loss of income.
- 8. Every year, the California Department of Pesticide Regulation's ("DPR") reports the number of acute poisonings. These numbers are likely to be serious underestimates of actual poisonings since most acute poisonings are never reported. See Reeves, M., A. Katten and M. Guzmán. 2002. Fields of Poison 2002: California farmworkers and pesticides. Pesticide Action Network, San Francisco,

CA. The report is available online at:

http://www.panna.org/sites/default/files/FieldsofPoison2002Eng.pdf.

- 9. Of the reported poisonings in California, fifty-one percent from 1998 to 2006 occurred when pesticides drifted from the site of application onto workers. Another 25% resulted from dermal contact with pesticide residues in fields. Chlorpyrifos was among the top five chemicals in the reported poisonings.
- 10. These data only address the most serious short-term poisoning incidents. There are ample data elsewhere that show that pesticides, including chlorpyrifos, have long-term, chronic adverse health effects on farmworkers.

 Those effects include nervous system damage, development problems, hormone disruption, immune system damage, cancer, reproductive effects, and birth defects.
- 11. Extensive discussion of these issues is provided in the PANNA Fields of Poison 2002 report (previously cited) that I co-authored with United Farm Workers (UFW), and California Legal Rural Assistance Foundation (CRLAF), and published in collaboration with Californians for Pesticide Reform. It revealed that pesticide safety laws fail to protect many of the California's 700,000 farmworkers and their families from poisonings even when the laws are followed. For that reason, PANNA believes that human pesticide exposures need to be reduced, in some cases, prevented altogether.

- 12. Chlorpyrifos has continued to be associated with acute pesticide poisonings, and data on chlorpyrifos poisonings collected and released by California's Department of Pesticide Regulation show that chlorpyrifos poisonings remain a concern.
 - a. The 2002¹ PANNA report showed that California's Pesticide Illness Surveillance Program ("PISP") had reported 156 chlorpyrifos poisoning cases between 1998 and 2000. We also noted that the reported poisonings likely represented only the tip of the iceberg, as many, probably most cases go unreported for myriad reasons including lack of familiarity among workers, residents, and physicians with signs and symptoms of pesticide-related illnesses and/or fear of retaliation among workers for reporting job-related incidents. We also pointed out that about half of all drift cases occurred when investigations determined that there had been no violations of pesticide use or worker safety regulations. In other words, the results demonstrated that the regulations themselves were inadequate to protect workers, and others, from pesticide exposure and associated poisonings.
 - b. More recent PISP data suggest that poisonings by agricultural use of chlorpyrifos continue albeit at apparently lower rates. The most recent 2016 data listed six cases attributed to chlorpyrifos.
 - c. While most PISP cases are reported for workers, reports of direct acute poisonings among children exposed at school have not been uncommon, with 34 cases reported (for all pesticides) between 2008 and 2011. The PISP reports of chlorpyrifos cases among workers in that time period totaled 62 with 49 attributed to drift exposure.

¹ Reeves, M., A. Katten and M. Guzmán, *Fields of Poison 2002: California farmworkers and pesticides*, Pesticide Action Network (2002).

d. A recent report of agricultural pesticides used near California schools showed that chlorpyrifos was the 8th most common highly hazardous pesticide applied within ½ miles of public schools.² There were no cases of drift exposure among children in the most recent 2016 report (data prior to 2016 are no longer readily available).

PANNA'S ACTIVITIES TO PROTECT CHILDREN AND COMMUNITIES FROM CHLORPYRIFOS

- 13. In addition to acute poisoning data, a continuously growing body of data demonstrates that both workers and consumers, including children, are regularly exposed to chlorpyrifos and other organophosphate pesticides. To complement these data, PANNA has conducted numerous field studies in California's Central Valley and elsewhere documenting the presence of chlorpyrifos (including at levels exceeding EPA's level of concern) in the air in communities located near citrus orchards where use of the pesticide is common during the summer months.
- 14. In 2003 PAN created the Drift Catcher, a simple air monitoring device designed to be used by trained lay people concerned about the presence of pesticides in the air in their communities. Modeled after similar devices used by government agencies, the collected samples are shipped to analytical laboratories for analysis. The community members then use the resulting data in support of public policy campaigns designed to win more protective public health policies.

² California Environmental Health Tracking Program, *Agricultural Pesticide Use Near Public Schools in California* (2014).

One good example was the use of Drift Catcher data, collected near homes in California's Tulare County, to successfully pass a 2008 ordinance requiring a one-quarter mile buffer zone (no spray area) around schools in session, occupied farm labor camps and residential areas. The buffer zone rule prohibits aerial applications of restricted use pesticides, including chlorpyrifos.

- 15. PANNA's primary partner in both air monitoring (aka drift-catching) for chlorpyrifos was our member and long-time close partner El Quinto Sol de America (EQS) located in the town of Lindsay in California's Central Valley. Air monitoring in 2004 and 2005 showed levels of concern near participants' homes. In 2006, I worked with EQS to repeat air monitoring and found that 30% of the air samples showed levels of chlorpyrifos above the level considered safe, by US EPA, for a one-year-old child; one site had two results about 10 times the "safe" level.
- 16. In 2006, we added a biomonitoring component to the Lindsay study. In addition to levels of concern in the air near participants' homes, we found that all but one of the 12 biomonitoring participants (8 women and 4 men) had levels of chlorpyrifos in their urine above the "acceptable" level for pregnant and nursing women. One of the participants was a young nursing mother who lived with her family directly across the street from the Lindsay elementary school. In 2009, we conducted another chlorpyrifos air monitoring and biomonitoring study near

Lindsay. Though air levels remained below levels of concern, 14 of 20 children or women of childbearing age (15-44) had levels of the chlorpyrifos metabolite TCPy in their urine above the Population Adjusted reference dose – or "safety" level of 30 ng/kg/day.

- 17. Our members who participated in both the air and biomonitoring studies are looking to PANNA to help them eliminate this avoidable source of contamination in their communities and in their bodies.
- 18. Along with Californians for Pesticide Reform (CPR), of which PAN is a founding member, and CPR partner groups, PANNA has engaged in air monitoring efforts in the towns of Lompoc and Parlier. These air monitoring efforts in turn led to the establishment of California's Department of Pesticide Regulations' (DPR) comprehensive Air Monitoring Network (AMN) program one focus of which is the use of organophosphate (OP) pesticides including chlorpyrifos. Lindsay, CA is one of the four OP-focused monitoring sites (four other sites were selected for their high use of highly hazardous fumigant pesticides). PANNA, together with our CPR partners, has recently provided detailed comments to DPR on its 2016 monitoring report focusing on both monitoring protocols and, most importantly, DPR's interpretation and presentation of the monitoring results. Our comments noted that US EPA's revised risk assessment for chlorpyrifos reviewed DPR's AMN data and found that levels

exceeded the levels of concern to protect against neurodevelopmental impacts at one of the monitoring sites. At that site, the highest 4-week rolling average for chlorpyrifos was 39.4 ng/m3 which is more than 18 times higher than the level of concern for pregnant women (2.1 ng/m3) set last year by USEPA scientists to protect against neurodevelopmental harm.

(http://www.cdpr.ca.gov/docs/emon/airinit/air_monitoring_plan_2017.pdf)

Organophosphate pesticides pose a high risk to people, and especially 19. to fetuses, infants, and young children. EPA's actions to date demonstrate a double standard that results in unacceptable neglect of rural and farm children while suburban and urban children receive some necessary protections against exposure to chlorpyrifos. In 2000, EPA took effective measures to cancel almost all residential uses of organophosphate pesticides, which has resulted in significant and measurable reduction in poisonings to children from roach baits, residential foggers or "bug bombs," and other homeowner uses. These protections, while necessary, do not address dangerous forms of exposure to chlorpyrifos and other organophosphate pesticides from spray drift and volatilization drift, which primarily affects children living in rural and farming communities. Often, the children affected are the children of farmworkers, meaning that the harm EPA allows falls disproportionately on children in low-income and minority communities. Any continued poisonings or permanent neurological harm to

children is unacceptable. This double standard is especially alarming because of the disproportionate nature of the harm on already overburdened communities.

Rural and farm children should be accorded the same protections as other children from this dangerous category of pesticides.

- 20. When EPA re-registered chlorpyrifos and the other organophosphates in 2006, it ignored exposures to children's and bystanders from pesticide drift. Ever since, we have advocated for EPA to consider drift among the aggregate exposures children face.
- 21. In 2007, we filed jointly with Natural Resources Defense Council a petition to ban all food uses of chlorpyrifos. The petition compiled the available data on drift and chlorpyrifos exposures.
- 22. In 2009, PANNA joined other farmworker and health advocated in petitioning EPA to protect children from pesticide drift. Pesticides in the Air Kids At Risk: Petition to EPA to Protect Children from Pesticide Drift (Oct. 13, 2009) (the "Kids Petition"). The Kids Petition presented evidence of pesticide drift and argued that EPA had violated its legal obligation to protect children against all aggregate exposures, including those from pesticide drift.
- 23. In 2011, EPA released a preliminary human health risk assessment for chlorpyrifos, which acknowledges the need to address spray drift and volatilization drift and that studies show widespread effects resulting from chlorpyrifos

exposure. PANNA filed comments on this assessment providing additional evidence and showing why EPA's assessment understates the risks to children from chlorpyrifos and a subsequent set of comments on EPA's volatilization assessment. Our comments are in www.regulations.gov at EPA-HQ-OPP-2008-0850-0098 and EPA-HQ-OPP-2015-0653-0165.

- 24. In its 2014 response to the Kids Petition, EPA acknowledged its legal obligation to address pesticide drift as an aggregate exposure under the Food Quality Protection Act, but indicated it would do so in its pesticide specific review of each pesticide. Agency Response to Pesticides in the Air Kids At Risk: Petition to EPA to Protect Children from Pesticide Drift (Mar. 31, 2014), available at www.regulations.gov at EPA-HQ-OPP-2009-0825-0084.
- 25. After acknowledging its obligation to protect children from pesticide drift, EPA found that drift was reaching schools, homes, and other places children gather in toxic amounts, which led to the imposition of the first no-spray buffers for chlorpyrifos in 2012. EPA, Chlorpyrifos Evaluation of the Potential Risks from Spray Drift and the Impact of Potential Risk Reduction Measures at 7 & Appendix C (July 13, 2012), *available at* https://www.regulations.gov/document?D=EPA-HQ-OPP-2008-0850-0105. We have argued in public comments that these buffers are too small because they

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ignore volatilization and inhalation exposures. Our concerns have been substantiated.

- 26. In August 2017, the California Department of Pesticide Regulation released a draft evaluation of chlorpyrifos as a toxic air contaminant, which finds drift in toxic amounts at far greater distances from chlorpyrifos spraying, *i.e.*, EPA's buffers are far too small to protect children.

 http://www.cdpr.ca.gov/docs/risk/rcd/chlorpyrifos_draft_evaluation_2017.pdf, at 15-17.
- 27. On May 5, 2017, chlorpyrifos traveled one-half mile from a farm, sickening dozens of people. The Kern County Department of Agriculture and Measurement Standards found that chlorpyrifos drifted one-half mile from a farm. An applicator implicated in this drift incident was assessed penalties of more than \$30,000. The following month, 18 farmworkers were sent to the hospital. An August incident, also in Kern County, is still under investigation but identified chlorpyrifos as one of the two pesticides sickening 70 farmworkers. https://www.panna.org/sites/default/files/Copus-Road%20Incident-May-Press%20Release.pdf. Here's a blog on the May 5 incident: http://www.panna.org/blog/why-cant-california-regulators-stop-pesticide-drift.
- 28. PANNA conducted a detailed analysis of chlorpyrifos body burden data from the Center for Disease Control biannual NHANES study. The 2004

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report, "Chemical Trespass: Pesticides in our bodies and corporate accountability" showed that many U.S. residents carry toxic pesticides in their bodies above government assessed "acceptable" levels. Chronic exposure to chlorpyrifos metabolite, was furthest above the government safety threshold, with average levels for the different age groups three to 4.6 times what agencies at that time considered "acceptable" for chronic exposure of vulnerable populations (e.g. women, children and the elderly). As CDC noted in the 2003 release of the data, young children carry particularly high body burdens—nearly twice that of adults—of a metabolite specific to chlorpyrifos. A 2010 update study by the CDC reported that while exposure levels of four target chemicals declined, exposure to chlorpyrifos increased 10.8%.

(https://www.cdc.gov/nchs/data/hpdata2010/hp2010_final_review_focus_area_08.pdf).

29. PANNA has engaged in concerted advocacy to obtain a nationwide ban on chlorpyrifos, including through the 2007 petition and a series of unreasonable delay cases seeking to compel EPA to act on that petition. Because EPA has delayed taking action, we have also devoted significant resources to advocacy in California to obtain restrictions and ultimately a ban on chlorpyrifos use in California. We have provided detailed technical comments on proposals and reviews of chlorpyrifos by California authorities and regulators; analyzed

California pesticide poisoning data; conducted air monitoring and biomonitoring of chlorpyrifos in California communities and tracked California monitoring; tracked and advocated for restrictions to prevent exposures of children at schools; and participated in hearings and proceedings on whether chlorpyrifos will be listed as a toxic air contaminant and as a reproductive or developmental toxicant under California's Proposition 65. PANNA partners and members of the statewide coalition Californians for Pesticide Reform (of which PANNA is an active, founding member) have devoted staff and funds for a concerted advocacy campaign to ban chlorpyrifos in California. If EPA had done its job and revoked all food tolerances in a timely manner, PANNA would no longer need to devote its resources to this campaign.

30. In addition to the work I've done for the past 21 years at PANNA on behalf of pesticide-exposed PANNA members, I also have personal experiences that influenced my decision to directly engage with PANNA's work. In the 10 years prior to coming to PANNA, part of my graduate student and post-doc research in Costa Rica involved the use of Lorsban (chlropyrifos) on the corn plants with which I was conducting my research. In fact, I directly applied granules of Lorsban by hand, to the developing tassels of corn plants. Though I was sufficiently careful to protect my skin from exposure, at no point did anyone with whom I was working, including more experienced agronomists or researchers, ever

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mention the potential dangers of exposure. As chlorpyrifos is relatively rapidly flushed from the body, I have no way to know if, at that time, I experienced exposure at levels of concern.

- 31. More recently, while conducting the biomonitoring study in Tulare County in the summer of 2005, I was driving near orange orchards and witnessed a nighttime pesticide application. Though there was no indication of what pesticide was being applied, there was a very good chance that it was chlorpyrifos. In response, I collected my urine sample in the same way we were collecting study participants' samples and sent it along with the other samples to the analytical laboratory. My resulting level of the chlorpyrifos metabolite TCPy was 4.26 µg/L which is substantially above the 1.5 µg/L average level of adults as reported by CDC in its Third National Report on Human Exposure to Environmental Chemicals, July 2005. So therefore, I experienced an unacceptable chlorpyrifos exposure, though my exposure was only on one occasion unlike many of the PANNA partners and members on whose behalf I have dedicated the past 21 years of work at PANNA.
- 32. Because of EPA's failure to ban chlorpyrifos, PANNA members and their children are still being exposed to unsafe levels of chlorpyrifos and will continue to be as long as the chlorpyrifos registrations and food tolerances challenged in the petition remain in effect.

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33. By denying the 2007 Petition in March 2017, and later our objections to that denial, and putting off a decision on whether chlorpyrifos must be banned for what could be years, EPA has harmed and is harming PANNA and its members.

Pursuant to 28 U.S.C. § 1746, I declare under penalty of perjury that the foregoing is true and correct to the best of my knowledge.

Executed on this 3rd day of December 2019, at Berkeley, CA.

<u>s/ Margaret Reeves</u> MARGARET REEVES

NO. 19-71979

UNITED STATES COURT OF APPEALS FOR THE NINTH CIRCUIT

LEAGUE OF UNITED LATIN AMERICAN CITIZENS; et al.,

Petitioners,

v.

ANDREW WHEELER, Administrator, United States Environmental Protection Agency, and UNITED STATES ENVIRONMENTAL PROTECTION AGENCY,

Respondents.

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DECLARATION OF MARTHA MORIARTY

I, MARTHA MORIARTY, declare and state as follows:

- 1. I am the Executive Director of the Learning Disabilities Association of America's ("LDAA") Minnesota affiliate, Learning Disabilities Association of Minnesota ("LDA Minnesota"). I have worked with LDA Minnesota since 2001 and was hired as the Executive Director in 2013. I have been a member of LDAA since LDA Minnesota became an affiliate organization in 2002. LDA Minnesota has been working with families impacted by learning disabilities for over 50 years.
- As the leader of LDA Minnesota, I see families from across the state who contact us for help or who come to our trainings about learning disabilities.
 Minnesota is a big agricultural state, and there are many families from rural areas

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who are facing severe challenges with their children's ability to access support and appropriate special education services for their learning disabilities. Many families call us to help find qualified tutors to help their children outside of school services, LDA offers virtual online tutoring to fill the gaps in rural areas where there are not trained tutors for learning disabilities. There is a lack of licensed special education teachers in our rural schools, including in areas where my nephews attend school. Special education teachers are spread thin and often must share classrooms, or in some schools, general education teachers can apply for a short term permission to teach special education students due to the shortage of properly trained and certified educators. As incidence of learning disabilities increase, there is the possibility for a real education crisis, especially in our rural communities. I support LDAA's efforts to seek a nationwide ban on chlorpyrifos because we want to avoid such a crisis and we want healthy brain development in children.

3. I am aware that chlorpyrifos has terrible immediate side effects on people that are exposed to it, and that it affects healthy brain development in children. These kinds of long-term impacts on brain development affect a child's ability to reach his or her full potential, and the costs to society and to families are enormous. For families, it can impact jobs, educational opportunities, and long-term health care needs. For society in general, harm to the developing brains of children also negatively impacts systems meant to support people, including health care, social services, and the educational system. The economic impact is much

wider than most people think about when you consider the long-term costs of all the things needed to support a person with learning disabilities. For example, the cost of educating a child through special education is \$16,000, over double the cost of educating a student in general education (NEA, 2004 IDEA Reauthorization).

- 4. The work that I do with LDA Minnesota is not just a job, it is also personal. I have nieces and nephews in both my family and my husband's family who have learning disabilities and attention-deficit/hyperactivity disorder ("ADHD"). They are now in middle and high school, and I have supported my siblings and in-laws with the challenges they face in raising children with learning disabilities. Being a parent of a child with a disability can be challenging throughout childhood, but particularly as they begin entering adulthood and making transitions from school to college and career are causing my relatives stress and concern for their child's future independence. I worry about my extended family's continued exposure to pesticides, including chlorpyrifos, because they live in agricultural areas. I don't think it is a coincidence that my family members who have more exposure to pesticides due to where they live are the ones with learning disabilities and ADHD.
- 5. My immediate family and I enjoy camping and other outdoor activities, and we travel all over the state for recreation. One time when we were camping in rural Minnesota, we saw a plane dropping pesticides on a nearby field and we were alarmed by our potential exposure and wondered if we should be

camping in that area. I would feel safer for myself and my family if I knew that neurotoxic pesticides like chlorpyrifos were banned so we are not at risk of

exposure when we are visiting rural areas in our home state.

6. I do the work that I do with LDAA and LDA Minnesota because I

want children to grow up in a healthy environment, free from neurological harm

from toxic pesticides like chlorpyrifos, and with the ability to reach their full

potential.

Pursuant to 28 U.S.C. § 1746, I declare under penalty of perjury that the

foregoing is true and correct to the best of my knowledge.

Executed on this 5th day of November, 2019, in Minneapolis, Minnesota.

/s Martha Moriarty
MARTHA MORIARTY

NO. 19-71979

UNITED STATES COURT OF APPEALS FOR THE NINTH CIRCUIT

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Petitioners,

v.

ANDREW WHEELER, Administrator, United States Environmental Protection Agency, and UNITED STATES ENVIRONMENTAL PROTECTION AGENCY,

Respondents.

DECLARATION OF REYNA LOPEZ

I, REYNA LOPEZ, declare and state as follows:

- 1. I am the Executive Director of Pineros y Campesinos Unidos del Noroeste (Northwest Treeplanters and Farmworkers United or "PCUN"). I have held this position since 2018.
- 2. Based in Woodburn, Oregon—the center of Oregon's agricultural industry— PCUN is Oregon's only farmworker union and the largest Latino organization in the state. Since its founding, PCUN has registered over 6,000 members, 98 percent of whom are immigrants from Mexico and Central America. Approximately one-third of PCUN's members come from indigenous communities

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in the Mexican states of Oaxaca, Puebla, Guerrero, Michoacan, Nayarit, Sinaloa, and Baja California. Most of these indigenous workers speak indigenous languages, such as Mixteco, Trique, or Zapoteco, but little to no English or Spanish.

- 3. PCUN's mission is to empower farmworkers to recognize and take action against systematic exploitation and all of its effects. To this end, PCUN is involved in community and workplace organizing on many levels. For example, PCUN's Collective Bargaining Committee negotiates and implements union contracts with local farms. Our Service Center provides members with support services such as translation, referrals to attorneys, and immigration assistance. Our Workplace Health program seeks to combat serious threats facing Oregon's farmworkers, including exposure to dangerous pesticides, a lack of education about safe pesticide use, sexual harassment, and workplace sexual assault. To educate and entertain our community while also raising political consciousness, PCUN operates Radio Movimiento, a community radio station with the slogan "La Voz del Pueblo" (The Voice of the People).
- 4. PCUN's members help to select the union's priorities by voting at annual meetings. As Executive Director, I am involved in coordinating all of PCUN's activities. Much of my time is devoted to lobbying Oregon's legislature and partnering with organizations across the country to protect farmworker rights.

- 5. Exposure to pesticides and other agricultural chemicals is a serious problem in our community. Many of PCUN's members have experienced the effects of exposure to pesticides. These symptoms include headaches, dizziness, fatigue, sleeplessness, nausea, and vomiting. In addition to pesticide exposure at work, many PCUN members live very close to areas where pesticides are applied. As a result, these members—along with their children—are threatened by exposure to dangerous pesticides even when they are not at work, because pesticides drift from fields to their homes. Some farmworker housing is only a few feet from fields where pesticides are sprayed, and people can be exposed to pesticides even when they are indoors. This is especially true during the summer months when people have open windows, or fans and air conditioners bring in air from outside, and they receive no notification when pesticides will be sprayed near them.
- 6. When I was a child, I loved going out to help my dad work in the fields. I learned work ethic, and felt a deep connection with the land. I'd hear stories from people in the fields getting aerial sprayed, and seeing chronic breathing issues develop. My father only allowed me to go out a pick a few times. Because he knew what the dangers were for a young child's development when it came to exposure to the chemicals he had to utilize while on the job.
- 7. I understand that the United States Environmental Protection Agency ("EPA") found that people may be exposed to chlorpyrifos through their drinking

water, and that people who live in agricultural areas may be at more risk of drinking water contamination. I also understand that EPA's proposal to ban chlorpyrifos was based on unsafe drinking water exposures. I am also aware that the U.S. Department of Agriculture has detected unsafe levels of chlorpyrifos on fruits and vegetables. In addition to drift and work exposures, PCUN's members and their families may also be exposed to this dangerous pesticide through the food they eat and the water they drink.

- 8. I know of two schools in Woodburn that are located very close to agricultural fields. On numerous occasions, I have seen pesticides being applied to those fields. PCUN's members with children at these schools are afraid that their children will be exposed to pesticide drift while playing outside at recess. Having seen how close the pesticide spray comes to the schools, I am also concerned about the safety of these children, especially with pesticides like chlorpyrifos that harm children's brains.
- 9. I am aware of EPA's findings that chlorpyrifos is a toxic chemical that is harmful to all people, and especially to children. I was disappointed when I learned that former EPA Administrator Scott Pruitt acted against the findings and recommendations of EPA's own scientists and refused to ban chlorpyrifos. Following Administrator Pruitt's denial, PCUN joined the other petitioners in filing objections with EPA and filing a lawsuit on June 5, 2017. Also, in June

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2017, PCUN's former president traveled to Washington, D.C. to ask senators from the Pacific Northwest to support a bill to ban food uses of chlorpyrifos.

- 10. I was again dismayed when EPA Administrator Andrew Wheeler denied our objections, despite the fact that he did not find that chlorpyrifos is safe. Following that decision, PCUN joined the other petitioners and filed this lawsuit.
- 11. Because EPA is failing to follow the science and the law and ban chlorpyrifos at the federal level, PCUN has been active in trying to obtain a ban of the pesticide in Oregon. PCUN lobbied and testified in support of an Oregon bill banning chlorpyrifos at the state level. While the bill did not pass during this legislative session, PCUN is planning to push a similar bill in the future.
- 12. PCUN has also invested resources in educating farmworkers about the harms associated with chlorpyrifos exposure and campaigning to get this pesticide banned. Because EPA refused to ban the pesticide, PCUN must expend additional time and resources on educating our members about chlorpyrifos and campaigning for a ban. I hope EPA acts to ban chlropyrifos soon. EPA's ongoing delay leaves workers and their families at risk, which this lawsuit seeks to remedy.

Pursuant to 28 U.S.C. § 1746, I declare under the penalty of perjury that the foregoing is true and correct, to the best of my knowledge, information, and belief.

Executed this 26th day of November 2019.

/s Reyna Lopez REYNA LOPEZ

NO. 19-71979

UNITED STATES COURT OF APPEALS FOR THE NINTH CIRCUIT

LEAGUE OF UNITED LATIN AMERICAN CITIZENS; et al., Petitioners,

v.

ANDREW WHEELER, Administrator, United States Environmental Protection Agency, and UNITED STATES ENVIRONMENTAL PROTECTION AGENCY,

Respondents.

DECLARATION OF SINDY BENAVIDES

I, SINDY BENAVIDES, declare and state as follows:

- 1. I am the Chief Executive Officer of the League of United Latin American Citizens ("LULAC"). I am submitting this declaration to describe LULAC's interests in this litigation and in obtaining a nationwide ban on chlorpyrifos.
- 2. As LULAC's CEO I manage the operations of the LULAC national organization and guide the organization's extensive legislative, public policy, and

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service activities in Hispanic communities throughout the United States and Puerto Rico.

- 3. Founded in 1929, LULAC is the country's oldest and largest Hispanic organization and our mission is to advance the economic condition, educational attainment, political influence, housing, health and civil rights of the Hispanic population of the United States.
- 4. With approximately 132,000 members and supporters throughout the United States and Puerto Rico, and 600 councils nationwide, LULAC's programs, services and advocacy address the most important issues for Latinos, meeting the critical needs of today and the future.
- 5. I am concerned about the health and quality of life of Latino families being exposed to toxic chemicals and pesticides. From the womb to households, workplaces and communities, Latinos are disproportionately more likely to be exposed to these neurotoxic chemicals and fighting toxic exposure to these chemicals to keep Latino communities safe and healthy is intrinsically tied to our mission.
- 6. The LULAC National Assembly, our organization's governing body on policy positions, has incorporated language into our platform and passed resolutions in support of fighting toxic exposure to chemicals, pesticides, and urging aggressive action by the government on this issue. On July 18, 2009,

thousands of LULAC members from across the country gathered for our National convention. At this event, our membership voted for and adopted a resolution on environmental justice which among many things affirmed that Latino communities in the United States have: a right to be safe from harmful exposure; a right to prevention; a right to know what we're exposed to; a right to participate in decision making processes that have implications for our communities; and a right to protection and enforcement of policies that promote and safeguard the well-being of workers, families and communities

- 7. I am aware that over 2 million farmworkers, an overwhelming majority of them being Latino, and including approximately 500,000 children, are on the frontlines of exposure to pesticides in fields, nurseries, forests and greenhouses across the United States and the Commonwealth of Puerto Rico.
- 8. I am aware that a 2014 report on "Agricultural Pesticide Use Near Public Schools in California" assessed 2,511 public schools in the 15 California counties with the highest total reported agricultural pesticide use in 2010. At the time that the assessment was conducted, over 1.4 million students attended these schools. The report found that Hispanic children are more likely to attend schools near places that have the "highest use of pesticides of public health concern." The six categories of pesticides of public health concern included carcinogens,

reproductive and developmental toxicants, cholinesterase inhibitors, toxic air contaminants, fumigants, and priority pesticides for assessment and monitoring.

- 9. I am aware that exposure to pesticides increases the risk of chronic health problems among adult and child farmworkers, such as cancer, infertility, neurological disorders, and respiratory conditions. Farmworkers generally live around the fields where they work and their families are exposed to pesticides from pesticide drift and the residues taken home by their parents on their clothing.
- 10. When it comes to preventing children from handling pesticides, issues like personal protective equipment, the right to know about workplace chemicals, safety training and emergency assistance are vital; yet, farmworker protection measures remain inadequate to ensure that workers are safe from the risks posed by neurotoxic chemicals like chlorpyrifos. There are also few protections for farmworker families exposed to pesticides through drift from the fields where the pesticides are sprayed and in their drinking water.
- 11. On July 11, 2015, during our National Convention, LULAC members voted and approved a resolution expressing support for protecting farmworkers and their families from pesticide exposure.
- 12. To further environmental justice and advance protections for some of the most vulnerable segments of the Hispanic population, LULAC has been working to reduce the exposure of Latinos to toxic chemicals and pesticides.

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- 13. I am aware that exposure to organophosphate pesticides like chlorpyrifos can lead to reduced IQ in children. This exposure threatens the health and educational attainment of Hispanic children and undermines their potential success and economic condition.
- 14. LULAC has submitted comments to the EPA and participated in meetings with agency officials to highlight the concerns of our membership about their families and communities. Our members live in states where chlorpyrifos is used. They work with and serve Latino communities in agricultural areas and are concerned about their exposure to this pesticide.
- 15. At LULAC's National Convention in the summer of 2017, we hosted a community policy briefing on the topic of chlorpyrifos. Our members heard directly from farmworker advocates and a pediatrician. LULAC members from across the country learned that children, workers, agricultural communities, and consumers are exposed to chlorpyrifos in our food, water and air, and expressed concern and urgency to engage at the federal level to ensure the EPA takes action to prohibit the continued use of this chemical.
- 16. In July 2017, LULAC advocates came to Washington, DC to urge their members of Congress to protect children's brains and farmworkers from pesticide poisoning by banning chlorpyrifos and supporting legislation introduced by Senator Tom Udall (D-NM) that would prohibit food uses of this chemical.

- 17. At LULAC's National Convention in the summer of 2018, we hosted a community policy briefing on the role of the environment and public health. Our members heard directly from experts who work in the field at the state and national level and included policy makers. LULAC included information regarding the dangerous pesticide chlorpyrifos and how it impacts farmworkers and consumers.
- 18. At LULAC's State of Latinx America Summit in February of 2019, we hosted a luncheon on the environment again seeking to increase awareness about the impact of the environment on public health.
- 19. I am aware that EPA has a legal duty to ban the use of chemicals that it cannot deem safe for humans at any level of exposure. Yet, it has refused to do so.
- 20. LULAC joined this lawsuit as a petitioner because it is appalling that EPA would fail to protect some of the most exposed communities to neurotoxic chlorpyrifos when the agency's own experts cannot determine a safe level of exposure to that chemical on humans. For the hundreds of thousands of children that labor in agriculture whose brains and developing bodies are in harm's way, and farmworker families and consumers across the country, we urge the court to put a stop to the EPA's refusal to act and order the agency to ban chlorpyrifos.

Pursuant to 28 U.S.C. § 1746, I declare under penalty of perjury that the foregoing is true and correct to the best of my knowledge.

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Executed on this 2nd day of December 2019, in Washington, D.C.

s/ Sindy Benavides
Sindy Benavides

NO. 19-71979

UNITED STATES COURT OF APPEALS FOR THE NINTH CIRCUIT

LEAGUE OF UNITED LATIN AMERICAN CITIZENS; et al.,

Petitioners,

v.

ANDREW WHEELER, Administrator, United States Environmental Protection Agency, and UNITED STATES ENVIRONMENTAL PROTECTION AGENCY,

Respondents.

DECLARATION OF SYLVIA YOUNGBLOOD

I, SYLVIA YOUNGBLOOD, declare and state as follows:

- 1. I have been a member of the Learning Disabilities Association of America ("LDAA") for about eight years, and I have been advocating for people with learning disabilities for over 25 years.
- 2. I live in El Monte, California, and I am very active in my community, particularly in working with other parents who have children with learning disabilities. I am the mother of four children, now ages 18 to 30, who all have specific learning disabilities. I am part of our local community advisory on special

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education, and I worked with our Soroptimist chapter to develop a scholarship fund for students with disabilities.

3. As a member of LDAA, I participate on a number of committees. I am the chair of our justice committee, where we talk about how learning disabilities funnel children into the school-to-prison pipeline. I am also on our public policy committee, finance committee and our development committee, and I serve on our Healthy Children Project. LDAA created the Healthy Children Project to raise awareness, promote policies and practices, and to build a nationwide network of LDAA members to protect children's health and reduce toxic exposures. Our mission is to: 1) Raise awareness of environmental factors, particularly toxic chemicals, that can harm brain development, contributing to learning disabilities and behavior disorders; 2) Promote policies and practices to prevent toxic chemical exposures, especially among pregnant women and children; and 3) Build a nationwide network of LDA members working to protect children's health and reduce toxic exposures that may lead to learning disabilities in current and future generations. I also advocate on behalf of individuals with learning disabilities and educate community members from a parent and advocate standpoint. I help parents navigate the school system, which is especially hard for parents of children with disabilities.

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- 4. Raising children with learning disabilities is a challenge to say the least. Once you accept that this is your "normal," it gets a little easier, but it is always a fight and always a battle. I don't have the experience of just packing a lunch, sending my kids off to school, and talking about our days at dinner. I would go to work and get calls from the school telling me I need to pick up my kids, that they are being suspended, that they got "F" report cards. Some days at work I just look at the phone and hope that it won't ring. Being at my children's school is part of my day-to-day life, and I've had to get to know the school, the teachers, and the administrators very well. It can be really stressful and I have had to work to develop my advocacy skills. Sometimes I would just burst into tears wondering why the school hated my child. I have had school staff tell me directly that they don't want my kid there. As a parent, you take that personally because that is your child. It is very emotional.
- 5. Chemicals like chlorpyrifos that can cause learning disabilities should not be allowed to be used on our food. It is cruel to inflict those harms on families. At my son's high school, they have a salad bar, which is wonderful, but I worry about what chemicals are on that produce. I do not know that he is always, or ever, receiving organic foods. I appreciate that we are pushing fruits and vegetables on our kids while they're at school, but I want to know that they are actually healthy and that my son is not being exposed to harmful pesticides.

6. If EPA knows that chlorpyrifos has the potential to create these effects

in pregnant women and children, and I understand that EPA has made such

findings, then shame on them for manufacturing kids with learning disabilities.

They do not understand the real effects and costs that their action (or lack of

action) creates in terms of medical costs, educational costs, and prison costs, as

well as emotional costs to families. I urge the Court to order EPA to take long

overdue action and protect our children from chlorpyrifos.

Pursuant to 28 U.S.C. § 1746, I declare under penalty of perjury that the

foregoing is true and correct to the best of my knowledge.

Executed on this 26th day of November 2019, in El Monte, California.

<u>s/Sylvia Youngblood</u> SYLVIA YOUNGBLOOD

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NO. 19-71979

UNITED STATES COURT OF APPEALS FOR THE NINTH CIRCUIT

LEAGUE OF UNITED LATIN AMERICAN CITIZENS; et al.,

Petitioners,

v.

ANDREW WHEELER, Administrator, United States Environmental Protection Agency, and UNITED STATES ENVIRONMENTAL PROTECTION AGENCY,

Respondents.

DECLARATION OF TRACY GREGOIRE

I, TRACY GREGOIRE, declare and state as follows:

- 1. I am currently the Coordinator of the Healthy Children Project at the Learning Disabilities Association of America (LDA).
- 2. Founded in 1964, LDA is headquartered in Pittsburgh, Pennsylvania, with state and local chapters throughout the country. It provides support, information and advocacy on behalf of individuals with learning disabilities.

 Members of LDA join the organization by paying annual dues. Members elect the board, which is the presiding body that votes on actions and policies. Board members are members of LDA. The general membership chooses delegates from

each state who elect the Board members at the annual Assembly of Delegates meeting.

- 3. I have worked with for the Healthy Children Project since December 2013, and am familiar with LDA's policies, practices, membership, and programs. The Learning Disabilities Association of America is a national non-profit membership organization. LDA members are people with learning disabilities, their parents and family members, educators including teachers, professors and school administrators, medical professionals including psychiatrists, psychologists, physicians and nurses; therapists and other service providers, and lawyers and specialists in the areas of education policy, human rights and disability policy and law.
- 4. LDA established the Healthy Children Project (HCP) in 2002 to raise awareness of environmental factors, particularly toxic chemicals, linked to problems with brain development and function, and to reduce and prevent toxic chemical exposures, especially among pregnant women, infants and children, through educating and advocating for changes in products, practices and policies. LDA's mission is "to create opportunities for success for all individuals affected by learning disabilities through support, education and advocacy". One of LDA's key strategies and ways we accomplish this mission is by working to eliminate the

preventable causes, including neurotoxic chemicals, to reduce the incidence of learning disabilities in future generations

- 5. As the Coordinator of LDA's Healthy Children Project, I work to raise awareness of environmental factors, particularly toxic chemicals, that may interfere with healthy brain development and contribute to learning, attention and behavior disorders, with a focus on the fetus, infants and young children, who are especially vulnerable to harm from toxic chemical exposures. I work in partnership with other health and disabilities organizations, health-affected individuals, environmental and environmental justice groups, health professionals and scientists to translate the scientific evidence into effective changes in policies and practices to reduce chemical exposures linked to disease and disabilities.
- 6. LDA co-founded Project TENDR (Targeting Environmental Neuro-Developmental Risks) and I represent LDA in this collaboration. TENDR is an alliance of more than 60 leading scientists, health professionals, and children's health advocates, who in July 2016 published a consensus statement as a national call to reduce widespread exposures to chemicals that interfere with fetal and children's brain development. In the statement, the TENDR experts named prime examples of toxic chemicals that are increasing children's risks for learning, behavioral or intellectual impairment, as well as specific neurodevelopmental disorders such as ADHD, learning disabilities and autism. These exemplar

chemicals include organophosphate pesticides, a class of pesticides that includes chlorpyrifos.

- 7. According to the U.S. Centers for Disease Control and Prevention, the prevalence of learning and developmental disabilities in American children increased 17% from 1997 to 2008, meaning that 1.8 million more American children had a learning or developmental disability in 2006-2008 compared to a decade earlier. Based on the CDC's analysis, published in 2011, one in six children in the United States has a reported learning or developmental disability.
- 8. Learning disabilities cover a range of brain-based disorders and difficulties with learning and processing information, with varying degrees of severity. These disorders involve problems with auditory and visual perception, sequencing and organization, memory, expressive language and fine and gross motor skills. Learning disabilities can include short attention span, difficulty following directions, inability to discriminate among letters, numbers or sounds, difficulty with reading and writing or math, and problems with coordination, and sensory difficulties. Learning disabilities can co-occur with attention and behavior disorders.
- 9. Learning and developmental disabilities persist with lasting impacts on children, families and society. On average, it costs twice as much to educate a child with a learning or developmental disability as to educate a child without a

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disability. Adolescents with learning disabilities are much more likely to drop out of high school, have problems with substance abuse, and wind up in the juvenile justice system. By conservative estimates, at least one third of children in the juvenile justice system in America have one or multiple learning or behavior disorders. High school graduates with learning disabilities are much more likely to be unemployed and have trouble keeping a job.

- 10. In working on toxic chemical issues related to problems with brain development, LDA and partner organizations address the broad range of learning and developmental disabilities for which toxic chemical exposures can be contributing factors, including ADHD, intellectual impairments, learning disabilities and autism spectrum disorder.
- 11. Based on the extensive and mounting toxicological and epidemiological evidence, and in light of widespread exposures, particularly to pregnant women and children, there is now scientific agreement that toxic chemicals, including organophosphate pesticides, are harming brain development, and that even low-level exposures can increase children's risks for learning, behavioral or intellectual disorders. In utero and during early childhood, there are critical windows of development when even tiny doses of toxic chemicals can do lasting harm.

- 12. Chlorpyrifos, measured by its specific metabolite, TCPy, was detected in more than 91% of women of childbearing age in the CDC's national biomonitoring data (NHANES). According to the CDC, this high percentage of detectable concentrations of chlorpyrifos implies ubiquitous exposure, probably primarily through the food chain. In recent years, multiple studies of pregnant women have shown that chlorpyrifos is present in pregnant women, in umbilical cord blood and in children.
- 13. The National Academy of Sciences estimates that environmental factors, including toxic chemicals, cause or contribute to at least a quarter of learning and developmental disabilities in American children. Although learning and developmental disabilities are complex disorders with multiple causes—genetic, social, and environmental—the contribution of toxic chemicals to these disorders is entirely preventable.
- 14. LDA annually secures funding to prioritize, maintain and expand initiatives to ensure its members and the public are kept informed of the latest scientific research on toxic chemicals and health, and made aware of ways to help reduce their families' exposures to toxic chemicals. LDA regularly disseminates the results of scientific research on environmental factors putting children at higher risk for learning disabilities, along with information on ways to reduce toxic chemical exposures, through social media, action alerts, factsheets, newsletter

articles and presentations and workshops at LDA's national annual conference, and at conferences and meetings throughout the country.

- 15. LDA convenes meetings of scientists, health professionals, education professionals and children's health advocates to learn and share the latest research findings on chemicals and brain development, and to plan and implement strategies to protect children from toxic chemical exposures.
- 16. LDA strives to ensure that the concerns and interests of its membership are represented in chemical policy decisions that affect children's health and neurological development. LDA holds Congressional briefings, provides written and oral testimony at hearings and public meetings, submits comments to federal and state legislative dockets, meets with policymakers to provide expertise on toxic chemicals and learning disabilities, writes sign-on letters and conducts outreach to partner learning and developmental disability groups, along with scientists and health professionals, to write letters to policymakers, holds press conferences and writes opinion articles and letters to the editor.
- 17. LDA also provides opportunities for members across the country to share their perspectives with decision makers on chemical safety issues, through action alerts that generate phone calls and e-mails, assisting with letters to the editor, drafting and circulating letters for state LDA leaders to sign, etc.

- 18. To better engage and serve its membership on environmental health issues, I created and coordinate a network involving twenty-five LDA state affiliate offices who are engaged on a consistent, ongoing basis in advocacy for safer chemical policies with policymakers at the state and federal levels. Through monthly conference calls, regular on-line communication and annual training workshops, we equip LDA state affiliate leaders – who are LDA members, both paid and volunteer – to raise awareness and disseminate information on toxic chemicals and brain development. LDA state members conduct outreach and give presentations to other non-profit groups such as state chapters of The Arc or Autism Society, to schools and child care centers, including Head Start programs, and to parent and health care provider groups, such as PTO and nurse's associations. This network of state LDA leaders, along with the national office, engages the wider membership and the public through action alerts, social media, presentations at state and national conferences, etc., to disseminate information on toxic chemical threats to healthy brain development, and ways to reduce prenatal and children's exposures to toxic chemicals.
- 19. In the spring of 2017, after former EPA Administrator Pruitt refuted long-established scientific evidence showing low levels of chlorpyrifos harming children's brain development, and decided not to ban chlorpyrifos to protect children's health, LDA took action at the state and federal levels, alerting its

membership, the Board, and state affiliate leaders through conference calls, an action alert and an e-newsletter article. In the summer of 2017, our previous executive director and five LDA advocates from states where chlorpyrifos is more heavily used in agriculture, traveled to Washington D.C. for two days of meetings with Congressional offices to share our concerns with EPA's decision.

- 20. LDA's previous Healthy Children Project Director, Maureen Swanson, gave remarks on behalf of LDA and Project TENDR at Senator Udall's press conference introducing his bill to ban chlorpyrifos. Those remarks focused on the scientific consensus that chlorpyrifos changes babies' brains, and contributes to the incidence of learning, behavior and intellectual disorders. LDA widely shared the video of those remarks through social media.
- 21. Maureen Swanson, as co-director of Project TENDR, coordinated the drafting and sign-on of two separate sets of comments to EPA regarding banning chlorpyrifos. The first comment letter, "Comments to EPA from Environmental Health Scientists and Healthcare Professionals in Support of EPA's Proposal to Revoke Chlorpyrifos Food Residue Tolerances," was submitted in January 2016. The second comment letter, "Comments to EPA from Environmental Health Scientists and Healthcare Professionals in support of EPA's 2016 Revised Human Health Risk Assessment and the 2015 Proposed Tolerance Revocation for

Chlorpyrifos," was submitted to the federal register in January 2017. Both comment letters were signed by dozens of scientists and healthcare professionals.

22. Because more individuals are likely to be at higher risk for learning disabilities due to EPA's decision, including children born in subsequent years, LDA will be forced to expend more time and money to provide them with information and assistance. Indirectly, thousands of schools and educators across the country who rely on LDA and are LDA members, along with their communities and the families they serve, also will bear increased costs to assist and educate children with learning disabilities.

23. LDA members are being harmed by the EPA decision not to ban chlorpyrifos—both by the 2017 petition denial and the 2019 objections denial—because they are being exposed to this pesticide in their food, in their drinking water, and when it drifts to their homes, day care centers, and schools from the fields where it is sprayed.

Pursuant to 28 U.S.C. § 1746, I declare under penalty of perjury that the foregoing is true and correct, to the best of my knowledge, information, and belief.

Executed this 26th day of November 2019, in Topsham, Maine.

<u>s/Tracy Gregoire</u> TRACY GREGOIRE

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NO. 19-71979

UNITED STATES COURT OF APPEALS FOR THE NINTH CIRCUIT

LEAGUE OF UNITED LATIN AMERICAN CITIZENS; et al.,

v.

ANDREW WHEELER, Administrator, United States Environmental Protection Agency, and UNITED STATES ENVIRONMENTAL PROTECTION AGENCY,

DECLARATION OF YANIRA MERINO

I, YANIRA MERINO declare and state as follows:

- 1. I am the National President of the Labor Council for Latin American Advancement ("LCLAA"), and I have held this position for one and a half years. LCLAA, was founded in 1972, to improve workers' rights and increase the influence of Latino workers in the political process by educating, organizing and mobilizing Latinos within and outside of the labor movement. I am submitting this declaration to describe LCLAA's interests in this litigation and in obtaining a nationwide ban on chlorpyrifos.
- 2. LCLAA represents the interests of more than 2 million Latino workers in the American Federation of Labor-Congress of Industrial Organizations (AFL-

- CIO), The Change to Win Federation, Independent Unions and all its membership. As part of our mission, we focus on raising awareness about occupational and environmental health and safety issues that disproportionately impact Latino and immigrant workers, including farmworkers and pesticide applicators. Among our membership, we have many individuals who live and work in agricultural communities and they and their families are exposed to harmful pesticides.
- 3. LCLAA members expect us to act on their behalf to obtain protections for them and their families. Which is why in June 2017, LCLAA joined other petitioners in a lawsuit challenging EPA's denial of the 2007 Petition to ban chlorpyrifos.
- 4. Studies show associations between early life exposure to chlorpyrifos and decreased cognitive function and behavioral problems. I am aware that chlorpyrifos is used in many fruits and vegetables that children eat. This is particularly troublesome since relative to adults, kids consume more fruits and vegetables, and drink more water and juice. I am concerned about the exposure of children to pesticides in agriculture and beyond. It is estimated that there are approximately 500,000 children that labor in agriculture and exposure to agricultural chemicals at an early age can cause irreversible harm.

- 5. In addition to occupational exposure to pesticides for the children, women and men that work in agriculture, take-home exposure puts farmworker families at risk. This is because farmworkers bring chemical residues on their bodies and clothes. If farmworkers are not adequately trained about the dangers of take-home exposure for children, pregnant women and others in their family, they may not know that they should change their clothes before going into the house or embracing their children.
- 6. The EPA has thus far ignored the science showing that chlorpyrifos is harmful to children and farmworkers and has refused to ban chlorpyrifos. This decision has left farmworker women, individuals living in rural communities and all consumers exposed to a chemical that does not belong in our food or our communities. Given the neurological impact resulting from the use of chlorpyrifos, its use stands to have economic and monetary consequences. Workers cannot work to their full potential if they get sick from pesticides that are applied while they are working or in the vicinity where they live. This results also has a negative impact on our economy. In addition, healthcare costs that are incurred, some of which must be paid for through public health programs, result in monetary harm consequences that could be avoided. These consequences are immediate, long-lasting and wholly preventable.

7. In July 2017, LCLAA members came to Washington, DC to urge the Senate to support a bill that would ban food uses of chlorpyrifos.

8. On September 21, 2016, LCLAA, along with other petitioners in this lawsuit, submitted a Petition for Emergency and Ordinary Suspension of Chlorpyrifos Uses that Post Unacceptable Risks to Workers and Petition to Cancel All Uses of Chlorpyrifos to the United States Environmental Protection Agency ("EPA"). We also submitted comments to EPA after the agency released its 2016 revised human health risk assessment, which found that chlorpyrifos is unsafe is nearly every way that it is used.

9. Now that EPA has denied our objections, we are bringing this lawsuit to challenge the agency's refusal to ban chlorpyrifos. We respectfully ask the Court to order EPA to stop delaying and act to ban chlorpyrifos.

Pursuant to 28 U.S.C. § 1746, I declare under the penalty of perjury that the foregoing is true and correct, to the best of my knowledge, information, and belief.

Executed this Monday, December 2nd 2019, in Washington, DC.

/sYanira Merino
Yanira Merino
LCLAA National President

EXHIBIT 02

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NO. 17-71636

UNITED STATES COURT OF APPEALS FOR THE NINTH CIRCUIT

LEAGUE OF UNITED LATIN AMERICAN CITIZENS, et al.,

Petitioners,

STATE OF NEW YORK, et al.,

Petitioner-Intervenors,

v.

SCOTT PRUITT, ADMINISTRATOR OF UNITED STATES ENVIRONMENTAL PROTECTION AGENCY, et al.,

Respondents.

DECLARATION OF AMADEO SUMANO

DECLARATION OF AMADEO SUMANO

- I, AMADEO SUMANO, declare and state as follows:
- 1. I am over the age of 18 and have personal knowledge of the statements in this declaration.
- 2. This declaration is submitted in support of the lawsuit, in which United Farmworker (UFW) is a petitioner, challenging United States Environmental Protection Agency ("EPA") Administrator Scott Pruitt's decision to leave chlorpyrifos tolerances in place without finding that the pesticide is safe.
- 3. I am currently a member of the United Farm Workers of America and have been a member since 2014. Ijoined the UFW and worked at a strawberry farm because I want to raise awareness so that others would step up and help keep kids and people safe from pesticides and specifically chlorpyrifos.
- 4. My family and I live in Oxnard, California. My wife and I both harvest strawberries during the winter and summer harvests in Ventura County. Together we have two young boys.
- 5. In the summer of 2017 I was working at a strawberry farm during the land preparation before planting. My co-workers and I were instructed by the ranch supervisor to enter a section of the farm that had recently been sprayed with pesticides. As we began the work assignment my coworkers and I immediately began to smell a strong odor. Soon after my eyes and throat began to be irritated. We began to complain the danger to the supervisor but he did not reassign us and did not come out to investigate. We then called the union representative who arranged for us to be reassigned. I believe that the ranch manager was aware that the area was recently sprayed and that the reentry window had not passed.

- 6. This was not the only time that I felt symptoms or my body reacted to coming into contact with pesticides. Often pesticides spraying happens close to harvesting. Strawberry farm are small in comparison to other crops. Where I work the farm is approximately 100 acres.

 Almost every day some kind of spraying happens and of course we pick for 8 to 100 hours during the harvesting season.
- 7. I have worked in the strawberry industry for close to 10 years. Pesticides are a reality. Unfortunately I have realized that farm worker safety often is given less importance than the production and harvest.
- 8. My two sons are very young. I am afraid that they are not safe from coming into contact with pesticides like chlorpyrifos. Our community is surrounded by strawberry farms. We purposely leave our work shoes outside in the trunk of our cars to prevent contaminating our homes. But are children come into contact because after working for 8 to 10 hours, we then have to rush to the baby sitter to pick up our kids. We try to change clothes as soon as possible but it's impossible for our children to not be exposed.
- 9. I know that chlorpyrifos has been linked to reduced IQ, loss of working memory, developmental delays, and learning disabilities. I learned this through my work with the UFW.
- 10. I remain concerned about my family's exposure to pesticides generally and chlorpyrifos specifically. Iknow that there are residues of chlorpyrifos and other pesticides on our food even though we live in the city now. Policymakers need to address this issue and protect our children, it shouldn't always have to be on individual families. Not everyone, myself included, can feed their children organic fruits and vegetables all the time.

11. I support UFW's efforts in working to get chlorpyrifos banned. I believe that Administrator Pruitt's decision to not ban chlorpyrifos even though EPA found the pesticide to be unsafe has caused and will continue to cause harm to me and my family.

I declare under penalty of perjury that the foregoing is true and correct. Executed by me on this 15 day of Jacob 2017 in Oxnard, California.

Certificate of Translation

I declare under penalty of perjury, under the laws of the State of California, that I am fluent in written and spoken Spanish and English and that I translated and read the foregoing declaration to the declarant in a loud voice and he affirmed the contents were true and correct. Executed in Oxnard, CA day of 2018 in Oxnard, California.

NO. 17-71636

UNITED STATES COURT OF APPEALS FOR THE NINTH CIRCUIT

LEAGUE OF UNITED LATIN AMERICAN CITIZENS, et al.,

Petitioners,

STATE OF NEW YORK, et al.,

Petitioner-Intervenors,

V.

SCOTT PRUITT, ADMINISTRATOR OF UNITED STATES ENVIRONMENTAL PROTECTION AGENCY, et al.,

Respondents.

Declaration of Anne Katten

I, ANNE KATTEN, declare and state as follows:

1. I am the Director of the Pesticide & Worker Safety Project at the California
Rural Legal Assistance Foundation ("CRLAF"). My job responsibilities include working to
bring to light and reduce agricultural work hazards and pesticide exposures faced by
California's agricultural workers and other rural residents. To accomplish these goals
I maintain an ongoing dialogue with Cal OSHA and local, state and federal pesticide
regulatory officials to encourage more thorough investigations and stricter enforcement of
existing laws and regulations, advocate for improvements in regulations, and increased use of
safer and more sustainable pest control alternatives. I also provide technical assistance to
attorneys from my organization, other organizations and the private bar who are providing

legal representation to farmworkers, and other workers or community members who were injured or harmed on the job or at home by pesticides or other workplace or environmental hazards. I also assist legal services programs and community organizations with developing outreach materials, accessing and understanding pesticide and work safety laws and regulations and public records and responding to pesticide poisoning incidents.

- 2. I submit this declaration based on my personal knowledge and based on my training and expertise as an industrial hygienist who focuses on exposures to pesticides to farmworkers, farmworkers' families, and rural communities -- from agricultural uses. This declaration is submitted in support of the lawsuit, in which CRLAF is a plaintiff, challenging USEPA's decision to postpone action on the proposal to rescind all food tolerances for the pesticide chlorpyrifos for years.
- 3. I earned a Bachelor's of Science from UC Berkeley in Plant Pathology and a Masters of Public Health specializing in industrial hygiene. I joined CRLAF in 1990 as a researcher and began my current position of Pesticide and Work Safety Project Director in 1998. I have been working in my current position for 19 years, advocating to protect workers from pesticide poisoning and other workplace hazards.
- 4. CRLAF is a 501(c)(3) non-profit civil legal aid organization that was founded in 1981 and provides free legal services and policy advocacy for California's rural poor. CRLAF's mission is to achieve social justice and equity in partnership with farm workers and all low-wage workers and their families in rural communities through community, legislative and legal advocacy. By engaging in community education and outreach, impact litigation, legislative and administrative advocacy, and public policy leadership at the state and local level, CRLAF aims to improve working and living conditions for farm workers and other

low-wage workers.

- 5. CRLAF has long advocated for more comprehensive protection of agricultural workers and other rural residents from exposure to organophosphates and other pesticides which pose high acute toxicity and chronic toxicity risks.
- 6. Consistent with CRLAF's mission, CRLAF is deeply concerned about the double standard which has allowed continued extensive use of chlorpyrifos in agriculture over the past 15 years while in contrast residential uses were ended in 2002 due to evidence of neurodevelopmental harm to children. Allowing continued agricultural use of chlorpyrifos shows a troubling disregard for protection of the brains and intellectual potential of farmworker children.
- 7. California Department of Pesticide Regulation publications document that over one million pounds of chlorpyrifos are applied annually to California fields and chlorpyrifos has been found repeatedly in air monitoring conducted in agricultural regions of California as well as in household dust, urine and blood samples of pregnant women and children, surface water and food.
- 8. Over the past 15 years, while this double standard has been in effect the body of evidence linking even low levels of prenatal and childhood exposure to chlorpyrifos to neurodevelopmental effects including but not limited to loss of working memory, attention deficits and intelligence decrements has continued to grow as more epidemiology and animal toxicology studies are completed and published. This body of evidence includes very compelling findings from the CHAMACOS study of farmworker women and children in the Salinas Valley of California.

- 9. Given this overwhelming body of evidence of harm posed by exposure of pregnant woman and children to chlorpyrifos and evidence that farmworker families face the higher levels of exposure because they are in direct contact with treated plants as well as exposure through air and food, we welcomed the USEPA's proposal in 2015 to revoke all food tolerances and were extremely disappointed when EPA announced in March of 2017 that it would postpone action on this proposal for as many as five more years.
- 10. As part of my job, I provide technical assistance to attorneys and community outreach workers working for my own organization and other organizations that are representing fieldworkers, pesticide applicators and rural residents who have been impacted by pesticide exposure and sometimes I meet directly with these impacted individuals. I am aware of many incidents where farm workers and low-wage workers and their families have suffered acute illness which sometimes results in prolonged anxiety and disability as a result of exposure to chlorpyrifos, most commonly by drift. Between 2004-2014 the California Department of Pesticide Registration documented illness in 246 individuals to chlorpyrifos in 84 separate incidents ¹. Over two thirds of these reported illnesses were due to pesticide drift and 17 percent resulted from exposure to pesticide residues. Several incidents stand out in my mind among multiple incidents of pesticide poisoning from drift of chlorpyrifos.
- 11. In May 2017, 37 workers in Kern County harvesting cabbage became ill after they began smelling a strong chemical odor. Tests confirmed that the pesticide had drifted a half mile from a tangerine orchard to the cabbage field.
- 12. In July 2007, the pesticide chlorpyrifos drifted from a walnut orchard across a road to a grape vineyard where a number of farm workers were pulling grape leaves. When

¹ http://www.cdpr.ca.gov/docs/whs/pdf/chlorpyrifos_cases_reported.pdf

the pesticide drifted, a number of workers became ill. The vineyard owner transported ten workers to the hospital for treatment, with one going home first to shower and then going to the hospital. Of these 11 farm workers, three of them had been vomiting. Later in the day, an additional 17 farm workers went to the hospital for treatment. Of these 17, two had previously been vomiting. Ten of the workers' clothes also tested positive for the pesticide. In total, 28 field workers experienced symptoms relating to chlorpyrifos exposure.

13. CRLAF is very concerned that the delay of revocation of tolerances and cancellation of food crop chlorpyrifos registrations will result in continued harm to the health and intellectual potential of California children, especially children of farm workers and other rural residents who live and go to school near to agricultural fields where chlorpyrifos continues to be used. The longer this action is delayed, the greater the number of farmworker children and other children in rural California who will be put at risk.

Pursuant to 28 U.S.C. § 1746, I declare under penalty of perjury that the foregoing is true and correct.

Executed this 17th day of January, 2018, at Sacramto, California.

Anne Katten

UNITED STATES COURT OF APPEALS FOR THE NINTH CIRCUIT

LEAGUE OF UNITED LATIN AMERICAN CITIZENS, et al.,

Petitioners,

STATE OF NEW YORK, et al.,

Petitioner-Intervenors,

v.

SCOTT PRUITT, ADMINISTRATOR OF UNITED STATES ENVIRONMENTAL PROTECTION AGENCY, et al.,

Respondents.

Declaration of Beverley Johns

I, BEVERLEY JOHNS, declare and state as follows:

- I am the President-Elect of the Illinois chapter of Learning Disabilities
 Association of America ("LDAA"). I have been actively engaged with LDAA for over 30 years.
- 2. For 35 years, I have been a special education teacher and administrator. I worked in the public schools with children with learning disabilities and significant behavioral problems for 35 years. The vast majority of these children lived in agricultural areas where they were exposed to pesticides. I now teach at a college and consult with the public schools.

- 3. In 1976, my husband and I bought a home in a subdivision in Jacksonville, Illinois. Agricultural fields were right behind our home, where corn and soybeans were grown. The farmers sprayed pesticides heavily for years.
- 4. My husband has a rare type of blood cancer. Another man who lived two houses down from us has the same type of cancer. After my husband was diagnosed, I researched the linkage between pesticides and cancer and became concerned that the pesticide spraying at the nearby farm may have been the cause of my husband's cancer. Ever since, I have tried to minimize my and my extended family's exposure to pesticides.
- 5. I am also very concerned about the impact of pesticides on children. I understand that studies have found linkages between pesticides and learning and behavioral disabilities in children. In my work, I have seen the long-term effects of learning and behavioral disabilities on children and their families. Some of the students have had lifelong learning problems, have struggled with mental health problems such as depression or obsessive compulsive disorders, have struggled to keep jobs, have had a number of health problems, and unfortunately some have died early because of a variety of illnesses such as heart problems and cancer.
- 6. I have advised my niece and friends and other relatives to limit their children's exposures to chemicals that can cause learning disabilities. LDAA has identified specific products, such as toys with plasticizers, that should be avoided. It is much harder with food. While my niece tries to buy organic foods, others cannot afford to. And even my niece can't control what her children eat at school or their friends' houses. They also can't prevent their children from being exposed to pesticides, like chlorpyrifos, in their drinking water. The teachers I have worked with and currently work with also express concern over what their students eat and the effects of the food on their ability to learn and function.

- 7. It is frightening for parents to lack control over the chemicals their children encounter. Chemicals associated with learning disabilities, like chlorpyrifos, are taking their toll on our children. A lot of innocent people, and innocent children in particular, are being exposed. They and their families are suffering from the consequences of learning and behavioral disabilities that could have been avoided.
- 8. I am proud to be a member and elected official of LDAA because I want to work to prevent exposures to toxic chemicals that cause learning disabilities.

Pursuant to 28 U.S.C. § 1746, I declare under penalty of perjury that the foregoing is true and correct to the best of my knowledge.

Executed on this _11th__ day of __January______, 2018, in Jacksonville, Illinois.

Beverley H. Johns

BEVERLEY JOHNS

UNITED STATES COURT OF APPEALS FOR THE NINTH CIRCUIT

LEAGUE OF UNITED LATIN AMERICAN CITIZENS, et al.,

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Petitioner-Intervenors,

V.

SCOTT PRUITT, ADMINISTRATOR OF UNITED STATES ENVIRONMENTAL PROTECTION AGENCY, et al.,

Respondents.

DECLARATION OF BONNIE WIRTZ

I, BONNIE WIRTZ, declare and state as follows:

- 1. I am over the age of 18 and have personal knowledge of the statements in this declaration.
- 2. This declaration is submitted in support of the lawsuit, in which Pesticide Action Network North America ("PAN") is a petitioner, challenging United States Environmental Protection Agency ("EPA") Administrator Scott Pruitt's decision to leave chlorpyrifos tolerances in place without finding that the pesticide is safe.
- 3. I am currently a member of PAN and have been a member since shortly after my family and I were exposed to the pesticide chlorpyrifos in 2012. I joined PAN because I want to raise awareness so that others would step up and help keep kids and people safe from pesticides

and specifically chlorpyrifos. I have also done organizing and educational activities with a group of mom's that are concerned about our children's exposure to pesticides.

- 4. My family and I live in St. Paul, Minnesota. We moved back to St. Paul in January 2014. Prior to that, we lived on a farm in Melrose, Minnesota.
- 5. In August 2012, my family and I were exposed to chlorpyrifos when it was sprayed outside our home without warning and it came in through our air conditioning unit. I was in the room where the air conditioning unit was and the room completely filled up with the pesticide. I could not breathe and had to go to the emergency room. I almost went into cardiac arrest. My husband and my son, Jayden, were in a different room and were also exposed, but not as badly. Jayden was eight months old at the time and had skin rashes that lasted for a week. The Minnesota Department of Agriculture came out and tested for chlorpyrifos and found it on our clothing and throughout the house.
- 6. As he got older, we learned that Jayden had developmental delays and speech issues. He was later diagnosed with a neurodevelopmental disorder, which I believe is related to his exposure to chlorpyrifos. Jayden is now six years old and receives special education services at school.
- 7. We moved back to a city to be closer to treatment for my son. We also felt that it was not safe for us to do another pesticide spray season in Melrose. Our three-acre farm was surrounded by fields that sprayed a lot of pesticides, and one farm consistently sprayed chlorpyrifos. Our house was within 200 feet of that field. We had done pesticide spray drift catching with PAN and learned that we were being exposed to chlorpyrifos at four times what EPA said was safe for a one-year-old child.

- 8. I would love to live in the country again, but I feel that the pesticide exposure risk is too high and I am worried about the long-term impacts of continued exposure. We probably would have stayed in Melrose and farmed if not for the risk from chlorpyrifos. Our goal was to transition to a bigger farming operation over time. I have thought about moving back to the St. Cloud area, about 45 minutes from Melrose, because I had a pretty good support system of women there and I miss them. If I knew that chlorpyrifos and other pesticides were not being used, I might be more likely to move back to a rural area. I want to be farming, but I am worried about myself and my family being poisoned again.
- 9. I know that chlorpyrifos has been linked to reduced IQ, loss of working memory, developmental delays, and learning disabilities. I learned this through my work with PAN and from their emails, and I have done some of my own research on the impacts on children and long-term impacts on adults.
- 10. I remain concerned about my family's exposure to pesticides generally and chlorpyrifos specifically, especially my son. I know that there are residues of chlorpyrifos and other pesticides on our food even though we live in the city now. I have sat in the room with a lot of families with children with special needs. Many of them wonder about what is causing health problems in their children and more people are making connections to what is in the food supply. Policymakers need to address this issue and protect our children, it shouldn't always have to be on individual families. Not everyone, myself included, can feed their children organic fruits and vegetables all the time.
- 11. I support PAN's efforts in working to get chlorpyrifos banned. I believe that Administrator Pruitt's decision to not ban chlorpyrifos even though EPA found the pesticide to be unsafe has caused and will continue to cause harm to me and my family.

Pursuant to 28 U.S.C. § 1746, I declare under the penalty of perjury that the foregoing is true and correct, to the best of my knowledge, information, and belief.

Executed this 23rd day of January, 2018, at St. Paul, Minnesota.

/s/ Bonnie Wirtz (signed with express permission)
Bonnie Wirtz

UNITED STATES COURT OF APPEALS FOR THE NINTH CIRCUIT

LEAGUE OF UNITED LATIN AMERICAN CITIZENS, et al.,

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STATE OF NEW YORK, et al.,

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	respondents.	
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Declaration of Brent Wilkes		

I, BRENT WILKES, declare and state as follows:

- 1. I am the Chief Executive Officer of the League of United Latin American Citizens ("LULAC"). I am submitting this declaration to describe LULAC's interests in this litigation and in obtaining a nationwide ban on chlorpyrifos.
- 2. As LULAC's CEO I manage the operations of the LULAC national organization and guide the organization's extensive legislative, public policy, and service activities in Hispanic communities throughout the United States and Puerto Rico.

- 3. Founded in 1929, LULAC is the country's oldest and largest Hispanic organization and our mission is to advance the economic condition, educational attainment, political influence, housing, health and civil rights of the Hispanic population of the United States.
- 4. With approximately 132,000 members throughout the United States and Puerto Rico, and 1,000 councils nationwide, LULAC's programs, services and advocacy address the most important issues for Latinos, meeting the critical needs of today and the future.
- 5. I am concerned about the health and quality of life of Latino families being exposed to toxic chemicals and pesticides. From the womb to households, workplaces and communities, Latinos are disproportionately more likely to be exposed to these neurotoxic chemicals and fighting toxic exposure to these chemicals to keep Latino communities safe and healthy is intrinsically tied to our mission.
- 6. The LULAC National Assembly, our organization's governing body on policy positions, has incorporated language into our platform and passed resolutions in support of fighting toxic exposure to chemicals, pesticides, and urging aggressive action by the government on this issue. On July 18, 2009, thousands of LULAC members from across the country gathered for our National convention. At this event, our membership voted for and adopted a resolution on environmental justice which among many things affirmed that Latino communities in the United States have: a right to be safe from harmful exposure; a right to prevention; a right to know what we're exposed to; a right to participate in decision making processes that have implications for our communities; and a right to protection and enforcement of policies that promote and safeguard the well-being of workers, families and communities

- 7. I am aware that over 2 million farmworkers, an overwhelming majority of them being Latino, and including approximately 500,000 children, are on the frontlines of exposure to pesticides in fields, nurseries, forests and greenhouses across the United States and the Commonwealth of Puerto Rico.
- 8. I am aware that a 2014 report on "Agricultural Pesticide Use Near Public Schools in California" assessed 2,511 public schools in the 15 California counties with the highest total reported agricultural pesticide use in 2010. At the time that the assessment was conducted, over 1.4 million students attended these schools. The report found that Hispanic children are more likely to attend schools near places that have the "highest use of pesticides of public health concern." The six categories of pesticides of public health concern included carcinogens, reproductive and developmental toxicants, cholinesterase inhibitors, toxic air contaminants, fumigants, and priority pesticides for assessment and monitoring.
- 9. I am aware that exposure to pesticides increases the risk of chronic health problems among adult and child farmworkers, such as cancer, infertility, neurological disorders, and respiratory conditions. Farmworkers generally live around the fields where they work and their families are exposed to pesticides from pesticide drift and the residues taken home by their parents on their clothing.
- 10. When it comes to preventing children from handling pesticides, issues like personal protective equipment, the right to know about workplace chemicals, safety training and emergency assistance, are vital; yet, farmworker protection measures remain inadequate to ensure that workers are safe from the risks posed by neurotoxic chemicals like chlorpyrifos.

There are also few protections for farmworker families exposed to pesticides through drift from the fields where the pesticides are sprayed and in their drinking water.

- 11. On July 11, 2015, during our National Convention, LULAC members voted and approved a resolution expressing support for protecting farmworkers s and their families from pesticide exposure.
- 12. To further environmental justice and advance protections for some of the most vulnerable segments of the Hispanic population, LULAC has been working to reduce the exposure of Latinos to toxic chemicals and pesticides.
- 13. I am aware that exposure to organophosphate pesticides like chlorpyrifos can lead to reduced IQ in children. This exposure threatens the health and educational attainment of Hispanic children and undermines their potential success and economic condition.
- 14. LULAC has submitted comments to the EPA and participated in meetings with agency officials to highlight the concerns of our membership about their families and communities. Our members live in states where chlorpyrifos is used. They work with and serve Latino communities in agricultural areas and are concerned about their exposure to this pesticide.
- 15. At LULAC's National Convention in the summer of 2017, we hosted a community policy briefing on the topic of chlorpyrifos. Our members heard directly from farmworker advocates and a pediatrician. LULAC members from across the country learned that children, workers, agricultural communities, and consumers are exposed to chlorpyrifos in our food, water and air, and expressed concern and urgency to engage at the federal level to ensure the EPA takes action to prohibit the continued use of this chemical.

- 16. In July 2017, LULAC advocates came to Washington, DC to urge their members of Congress to protect children's brains and farmworkers from pesticide poisoning by banning chlorpyrifos and supporting legislation introduced by Senator Tom Udall (D-NM) that would prohibit food uses of this chemical.
- 17. I am aware that EPA has a legal duty to ban the use of chemicals that it cannot deem safe for humans at any level of exposure. Yet, it has refused to do so.
- 18. LULAC joined this lawsuit as a petitioner because it is appalling that EPA would fail to protect some of the most exposed communities to neurotoxic chlorpyrifos when the agency's own experts cannot determine a safe level of exposure to that chemical on humans. For the hundreds of thousands of children that labor in agriculture whose brains and developing bodies are in harm's way, and farmworker families and consumers across the country, we urge the court to put a stop to the EPA's refusal to act and order the agency to ban chlorpyrifos.

Pursuant to 28 U.S.C. § 1746, I declare under penalty of perjury that the foregoing is true and correct to the best of my knowledge.

Executed on this 19th day of January, 2018, in Washington, D.C.

Brent Wilkes

Brent Wilkes

UNITED STATES COURT OF APPEALS FOR THE NINTH CIRCUIT

LEAGUE OF UNITED LATIN AMERICAN CITIZENS, et al.,

Petitioners,

STATE OF NEW YORK, et al.,

Petitioner-Intervenors,

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SCOTT PRUITT, ADMINISTRATOR OF UNITED STATES ENVIRONMENTAL PROTECTION AGENCY, et al.,

Respondents.

Declaration of Diana Perez

I, DIANA PEREZ, declare and state as follows:

- I am the Washington State Director of the League of United Latin American
 Citizens ("LULAC"). I am also the founder of the Southwest Washington LULAC Council and a new board member of the LULAC National Education Service Center. I have been a LULAC member since 2009.
- 2. As a LULAC member, I have advocated for a state-level pesticide bill that would protect farmworkers and others in agricultural areas from drift. I have also taken on trying to get a ban of the pesticide chlorpyrifos in Washington state, and I have tried to get my LULAC counterparts in other states, particularly in Oregon and California, to do the same. I

communicate information about our state-level work in addressing local issues and concerns, and represent the interests of Washington Latino communities to the national LULAC organization.

- 3. Obtaining a statewide ban on chlorpyrifos is one of the Washington LULAC State Board's top three priorities. We set our priorities through Council input and through our community work. Washington LULAC is made up of Councils that are located in southwest Washington and in the eastern part of the state, the Tri-Cities and Yakima, which are largely agricultural areas. We have a lot of input from agricultural communities, as well as partner Latino organizations, and we are working on raising the awareness of the dangers of chlorpyrifos specifically.
- 4. We have a heavy agricultural landscape in Washington and a large farmworker population. I have seen and heard of a lot of abuse and exploitation of immigrant farmworkers who come here and are not aware of their rights and are not educated about the dangers of the pesticides they are exposed to, including through spray drift. I have seen how some local citizens do not get hired for these jobs because they make more of a demand for their rights. It is important to me that the people who are handling our food are treated well, healthy and aware of what they are being exposed to, and that the people who are going to consume the food are not in harm's way. I am also very concerned about the effects of pesticides, and chlorpyrifos specifically, on younger children in these communities. We have a lot of families that are exposed to pesticides through the agricultural industry. Research has shown the dangers associated with brain development.
- 5. I am concerned about my own exposure to neurotoxic pesticides like chlorpyrifos through the food that I eat. I like to buy local food from Washington farms and businesses, but I worry about what chemicals may be on the produce. I am particularly worried about

chlorpyrifos because I know that it was banned from household use many years ago. If chlorpyrifos is not safe enough for me to clean with, then why is it on the food that I eat?

6. As a LULAC member, I want to advance the civil rights and health of our Latino population, and specifically immigrant communities. We do education programs to families and students about pesticides and neurotoxicity, but there is a huge learning curve for all of us. Our whole community, not just immigrants, are at a disadvantage in not knowing about chlorpyrifos and the risks associated with it. The data and history of chlorpyrifos show how dangerous this pesticide is and it is ridiculous that young children and families can be exposed to the long-term consequences of its use on our food.

Pursuant to 28 U.S.C. § 1746, I declare under penalty of perjury that the foregoing is true and correct to the best of my knowledge.

Executed on this 17 day of JAN, 2018, in Vancouver, Washington. __, 2018, in Vancour,

UNITED STATES COURT OF APPEALS FOR THE NINTH CIRCUIT

LEAGUE OF UNITED LATIN AMERICAN CITIZENS, et al.,

Petitioners,

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SCOTT PRUITT, ADMINISTRATOR OF UNITED STATES ENVIRONMENTAL PROTECTION AGENCY, et al.,

Declaration of Dr. Elena Rios	

I, DR. ELENA RIOS, declare and state as follows:

- 1. I am the President and Chief Executive Officer of the National Hispanic Medical Association ("NHMA"). I am also the founder of NHMA, which was incorporated in 1994. I am submitting this declaration to describe NHMA's interests in this litigation and in obtaining a nationwide ban on chlorpyrifos.
- 2. NHMA is a national, non-profit organization representing the interests of 50,000 Hispanic physicians and other health care professionals. NHMA's mission is to empower Hispanic physicians and health care professionals to improve the health of Hispanic and other underserved populations. NHMA works collaboratively with Hispanic state medical societies,

medical students, residents, and other public and private sector partners. NHMA also serves as a resource, providing expert information to federal agencies, Congress, and the White House in order to strengthen public policies affecting the health of Hispanic communities across the nation.

- 3. As a network of concerned physicians and health care professionals, NHMA recognized early on the importance of programs and policies to protect the health of Hispanic populations and the need to lend our voices for improving the health and lives of Hispanic communities. NHMA has long advocated to improve the health and well-being of Hispanics and other underserved communities. We place a particular emphasis on protecting women and children and communities that suffer from poor health and multiple stressors.
- 4. We have identified reducing exposures to toxic pesticides as a priority. Many Hispanics and Hispanic communities face public health hazards from toxic pesticides used in agriculture. People employed in agriculture are directly exposed to toxic pesticides in their work. Some of our members diagnose and treat farmworkers for acute pesticide poisonings. The workers place trust in our members who speak Spanish and are aware of pesticide risks so they can effectively diagnose and treat people who are experiencing poisoning symptoms.
- 5. Farmworkers can bring home residues of toxic pesticides on their clothing and expose their children. Toxic pesticides also drift from the fields where they are applied to schools, homes, and other places where children live, learn, and play. Our members who are pediatricians or OB-GYN physicians and other health care providers working with children and pregnant women work to protect their patients from these hazards or reduce the harmful consequences when their patients suffer from exposures. NHMA has worked to educate its members on the risks posed by toxic pesticides and diagnosis and treatment.

- 6. NHMA also works on behalf of its members to address the problem at its source and reduce or eliminate these toxic exposures. NHMA has testified on Capitol Hill and submitted comments to federal agencies on the risks posed by toxic pesticides. It has submitted comments to the Environmental Protection Agency ("EPA") and attended meetings with EPA to present scientific evidence of the harm that chlorpyrifos and other organophosphate pesticides cause to people through acute poisonings and to children from low-level exposures that cause neurodevelopmental harm. Our members have patients who suffer from autism, attention deficit disorder, and other learning disabilities that are associated with exposure to chlorpyrifos and other organophosphates. They see first-hand the damage that chemical exposure can cause and the impacts on the individual children, the families, and communities that deal with these impediments to learning.
- 7. At our annual conference in the spring of 2017, our young physicians chapter sponsored a session that addressed chlorpyrifos. At this session, we provided information to our members to enable them to identify the risks posed by chlorpyrifos and to be a voice for protections for their patients. At this conference, in communications with our members, and through our networks, we provide our members with information about public policy proceedings where they can submit comments or testimony. Many of our members provide information to government decision makers, drawing on their experiences with their patients or their medical backgrounds. Some of our members who are early in their medical careers raised concerns about speaking out in areas where they could face retaliation and welcome NHMA taking positions on their behalf to eliminate exposures to chlorpyrifos.
- 8. At a conference of the League of United Latin American Citizens in the summer of 2017, one of our members Dr. Jaime Estrada, an accomplished and Texas-based pediatrician,

participated in a panel on toxic pesticides, raising concern about the risks of chlorpyrifos to the developing brains of children and farmworker health.

9. NHMA joined this lawsuit as a petitioner because it is indefensible that EPA would expose Hispanic communities to chlorpyrifos when the evidence the harm that it causes is so overwhelming. It is particularly indefensible for EPA to allow pregnant women to be exposed to chlorpyrifos when such exposures can cause longlasting damage to their children's brains. We urge the court to put an end to EPA's delays and order EPA to ban chlorpyrifos.

Pursuant to 28 U.S.C. § 1746, I declare under penalty of perjury that the foregoing is true and correct to the best of my knowledge.

Executed on this 9 day of Jan., 2018, in Washington, D.C.

Elena ain MB DR. ELENA RIOS

UNITED STATES COURT OF APPEALS FOR THE NINTH CIRCUIT

LEAGUE OF UNITED LATIN AMERICAN CITIZENS, et al.,

Petitioners,

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SCOTT PRUITT, ADMINISTRATOR OF UNITED STATES ENVIRONMENTAL PROTECTION AGENCY, et al.,

Declaration of Dr. Jaime Estrada	

I, DR. JAIME ESTRADA, declare and state as follows:

- 1. I am a pediatric hematologist-oncologist. Since 1992, I have been in practice in pediatric hematology and oncology in San Antonio, Texas.
- 2. I graduated from the Universidad Michoacana de San Nicolas de Hidalgo in Mexico, and completed a residency in pediatrics at Cardinal Glennon Memorial Hospital in St. Louis Missouri followed by a clinical and research fellowship in pediatric hematology and oncology at the MD Anderson Hospital and Tumor Institute in Houston, Texas. I earned an MS in Biomedical Sciences with special emphasis in oncology during this fellowship. I then accepted

a position as assistant professor of pediatrics, department of hematology and oncology at the School of Medicine, University of South Florida in Tampa, Florida.

- 3. When I moved to San Antonio in 1992, I saw a need for medical services in pediatric hematology and oncology in south Texas including heavily agricultural areas in the Rio Grande Valley. In 1994, I started an outreach clinic in Laredo which still continues, and in 1996, I started a clinic in the Rio Grande Valley, first in Weslaco at Knapp Medical Center, and then in McAllen 2 years later. I would go and see patients at these clinics and bring them to San Antonio for diagnosis and to begin treatment when needed. At the time, I knew that these children were exposed to pesticides and wondered about the role that pesticide exposures played in the medical conditions I observed. I closed the McAllen clinic in 2005 once a local clinic opened that could provide needed medical services in pediatric hematology and oncology.
- 4. In the course of treating patients for cancer and blood disorders, I often see the effects of neurocognitive and psychomotor delays on children. These types of delays and impairments impact any pediatric practice, regardless of specialty. Parents often report that their children do not like to take their medications and that they are difficult to control at home and school. Poor academic progress is a frequent complaint. These are common occurrences with children experiencing hyperactivity and attention deficit disorders.
- 5. I have been an advocate for access to comprehensive, cost-effective health care in Texas for many years. I founded Texas Doctors for Social Responsibility in 2014 to enable doctors in Texas to come together and enhance their voices and impact on public policies affecting medical care.

- 6. I have been a member of the National Hispanic Medical Association ("NHMA") since 2004. I support NMHA's efforts to reduce exposure to neurotoxic pesticides like chlorpyrifos.
- 7. In June 2017, I gave a presentation at the annual conference of League of United Latin American Citizens ("LULAC") in San Antonio, Texas. I researched the published scientific studies on chlorpyrifos, including the Columbia study, which found a strong correlation between prenatal exposure to high levels of chlorpyrifos and subsequent cognitive and psychomotor delays. The goal of the presentation to the LULAC members was to educate them about the neurodevelopmental harm caused by this pesticide.
- 8. I think it needs to be a top priority to reduce or eliminate children's exposures to chemicals like chlorpyrifos that can cause such serious long-term neuro-cognitive harm.

 Pregnant women who work in the fields can be exposed to levels of chlorpyrifos that can cause such harm to their children. Parents who are exposed to pesticides like chlorpyrifos when they work in the fields can bring home residues and expose their children. I strongly support NHMA's participation in this case to protect these children and reduce the types of neuro-cognitive harms they experience from toxic exposures.

Pursuant to 28 U.S.C. § 1746, I declare under penalty of perjury that the foregoing is true and correct to the best of my knowledge.

Executed on this 11th day of January, 2018, in San Antonio, Texas.

Joshode

DR. JAIME ESTRADA

UNITED STATES COURT OF APPEALS FOR THE NINTH CIRCUIT

LEAGUE OF UNITED LATIN AMERICAN CITIZENS, et al.,

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SCOTT PRUITT, ADMINISTRATOR OF UNITED STATES ENVIRONMENTAL PROTECTION AGENCY, et al.,

Respondents.

Declaration of Erik Nicholson

I, ERIK NICHOLSON, declare and state as follows:

- I am the National Vice President of the United Farm Workers ("UFW"). I have worked at UFW for the past fifteen years.
- UFW is the nation's largest farm workers union. Since 1962, UFW has worked to
 protect and expand farm workers' rights and to protect the health of farm workers and their
 families, including by limiting their exposure to toxic pesticides.
- UFW currently has more than 27,000 members. UFW members include current, seasonal, and retired farm workers.
- UFW has a long history of advocating for better protections from dangerous pesticides. To educate farm workers, rural communities, elected officials, and the public about

the dangers of pesticide exposure, UFW prepares and disseminates papers describing the health hazards associated with certain pesticides, the inadequacies of existing protections, and the government's failure to monitor for violations or enforce rules when violations occur. UFW also advocates for legislative and regulatory reforms to protect farm workers and their families from dangerous pesticides. These efforts have achieved some success. For example, UFW established the first comprehensive health care plan for farm workers and their families. UFW also negotiated the first farm worker labor contracts with provisions to prevent pesticide exposure, such as a ban on pesticide spraying while workers are in the field, prohibitions against the use of especially dangerous pesticides, and requirements that workers have access to protective clothing, washing stations, and clean drinking water. These labor contracts also included provisions mandating medical monitoring for workers exposed to neurotoxic pesticides, including organophosphate pesticides like chlorpyrifos.

- 5. In my position as National Vice President, I coordinate UFW's efforts to implement national policies that provide adequate protection from dangerous pesticides and otherwise promote farm worker health and safety. I communicate with UFW's members regularly, during house visits, on farms, at membership meetings, and through social media.
- 6. Unlike most people, UFW's members work in an industry that intentionally introduces toxins—that is, dangerous pesticides—into the workplace. UFW has members who mix and apply pesticides to crops—including apples, pears, cherries, and peaches—and members who prune, thin, and harvest crops contaminated with pesticide residues. The workers can bring home residues of toxic pesticides like chlorpyrifos on their clothing and bodies, which then expose their family members to the pesticides. UFW has advocated for showers, workplace uniforms, and places to remove and store contaminated clothing, amongst other urgently needed

protections. While we have achieved some success, many of our members still work in places that lack such protections or facilities. Their family members continue to be at risk of hazardous exposures.

- 7. UFW also has members who live and work very close to areas where pesticides are applied. Sometimes the farm worker housing is located within a few feet of the fields or orchards. When pesticides are sprayed in the air, they often drift and settle on or near this farm worker housing, exposing UFW members and their families to the pesticides. Farm worker families are exposed to pesticide drift at other places they frequent, including schools, churches, hospitals, day care, and play fields. UFW has advocated for buffer zones and other restrictions on pesticide use to reduce pesticide drift. While small buffer zones are in place for chlorpyrifos, they are insufficient. For example, last year on Cinco de Mayo, chlorpyrifos drifted ¼ mile from where it was applied and poisoned workers at another farm. UFW staff immediately went to the farm to provide assistance to the sickened workers.
- 8. Many UFW members and their families, including children, have experienced symptoms associated with acute and chronic pesticide poisoning, including dizziness, fatigue, headache, nausea, nosebleeds, and memory loss. Some of our members suffer from long-term neurological damage or have children who have autism, attention deficit disorders, or other learning disabilities. I am aware that exposure to chlorpyrifos and organophosphates has been associated with a greater incidence of such learning disabilities. Our members face an increased risk of pesticide poisonings and their children of having learning disabilities because of their exposures to chlorpyrifos.
- 9. I am aware that chlorpyrifos is identified as the cause of pesticide poisoning incidents every year. Because of its widespread use and the risks it poses, UFW has made it a

priority to advocate to obtain a ban on chlorpyrifos. In 2007, we were plaintiffs in a lawsuit filed in California challenging EPA's determination to reregister chlorpyrifos. *United Farm Workers v. Administrator, EPA*, No. 07-3950. We have since participated in the registration review process along with our allies by submitting comments on EPA's risk assessments and on its 2015 proposal to ban all uses of chlorpyrifos. In 2016, we petitioned EPA again with our allies to suspend and cancel chlorpyrifos uses that pose unacceptable uses to workers. EPA identified these unacceptable risks in 2014, but continues to authorize the uses associated with them. We have met with EPA decision-makers, including the Administrator, urging the agency to act quickly to ban chlorpyrifos.

- 10. We have been extremely disappointed at EPA's slow pace in limiting chlorpyrifos use. More than a decade ago, EPA obtained a ban on homeowner uses that put children at risk. EPA failed to afford farm worker children comparable protection. These children were forgotten, left behind for years before EPA even acknowledged its obligation to protect them from pesticide drift.
- acknowledging the extreme risks posed by chlorpyrifos to children from neurodevelopmental harm, to workers from workplace exposures, and to drinking water supplies across the country. We were also relieved when EPA proposed in 2015 to ban chlorpyrifos upon finding it unsafe and proposed to make the ban effective six months after the rule became final. At long last, our members would no longer be exposed to this dangerous pesticide on a regular basis, through multiple pathways. They would be comforted in knowing their families would not be consuming this poison in their food or drinking water, or exposed to it in the air they breathe. We believed

that 2017 would be the last year this pesticide would be sprayed on our crops, drift onto our homes, and contaminate our food and water.

- 12. And then in March, the new EPA Administrator did the unthinkable. He refused to ban this pesticide, not because he found it safe, but because he didn't want to act. This decision is indefensible. It puts UFW's members and their families at risk of pesticide poisonings and neurodevelopmental damage. Instead of being free of chlorpyrifos at work, at home, at school, at church, and at the dinner table last fall, UFW members and their families continue to live, work, and attend school in places where exposure to chlorpyrifos is likely. Every month that chlorpyrifos continues to be used in agriculture, UFW members and their families will be exposed to it through their work, drift and volatilization, their food, and/or their drinking water. EPA is putting UFW members at risk of acute pesticide poisonings from such exposures. It is also putting the children of UFW members at risk of damage to their brains and learning disabilities. It is unconscionable to put the families that work to help put food on our tables at risks of such egregious harm.
- 13. UFW has brought this lawsuit because subjecting our members to these harms has to end. UFW is also investing its resources to obtain a ban on chlorpyrifos in California. If EPA had done its job and followed the law and the science, we would not need to pursue a state ban and piecemeal protections from this dangerous pesticide.

Pursuant to 28 U.S.C. § 1746, I declare under penalty of perjury that the foregoing is true and correct to the best of my knowledge.

Executed on this Hay of Marky, 2018, in Tacoma, Washington.

FRIK NICHOLSON

UNITED STATES COURT OF APPEALS FOR THE NINTH CIRCUIT

LEAGUE OF UNITED LATIN AMERICAN CITIZENS, et al.,

Petitioners,

STATE OF NEW YORK, et al.,

Petitioner-Intervenors,

V.

SCOTT PRUITT, ADMINISTRATOR OF UNITED STATES ENVIRONMENTAL PROTECTION AGENCY, et al.,

Respondents.

Declaration of Esteban Ortiz

I, ESTEBAN ORTIZ, declare and state as follows:

- I am over the age of 18 and have personal knowledge of the statements in this
 declaration.
- I am submitting this declaration in support of the lawsuit, in which GreenLatinos is a
 petitioner, challenging United States Environmental Protection Agency ("EPA")
 Administrator Scott Pruitt's decision to leave chlorpyrifos tolerances in place without
 finding that the pesticide is safe.
- I currently live in Indianapolis, Indiana, and I have been a member of GreenLatinos since
 As a member of GreenLatinos, I speak with decision makers about issues that

affect the Latino community at the local level. I work as an Outreach Coordinator at the Migrant Farmworker Law Center at Indiana Legal Services, Inc. My work takes me all over the state and I speak with farmworkers about their concerns and advocate for better training and protections for them. Farmworkers and their families lack information about the pesticides used around them and the harms associated with those pesticides due to language barriers, a lack of cultural competency, and a lack of resources to provide adequate information to farmworkers.

4. I also come from a family of farmworkers and worked on a farm as a youth. Many members of my family still work on farms in Ohio and live in agricultural communities.

Like the farmworkers that I serve through my job, my family members are not provided information about the pesticides that are used in their area and how they may be exposed to those pesticides. They also don't feel like they can ask questions about what pesticides are being used on the farms they work at. When I visited my mom and talked to her about the work I do advocating for farmworkers and how we explain the rights farmworkers have, she mentioned how she and her whole family never once complained about lost wages, safety trainings done in only English and not Spanish, lack of restrooms in the fields, or about pesticides. The only thing they were ever told was not to be present working in the fields when the airplanes would spray the fields with pesticides. No signs were ever posted about the time to stay off the fields. The dangers that pesticides would have on them was never explained in a language they could understand, and safety training was not required regarding any pesticides or hazards.

- 5. I am aware that the pesticide chlorpyrifos is used in Indiana and I fear that the farmworkers I serve may be exposed to it while at work, in and around their homes, and on their food and in their drinking water. I know that chlorpyrifos has damaging, long-term effects on people, and I support a ban on the pesticide. I am also concerned that chlorpyrifos is on the food I eat, and I am outraged that EPA refused to ban the use of this pesticide on food when they know it causes harm to people.
- 6. I want EPA to do its job and protect my family, as well as the farmworkers I work with and their families, by acting on the recommendations of EPA's own scientists and ban the use of chlorpyrifos on food. I support this lawsuit and GreenLatinos' ongoing efforts to get this dangerous pesticide out of our food, drinking water, and air.

Pursuant to 28 U.S.C. § 1746, I declare under penalty of perjury that the foregoing is true and correct to the best of my knowledge.

Executed on this 16 day of JANUCKY, 2018, in Indianapolis, Indiana.

ESTEBAN ORTIZ

UNITED STATES COURT OF APPEALS FOR THE NINTH CIRCUIT

LEAGUE OF UNITED LATIN AMERICAN CITIZENS, et al.,

Petitioners,

STATE OF NEW YORK, et al.,

Petitioner-Intervenors,

V.

SCOTT PRUITT, ADMINISTRATOR OF UNITED STATES ENVIRONMENTAL PROTECTION AGENCY, et al.,

Respondents.

Declaration of Eugenia Economos

DECLARATION OF EUGENIA ECONOMOS

I, EUGENIA ECONOMOS, declare and state as follows:

1. I am the Pesticide Safety and Environmental Health Project Coordinator for the Farmworker Association of Florida ("FWAF"). The duties for my job include pesticide health and safety trainings for farmworkers; coordinating and updating such trainings and materials; training healthcare providers about diagnosing and treating cases of pesticide exposure; community-based participatory research around farmworker health and safety issues, including pesticide exposure; filing complaints for violations of certain farmworker pesticide protection regulations entrusted by the United States Environmental Protection Agency ("EPA") for

enforcement by the Florida Department of Agriculture and Consumer Services, and working for better workplace protections for farmworkers against pesticide exposures.

- 2. I submit this declaration based on my personal knowledge and based on my years of experience as a pesticide health and safety advocate for farmworkers and their families. This declaration is submitted in support of the lawsuit, in which FWAF is a plaintiff, challenging EPA Administrator Scott Pruitt's decision to leave chlorpyrifos tolerances in place without finding that chlorpyrifos is safe.
- 3. I began working with FWAF in 1995 as a volunteer and became a full-time paid employee from 1996 to 2001. For those five years, I worked on the Lake Apopka Farmworker project. The next five years, I worked in a volunteer capacity on the Lake Apopka project, before returning again as a full-time FWAF staff member in 2006. In 2007, I moved into my current position of the Health and Safety Project Coordinator. I have held my current position for over 10 years, working to educate and protect farmworkers and their families from pesticide poisoning and other workplace hazards.
- 4. FWAF is a grassroots, farmworker-membership, community-based organization in Florida that was founded in 1983, incorporated in 1986, expanded statewide in 1992 and that currently has over 10,000 members across the State. FWAF's long-standing mission is to build power among farmworker and rural low-income communities to respond to and gain control over the social, political, workplace, economic, health, and environmental justice issues that impact their lives. FWAF believes in the power of our membership to develop leadership in the community and generate effective action for social change. We are led and governed by the farmworker-communities in which we work. Among the many types of assistance we provide

are: disaster relief and response; pesticide health and safety training; aid to workers who have been victims of wage theft, workplace discrimination, and labor trafficking; among many others.

5. FWAF has been on the forefront of advocating for policies to protect farmworkers' health and safety, including by advocating for a chlorpyrifos ban due to the grave harms associated with that pesticide. FWAF has urged EPA to protect our members and farmworker communities from chlorpyrifos for years. We have signed onto letters calling for a ban on the pesticide, and we have submitted our own comments on EPA's various risk assessments for chlorpyrifos. In 2011, I submitted comments on behalf of FWAF that described the story of Ignacia. Ignacia came to FWAF to seek help with and possible legal recourse for her serious medical conditions that were causing her to experience a debilitating illness. She had previously seen an attorney, but he was not able to help her, because he had no experience or expertise in occupational health exposure cases. Ignacia and I talked, and she told me about her work and about being repeatedly exposed to pesticides in the workplace during the years she worked as an agricultural worker. Ignacia worked in a Florida ornamental plant nursery for over a decade and was repeatedly exposed to pesticides in her workplace, and she eventually had to quit due to her evermore concerning health problems. Ignacia sought medical help both in the U.S. and also in her home country of Mexico, where health care was more affordable and more accessible. Due to her mounting health care bills from over four years of seeking medical treatment for an increasingly worsening illness, Ignacia was afraid of losing her home in the U.S., so she came to FWAF in desperation looking for help. As the pesticide project coordinator for FWAF, it was deeply unsettling for me and emotionally gut-wrenching when all I could do was to look Ignacia in the eyes and tell her that there was nothing we could do to help her. The statute of limitations had passed for any kind of legal action. Plus, I have had enough experience to know the obstacles and difficulties of getting any kind of legal redress for those who experience chronic health effects related to long-time exposure to pesticides. I have been haunted by this incident ever since. Because Florida does not have a pesticide use reporting requirement, I cannot obtain information about what pesticides were used and when at the nursery in question or any other nursery in our area. I know that chlorpyrifos was used in area nursery and fernery operations in Central Florida. Chlorpyrifos was probably one of the pesticides that Ignacia had been repeatedly exposed to. Lack of information about the pesticides being used in the workplace inhibited Ignacia and continues to inhibit other farmworkers in Florida from having the information they need about the pesticides that are applied in their work areas. There are many other farmworkers, like Ignacia, that suffer chronic health problems and wonder if pesticide exposure over many years of work could be one of the causes.

- 6. In the past, FWAF joined others in submitting comments on EPA's 2016 revised human health risk assessment for chlorpyrifos on behalf of the organization and our members.
 We also joined the other petitioners in filing objections with EPA following Administrator
 Pruitt's denial of the 2007 PAN/NRDC petition to revoke chlorpyrifos tolerances. Our objections were filed on June 5, 2017 and EPA has not provided us with a response.
- 7. FWAF believed that EPA would follow the law and the recommendations of its own scientists and finalize its proposed rule revoking chlorpyrifos tolerances, which we believed was a long overdue step in protecting farmworkers, their families and rural communities from exposure to this dangerous pesticide. We were pleased by what seemed to be an inevitable ban based on the growing number of studies demonstrating neurodevelopmental harm to children from chlorpyrifos, in addition to EPA's conclusion that nearly every use of chlorpyrifos posed harm to workers even with maximum protective equipment.

- 8. We were very disappointed when Administrator Pruitt issued the Denial of the 2007 PAN/NRDC petition on March 29, 2017. We were also surprised that EPA would leave chlorpyrifos tolerances in place after finding that it was unsafe in a series of risk assessments that led to its proposing to revoke all tolerances based on those findings.
- 9. As part of my job, I regularly hear heartbreaking stories from workers about illnesses related to their exposure to pesticides and the long-term consequences they have on people, including children. I have seen applicators and farmworkers suffering from horrible rashes over their hands and faces from exposure to these harmful toxins. Medical doctors often prescribe creams to ease the itching, without ever addressing the causes or taking an occupational health history of the patient. But applicators and farmworkers are not the only ones at risk. Children, the elderly, and those with lowered immune systems or allergies are much more vulnerable to the long-term consequences of pesticide exposure. Also, EPA specifically found that chlorpyrifos is harmful to children's developing brains.
- 10. FWAF is very concerned that chlorpyrifos will continue to harm the health of Florida farmworkers, their families and rural communities at large because of EPA's decision to leave chlorpyrifos tolerances in place after finding that the pesticide is unsafe in nearly every way it is used. We are also worried about EPA's representations that it will not respond to our objections or take any other action addressing the harms posed by chlorpyrifos until the registration review deadline of 2022. This delay leaves our members, farmworkers and their families vulnerable to exposures and at continued risk of harm and without any possibility of relief for years to come.
- 11. FWAF addresses many issues impacting farmworkers, from issues of inadequate housing, unfair wages and wage theft, discrimination in the workplace, harassment, job loss due

to natural disasters and much more. Addressing farmworkers' incidences of pesticide exposure and educating our members about the dangers of organophosphate pesticides like chlorpyrifos is an added burden to the already overwhelming work we undertake everyday of addressing issues of injustices against farmworkers. The amount of dollars and time spent on more research on the impacts of chlorpyrifos, when the current overwhelming science clearly points to its dangers and harms, could be better spent on other issues to help farmworkers.

- 12. FWAF conducted a four-year community-based research project with Emory
 University. As part of that study, we conducted focus groups with farmworker women of
 reproductive age in two different areas of the state working in two different crops. During those
 focus groups, we had more than one woman tell us that they had children with learning
 disabilities and children who did not have learning disabilities. In each case, the women had
 been working in agriculture when they were pregnant with their children who later were
 diagnosed with learning disabilities. When they were not working in agriculture, those children
 were born without the problem, the women in the focus groups told us.
- 13. FWAF has also recently partnered with University of Central Florida School of Nursing to do developmental screenings of farmworker children to look for incidences of learning disabilities and other neurodevelopmental problems. We are in the initial stages of this collaboration, but the nursing school identified these conditions as such a problem, that they felt there was great need to do these screenings and, later, referrals in our community.
- 14. Chlorpyrifos has been banned for residential use because of the risks to children from exposure to this pesticide. Farmworker children are children too, and no less valuable and worthy of protection than children in residential communities. Farmworker children are doubly exposed to this pesticide, from exposure in their homes and communities, and then again on the

foods that they eat. Most farmworkers cannot afford to buy organic food to feed their children. In fact, farmworker families that live close to fields might find their children eating produce out of the field without first washing it, not to mention the take home exposures that put them at greater risk. We see the affects to individuals, families, communities, and the children themselves of neurodevelopmental problems that will last their entire lives.

At this time, approximately 60-65% of my workload involves pesticide work, 15. including helping to raise awareness among our supporters about the need for stronger workplace protections. Staff in our other areas also conduct health and safety trainings. They also see and interact with farmworker community members on a daily basis, including those workers who have experienced or are experiencing pesticide exposure symptoms. Almost all of our organizing staff are former farmworkers themselves with their own personal experience of working in, near or around pesticides and pesticide residues. We are hopeful that the percentage of our time addressing the tragedies of families and children affected by pesticide-related farmworker problems could be reduced if chlorpyrifos were banned. Farmworker children with learning disabilities and other neurodevelopmental problems present a public health issue that becomes a burden for schools in which these children are enrolled where there is a need for special education programs. It is also a burden to families, who are working and raising children, and who have added demands on them in dealing with offspring with neurodevelopmental problems. This is one more issue that we try to address within our organization and with our communities. My goal would be to have healthy workers and families in our communities, so that I could focus more time and attention on other important issues to our organization and our communities, such as our growing agroecology and community gardens program and the increasingly problematic

issue of heat stress among farmworkers, in addition to issues of discrimination, immigration reform, and wage theft.

Pursuant to 28 U.S.C. § 1746, I declare under the penalty of perjury that the foregoing is true and correct, to the best of my knowledge, information, and belief.

Executed this 18 day of January , 2018, at Apopla, Florida

NO. 17-71636

UNITED STATES COURT OF APPEALS FOR THE NINTH CIRCUIT

LEAGUE OF UNITED LATIN AMERICAN CITIZENS, et al.,

Petitioners,

STATE OF NEW YORK, et al.,

Petitioner-Intervenors.

v.

SCOTT PRUITT, ADMINISTRATOR OF UNITED STATES ENVIRONMENTAL PROTECTION AGENCY, et al.,

Respondents.

Declaration of Gerardo Rios

I, GERARDO RIOS, declare and state as follows:

- I am over the age of 18 and have personal knowledge of the statements in this declaration.
- 2. This declaration is being submitted in support of a lawsuit, in which the United Farm Workers ("UFW") is a petitioner, challenging the United States Environmental Protection Agency ("EPA") Administrator Scott Pruitt's decision to leave chlorpyrifos tolerances in place without finding that the pesticide is safe.
- 3. I am currently a member of the UFW and have been a member of the union for almost 22 years since we signed our first contract in Washington State. I am the General Secretary of the worker board at my company and have volunteered and participated in many

- efforts to improve the lives of farm workers because I believe in a safe and just working environment for all farm workers.
- I live in Sunnyside, WA, a rural community, with my wife. Here we raised our 4 daughters and are now grandparents to 7 children.
- 5. I am currently employed as a tractor operator at a wine grape vineyard. I am a licensed pesticide applicator and my main job involves mixing insecticides, herbicides, and fungicides and applying them to the fields. I have been a farm worker for over 37 years and have worked in the fruit tree industry including nectarines, peaches, apples, cherries, and now in grapes.
- I have been exposed to pesticides in the past while mixing and apply chemicals to the
 fields as part of my job. I have inhaled chemicals when my mask has come off during the
 mixing process.
- 7. My wife was also exposed to pesticides at an apple orchard where we both were employed in Washington many years ago. She began having an allergic reaction that we believe was related to her inhaling the pesticide particles in the air while working. Since then, she has suffered from allergies on a regular basis.
- 8. I have been a farm worker my entire adult life and I like what I do. However, I worry about the effects of pesticides on myself and my family. I do my best to protect myself and my family from the harmful effects of pesticide exposure, however there is only so much I can do to protect us and I don't have very much information about what the dangers are of different pesticides.
- I have recently learned a little bit about the pesticide chlorpyrifos. It worries me that in the state of Washington over 200,000 pounds of this dangerous pesticide is used each

year. I don't know if I have ever been exposed to this chemical, but I worry about it being used in the area where I live and work. I also worry that residues from this pesticide could be on the food that my family and I eat which could result in health problems.

10. I do the best I can to protect myself and my family from dangerous pesticides, however I can only do so much. I hope that the EPA would be mindful of the dangers of chlorpyrifos and do something to eliminate its use and protect farm workers and our families and communities.

Pursuant to 28 U.S.C. § 1746, I declare under penalty of perjury that the foregoing is true and correct to the best of my knowledge.

Executed on this 12 day of January, 2018, in Sungside

GERARDO RIOS

CERTIFICATE OF TRANSLATION

I, VICTORIA RUDDY, pursuant to 28 U.S.C. § 1746, declare under penalty of perjury under the laws of the United States of America that I am fluent in the English and Spanish languages and that I truly and correctly translated the foregoing declaration to the best of my ability.

VICTORIA RUDDY

NO. 17-71636

UNITED STATES COURT OF APPEALS FOR THE NINTH CIRCUIT

LEAGUE OF UNITED LATIN AMERICAN CITIZENS, et al.,

Petitioners,

STATE OF NEW YORK, et al.,

Petitioner-Intervenors,

V.

SCOTT PRUITT, ADMINISTRATOR OF UNITED STATES ENVIRONMENTAL PROTECTION AGENCY, et al.,

Respondents.

Declaration Of Hector E. Sanchez Barba

I, HECTOR E. SANCHEZ BARBA declare and state as follows:

- 1. I am the Executive Director of the Labor Council for Latin American

 Advancement ("LCLAA"), and I have held this position for 8 years. LCLAA, formed in 1972,
 was founded to improve workers' rights and increase the influence of Latino workers in the
 political process by educating, organizing and mobilizing Latinos within and outside of the labor
 movement. I am submitting this declaration to describe LCLAA's interests in this litigation and
 in obtaining a nationwide ban on chlorpyrifos.
- 2. LCLAA represents the interests of more than 2 million Latino workers in the American Federation of Labor-Congress of Industrial Organizations (AFL-CIO), The Change to Win Federation, Independent Unions and all its membership. As part of our mission, we focus

on raising awareness about occupational and environmental health and safety issues that disproportionately impact Latino and immigrant workers, including farmworkers and pesticide applicators. Among our membership, we have many individuals who live and work in agricultural communities and they and their families are exposed to harmful pesticides.

- 3. In my work with farmworkers I've learned that they experience symptoms including rashes, blisters, nausea, and stinging in the eyes, as well as far more serious health impacts such as infertility and neurological disorders. Their children and their families are exposed to toxic pesticides through spray drift, as well as in their food and drinking water. This should not happen. I believe that all people should be afforded basic protections from harmful pesticides, including chlorpyrifos, and that is why I do this work.
- 4. Our members expect us to act on their behalf to obtain protections for them and their families, and as part of my job I hear and share their stories and concerns with decision makers to try and compel action. In June 2017, LCLAA joined other petitioners in this lawsuit.
- 5. To raise awareness about the unique experiences of farmworkers and their families and the regular exposure to pesticides that they experience, I have met with the EPA and shared stories about the reality facing farmworkers. In July 2017, our members came to Washington, DC to urge the Senate to support a bill that would ban food uses of chlorpyrifos.
- 6. I have shared stories from farmworker Mily Trevino-Sauceda. Mily informed me that when she was working on a citrus farm in Blythe, California, an overhead plane sprayed the fields and all the workers in it with toxic pesticides. One of her fellow farmworkers, an expectant mother, was rushed to the hospital. The baby survived, but the mother lost her life that day.
- 7. I have also shared the story of Florida farmworker Reina Lemus de Zelaya while advocating for better protections from pesticides. Reina's husband and daughter spoke with

LCLAA and others about their family's experience and that of farmworkers that labor in farms, nurseries and greenhouses across the state of Florida. Reina didn't realize the harms of pesticides during her time working the fields of Florida. She had yet to hear the stories of rashes, stinging eyes, blisters, nausea, headaches, respiratory problems, asphyxia, and even death that so many farmworkers routinely share. So she worked the fields through all stages of her pregnancy and even brought her baby to work, keeping her in a stroller by her side. That daughter, unlike Reina's other children, suffers from asthma, illness, and learning disabilities.

- 8. These stories from California and Florida echo the conditions I witnessed in labor camps in North Carolina, where farmworkers were coming home to shared rooms and due to exhaustion, laying down in the same clothes they wore while in the fields. Pesticides take longer to break down when they are indoors and if farmworkers have pesticide residues on their clothes and shoes, they are exposing their children and families to harmful chemicals.
- 9. We are particularly concerned about farmworker health and safety because unlike LCLAA members who traditionally rely on the Department of Labor (DOL) and the Occupational Safety and Health Administration (OSHA) to protect them from chemical exposure, farmworkers and pesticide applicators rely on the Environmental Protection Agency (EPA) to establish minimum protections from pesticide exposure via the Agricultural Worker Protection Standard (WPS) and the Certification of Pesticide Applicators (CPA) rule. These two rules are fundamental to the protection of farmworkers and their families and LCLAA advocated for the strengthening of these standards. Unfortunately, in addition to refusing to ban chlorpyrifos in our food, I am aware that in late December 2017, EPA posted to the Federal Register that it will also reconsider the safeguards provided by the WPS and CPA rule to youth and adult workers.

- 10. The continued use of chlorpyrifos, especially when combined with EPA efforts to weaken basic protections for farmworkers and pesticide applicators, is alarming and undermines the health and safety of farmworkers and rural communities.
- chemical that is harmful to all people and to children in particular. I understand that EPA found that people may be exposed to chlorpyrifos through their drinking water, and that people who live in agricultural areas may be at more risk of drinking water contamination. I also understand that EPA's proposal to ban chlorpyrifos was based on unsafe drinking water exposures. I am also aware that the U.S. Department of Agriculture has detected unsafe levels of chlorpyrifos on fruits and vegetables. LCLAA members and their families may be exposed to chlropyrifos through food and drinking water. Members that live in rural areas or that work on or near farms may also be exposed to chlorpyrifos through spray drift and occupational exposures.
- 12. On September 21, 2016, LCLAA, along with other petitioners in this lawsuit, submitted a Petition for Emergency and Ordinary Suspension of Chlorpyrifos Uses that Post Unacceptable Risks to Workers and Petition to Cancel All Uses of Chlorpyrifos to the United States Environmental Protection Agency ("EPA"). We also submitted comments to EPA after the agency released its 2016 revised human health risk assessment, which found that chlorpyrifos is unsafe is nearly every way that it is used.
- 13. I was dismayed when I learned that EPA Administrator Scott Pruitt acted against the findings and recommendations of the agency's own scientists and refused to ban chlorpyrifos in March 2017, leaving our members at disproportionate risk from this toxic pesticide. On June 5, 2017, LCLAA joined the other petitioners in filing objections with EPA and filing this lawsuit. We respectfully ask the Court to order EPA to stop delaying and act to ban chlorpyrifos.

Pursuant to 28 U.S.C. § 1746, I declare under the penalty of perjury that the foregoing is

true and correct, to the best of my knowledge, information, and belief.

Executed this 12th day of January 2018, in Washington, DC.

Hector E. Sanchez Barba

NO. 17-71636

UNITED STATES COURT OF APPEALS FOR THE NINTH CIRCUIT

LEAGUE OF UNITED LATIN AMERICAN CITIZENS, et al.,

Petitioners,

STATE OF NEW YORK, et al.,

Petitioner-Intervenors,

v.

SCOTT PRUITT, ADMINISTRATOR OF UNITED STATES ENVIRONMENTAL PROTECTION AGENCY, et al.,

Respondents.

DECLARATION OF JAVIER CEJA

DECLARATION OF JAVIER CEJA

I, JAVIER CEJA, declare and state as follows:

- I am over the age of 18 and have personal knowledge of the statements in this declaration.
- 2. This declaration is submitted in support of the lawsuit, in which Pineros y
 Campesinos Unidos del Noroeste ("PCUN") is a petitioner, challenging the delay by the United
 States Environmental Protection Agency ("EPA") in responding to petitioners' objections after
 EPA denied a petition to ban chlorpyrifos.
 - 3. I am a founding member of PCUN, and I have been a member for over 31 years.
- 4. I currently live in Woodburn, Oregon. Woodburn is a small, agricultural town that is surrounded by farms and fields.
- 5. Based upon my personal knowledge and experience, I am very concerned about the use of dangerous pesticides, including chlorpyrifos, in the fields that I work in and live near.
- 6. I have been a farmworker for more than 50 years. I have worked as a farmworker in Oregon and California with various vegetable crops, fruit trees, grapes, and ornamentals. I am currently working on a grass seed farm.
- 7. My wife is also a farmworker, and we are both exposed to pesticides at work. I fear that we are also exposed to dangerous pesticides through spray drift and on our food.
- 8. I don't know the names of all the chemicals that are used on the farm that I work in because the growers almost never tell us what they are using. The chemicals are very powerful and they smell terrible. I have seen people in the fields come into contact with these pesticides and get rashes, headaches, and sometimes faint.
- 9. I don't know which pesticides are used around the area that I live in because they don't tell us what they are spraying or what the effects could be. I sometimes see crop dusters

spraying pesticides on fields when I am outside and I am afraid that I am being exposed to dangerous pesticides through drift.

- 10. I am currently in remission from cancer and I have to go in for regular check-ups. My cousin who is also a farmworker got cancer too. I don't know how I got cancer, but I have heard that pesticides can cause cancer and I think that may have been the cause.
- 11. I am aware that chlorpyrifos is a very toxic chemical and I believe that it should not be used on food. I am concerned about the presence of chlorpyrifos on the food that my family and I eat, especially since we are already exposed to pesticides in other ways. I would feel much safer for myself and my family if I know that chlorpyrifos was not allowed to be used on food at all.
- 12. I support PCUN's efforts in working to get chlorpyrifos banned. I believe that EPA's delay in responding to PCUN's objections while allowing the use of chlorpyrifos to continue causes harm to me and my family.

Pursuant to 28 U.S.C. § 1746, I declare under the penalty of perjury that the foregoing is true and correct, to the best of my knowledge, information, and belief.

Executed this 28 day of OCTOBER, 2017, at WOODBURN OPERON

Javier Caja.
Javier Ceja

CERTIFICATE OF TRANSLATION

I, RAMON RAMIREZ, pursuant to 28 U.S.C. § 1746, declare under penalty of perjury under the laws of the United States of America that I am fluent in the English and Spanish languages and that I truly and correctly translated the foregoing declaration to the best of my ability.

Ramon Ramirez

Mum lang

NO. 17-71636

UNITED STATES COURT OF APPEALS FOR THE NINTH CIRCUIT

LEAGUE OF UNITED LATIN AMERICAN CITIZENS, et al.,

Petitioners,

STATE OF NEW YORK, et al.,

Petitioner-Intervenors,

V.

SCOTT PRUITT, ADMINISTRATOR OF UNITED STATES ENVIRONMENTAL PROTECTION AGENCY, et al.,

Respondents.

DECLARATION OF JENNIFER SASS

- I, Jennifer Sass, declare as follows:
- I am a Senior Scientist for petitioner Natural Resources Defense Council ("NRDC").
- NRDC is a non-profit organization whose mission is to safeguard the earth—its
 people, its plants and animals, and the natural systems on which all life depends.

Among NRDC's six priorities is stemming the tide of toxic chemicals. Protecting the public from the substantial adverse health effects caused by exposure to toxic chemicals, including pesticides like chlorpyrifos, is central to NRDC's mission and goals.

- 3. NRDC currently has over 408,000 members. NRDC members reside in each of the 50 states and the District of Columbia. NRDC members may be exposed to chlorpyrifos in the foods they eat, the water they drink, from contaminated air resulting from pesticide drift and residues taken home on clothing. Children face particularly high exposures because of the foods they eat, their higher water consumption per pound of body-weight, and the activities they engage in, like putting their hands in their mouths, that put them into contact with pesticide residues.
- 4. NRDC has long devoted extensive resources to protecting people from toxic pesticides. I have spent a substantial amount of time on these activities since I started working at NRDC in January 2001. I have advanced degrees in Anatomy and Cell Biology, with specific expertise in developmental biology, neurobiology, molecular biology, and environmental health. In my position with NRDC, I am responsible for reviewing the science underlying many of the federal regulations of industrial chemicals and pesticides. I have published over forty-five articles in peer-reviewed scientific journals, including many pertaining to pesticide hazards and regulations. On numerous occasions, I have provided testimony to the Environmental Protection Agency ("EPA"), both written and oral, on the registration of dozens of pesticides during its registration process.
- I represented NRDC for over a decade as an active member of the EPA/U.S.
 Department of Agriculture ("USDA") Pesticide Program Dialogue Committee ("PPDC"), a stakeholder committee that provides feedback to the EPA Office of Pesticide Programs on

various issues related to pesticide regulatory, policy, and program implementation issues.

Through my years of work on the PPDC, from 2001 to 2013, I also served on issue-specific PPDC workgroups to provide more in-depth perspectives and advice on pesticide issues. I was also a member of the EPA/USDA Committee to Advise on Reassessment and Transition ("CARAT") from 2001 until the committee disbanded in 2003. The purpose of CARAT was to provide advice on strategic approaches for pest management planning, transition, and tolerance reassessment for pesticides as required by the Food Quality Protection Act ("FQPA").

- 6. NRDC has been extensively engaged in advocacy and scientific analysis to obtain revocation of chlorpyrifos tolerances. In addition to the 2007 Petition, we submitted comments on EPA risk assessments and the proposed revocation rule and provided comments to Scientific Advisory Panels. See, e.g., Administrative Record 995, 1025, 1512, 1526.
- 7. In this declaration, I provide background about the pesticide chlorpyrifos and the significant human health risks that it poses, particularly to children. I also describe the petition that NRDC and Pesticide Action Network North America ("PANNA") submitted to EPA in September of 2007, which asked EPA to ban food uses for chlorpyrifos and revoke all tolerances (maximum residue levels allowed on food) for chlorpyrifos. I describe the EPA Administrator's March 29, 2017 Order denying that petition, and the harm that is being caused during EPA's ongoing delay in taking effective and enforceable action to protect people, especially children, from chlorpyrifos.

Background on Chlorpyrifos

8. Chlorpyrifos is one of the most widely used insecticides in the United States. It is used on various food and feed crops. According to 2015 U.S. Geologic Service data – the most

recent data publicly available - approximately five to seven million pounds of chlorpyrifos are applied annually in U.S. agriculture, with widespread use on corn, orchards and grapes.

- 9. Chlorpyrifos is an organophosphate pesticide. Organophosphates (also referred to as organophosphorus pesticides or OPs) are a class of chemicals originally developed many decades ago; some were used during World War II as nerve agents. They kill insects by overstimulating the nervous system, ultimately leading to its collapse.
- 10. For the same reason that they are effective pesticides, OPs can exert strong adverse effects on the human nervous system.
- 11. One key nervous system effect of OPs is known as "cholinesterase inhibition," in which the pesticide interferes with the function of one of the body's proteins, an enzyme called cholinesterase. Cholinesterase is necessary to degrade one of the nervous system's key messengers, acetylcholine, in a timely manner. When OPs are in the system, the cholinesterase enzyme cannot do its job to degrade acetylcholine. Acetylcholine is a neurotransmitter protein that carries messages from the brain and spinal cord out to muscle cells and other cell receptors where it activates skeletal muscles, inhibits heart muscle, and aids in memory formation, learning, attentiveness, and other critical nervous system functions. OP exposure leads to a buildup of acetylcholine and prolonged over-activation of acetylcholine receptor cells. The result of OP exposure can vary in people depending on the dose and differences in ages, health status, and other factors. Effects can include headaches, nausea, dizziness, restlessness, muscle twitching, weakness, tremor, poor coordination, confusion, difficulty breathing, vomiting, and diarrhea. At very high exposures, more serious effects such as convulsions, respiratory paralysis, and death have been reported. Poisoning can occur through any route of exposure, including inhalation, ingestion, eye contact, and absorption through the skin.

Children are especially sensitive to harm from chlorpyrifos exposure.

- Children are especially sensitive to harm from chlorpyrifos exposure.
- 13. Per pound of body weight, children eat, drink, and breathe more than adults. For example, EPA's Exposure Factors Handbook reports that the average bottle-fed newborn drinks 52 milliliters of water per kilogram body weight per day (mL/kg-day) and the highest five percent of bottle-fed babies drink 232 mL/kg-day, whereas a one-year old drinks half that amount (23 mL/kg-day average and 71 mL/kg-day at the top five percent). The average adult drinks half that amount again (13 mL/kg-day average and 40 mL/kg-day at the top five percent).
- 14. Infants, toddlers, and young children are more likely to play on the ground and engage in more frequent hand- to-mouth contact than adults, and therefore have higher rates of dermal and oral exposure from pesticide-contaminated objects, dust, or soil. EPA's Exposure Factors Handbook reports that during indoor activities babies, six to twelve months old put their hands to their mouths an average of 19 times per hour, and five percent of babies do it 52 times per hour, whereas adults do it rarely. These age-related activities mean that infants and young children are much more likely to have greater chlorpyrifos exposures than adults, when adjusted for body weight.
- 15. In addition, infants and children are especially susceptible to chemical toxicity compared with adults. Children's bodies have immature detoxification mechanisms compared with adults, and chemical assault during development of critical target organs and systems can

¹ U.S. EPA. Exposure Factors Handbook 2011 Edition (Final). U.S. Environmental Protection Agency, Washington, D.C., EPA/600/R-09/052F, 2011. See Chapter 3, Table 3-1 on drinking water ingestion rates by age. https://cfpub.epa.gov/ncea/risk/recordisplay.cfm?deid=236252

² U.S. EPA. Exposure Factors Handbook 2011 Edition (Final). U.S. Environmental Protection Agency, Washington, D.C., EPA/600/R-09/052F, 2011. See Chapter 4, Table 4-10 on indoor hand-to-mouth frequency by age. http://cfpub.epa.gov/ncea/risk/recordisplay.cfm?deid=236252

cause disruptions that are then hard-wired into the developing system.³ For example, extensive research on lead and mercury demonstrates that during neural development the nervous system is acutely vulnerable to neurotoxic assault, and exposures may result in long-term or permanent destruction or dysfunction to systems including learning, memory, and intelligence. This is also true for the developing immune system, endocrine system, and reproductive system. For example, doses of lead or mercury with no obvious effect on adults can cause permanent measurable brain damage in exposed children. For this reason, studies on adults, including adult laboratory animals, will under-predict risks to fetuses, infants, and children. The scientific consensus is that early life developmental stages are particularly vulnerable to toxic exposures.⁴

The Food Quality Protection Act

16. Because infants and children are especially sensitive, the National Academy of Sciences' landmark 1993 report, "Pesticides in the Diets of Infants and Children," made the scientific case to overhaul of EPA's pesticide program to assure the safety of children, citing OPs as one of the classes of pesticides of concern. This report was widely cited as the catalyst for the enactment of the unanimously passed Food Quality Protection Act (FQPA), which significantly overhauled the pesticide regulatory framework.

³ Huen K, Harley K, Brooks J, et al. Developmental Changes in PON1 Enzyme Activity in Young Children and Effects of PON1 Polymorphisms. *Environmental Health Perspectives*. 2009;117(10):1632-1638. Available at:

https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2790521/

⁴ National Research Council. 1993. Pesticides in the Diets of Infants and Children. Washington, DC: The National Academies Press.

⁵ Pesticides in the Diets of Infants and Children (Washington, D.C.: National Academy Press, 1993).

- 17. The FQPA recognizes that the previous law insufficiently protected infants and children. It therefore mandates that EPA use an additional ten-fold safety factor in its assessments to address toxicity to infants and children and gaps in information on toxicity or exposure.
- 18. The FQPA requires EPA to protect children from aggregate exposures to each pesticide. Whereas EPA previously assessed exposure to a pesticide in various foods individually, it must now aggregate all the routes by which children are exposed to each pesticide. EPA must therefore evaluate children's exposures to chlorpyrifos through consuming foods with residues of chlorpyrifos, drinking water contaminated with chlorpyrifos, and drift from fields.
- 19. The FQPA also requires EPA to evaluate the cumulative effects of people's exposure to all pesticides that share a common mechanism of toxicity. Because all the OPs attack the human nervous system in essentially the same way, EPA has determined that they share a "common mechanism of toxicity," as described in the FQPA. Therefore, EPA developed has spent a decade developing a cumulative risk assessment for the OPs.
- 20. Because of the high risk that OPs pose to people, and especially to children, EPA took protective measures to cancel almost all the residential uses of the OPs in 2000. This resulted in a significant and measurable reduction in poisonings to children from roach baits, residential foggers or "bug bombs," and other homeowner uses.
- 21. However, the cancelations left children living in agricultural areas at direct risk from all the agriculture uses that remained, and led to continuing contamination of our food supply and waterways including sources of drinking water.
- Children of farmworkers and those living in agricultural communities are heavily exposed to pesticides, including chlorpyrifos. Children in agriculture communities may come in

contact with pesticides through residues on their parents' skin and clothing, contaminated soil in their play areas, pesticide-laden dust tracked into their homes, drift from chlorpyrifos applications, contaminated air and drinking water, residues on produce, and even breast milk. Furthermore, these children may accompany their parents to work in the fields or help by working themselves, thus experiencing high or occupational levels of exposure. Children of farmworkers are also exposed to pesticides prenatally, when pregnant women are exposed to pesticides during their work.

Despite Evidence of Harm, EPA's Previous Evaluation Allowed Chlorpyrifos To Remain on the Market

23. In 2001, EPA completed the chlorpyrifos aggregate assessment, called an Interim Reregistration Eligibility Decision ("IRED"), which revised but retained many of the pre-existing food tolerances (allowable residue limits on food). In its 2002 comments on the IRED (Docket ID No. OPP-34203G), NRDC challenged the scientific limitations of the IRED, identified evidence of harm, and highlighted that there is inadequate evidence to establish an exposure level at which infants and children will not suffer any developmental harm due to chlorpyrifos exposure, i.e. a "no observable adverse effect level" or NOAEL. EPA never responded directly to NRDC's comments or other comments submitted by other public interest advocates, including Pesticide Action Network and the New York Attorney General.

⁶ Engel SM, Bradman A, Wolff MS, Rauh VA, Harley KG, Yang JH, Hoepner LA, Barr DB, Yolton K, Vedar MG, Xu Y, Hornung RW, Wetmur JG, Chen J, Holland NT, Perera FP, Whyatt RM, Lanphear BP, Eskenazi B. 2016. Prenatal organophosphorus pesticide exposure and child neurodevelopment at 24 months: an analysis of four birth cohorts. Environ Health Perspect 124:822-830.

⁷ 66 Fed. Reg. 57,073 (Nov. 14, 2001) Organophosphate Pesticide; Availability of Chlorpyrifos Interim Risk Management Decision Document. IRED at 64-68.

24. In 2006, EPA completed the cumulative risk assessment for all OPs, including chlorpyrifos, and reaffirmed the chlorpyrifos IRED without change, despite new, significant published studies that had emerged during this time showing harm to the developing brain of children. Without addressing the comments by NRDC and others, the Agency concluded that chlorpyrifos uses would be eligible for reregistration and tolerances with a few limitations on some uses.⁸

2007 Petition to EPA to Cancel Chlorpyrifos and Revoke All Tolerances

- 25. In 2007, I coauthored the "Petition to Revoke All Tolerances and Cancel All Registrations for the Pesticide Chlorpyrifos" (the "2007 Petition"), which was submitted to EPA. That document was submitted to EPA on behalf of PANNA and NRDC on September 12, 2007. The 2007 Petition focused on scientific evidence of the long-lasting effects to children from early life chlorpyrifos exposure, as well as exposures through air contamination from pesticide drift and volatilization.
- 26. The 2007 Petition presented a robust body of scientific information laying out the human health risks associated with chlorpyrifos, and those risks particularly relevant to children and infants, which is sufficient to justify EPA revoking all tolerances and cancelling all registrations for chlorpyrifos. That evidence is described in more depth in the 2007 Petition.
- 27. Scientific evidence that has emerged since 2001 and since we submitted the 2007 Petition further supports the revocation of all tolerances and cancellation of all registrations for chlorpyrifos.

Memo from Debra Edwards to Jim Jones, re: Finalization of Interim Reregistration Eligibility Decisions (IREDs) and Interim Tolerance Reassessment and Risk Management Decisions (TREDs) for the Organophosphate Pesticides, and Completion of the Tolerance Reassessment and Reregistration Eligibility Process for the Organophosphate Pesticides, July 31, 2006.

Children Have Long-Lasting Effects from Early Life Exposure to Chlorpyrifos

- 28. EPA found that different types of studies including animal toxicology to human epidemiology examining the impact of early-life chlorpyrifos exposure consistently show that prenatal exposure to chlorpyrifos, including some studies that show that levels too low to trigger effects in adults cause adverse neurodevelopmental and neurobehavioral effects.
- 29. Animal studies show that the animals exposed prenatally to chlorpyrifos suffer neurodevelopmental adverse effects, including some recent studies correlating such effects with exposures below levels that caused ten percent or more cholinesterase inhibition in the pregnant adult rat. The effects caused by chlorpyrifos during neurodevelopment in test rodents are associated with impaired learning and working memory as the rodents mature, demonstrating persistent functional effects.⁹
- 30. Human population studies strengthen the evidence that exposure to chlorpyrifos during pregnancy can cause lasting neurodevelopmental harm, even at doses too low to cause cholinesterase inhibition to the pregnant mother. Multiple epidemiologic studies in diverse populations spanning urban and agricultural settings have shown significant links between lasting deficits in brain development and function and prenatal exposure to OPs generally and to chlorpyrifos specifically.¹⁰

⁹ Levin ED, Addy N, Baruah A, Elias A, Christopher NC, Seidler FJ, Slotkin TA. Prenatal chlorpyrifos exposure in rats causes persistent behavioral alterations. Neurotoxicol Teratol. 2002 Nov-Dec;24(6):733-41.

Muñoz-Quezada MT, Lucero BA, Barr DB, Steenland K, Levy K, Ryan PB, Iglesias V, Alvarado S, Concha C, Rojas E, Vega C. Neurodevelopmental effects in children associated with exposure to organophosphate pesticides: a systematic review. Neurotoxicology. 2013 Dec;39:158-68.

González-Alzaga B, Lacasaña M, Aguilar-Garduño C, Rodríguez-Barranco M, Ballester F, Rebagliato M, Hernández AF. A systematic review of neurodevelopmental effects of prenatal

- 31. A team of Columbia University researchers have an important, ongoing longitudinal study that began in 1997. It includes mothers and their children who were born between February 1998 and May 2002.¹¹ The study provides a unique opportunity for the researchers to measure the public health impact of the EPA ban on the sale of chlorpyrifos products for residential uses, announced in June 2000. Researchers measured a dramatic drop in exposure levels in the children born after the ban took effect. Residential air samples decreased three-fold and newborn infant plasma cord blood levels at birth decreased over five-fold among women and their babies in the study.¹²
- 32. The Columbia University researchers have been following and reporting on the progress of the children born into the study. At age three, the researchers reported that based on performance in standardized tests the children with the highest levels of chlorpyrifos at birth were five times more likely to have delayed development of physical movement like dexterity and fine motor control, and 2.4 times more likely to have delayed mental development, compared with the children with the lowest levels at birth.¹³ Adverse neurobehavioral effects

and postnatal organophosphate pesticide exposure. Toxicol Lett. 2014 Oct 15;230(2):104-21. doi:10.1016/j.toxlet.2013.11.019. Epub 2013 Nov 26. Review.

¹¹ Whyatt RM, Barr DB, Camann DE, Kinncy PL, Barr JR, Andrews HF, Hoepner LA, Garfinkel R, Hazi Y, Reyes A, Ramirez J, Cosme Y, Perera FP. Contemporary-use pesticides in personal air samples during pregnancy and blood samples at delivery among urban minority mothers and newborns. Environ Health Perspect. 2003 May;111(5):749-56.

Rauh VA, Garfinkel R, Perera FP, Andrews HF, Hoepner L, Barr DB, Whitehead R, Tang D, Whyatt RW. Impact of prenatal chlorpyrifos exposure on neurodevelopment in the first 3 years of life among inner-city children. Pediatrics. 2006 Dec;118(6):e1845-59.

Also, see comments to EPA from Dr. Dale Hattis. Table 35. April 16, 2016. Doc ID: EPA-HQ-OPP-2016-0062-0121.

Rauh VA, Garfinkel R, Perera FP, Andrews HF, Hoepner L, Barr DB, Whitehead R, Tang D, Whyatt RW. Impact of prenatal chlorpyrifos exposure on neurodevelopment in the first 3 years of life among inner-city children. Pediatrics. 2006 Dec;118(6):e1845-59.

include attention problems, attention-deficit/hyperactivity disorder (ADHD) problems, and longlasting developmental disorder problems.

- 33. The Columbia University researchers reported that at age eleven, arm tremors (measured using standardized tests involving drawing specific spiral shapes) in the children with highest chlorpyrifos exposures (as measured in the cord blood at birth). ¹⁴ This suggests that prenatal chlorpyrifos exposure may cause an even broader scope of effects, including latent or long term development of fine motor control that may not become obvious for over a decade or more.
- 34. Adverse consequences appear to extend into late childhood and adolescence.

 Forty of the children in the Columbia University study were examined at six to eleven years old using magnetic resonance imaging to look at brain structures. In the twenty children with the highest prenatal chlorpyrifos exposure, the researchers observed unusual thinning and deformed areas in the outer areas of the brain, called the cortex, in regions specific for social cognition and emotional control. The twenty low-exposure children did not have these structural brain alterations.
- 35. A recent study of Chinese infants by a collaboration of scientists from the
 University of Michigan and a children's hospital and medical university in China reported
 similar findings to those of the Columbia University team. The Chinese infants exposed
 prenatally to chlorpyrifos had poorer reflexes, grasping, and locomotion skills when compared to

¹⁴ Rauh VA, Garcia WE, Whyatt RM, Horton MK, Barr DB, Louis ED. Prenatal exposure to the organophosphate pesticide chlorpyrifos and childhood tremor. Neurotoxicology. 2015 Dec;51:80-6. 0

¹⁵ Rauh, V. A., Perera, F. P., Horton, M. K., Whyatt, R. M., Bansal, R., Hao, X., ... Peterson, B. S. (2012). Brain anomalies in children exposed prenatally to a common organophosphate pesticide. Proceedings of the National Academy of Sciences of the United States of America, 109(20), 7871–7876.

unexposed infants. 16 The authors suggest these delays in early motor skills may possibly lead to later life developmental delays in both physical and mental abilities.

36. The Childhood Autism Risks from Genetics and Environment study showed that applying OPs in agricultural fields within 1.5 kilometers of the home of a woman while she is pregnant is associated with an increased incidence of autism spectrum disorders in the prenatally exposed child, and the risk was most elevated for chlorpyrifos. ¹⁷ Chlorpyrifos was the most abundant and widely used of all the pesticides reported in the study.

Scientific Advisory Panels agree that cholinesterase inhibition is not a protective endpoint.

- 37. Based on the large and convincing body of scientific evidence from high quality animal toxicology and human epidemiology studies, the EPA's Scientific Advisory Panels (SAP), building on findings made by the SAP in 2008, in 2012 and in 2016 agreed that relying on a threshold of no higher than ten percent cholinesterase inhibition as a NOAEL level does not account for neurodevelopmental effects and is not sufficiently protective of the American population. The SAPs' largest concern was for prenatally exposed children, where long-lasting and possibly permanent deficits in learning, working memory, and anti-social behavior was reported.
- 38. In the 2016 review, "[t]he Panel agrees that both epidemiology and toxicology studies suggest there is evidence for adverse health outcomes associated with chlorpyrifos

¹⁶ Silver MK, Shao J, Zhu B, Chen M, Xia Y, Kaciroti N, Lozoff B, Meeker JD. Prenatal naled and chlorpyrifos exposure is associated with deficits in infant motor function in a cohort of Chinese infants. Environ Int. 2017 Sep;106:248-256.

¹⁷ Shelton JF, Geraghty EM, Tancredi DJ, Delwiche LD, Schmidt RJ, Ritz B, Hansen RL, Hertz-Picciotto I. Neurodevelopmental disorders and prenatal residential proximity to agricultural pesticides: the CHARGE study. Environ Health Perspect. 2014 Oct;122(10):1103-9. Erratum in: Environ Health Perspect. 2014 Oct;122(10):A266.

exposures below levels that result in [ten percent cholinesterase inhibition] (i.e., toxicity at lower doses)." The SAP recommended that EPA continue to work to account for that neurodevelopmental impacts in children from prenatal exposures occur even at levels below those that cause detectable cholinesterase inhibition in the pregnant mother.

EPA Finds Food Residue Exposure Alone Is Unsafe

- 39. In the 2016 assessment, EPA found that food exposures for young children (one to two years old) were up to 140 times greater than EPA's target risk threshold. Food exposures for pregnant women were found to be 62 times greater than the target risk threshold to protect against harm to the developing brain. EPA's exposure analysis identified ten food crops where more than 25 percent are grown with chlorpyrifos. Regular residue testing performed by the USDA (and summarized in EPA's food exposure analysis) routinely finds residues on these crops and others. On the second of the secon
- 40. Children face significant risk from chlorpyrifos residues in the diet because

 USDA testing finds chlorpyrifos residues on the top fruit consumed by children apples make

 up approximately 36 percent of non-juice related daily fruit intake even after washing. ²¹ ²²

¹⁸ 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". July, 2016. Report and other meeting materials available at: https://www.epa.gov/sap/meeting-materials-april-19-21-2016-scientific-advisory-panel p.20

Experts Support EPA Proposed Ban on Chlorpyrifos. January 17, 2017 Jennifer Sass
 https://www.nrdc.org/experts/jennifer-sass/experts-support-epa-proposed-ban-chlorpyrifos
 EPA: Toxic Pesticide on Fruits, Veggies Puts Kids at Risk. January 06, 2017 Miriam Rotkin-Ellman and Veena Singla

https://www.nrdc.org/experts/miriam-rotkin-ellman/epa-toxic-pesticide-fruitsveggies-puts-kids-risk

²¹ Herrick KA, Rossen LM, Nielsen SJ, Branum AM, Ogden CL. Fruit Consumption by Youth in the United States. Pediatrics. 2015;136(4):664-671. doi:10.1542/peds.2015-1709.

²² USDA Pesticide Date Program.

Similarly, chlorpyrifos residues are found on other fruits popular with children: peaches/nectarines, citrus (even peeled), grapes, berries, and melon (even under the rind).

41. In the most recent USDA pesticide residue testing data available (2015), chlorpyrifos residues were found on twelve different types of fruits and vegetables, which was 71 percent of the seventeen crops tested.²³

EPA Finds Drinking Water Exposure Alone is Unsafe

- 42. In its 2014 and 2016 assessment, EPA calculated that many of the legally permitted uses of chlorpyrifos result in drinking water contamination levels that exceed EPA's levels of concern.²⁴
- 43. In its 2014 assessment, EPA found that children would be exposed to unsafe levels of chlorpyrifos from drinking water contamination alone, even before considering additional daily routes of exposure including food.
- 44. For its 2016 Refined Drinking Water Assessment, EPA performed additional analyses to assess potential chlorpyrifos drinking water exposures based on national and regional modeling information as well as real-world water monitoring data. All analyses showed that drinking water concentrations across the country exceed the drinking water level of concern, presuming that there is no food exposure. The assessment confirmed the Agency's previous findings that "the majority of estimated drinking water exposures from currently registered uses, including water exposures from non-food uses, continue to exceed safe levels even taking into account more refined drinking water exposures."

²³ USDA 2015. Pesticide Date Program, Annual Summary, Calendar Year 2015.

²⁴ 80 Fed. Reg. 69,079, 69,083 (Nov. 6, 2015)

45. Unsurprisingly, EPA also found that higher concentrations of chlorpyrifos and the more potent chlorpyrifos-oxon are likely to be found in areas with higher agriculture uses of chlorpyrifos. Thus, agricultural communities, including farmworkers and their families, are more likely to have their drinking water contaminated by chlorpyrifos.

EPA's Failure to Revoke all Chlorpyrifos Tolerances and Cancel Registrations for Food Uses Is Causing Harm to NRDC and its Members

- 46. On March 29, 2017, EPA Administrator Scott Pruitt denied the 2007 petition (the "Pruitt Order"), because he chose to engage in "further evaluation of the science" on the "adverse neurodevelopmental effects to occur from current human exposures to chlorpyrifos" before finalizing the proposed revocation of chlorpyrifos tolerances. He indicated that this further evaluation would take place during the registration review process, which has a statutory deadline of October 1, 2022.
- 47. Because of EPA's failure to act on the pending petition, NRDC members and their children are being exposed to unsafe levels of chlorpyrifos on food, in drinking water, and in pesticide drift and volatilization, and will continue to be as long as the chlorpyrifos registrations and food tolerances remain in effect.
- 48. In addition, EPA's failure to revoke chlorpyrifos tolerances and end food uses of chlorpyrifos has led NRDC to devote extensive resources to compiling and disseminating information about the risks of chlorpyrifos. Drawing on the frequent detection of residues on fruits consumed regularly by children in government surveys, NRDC compiled and prepared information for the public in the form of online articles, media briefing information, and fact sheets to help parents and others understand what EPA's assessment means for their family. For example, NRDC highlighted the fact that many fruits that kids regularly eat, including apples,

peaches, and strawberries, have chlorpyrifos residues in the fruit even after they are washed and peeled.²⁵ NRDC also pointed out that chlorpyrifos residues are also routinely found on imported fruits like peaches, grapes, and melons.

- 49. EPA's failure to enact the proposed tolerance revocations has resulted in state-based efforts to eliminate or reduce risk to their residents. NRDC has spent significant resources advocating along with partners for a ban on chlorpyrifos in California. These efforts have resulted in designation of chlorpyrifos as a restricted use pesticide, a proposal to have it designated as a toxic air contaminant, and a proceeding which added chlorpyrifos to the Proposition 65 list of reproductive chemicals that may require warnings to the public. NRDC has provided technical analyses to inform California scientific bodies and regulators of the science and risks posed by chlorpyrifos and the dangerous exposures identified in California's agricultural communities.
- 50. This investment of resources would not be necessary if EPA had complied with its obligations and revoked chlorpyrifos tolerances because it cannot find the pesticide safe.

Pursuant to 28 U.S.C. §1746, I declare under penalty of perjury that the foregoing is true and correct, to the best of my knowledge. Executed this 23day of January, 2018, in Washington, D.C.

JENNIFER SASS, PH.D

²⁵ EPA: Toxic Pesticide on Fruits, Veggies Puts Kids at Risk. NRDC Expert blog, by Miriam Rotkin-Ellman and Veena Singla. January 6, 2017. https://www.nrdc.org/experts/miriam-rotkin-ellman/epa-toxic-pesticide-fruitsveggies-puts-kids-risk

NO. 17-71636

UNITED STATES COURT OF APPEALS FOR THE NINTH CIRCUIT

LEAGUE OF UNITED LATIN AMERICAN CITIZENS, et al.,

Petitioners.

STATE OF NEW YORK, et al.,

Petitioner-Intervenors.

V.

SCOTT PRUITT, ADMINISTRATOR OF UNITED STATES ENVIRONMENTAL PROTECTION AGENCY, et al.,

Respondents.

Declaration of Jose Cruz

I, JOSE CRUZ, declare and state as follows:

- I am over the age of 18 and have personal knowledge of the statements in this declaration.
- 2. This declaration is being submitted in support of a lawsuit, in which the United Farm Workers ("UFW") is a petitioner, challenging the United States Environmental Protection Agency ("EPA") Administrator Scott Pruitt's decision to leave chlorpyrifos tolerances in place without finding that the pesticide is safe.
- I am a member of the United Farm Workers union. I have been a member for about 19 years. I am a member of the worker board and have a great deal of protections under

my union contract. However, other farm workers do not benefit from the same protections and I believe that all farm workers should have health and safety standards at work.

- I live in Sunnyside, Washington and have two young daughters, ages 8 and 10.
- 5. I have been a farm worker for 20 years and currently work as a pesticide applicator at a vineyard. My job involves mixing pesticides and spraying them onto the fields.
 We apply lots of different types of pesticides, but I am not sure what the name of each pesticide is.
- 6. I have been exposed to pesticides while at work on two occasions. Once I was involved in an accident when a coworker left a sprayer on and I was sprayed by a pesticide. I don't remember what chemical I was sprayed with. My face was not fully protected and I got the pesticide on my skin. On another occasion, several coworkers and I were exposed to aerial drift when a dusting plane was spraying pesticides on a neighboring field. We began to inhale the pesticides that were drifting onto the field where we were working and workers started getting concerned and told the supervisor. A few workers began to feel sick after inhaling the pesticides.
- 7. I have a lot of concern about my exposure to pesticides, as I come in contact with pesticides on a regular basis at work. I have been mixing and applying pesticides for many years and I have spoken with other farm workers that I know personally who have gotten sick after long time exposure to pesticides in the fields. I worry that I might get sick because of my contact with pesticides.
- 8. I don't know whether I have ever been exposed to chlorpyrifos, but it does worry me because it is a very dangerous and toxic pesticide. I would feel much better knowing that this pesticide wasn't being applied to the food that I feed my family or being sprayed near my home or my work.

9. I feel that the EPA is putting farm workers and their families in danger by not prohibiting the use of Chlorpyrifos. They are ignoring our health and safety by allowing us to be exposed to this dangerous pesticide. If this pesticide was banned from use in our communities we would all be much safer.

Pursuant to 28 U.S.C. § 1746, I declare under penalty of perjury that the foregoing is true and correct to the best of my knowledge.

Executed on this 12 day of January, 2018, in Sunnyside

Exhibit 2, Page 80

CERTIFICATE OF TRANSLATION

I, VICTORIA RUDDY, pursuant to 28 U.S.C. § 1746, declare under penalty of perjury under the laws of the United States of America that I am fluent in the English and Spanish languages and that I truly and correctly translated the foregoing declaration to the best of my ability.

VICTORIA RUDDY

NO. 17-71636

UNITED STATES COURT OF APPEALS FOR THE NINTH CIRCUIT

LEAGUE OF UNITED LATIN AMERICAN CITIZENS, et al.,

Petitioners,

STATE OF NEW YORK, et al.,

Petitioner-Intervenors,

V.

SCOTT PRUITT, ADMINISTRATOR OF UNITED STATES ENVIRONMENTAL PROTECTION AGENCY, et al.,

Respondents.

DECLARATION OF JUDY FISHMAN

DECLARATION OF JUDY FISHMAN

I, JUDY FISHMAN, declare and state as follows:

- I have been a member of the Natural Resources Defense Council since 1999, and I support NRDC's efforts to protect the public from exposure to harmful pesticides.
 - 2. I am 72 years old and live in Los Angeles, California.
- 3. My husband and I have three grown children and five grandchildren between the ages of four and seventeen. They live in Los Angeles and San Francisco, CA.
- 4. I am aware that chlorpyrifos and other organophosphate pesticides are widely used and can have negative impacts on our physical health and our mental health. I am concerned about the health impacts caused by chlorpyrifos, and the overall impacts of exposure to chlorpyrifos and other pesticides.
- 5. I am very concerned about my grandkids who eat a lot of fruit and are still growing. As much as their parents try, my grandchildren do not eat just organic food. I am concerned that my grandchildren are putting substances in their bodies that are going to cause them health and cognitive issues for a lifetime. I am concerned about how these pesticides may stay in their bodies during puberty that will affect their children and future generations.
- 6. I am concerned about all kids being exposed to pesticides on food because eating organic food to avoid pesticides isn't an option for most children. If kids eat in schools, other homes, restaurants, any place outside the home, they are not eating organic the bulk of the time.
- 7. I am concerned about the widespread use of chlorpyrifos and other pesticides. There is no way for me to detect if it is on what I'm eating and what my grandchildren are eating. Even if we try to eat healthily, by eating fruits and vegetables, we can guess that we are eating food with chlorpyrifos and other pesticides.
- 8. I have a Master's degree in Educational Psychology with a specialty in Parent Education and Child Development. I worked as an Educational Therapist and ran parent education programs for ten years. I helped found the Children's Nature Institute, an environmental education program that taught our youngest children and served thousands of inner city kids during the 30 years it was in Los Angeles.
- 9. In my work, I saw what inner-city kids ate when we bused them to our programs. While most of it was unhealthy, when it was healthy, it was foods that were likely affected by chlorpyrifos like apples, grapes, strawberries. These kids need all the help they can get to eat healthy and to thrive in this world. Many of the kids we served were already challenged by poverty, developmental delays, lack of school readiness

and toxic stress. Some were homelessness, in foster care or being raised by teen parents. Most had poorly educated parents struggling with poverty and some were affected by the opioid crisis. Adding another problem, such as developmental issues, on top of what they are already dealing with has a much more profound effect on their lives.

- 10. I am concerned that like other pesticides, chlorpyrifos is getting into our food chain, including food my family and I eat. Once in the food chain, it is there permanently. It could take years to get rid of it, if ever.
- 11. I am concerned because chlorpyrifos is a drift pesticide (making it even more toxic and pervasive), and that it's in schools and homes in farming areas such as the California Central Valley. It is negatively affecting children's development and therefore the future of our country.
- 12. Chlorpyrifos has been proven to lower the IQ of our children who need math, science, and cognitive skills to function in our rapidly changing world. I am concerned that the impact of chlorpyrifos on children's neurodevelopment is undermining our future economy and the health of our country. I am concerned that chlorpyrifos is making our population more vulnerable.
- 13. I am aware that the Natural Resources Defense Council petitioned the U.S. Environmental Protection Agency to ban chlorpyrifos in 2007. I am also aware that the NRDC has been part of several lawsuits about that petition. I am aware that the NRDC has filed objections to EPA on chlorpyrifos, but that EPA has not responded to those objections.

I believe that EPA cannot wait any longer to take action on chlorpyrifos.

Executed this 12 day of January, 2018, at 1:16 pm Los Cargeles, Car 900.49

Judy Fishman

NO. 17-71636

UNITED STATES COURT OF APPEALS FOR THE NINTH CIRCUIT

LEAGUE OF UNITED LATIN AMERICAN CITIZENS, et al.,

Petitioners,

STATE OF NEW YORK, et al.,

Petitioner-Intervenors.

v.

SCOTT PRUITT, ADMINISTRATOR OF UNITED STATES ENVIRONMENTAL PROTECTION AGENCY, et al.,

Respondents.

Declaration of Margaret Reeves

I, MARGARET REEVES, declare and state as follows:

- I am a senior scientist at Pesticide Action Network of North America ("PANNA").
- 2. I have a Ph.D. in Agricultural Ecology from the University of Michigan (1991), and I spent two years of post-doctoral research in Agronomy at Ohio State University (1991-1993). Before joining PANNA in 1996, I spent about nine years in Central America, teaching and conducting research in tropical agricultural ecology. I worked with university colleagues and Non-Governmental Organizations to improve productivity of low-input, ecologically sound agricultural methods. I have published articles, in both Spanish and English, in professional and popular/educational journals.

- 3. I also have a long-standing interest in working on behalf of people at risk of exposure to dangerous pesticides. I've been an advocate for farmworkers since the early 1980s when I volunteered in the Ann Arbor, MI support group for the Ohio-based Farm Labor Organizing Committee. Since coming to PANNA in 1996, I have continued to support the work of farmworker unions and work with members of farmworker communities in California to document exposure to harmful pesticides and to improve workplace and public health policies to better protect against such exposures.
- 4. As a senior scientist, I conduct research to support the organization's advocacy campaigns seeking stricter regulation of dangerous pesticides, better enforcement of existing regulations, and stronger incentives for less toxic alternatives. For example, I work with rural communities to collect data about pesticide exposure. I also monitor peer-reviewed scientific literature to keep abreast of the health hazards associated with exposure to specific pesticides. I educate the public about my research findings by writing reports and contributing to PANNA's blog. In addition, I share my findings during regular conference calls and other communications with PANNA's allies, including grassroots community groups and farmworker unions. Many of these organizations lack the resources to hire staff scientists and, therefore, rely on my research and PANNA's expertise to educate their members about the risks of pesticide exposure, as well as the substance and adequacy of existing state and federal regulations governing pesticide use.

PANNA'S MISSION AND ACTIVITIES TO REDUCE AND ELIMINATE EXPOSURE TO TOXIC PESTICIDES

5. PANNA is a non-profit advocacy and education organization that was founded in 1982 and is dedicated to preventing harm to the public from pesticides. PANNA focuses on two related goals: (1) protecting people from exposure to dangerous pesticides; and (2) promoting a shift to less toxic alternatives. PANNA is the North American branch of the Pesticide Action

Network, an international coalition of hundreds of public interest organizations in more than 90 countries. The network challenges the global proliferation of pesticides, defends basic rights to health and environmental quality, and works to ensure the transition to a just and viable society.

6. The total number of PANNA members and supporters is about 115,000. In the past six months PANNA, members took over 19,000 PAN-facilitated actions urging their state and national representatives to ban chlorpyrifos because of their concerns about the serious human health and environmental effects of organophosphate pesticides in general, and chlorpyrifos in particular. These members have expressed particular concerns about exposure of their children to pesticides. PANNA and its members, are very concerned that EPA is failing to protect people, including PANNA members, in rural communities from chlorpyrifos and other organophosphate pesticides.

HARM FROM CHLORPYRIFOS

- 7. Chlorpyrifos and other organophosphates are nerve toxin insecticides. They cause numerous acute poisonings every year. Acute pesticide poisoning refers to adverse health effects associated with exposure to pesticides that occur immediately or shortly following the exposure. Acute effects from chlorpyrifos exposures include irritation of eyes, nose and throat; skin irritation; respiratory difficulty; headache; exhaustion; blurred vision; stomach cramps and vomiting; excessive salivation; tremors, staggering gait and dizziness; numbness; chest tightness; and excessive sweating. These effects may be of short duration, last days or weeks, or, in some cases, lead to long-term effects such as chronic neurological problems. Acute effects often lead to temporary job loss and loss of income.
- 8. Every year, the California Department of Pesticide Regulation's ("DPR") reports the number of acute poisonings. These numbers are likely to be serious underestimates of actual poisonings since most acute poisonings are never reported. See Reeves, M., A. Katten and M.

Guzmán. 2002. Fields of Poison 2002: California farmworkers and pesticides. Pesticide Action Network, San Francisco, CA. The report is available online at: http://www.panna.org/sites/default/files/FieldsofPoison2002Eng.pdf.

- 9. Of the reported poisonings in California, fifty-one percent from 1998 to 2006 occurred when pesticides drifted from the site of application onto workers. Another 25% resulted from dermal contact with pesticide residues in fields. Chlorpyrifos was among the top five chemicals in the reported poisonings.
- 10. These data only address the most serious short-term poisoning incidents. There are ample data elsewhere that show that pesticides, including chlorpyrifos, have long-term, chronic adverse health effects on farmworkers. Those effects include nervous system damage, development problems, hormone disruption, immune system damage, cancer, reproductive effects, and birth defects.
- 11. Extensive discussion of these issues is provided in the PANNA Fields of Poison 2002 report (previously cited) that I co-authored with United Farm Workers (UFW), and California Legal Rural Assistance Foundation (CRLAF), and published in collaboration with Californians for Pesticide Reform. It revealed that pesticide safety laws fail to protect many of the California's 700,000 farmworkers and their families from poisonings even when the laws are followed. For that reason, PANNA believes that human pesticide exposures need to be reduced, in some cases, prevented altogether.
- 12. Chlorpyrifos has continued to be associated with acute pesticide poisonings, and data on chlorpyrifos poisonings collected and released by California's Department of Pesticide Regulation show that chlorpyrifos poisonings remain unacceptably high.

- a. The 2002¹ PANNA report showed that California's Pesticide Illness Surveillance Program ("PISP") had reported 156 chlorpyrifos poisoning cases between 1998 and 2000. We also noted that the reported poisonings likely represented only the tip of the iceberg, as many, probably most cases go unreported for myriad reasons including lack of familiarity among workers, residents, and physicians with signs and symptoms of pesticide-related illnesses and/or fear of retaliation among workers for reporting job-related incidents. We also pointed out that about half of all drift cases occurred when investigations determined that there had been no violations of pesticide use or worker safety regulations. In other words, the results demonstrated that the regulations themselves were inadequate to protect workers, and others, from pesticide exposure and associated poisonings.
- b. More recent PISP data suggest that poisonings by agricultural use of chlorpyrifos continue albeit at apparently lower rates.
- c. While most PISP cases are reported for workers, reports of direct acute poisonings among children exposed at school are not uncommon, with 34 cases reported (for all pesticides) between 2008 and 2011. The PISP reports of chlorpyrifos cases among workers in that time period totaled 62 with 49 attributed to drift exposure. There is a lag period of at least two or three years between incident and public reporting of PISP data, so while we believe incidents continue to occur these are the most up-to-date data available.

¹ Reeves, M., A. Katten and M. Guzmán, *Fields of Poison 2002: California farmworkers and pesticides*, Pesticide Action Network (2002).

d. A recent report of agricultural pesticides used near California schools showed that chlorpyrifos was the 8th most common highly hazardous pesticide applied within ¹/₄ miles of public schools.²

PANNA'S ACTIVITIES TO PROTECT CHILDREN AND COMMUNITIES FROM CHLORPYRIFOS

- 13. In addition to acute poisoning data, a continuously growing body of data demonstrates that both workers and consumers, including children, are regularly exposed to chlorpyrifos and other organophosphate pesticides. To complement these data, PANNA has conducted numerous field studies in California's Central Valley and elsewhere documenting the presence of chlorpyrifos (including at levels exceeding EPA's level of concern) in the air in communities located near citrus orchards where use of the pesticide is common during the summer months.
- 14. In 2003 PAN created the Drift Catcher, a simple air monitoring device designed to be used by trained lay people concerned about the presence of pesticides in the air in their communities. Modeled after similar devices used by government agencies, the collected samples are shipped to analytical laboratories for analysis. The community members then use the resulting data in support of public policy campaigns designed to win more protective public health policies. One good example was the use of Drift Catcher data, collected near homes in California's Tulare County, to successfully pass a 2008 ordinance requiring a one-quarter mile buffer zone (no spray area) around schools in session, occupied farm labor camps and residential areas. The buffer zone rule prohibits aerial applications of restricted use pesticides, including chlropryifos.

² California Environmental Health Tracking Program, *Agricultural Pesticide Use Near Public Schools in California* (2014).

- 15. PANNA's primary partner in both air monitoring (aka drift-catching) for chlorpyrifos was our member and long-time close partner El Quinto Sol de America (EQS) located in the town of Lindsay in California's Central Valley. Air monitoring in 2004 and 2005 showed levels of concern near participants' homes. In 2006, I worked with EQS to repeat air monitoring and found that 30% of the air samples showed levels of chlorpyrifos above the level considered safe, by US EPA, for a one-year-old child; one site had two results about 10 times the "safe" level.
- 16. In 2006, we added a biomonitoring component to the Lindsay study. In addition to levels of concern in the air near participants' homes, we found that all but one of the 12 biomonitoring participants (8 women and 4 men) had levels of chlorpyrifos in their urine above the "acceptable" level for pregnant and nursing women. One of the participants was a young nursing mother who lived with her family directly across the street from the Lindsay elementary school. In 2009, we conducted another chlorpyrifos air monitoring and biomonitoring study near Lindsay. Though air levels remained below levels of concern, 14 of 20 children or women of childbearing age (15-44) had levels of the chlorpyrifos metabolite TCPy in their urine above the Population Adjusted reference dose or "safety" level of 30 ng/kg/day.
- 17. Our members who participated in both the air and biomonitoring studies are looking to PANNA to help them eliminate this avoidable source of contamination in their communities and in their bodies.
- 18. Along with Californians for Pesticide Reform (CPR), of which PAN is a founding member, and CPR partner groups, PANNA has engaged in air monitoring efforts in the towns of Lompoc and Parlier. These air monitoring efforts in turn led to the establishment of California's Department of Pesticide Regulations' (DPR) comprehensive Air Monitoring Network (AMN)

program one focus of which is the use of organophosphate (OP) pesticides including chlorpyrifos. Lindsay, CA is one of the four OP-focused monitoring sites (four other sites were selected for their high use of highly hazardous fumigant pesticides). PANNA, together with our CPR partners, has recently provided detailed comments to DPR on its 2016 monitoring report focusing on both monitoring protocols and, most importantly, DPR's interpretation and presentation of the monitoring results. Our comments noted that US EPA's revised risk assessment for chlorpyrifos reviewed DPR's AMN data and found that levels exceeded the levels of concern to protect against neurodevelopmental impacts at one of the monitoring sites. At that site, the highest 4-week rolling average for chlorpyrifos was 39.4 ng/m3 which is more than 18 times higher than the level of concern for pregnant women (2.1 ng/m3) set last year by USEPA scientists to protect against neurodevelopmental harm.

(http://www.cdpr.ca.gov/docs/emon/airinit/air_monitoring_plan_2017.pdf)

19. Organophosphate pesticides pose a high risk to people, and especially to fetuses, infants, and young children. EPA's actions to date demonstrate a double standard that results in unacceptable neglect of rural and farm children while suburban and urban children receive some necessary protections against exposure to chlorpyrifos. In 2000, EPA took effective measures to cancel almost all residential uses of organophosphate pesticides, which has resulted in significant and measurable reduction in poisonings to children from roach baits, residential foggers or "bug bombs," and other homeowner uses. These protections, while necessary, do not address dangerous forms of exposure to chlorpyrifos and other organophosphate pesticides from spray drift and volatilization drift, which primarily affects children living in rural and farming communities. Often, the children affected are the children of farmworkers, meaning that the harm EPA allows falls disproportionately on children in low-income and minority communities.

Any continued poisonings or permanent neurological harm to children is unacceptable. This double standard is especially alarming because of the disproportionate nature of the harm on already overburdened communities. Rural and farm children should be accorded the same protections as other children from this dangerous category of pesticides.

- 20. When EPA re-registered chlorpyrifos and the other organophosphates in 2006, it ignored exposures to children's and bystanders from pesticide drift. Ever since, we have advocated for EPA to consider drift among the aggregate exposures children face.
- 21. In 2007, we filed jointly with Natural Resources Defense Council a petition to ban all food uses of chlorpyrifos. The petition compiled the available data on drift and chlorpyrifos exposures.
- 22. In 2009, PANNA joined other farmworker and health advocated in petitioning EPA to protect children from pesticide drift. Pesticides in the Air Kids At Risk: Petition to EPA to Protect Children from Pesticide Drift (Oct. 13, 2009) (the "Kids Petition"). The Kids Petition presented evidence of pesticide drift and argued that EPA had violated its legal obligation to protect children against all aggregate exposures, including those from pesticide drift.
- 23. In 2011, EPA released a preliminary human health risk assessment for chlorpyrifos, which acknowledges the need to address spray drift and volatilization drift and that studies show widespread effects resulting from chlorpyrifos exposure. PANNA filed comments on this assessment providing additional evidence and showing why EPA's assessment understates the risks to children from chlorpyrifos and a subsequent set of comments on EPA's volatilization assessment. Our comments are in www.regulations.gov at EPA-HQ-OPP-2008-0850-0098 and EPA-HQ-OPP-2015-0653-0165.

- 24. In its 2014 response to the Kids Petition, EPA acknowledged its legal obligation to address pesticide drift as an aggregate exposure under the Food Quality Protection Act, but indicated it would do so in its pesticide specific review of each pesticide. Agency Response to Pesticides in the Air Kids At Risk: Petition to EPA to Protect Children from Pesticide Drift (Mar. 31, 2014), available at www.regulations.gov at EPA-HQ-OPP-2009-0825-0084.
- 25. After acknowledging its obligation to protect children from pesticide drift, EPA found that drift was reaching schools, homes, and other places children gather in toxic amounts, which led to the imposition of the first no-spray buffers for chlorpyrifos in 2012. EPA, Chlorpyrifos Evaluation of the Potential Risks from Spray Drift and the Impact of Potential Risk Reduction Measures at 7 & Appendix C (July 13, 2012), *available at* https://www.regulations.gov/document?D=EPA-HQ-OPP-2008-0850-0105. We have argued in public comments that these buffers are too small because they ignore volatilization and inhalation exposures. Our concerns have been substantiated.
- 26. In August 2017, the California Department of Pesticide Regulation released a draft evaluation of chlorpyrifos as a toxic air contaminant, which finds drift in toxic amounts at far greater distances from chlorpyrifos spraying, *i.e.*, EPA's buffers are far too small to protect children. http://www.cdpr.ca.gov/docs/risk/rcd/chlorpyrifos_draft_evaluation_2017.pdf, at 15-17.
- 27. On May 5, 2017, chlorpyrifos traveled one-half mile from a farm, sickening dozens of people. The Kern County Department of Agriculture and Measurement Standards found that chlorpyrifos drifted one-half mile from a farm. An applicator implicated in this drift incident was assessed penalties of more than \$30,000. The following month, 18 farmworkers

were sent to the hospital. An August incident, also in Kern County, is still under investigation but identified chlorpyrifos as one of the two pesticides sickening 70 farmworkers.

https://www.panna.org/sites/default/files/Copus-Road%20Incident-May-Press%20Release.pdf.

Here's a blog on the May 5 incident: http://www.panna.org/blog/why-cant-california-regulators-stop-pesticide-drift.

28. PANNA conducted a detailed analysis of chlorpyrifos body burden data from the Center for Disease Control biannual NHANES study. The 2004 report, "Chemical Trespass: Pesticides in our bodies and corporate accountability" showed that many U.S. residents carry toxic pesticides in their bodies above government assessed "acceptable" levels. Chronic exposure to chlorpyrifos metabolite, was furthest above the government safety threshold, with average levels for the different age groups three to 4.6 times what agencies at that time considered "acceptable" for chronic exposure of vulnerable populations (e.g. women, children and the elderly). As CDC noted in the 2003 release of the data, young children carry particularly high body burdens—nearly twice that of adults—of a metabolite specific to chlorpyrifos. A 2010 update study by the CDC reported that while exposure levels of four target chemicals declined, exposure to chlorpyrifos increased 10.8%

(https://www.cdc.gov/nchs/data/hpdata2010/hp2010_final_review_focus_area_08.pdf).

29. PANNA has engaged in concerted advocacy to obtain a nationwide ban on chlorpyrifos, including through the 2007 petition and a series of unreasonable delay cases seeking to compel EPA to act on that petition. Because EPA has delayed taking action, we have also devoted significant resources to advocacy in California to obtain restrictions and ultimately a ban on chlorpyrifos use in California. We have provided detailed technical comments on proposals and reviews of chlorpyrifos by California authorities and regulators; analyzed

California pesticide poisoning data; conducted air monitoring and biomonitoring of chlorpyrifos in California communities and tracked California monitoring; tracked and advocated for restrictions to prevent exposures of children at schools; and participated in hearings and proceedings on whether chlorpyrifos will be listed as a toxic air contaminant and as a reproductive or developmental toxicant under California's Proposition 65. PANNA partners and members of the statewide coalition Californians for Pesticide Reform (of which PANNA is an active, founding member) have devoted staff and funds for a concerted advocacy campaign to ban chlorpyrifos in California. If EPA had done its job and revoked all food tolerances in a timely manner, PANNA would no longer need to devote its resources to this campaign.

- 30. In addition to the work I've done for the past 21 years at PANNA on behalf of pesticide-exposed PANNA members, I also have personal experiences that influenced my decision to directly engage with PANNA's work. In the 10 years prior to coming to PANNA, part of my graduate student and post-doc research in Costa Rica involved the use of Lorsban (chlropyrifos) on the corn plants with which I was conducting my research. In fact, I directly applied granules of Lorsban by hand, to the developing tassels of corn plants. Though I was sufficiently careful to protect my skin from exposure, at no point did anyone with whom I was working, including more experienced agronomists or researchers, ever mention the potential dangers of exposure. As chlorpyrifos is relatively rapidly flushed from the body, I have no way to know if, at that time, I experienced exposure at levels of concern.
- 31. More recently, while conducting the biomonitoring study in Tulare County in the summer of 2005, I was driving near orange orchards and witnessed a nighttime pesticide application. Though there was no indication of what pesticide was being applied, there was a very good chance that it was chlorpyrifos. In response, I collected my urine sample in the same

way we were collecting study participants' samples and sent it along with the other samples to the analytical laboratory. My resulting level of the chlorpyrifos metabolite TCPy was $4.26~\mu g/L$ which is substantially above the $1.5~\mu g/L$ average level of adults as reported by CDC in its Third National Report on Human Exposure to Environmental Chemicals, July 2005. So therefore, I experienced an unacceptable chlorpyrifos exposure, though my exposure was only on one occasion unlike many of the PANNA partners and members on whose behalf I have dedicated the past 21 years of work at PANNA.

- 32. Because of EPA's failure to ban chlorpyrifos, PANNA members and their children are still being exposed to unsafe levels of chlorpyrifos and will continue to be as long as the chlorpyrifos registrations and food tolerances challenged in the petition remain in effect.
- 33. By denying the 2007 Petition in March 2017 and putting off a decision on whether chlorpyrifos must be banned for what could be five more years, EPA has harmed and is harming PANNA and its members.

Pursuant to 28 U.S.C. § 1746, I declare under penalty of perjury that the foregoing is true and correct to the best of my knowledge.

Executed on this 22 day of Savary, 2018, at Berkeley, CA.

MARGARET REEVES

NO. 17-71636

UNITED STATES COURT OF APPEALS FOR THE NINTH CIRCUIT

LEAGUE OF UNITED LATIN AMERICAN CITIZENS, et al.,

Petitioners,

STATE OF NEW YORK, et al.,

Petitioner-Intervenors,

v.

SCOTT PRUITT, ADMINISTRATOR OF UNITED STATES ENVIRONMENTAL PROTECTION AGENCY, et al.,

Respondents.

Declaration of Mark Magaña

I, MARK MAGAÑA, declare and state as follows:

1. I am the Founding President and CEO of GreenLatinos, and I have held these positions for 5 years. GreenLatinos was formed in 2008 originally as the National Latino Coalition on Climate Change (NLCCC) and has been formally known as GreenLatinos since 2013, serving as a national coalition of Latino environmental, natural resources, and conservation advocates. Our mission is to convene a broad coalition of Latino leaders committed to addressing national, regional and local environmental, natural resources and conservation issues that significantly affect the health and welfare of the Latino community in the United States. GreenLatinos provides an inclusive table at which its members establish collaborative partnerships and networks to improve the environment; protect and promote conservation of land and other natural resources; amplify the voices of minority, low-income and

tribal communities; and train, mentor, and promote the current and future generations of Latino environmental leaders for the benefit of the Latino community and beyond. GreenLatinos develops and advocates for policies and programs to advance this mission.

2. As President and CEO, I directly report to the Board of Directors and am responsible for the overall vision and administration of the organization. Protecting farmworkers from pesticide exposure has been a GreenLatinos priority for years. On July 16, 2013, GreenLatinos joined farmworkers who came to Washington, DC to advocate for stronger protections from pesticides. Out of growing concern for farmworkers and rural communities, GreenLatinos' members worked closely with farmworker and community-based organizations to urge the EPA to strengthen the Agricultural Worker Protection Standard (WPS) and ensure that farmworkers were involved at every stage of the rulemaking process. The WPS is the primary set of federal safeguards that protect child and adult farmworkers from the hazards of working with pesticides—a basic standard that had not been revised for more than 20 years, was finally strengthened in 2015, and is now being targeted by Scott Pruitt. Since then, we have been joined at our annual summits by farmworker and environmental organizations that brief our members about the challenges and opportunities that farmworkers face in advancing protections from pesticides for the most exposed and vulnerable communities. At our May 2017 Summit, our members learned about chlorpyrifos and the risk that this chemical poses to children, farmworkers, rural communities and consumers, and we voted to include action on toxic chemicals and pesticides as one of our core priorities for 2017-2018. In July 2017, I participated in a lobby day in Washington D.C., asking members of the Senate to support a bill that would ban food uses of chlorpyrifos.

- 3. GreenLatinos is a membership organization with approximately 350 full paid members and 100 associate members, and a network of over 6,000 allies and supporters. Full members vote on our organization's core policy priorities at our annual GreenLatinos National Summit. We currently have 5 priority areas that we are working on, including toxic chemicals and pesticides and how they affect Latino, immigrant and indigenous communities. Among our membership, we have farmworkers as well as individuals who work in agricultural communities and see the effects that harmful pesticides have on people working in the fields. Esteban Ortiz, a GreenLatinos member that currently serves farmworker communities in the state of Indiana will be submitting a declaration.
- 4. On September 21, 2016, GreenLatinos, along with several of the petitioners in this lawsuit, submitted a Petition for Emergency and Ordinary Suspension of Chlorpyrifos Uses that Post Unacceptable Risks to Workers and Petition to Cancel All Uses of Chlorpyrifos to the United States Environmental Protection Agency ("EPA"). We also submitted comments to EPA after the agency released its 2016 revised human health risk assessment, which found that chlorpyrifos is unsafe is nearly every way that it is used.
- 5. I am aware that EPA found chlorpyrifos to be a toxic chemical that is harmful to all people, and to children in particular. I understand that EPA found that people may be exposed to chlorpyrifos through their drinking water, and that people who live in agricultural areas may be at more risk of drinking water contamination. I also understand that EPA's proposal to ban chlorpyrifos was based on unsafe drinking water exposures. I am also aware that the U.S. Department of Agriculture has detected unsafe levels of chlorpyrifos on fruits and vegetables. GreenLatinos' members and their families may be exposed to chlorpyrifos through food and drinking water. Members that live in rural areas or that work on or near farms may also be exposed to chlorpyrifos through spray drift and occupational exposures.

6. I was dismayed when I learned that EPA Administrator Scott Pruitt acted against the findings and recommendations of the agency's own scientists and refused to ban chlorpyrifos, leaving our members at risk from this toxic pesticide. As part of our ongoing commitment to farmworker protection and recognizing that the majority of farmworkers are of Latino and/or indigenous ancestry, on June 5, 2017, GreenLatinos joined the other petitioners in filing objections with EPA and filing this lawsuit.

Pursuant to 28 U.S.C. § 1746, I declare under the penalty of perjury that the foregoing is true and correct, to the best of my knowledge, information, and belief.

Executed this 10 day of January, 2018, at 11:46AM EST.

Mark Magañ

NO. 17-71636

UNITED STATES COURT OF APPEALS FOR THE NINTH CIRCUIT

LEAGUE OF UNITED LATIN AMERICAN CITIZENS, et al.,

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SCOTT PRUITT, ADMINISTRATOR OF UNITED STATES ENVIRONMENTAL PROTECTION AGENCY, et al.,

Respondents.

Declaration of Martha Moriarty

I, MARTHA MORIARTY, declare and state as follows:

- 1. I am the Executive Director of the Learning Disabilities Association of America's ("LDAA") Minnesota affiliate, Learning Disabilities Association of Minnesota ("LDA Minnesota"). I have worked with LDA Minnesota since 2001 and was hired as the Executive Director in 2013. I have been a member of LDAA since LDA Minnesota became an affiliate organization in 2002. LDA Minnesota has been working with families impacted by learning disabilities for over 50 years.
- 2. As the leader of LDA Minnesota, I see families from across the state who contact us for help or who come to our trainings about learning disabilities. Minnesota is a big agricultural state, and there are many families from rural areas who are facing severe challenges

with their children's ability to access support and appropriate special education services for their learning disabilities. Many families call us to help find qualified tutors to help their children outside of school services, LDA has begun offering virtual online tutoring to fill the gaps in rural areas where there are not trained tutors for learning disabilities. There is a lack of qualified special education teachers in our rural schools, including in areas where my nephews attend school. Special education teachers are spread thin and often must share classrooms, or in some schools, general education teachers can obtain a waiver to teach special education students due to the shortage of properly trained and certified educators. As incidence of learning disabilities increase, there is the possibility for a real education crisis, especially in our rural communities. I support LDAA's efforts to seek a nationwide ban on chlorpyrifos because we want to avoid such a crisis and we want healthy brain development in children.

3. I am aware that chlorpyrifos has terrible immediate side effects on people that are exposed to it, and that it effects healthy brain development in children. These kinds of long-term impacts on brain development affect a child's ability to reach his or her full potential, and the costs to society and to families are enormous. For families, it can impact jobs, educational opportunities, and long-term health care needs. For society in general, harm to the developing brains of children also negatively impacts systems meant to support people, including health care, social services, and the educational system. The economic impact is much wider than most people think about when you consider the long-term costs of all the things needed to support a person with learning disabilities. For example, the cost of educating a child through special education is \$16,000, over double the cost of educating a student in general education (NEA, 2004 IDEA Reauthorization).

- 4. The work that I do with LDA Minnesota is not just a job, it is also personal. I have nieces and nephews in both my family and my husband's family who have learning disabilities and attention-deficit/hyperactivity disorder ("ADHD"). They are now in middle and high school, and I have supported my siblings and in-laws with the challenges they face in raising children with learning disabilities. Being a parent of a child with a disability can be challenging throughout childhood, but particularly as they begin entering adulthood and making transitions from school to college and career are causing my relatives parents stress and concern for their child's future independence. I worry about my extended family's continued exposure to pesticides, including chlorpyrifos, because they live in agricultural areas. I don't think it is a coincidence that my family members who have more exposures to pesticides due to where they live are the ones with learning disabilities and ADHD.
- 5. My immediate family and I enjoy camping and other outdoor activities, and we travel all over the state for recreation. One time when we were camping in rural Minnesota, we saw a plane dropping pesticides on a nearby field and we were alarmed by our potential exposure and wondered if we should be camping in that area. I would feel safer for myself and my family if I knew that neurotoxic pesticides like chlorpyrifos were banned so we are not at risk of exposure when we are visiting rural areas in our home state.
- 6. I do the work that I do with LDAA and LDA Minnesota because I want children to grow up in a healthy environment, free from neurological harm from toxic pesticides like chlorpyrifos, and with the ability to reach their full potential.

Pursuant to 28 U.S.C. § 1746, I declare under penalty of perjury that the foregoing is true and correct to the best of my knowledge.

Executed on this 19 day of January , 2018, in Minneapolis, Minnesota.

Martha Moriarty

NO. 17-71636

UNITED STATES COURT OF APPEALS FOR THE NINTH CIRCUIT

LEAGUE OF UNITED LATIN AMERICAN CITIZENS, et al.,

Petitioners,

STATE OF NEW YORK, et al.,

Petitioner-Intervenors.

v.

SCOTT PRUITT, ADMINISTRATOR OF UNITED STATES ENVIRONMENTAL PROTECTION AGENCY, et al.,

Respondents.

Declaration of Maureen Swanson

- I, MAUREEN SWANSON, declare and state as follows:
- I am currently the Director of the Healthy Children Project at the Learning Disabilities Association of America (LDA).
- 2. I have a Masters in Public Administration from the School of Public and Environmental Affairs at Indiana University, with a concentration in environmental policy. Prior to my tenure at LDA, I was a senior policy analyst at the Minnesota Office of Environmental Assistance, now part of the Minnesota Pollution Control Agency.
- 3. I am a co-author of two peer-reviewed articles on how toxic chemical exposures affect children's brain development:

- Bennett D, Bellinger DC, Birnbaum LS, et al; Project TENDR (Targeting Environmental Neuro-Developmental Risks: the TENDR Consensus Statement. Environ Health Perspect. 2016;124(7):A118-A122; and
- Swanson, Maureen and Hepp, Nancy. Protecting Brain Development: How Toxic Chemical Exposures Interact with Nutrition and Genetics to Put Children at Risk. Journal of Amer. Speech-Language-Hearing Assoc. SIG 16 Perpsectives on School-Based Issues. Aug 2012;13:54-49;

And a contributing author to:

- Bellinger D, Chen A and Lanphear B. Establishing and Achieving National Goals for Preventing Lead Toxicity and Exposure in Children. JAMA Pediatrics. May 2017;E1-E2Pursuant to 28 U.S.C. § 1746, I declare under penalty of perjury that the foregoing is true and correct.
- 4. As the Director of LDA's Healthy Children Project, I work to raise awareness of environmental factors, particularly toxic chemicals, that may interfere with healthy brain development and contribute to learning, attention and behavior disorders, with a focus on the fetus, infants and young children, who are especially vulnerable to harm from toxic chemical exposures. I work in partnership with other health and disabilities organizations, health-affected individuals, environmental and environmental justice groups, health professionals and scientists to translate the scientific evidence into effective changes in policies and practices to reduce chemical exposures linked to disease and disabilities.
- 5. I also am co-founder and co-director of Project TENDR (Targeting Environmental Neuro-Developmental Risks). TENDR is an alliance of more than 50 leading scientists, health professionals, and children's health advocates, who in July 2016 published a consensus statement as a national call to reduce widespread exposures to chemicals that interfere with fetal and children's brain development. In the statement, the TENDR experts named prime examples of toxic chemicals that are increasing children's

risks for learning, behavioral or intellectual impairment, as well as specific neurodevelopmental disorders such as ADHD, learning disabilities and autism. These exemplar chemicals include organophosphate pesticides, a class of pesticides that includes chlorpyrifos.

- 6. According to the U.S. Centers for Disease Control and Prevention, the prevalence of learning and developmental disabilities in American children increased 17% from 1997 to 2008, meaning that 1.8 million more American children had a learning or developmental disability in 2006-2008 compared to a decade earlier. Based on the CDC's analysis, published in 2011, one in six children in the United States has a reported learning or developmental disability.
- 7. Learning disabilities cover a range of brain-based disorders and difficulties with learning and processing information, with varying degrees of severity. These disorders involve problems with auditory and visual perception, sequencing and organization, memory, expressive language and fine and gross motor skills. Learning disabilities can include short attention span, difficulty following directions, inability to discriminate among letters, numbers or sounds, difficulty with reading and writing or math, and problems with coordination, and sensory difficulties. Learning disabilities can co-occur with attention and behavior disorders.
- 8. Learning and developmental disabilities persist with lasting impacts on children, families and society. On average, it costs twice as much to educate a child with a learning or developmental disability as to educate a child without a disability.

 Adolescents with learning disabilities are much more likely to drop out of high school, have problems with substance abuse, and wind up in the juvenile justice system. By

conservative estimates, at least one third of children in the juvenile justice system in America have one or multiple learning or behavior disorders. High school graduates with learning disabilities are much more likely to be unemployed and have trouble keeping a job.

- 9. In working on toxic chemical issues related to problems with brain development, LDA and partner organizations address the broad range of learning and developmental disabilities for which toxic chemical exposures can be contributing factors, including ADHD, intellectual impairments, learning disabilities and autism spectrum disorder.
- 10. Based on the extensive and mounting toxicological and epidemiological evidence, and in light of widespread exposures, particularly to pregnant women and children, there is now scientific agreement that toxic chemicals, including organophosphate pesticides, are harming brain development, and that even low-level exposures can increase children's risks for learning, behavioral or intellectual disorders. In utero and during early childhood, there are critical windows of development when even tiny doses of toxic chemicals can do lasting harm.
- 11. Chlorpyrifos, measured by its specific metabolite, TCPy, was detected in more than 91% of women of childbearing age in the CDC's national biomonitoring data (NHANES). According to the CDC, this high percentage of detectable concentrations of chlorpyrifos implies ubiquitous exposure, probably primarily through the food chain. In recent years, multiple studies of pregnant women have shown that chlorpyrifos is present in pregnant women, in umbilical cord blood and in children.

- 12. The National Academy of Sciences estimates that environmental factors, including toxic chemicals, cause or contribute to at least a quarter of learning and developmental disabilities in American children. Although learning and developmental disabilities are complex disorders with multiple causes—genetic, social, and environmental—the contribution of toxic chemicals to these disorders is entirely preventable.
- 13. I have worked as the Director of the Healthy Children Project since December 2006, and am familiar with LDA's policies, practices, membership, and programs. The Learning Disabilities Association of America is a national non-profit membership organization. LDA members are people with learning disabilities, their parents and family members, educators including teachers, professors and school administrators, medical professionals including psychiatrists, psychologists, physicians and nurses; therapists and other service providers, and lawyers and specialists in the areas of education policy, human rights and disability policy and law.
- 14. Founded in 1964, LDA is headquartered in Pittsburgh, Pennsylvania, with state and local chapters throughout the country. It provides support, information and advocacy on behalf of individuals with learning disabilities. Members of LDA join the organization by paying annual dues. Members elect the board, which is the presiding body that votes on actions and policies. Board members are members of LDA. The general membership chooses delegates from each state who elect the Board members at the annual Assembly of Delegates meeting.
- 15. LDA established the Healthy Children Project (HCP) in 2002 to raise awareness of environmental factors, particularly toxic chemicals, linked to problems with

brain development and function, and to reduce and prevent toxic chemical exposures, especially among pregnant women, infants and children, through educating and advocating for changes in products, practices and policies. In 2005, LDA's Board of Directors, elected by LDA members across the country, added "and to reduce the incidence of learning disabilities in future generations" to LDA's mission statement to reflect LDA's commitment to the goal of protecting children's brain development from toxic threats. LDA's mission is thus "to create opportunities for success for all individuals affected by learning disabilities, and to reduce the incidence of learning disabilities in future generations."

- 16. LDA annually secures funding to prioritize, maintain and expand initiatives to ensure its members and the public are kept informed of the latest scientific research on toxic chemicals and health, and made aware of ways to help reduce their families' exposures to toxic chemicals. LDA regularly disseminates the results of scientific research on environmental factors putting children at higher risk for learning disabilities, along with information on ways to reduce toxic chemical exposures, through social media, action alerts, factsheets, newsletter articles and presentations and workshops at LDA's national annual conference, and at conferences and meetings throughout the country.
- 17. LDA convenes meetings of scientists, health professionals, education professionals and children's health advocates to learn and share the latest research findings on chemicals and brain development, and to plan and implement strategies to protect children from toxic chemical exposures.

- 18. LDA strives to ensure that the concerns and interests of its membership are represented in chemical policy decisions that affect children's health and neurological development. LDA holds Congressional briefings, provides written and oral testimony at hearings and public meetings, submits comments to federal and state legislative dockets, meets with policymakers to provide expertise on toxic chemicals and learning disabilities, writes sign-on letters and conducts outreach to partner learning and developmental disability groups, along with scientists and health professionals, to write letters to policymakers, holds press conferences and writes opinion articles and letters to the editor.
- 19. LDA also provides opportunities for members across the country to share their perspectives with decision makers on chemical safety issues, through action alerts that generate phone calls and e-mails, assisting with letters to the editor, drafting and circulating letters for state LDA leaders to sign, etc.
- 20. To better engage and serve its membership on environmental health issues, I along with LDA's Affiliate Coordinator created and coordinate a network involving twenty LDA state affiliate offices who are engaged on a consistent, ongoing basis in advocacy for safer chemical policies with policymakers at the state and federal levels. Through monthly conference calls, regular on-line communication and annual training workshops, we equip LDA state affiliate leaders who are LDA members, both paid and volunteer to raise awareness and disseminate information on toxic chemicals and brain development. LDA state members conduct outreach and give presentations to other non-profit groups such as state chapters of The Arc or Autism Society, to schools and child care centers, including Head Start programs, and to parent and health care provider groups, such as PTO and nurse's associations. This network of state LDA

leaders, along with the national office, engages the wider membership and the public through action alerts, social media, presentations at state and national conferences, etc., to disseminate information on toxic chemical threats to healthy brain development, and ways to reduce prenatal and children's exposures to toxic chemicals.

- 21. After EPA Administrator Pruitt refuted long-established scientific evidence showing low levels of chlorpyrifos harming children's brain development, and decided not to ban chlorpyrifos to protect children's health, LDA took action at the state and federal levels, alerting its membership, the Board, and state affiliate leaders through conference calls, an action alert and an e-newsletter article. Last summer, I, along with five LDA advocates from states where chlorpyrifos is more heavily used in agriculture, traveled to Washington D.C. for two days of meetings with Congressional offices to share our concerns with EPA's decision.
- 22. I was invited to give remarks on behalf of LDA and Project TENDR at Senator Udall's press conference introducing his bill to ban chlorpyrifos. My remarks focused on the scientific consensus that chlorpyrifos changes babies' brains, and contributes to the incidence of learning, behavior and intellectual disorders. LDA widely shared the video of my remarks through social media.
- 23. As co-director of Project TENDR, I coordinated the drafting and sign-on of two separate sets of comments to EPA regarding banning chlorpyrifos. The first comment letter, "Comments to EPA from Environmental Health Scientists and Healthcare Professionals in Support of EPA's Proposal to Revoke Chlorpyrifos Food Residue Tolerances," was submitted in January 2016. The second comment letter, "Comments to EPA from Environmental Health Scientists and Healthcare Professionals

in support of EPA's 2016 Revised Human Health Risk Assessment and the 2015 Proposed Tolerance Revocation for Chlorpyrifos," was submitted to the federal register in January 2017. Both comment letters were signed by dozens of scientists and healthcare professionals.

- 24. I also am assisting TENDR members who are providing testimony in support of state bills to ban chlorpyrifos. Currently, I have convened a small group of experts who are drafting and providing testimony in support of a bill in Maryland.
- 25. Because more individuals are likely to be at higher risk for learning disabilities due to EPA's decision, including children born in subsequent years, LDA will be forced to expend more time and money to provide them with information and assistance. Indirectly, thousands of schools and educators across the country who rely on LDA and are LDA members, along with their communities and the families they serve, also will bear increased costs to assist and educate children with learning disabilities.
- 26. LDA members are being harmed by the EPA decision not to ban chlorpyrifos last year because they are being exposed to this pesticide in their food, in their drinking water, and when it drifts to their homes, day care centers, and schools from the fields where it is sprayed.

Pursuant to 28 U.S.C. § 1746, I declare under penalty of perjury that the foregoing is true

Executed this 19th day of January, 2018, at Pittsburgh, Pennsylvania.

Mauren Swanson

MAUREEN SWANSON

UNITED STATES COURT OF APPEALS FOR THE NINTH CIRCUIT

LEAGUE OF UNITED LATIN AMERICAN CITIZENS, et al.,

Petitioners,

STATE OF NEW YORK, et al.,

Petitioner-Intervenors,

v.

SCOTT PRUITT, ADMINISTRATOR OF UNITED STATES ENVIRONMENTAL PROTECTION AGENCY, et al.,

Respondents.

Declaration of Mónica Ramírez

I, MONICA RAMIREZ, declare and state as follows:

- 1. I am the Deputy Director of the Labor Council for Latin American Advancement (LCLAA), and I have held this position for six months. I am submitting this declaration to describe the interests in this litigation of LCLAA members in obtaining a nationwide ban on chlorpyrifos.
 - 2. I currently live in Chevy Chase, Maryland.
- 3. I grew up in a rural community in Ohio that has a vibrant agricultural economy where farmers regularly apply pesticides and other chemicals to the crops, which poses health risks to the workers who live on the premises and in the nearby area.

- 4. Many of my family members worked in the agricultural fields in Ohio and other states around the country for many years as migrant farm workers.
 - 5. I have been a member of LCLAA since 2016.
- 6. In my capacity as Deputy Director of LCLAA, I support the executive director with the general administration of the organization. I also support the programmatic work of the organization, such as planning events, conferences, worker delegations, briefings and meetings related to specific issues that impact workers, such as pesticides exposure, environmental protection standards, equal pay, sexual harassment and other issues. During my time with LCLAA, I have helped to plan and support LCLAA member delegations to meet with members of Congress related to pesticides exposure. I have also met with staff members from Congressional offices to discuss our concerns related to the harmful impact of pesticides on farmworker families and the nearby area residents who are exposed to drift, not to mention consumers who are at risk of long term health consequences due to consumption of products that have been grown with organophosphate pesticides like chlorpyrifos.
- 7. Prior to my role at LCLAA, I have been an advocate on behalf of farmworkers, specifically farmworker women, for over two decades, including serving as an attorney for farmworkers in different types of cases related to promoting their rights and helping them access justice. I have represented migrant farmworker women in employment litigation, as well as administrative complaints specifically related to pesticides exposure. In addition, I have conducted educational trainings and outreach to migrant farmworker women and their families related to the health consequences of pesticides exposure, how to identify whether an individual has been exposed to pesticides and how to limit introducing pesticides into a workers' home, among other things.

- 8. As an advocate and activist, I have created several major projects and initiatives related to advancing and protecting the rights of farmworker women. Among these, in 2011, I helped to co-found Alianza Nacional de Campesinas (The National Farmworker Women's Alliance), which formally launched in 2012. I currently serve as the President of the Board of Alianza.
- 9. Alianza de Campesinas is an organization that is comprised of women who currently and formerly worked as migrant farmworkers, in addition to individuals who come from farmworker families. The organizational priorities have been established by farmworker women for farmworker women and, since its establishment in 2012, pesticides has been one of the top advocacy priorities.
- 10. Alianza has worked to address concerns related to the devastating consequences of pesticide exposure, application and use on farmworker women, including birth defects in children, miscarriage, neurological deficiencies and harm, headaches, nausea and other health consequences, by conducting public education events with community members, hosting our a public awareness art activism project "morralitos" each February, which encourages community members to design handkerchiefs with messages related to ending the use of pesticides and providing needed care to community members who have been exposed, and engaging in advocacy with political leaders to educate them about the health consequences to farmworkers and other communities due to the use of pesticides on the produce that farmworkers grow and harvest, as well as food that consumers eat and fields that community members live near that present the danger of pesticide drift to individuals in the area surrounding the agricultural fields.
- 11. I am personally concerned with my own family's health related to exposure to chemicals. Several of my family members who worked in the agricultural fields and individuals

who lived for years in agricultural communities, including the one where I was raised, have died from cancer. While it is difficult to know whether their health challenges were related to their exposure to pesticides, knowing the impact of pesticides on individuals, I worry that these illnesses may have stemmed from exposure to pesticides.

- 12. I've learned that in Ohio, chlorpyrifos is used in corn, soybeans, alfalfa, vegetables, fruit, orchards and other crops. As a teenager, I worked for a very short period picking cucumbers in Ohio. I don't know if I was exposed to chlorpyrifos, but I worry that I might have been exposed to pesticides while I worked in the fields. I am also concerned that I could be at risk for health consequences because I have spent years near and around agricultural fields because of where I have lived, not to mention because of my work which has put me in frequent contact with agricultural fields where pesticides were likely applied.
- 13. As a mother to a four-year-old son, I have concerns about the produce that he consumes and whether he will experience any negative health effects where pesticides have been used on the fruits and vegetables that he eats, particularly where these chemicals might have leached into the produce or where residue remains on the food that he eats. In particular, I am deeply concerned about my son's brain and body development, if he has been consuming products with residues of chlorpyrifos in food and drinking water.
- 13. I am aware that studies show associations between early life exposure to chlorpyrifos and decreased cognitive function and behavioral problems. I am also aware that chlorpyrifos is used in many fruits and vegetables that children eat. This is particularly troublesome since relative to adults, kids consume more fruits and vegetables, and drink more water and juice.

- 14. As the child of farmworkers and an advocate for farmworker women and their families, I am concerned about the exposure of children to pesticides in agriculture and beyond. It's estimated that there are approximately 500,000 children that labor in agriculture and exposure to agricultural chemicals at an early age can cause irreversible harm.
- 15. In addition to occupational exposure to pesticides for the children, women and men that work in agriculture, take-home exposure puts farmworker families at risk since farmworkers bring chemical residues on their bodies and clothes. If farmworkers are not adequately trained about the dangers of take-home exposure for children, pregnant women and others in their family, they may not know that they should change their clothes before going into the house or embracing their children.
- about neurotoxic chlorpyrifos, I was appalled to learn that EPA Administrator Scott Pruitt is ignoring the science showing that chlorpyrifos is harmful to children and farmworkers and is refusing to ban chlorpyrifos. This decision leaves farmworker women, individuals living in rural communities and all consumers exposed to a chemical that does not belong in our food or our communities. Given the neurological impact resulting from the use of chlorpyrifos, its use stands to have economic and monetary consequences. Workers cannot work to their full potential if they get sick from pesticides that are applied while they are working or in the vicinity where they live. This, thus, results in a negative consequence for our economy. In addition, healthcare costs that are incurred, some of which must be paid for through public health programs, result in monetary harm consequences that could be avoided. These consequences are immediate, long-lasting and wholly preventable.

17. In July 2017, I joined a delegation of LCLAA members who came to Washington, DC to urge the Senate to support a bill that would ban food uses of chlorpyrifos.

Pursuant to 28 U.S.C. § 1746, I declare under the penalty of perjury that the foregoing is true and correct, to the best of my knowledge, information, and belief.

Executed this 19th day of January 2018, in Washington, DC.

Mónica Ramírez

UNITED STATES COURT OF APPEALS FOR THE NINTH CIRCUIT

LEAGUE OF UNITED LATIN AMERICAN CITIZENS, et al.,

Petitioners,

STATE OF NEW YORK, et al.,

Petitioner-Intervenors.

v.

SCOTT PRUITT, ADMINISTRATOR OF UNITED STATES ENVIRONMENTAL PROTECTION AGENCY, et al.,

Respondents.	

Declaration of Ofelia Aguilar

I. OFELIA AGUILAR declare and state as follows:

- 1. I have lived in the United States since 1992. I live in Homestead, Florida, in an agricultural area. I have always worked hard to earn a living for my family and I worked as a farmworker for over twenty years. I have also been a member of the Farmworker Association of Florida (FWAF) for almost two decades.
- 2. I have worked with the Association since they started doing trainings about pesticides and workers' rights. I participate in the activities as a volunteer. I invite new members to be informed just like me. If there is abuse, the Association helps us understand the process and how to file claims. They also inform us how to take care of our health and where workers can turn to if they do not have health insurance.

- 3. As a farmworker, exposure to pesticides happens frequently. I worked on a farm for almost two years and in the last three months before the pesticide poisoning incident I experienced there, I was assigned to work in an area where pesticides were being applied near me every day. This farm had a plant and flower nursery, where the plants are kept in both open-air and enclosed areas. It was the season of the Mandevilla plant and I was assigned to work in that area. Mandevilla is a plant with flowers of various colors, and they were spraying them while other workers were tying the plant to some wooden sticks, which is what we do so that as the plant grows; the plant wraps around the sticks and it helps it take form. We would work in groups of 15-20 women that prepared the plants, and in our group there was a supervisor who would come once or twice a day to check on the work and then would leave. The pesticide application was happening very close to me, to give you a sense of how close it was, it's as if I was standing on the driveway of your house and the pesticide applicators were in the yard. The applicators always sprayed the plants near us. On a daily basis, we would comment to one another that the smell of the pesticides was unbearable. The pesticides are applied even on windy days. Although the odors were strong, we were afraid to complain for fear of being fired. The supervisors would tell us that whatever was being applied would not harm us.
- 4. After spending three months working in the Mandevilla area, I began to feel sick. I felt dizzy, with a strong headache, and my eyes burned a lot. I told my supervisor that I didn't feel well and he told me not to worry about it. In the last week of that month, I summoned my courage to tell my immediate supervisor that I was feeling worse and needed help. His reaction only made things worse. He told me that I felt sick because I was old. At the time of the incident, I was only 43 years old. He also told me that he didn't have anything to give me to make me feel better and that if I wanted medicine, I had to get it myself. I asked the supervisor to take me to the doctor

and he told me that he was not going to stop working and leave his job to listen to my complaints. He told me that other people were not complaining, so there was no problem. However, I knew that other fellow workers were not feeling well either but they were afraid to say anything out of fear of being fired.

- 5. After that incident and with difficulty, I headed home. There was a driver that handles the van that transports the workers from the Mandevilla farm to the area where we park our cars and punch our time cards. The driver saw me and noticed that I was having difficulty getting into the van. My body was trembling, my head and throat really hurt and I could not speak clearly. He told me, "you have to ask for help. You have to complain because those people do the same with everyone." He was referring to putting people to work without caring if the work was making them sick.
- 6. That day, I arrived at my house with great difficulty. I did not go to the hospital because I was going through a very tough economic situation and I was afraid of having to pay a large bill for services. I could not eat dinner when I got home. I only drank water. The next day I woke up with a severe stomach ache. It took two days for my eyes to get better because they were very red. I felt nauseous for several days. Many months after the incident I could not eat with ease because my stomach would still hurt so much.
- 7. The evening of the incident, I called the Association to inform them about what had happened and they told me to go to their offices to document the incident because what the supervisor had done was not right.
- 8. The next day, when I returned to work, my supervisors were annoyed with me. They told me that I wouldn't be working in the area where I got sick. They separated me from my co-

workers and made me work by myself. At noon, I called the supervisor and asked him to give me a copy of the pesticide incident report because I needed it. I asked him to bring it to the area where I was working. He told me he wasn't going to stop doing his job and pretended not to know what I was talking about. When I insisted, he said that he did not have to write a report and that he was not going to give me anything because he claimed that I was a problematic person. He also said that he had asked for me to be assigned to work in another area where he did not have to deal with me.

- 9. That is why I turned to the Farmworker Association of Florida for help. Through the Association, I learned about my rights and they informed me that when pesticide poisoning occurs, the employer has to document the incident and report it.
- 10. I stopped working in the fields because my employer was retaliating against me, and my coworkers were told not to talk to me because I was a "bad influence." I was the only person that complained and I worry about all the workers who are exposed to really harmful pesticides but are afraid to speak out. Many people are just trying to make ends meet and they are afraid to complain for fear of losing their jobs. I had the Association to turn to for help, but what about other workers across the country that don't have organizations that can help them when pesticides are making them sick? I cannot pronounce chlorpyrifos but I've learned that it is used in many products in Florida, including fruits like citrus, vegetables and ornamental plants. I don't know if I was exposed to chlorpyrifos while I was working but I have learned that this chemical poisons many workers.
- 11. I worry about my family's exposure to pesticides because I have children and grandchildren, and I do not want them to go through the incident that I went through. I have seen children and young people working on the farms, in the vegetable fields and in the nurseries. I

worry that they are being exposed to pesticides. My youngest son is three years old, and I have three grandchildren, a four-year-old, a two-year-old and a three-month-old baby. I am worried that they will be exposed to some type of chemical that impacts their development. Pesticide poisoning is something horrible that I do not want anyone in my family or any human being to experience.

- 12. It is not fair that the administration is refusing to ban this chemical and is not considering the health of farmworkers and children. They are only considering the economic benefit and the profits of the corporations making these chemicals and they are forgetting about us, the people that are most exposed.
- 13. I worry that this chemical is in the food my family eats and the water we drink. I also worry about pesticide drift because we constantly experience it here. Where we live there are fields of beans, corn, cucumber, guava and tomato and when they apply pesticides, it is dispersed by the air and reaches our homes. You can feel it when the pesticides get inside your home, you can smell it and you feel uncomfortable. Now that I have the baby, when we see people spraying pesticides, we get in the car and drive away so we do not have to breath it. But the problem is when they spray at night –the smell enters the home and we cannot do anything about it.
- 14. To advocate for stronger protections for farmworker families and communities, I traveled to Washington, DC in July 2013. I have met with officials at the Environmental Protection Agency (EPA) and I spoke at a Congressional briefing on pesticides, urging for stronger protections from pesticide exposure. It's important that decision makers know that their policies affect people like me and my family, and many more. I hope that our voices will be heard and that this toxic chemical is banned to protect us all.

Pursuant to 28 U.S.C. § 1746, I declare under the penalty of perjury that the foregoing is true and correct, to the best of my knowledge, information, and belief.

Executed this 19th day of January 2018, in Homestead, FL.

Ofelia Aguilar

Ofelia Aguilar

CERTIFICATE OF TRANSLATION

I, ANDREA L. DELGADO, pursuant to 28 U.S.C. § 1746, declare under penalty of perjury under the laws of the United States of America that I am fluent in the English and Spanish languages and that I truly and correctly translated the foregoing declaration to the best of my ability.

Andrea L. Delgado

UNITED STATES COURT OF APPEALS FOR THE NINTH CIRCUIT

LEAGUE OF UNITED LATIN AMERICAN CITIZENS, et al.,

Petitioners,

STATE OF NEW YORK, et al.,

Petitioner-Intervenors,

v.

SCOTT PRUITT, ADMINISTRATOR OF UNITED STATES ENVIRONMENTAL PROTECTION AGENCY, et al.,

Respondents.

DECLARATION OF RAMON RAMIREZ

I, RAMON RAMIREZ, declare and state as follows:

- 1. I am the President of Pineros y Campesinos Unidos del Noroeste (Northwest Treeplanters and Farmworkers United or "PCUN"). I have held this position since PCUN's founding in 1985. Before becoming President of PCUN, I worked as a farmworker organizer.
- 2. Based in Woodburn, Oregon—the center of Oregon's agricultural industry—PCUN is Oregon's only farmworker union and the largest Latino organization in the state. Since its founding, PCUN has registered over 6,000 members, 98 percent of whom are immigrants from Mexico and Central America. Approximately one-third of PCUN's members come from indigenous communities in the Mexican states of Oaxaca, Puebla, Guerrero, Michoacan, Nayarit,

Sinaloa, and Baja California. Most of these indigenous workers speak indigenous languages, such as Mixteco, Trique, or Zapoteco, but little to no English or Spanish.

- 3. PCUN's mission is to empower farmworkers to recognize and take action against systematic exploitation and all of its effects. To this end, PCUN is involved in community and workplace organizing on many levels. For example, PCUN's Collective Bargaining Committee negotiates and implements union contracts with local farms. Our Service Center provides members with support services such as translation, referrals to attorneys, and immigration assistance. Our Workplace Health program seeks to combat serious threats facing Oregon's farmworkers, including exposure to dangerous pesticides, a lack of education about safe pesticide use, sexual harassment, and workplace sexual assault. To educate and entertain our community while also raising political consciousness, PCUN operates Radio Movimiento, a community radio station with the slogan "La Voz del Pueblo" (The Voice of the People).
- 4. PCUN's members help to select the union's priorities by voting at annual meetings. As President, I am involved in coordinating all of PCUN's activities. Much of my time is devoted to lobbying Oregon's legislature and partnering with organizations across the country to protect farmworker rights. In June 2017, I traveled to Washington, D.C. to ask senators from the Pacific Northwest in support of a bill to ban food uses of chlorpyrifos.
- 5. Exposure to pesticides and other agricultural chemicals is a serious problem in our community. Many of PCUN's members have experienced the effects of exposure to pesticides. These symptoms include headaches, dizziness, fatigue, sleeplessness, nausea, and vomiting. In addition to pesticide exposure at work, many PCUN members live very close to areas where pesticides are applied. As a result, these members—along with their children—are threatened by exposure to dangerous pesticides even when they are not at work, because pesticides drift from

fields to their homes. Some farmworker housing is only a few feet from fields where pesticides are sprayed, and people can be exposed to pesticides even when they are indoors. This is especially true during the summer months when people have open windows, or fans and air conditioners bring in air from outside, and they receive no notification when pesticides will be sprayed near them.

- 6. I have experienced symptoms of pesticide poisoning after being exposed through spray drift. Around April 2004, I was standing near a field when a cloud of pesticides fell on me and the group I was with. I immediately began to feel itchy. My eyes watered. I became dizzy, nauseous, and thirsty. I reported this incident to the Oregon Occupational Safety and Health Administration.
- 7. I understand that the United States Environmental Protection Agency ("EPA") found that people may be exposed to chlorpyrifos through their drinking water, and that people who live in agricultural areas may be at more risk of drinking water contamination. I also understand that EPA's proposal to ban chlorpyrifos was based on unsafe drinking water exposures. I am also aware that the U.S. Department of Agriculture has detected unsafe levels of chlorpyrifos on fruits and vegetables. In addition to drift and work exposures, PCUN's members and their families may also be exposed to this dangerous pesticide through the food they eat and the water they drink.
- 8. I know of two schools in Woodburn that are located very close to agricultural fields. On numerous occasions, I have seen pesticides being applied to those fields. PCUN's members with children at these schools are afraid that their children will be exposed to pesticide drift while playing outside at recess. Having seen how close the pesticide spray comes to the

schools, I am also concerned about the safety of these children, especially with pesticides like chlorpyrifos that harm children's brains.

- 9. I am aware of EPA's findings that chlorpyrifos is a toxic chemical that is harmful to all people, and especially to children. I was disappointed when I learned that EPA Administrator Scott Pruitt acted against the findings and recommendations of EPA's own scientists and refused to ban chlorpyrifos. Following Administrator Pruitt's denial, PCUN joined the other petitioners in filing objections with EPA and filing this lawsuit on June 5, 2017.
- associated with chlorpyrifos exposure and campaigning to get this pesticide banned. Because EPA refused to ban the pesticide and is delaying acting on the objections, PCUN must expend additional time and resources on educating our members about chlorpyrifos and campaigning for a ban. I hope EPA responds to the objections and acts to ban chlropyrifos. EPA's ongoing delay leaves us in a state of limbo, and leaves workers and their families at risk, which this lawsuit seeks to remedy.

Pursuant to 28 U.S.C. § 1746, I declare under the penalty of perjury that the foregoing is true and correct, to the best of my knowledge, information, and belief.

Executed this 19th day of January, 2018.

Ramon Ramirez

UNITED STATES COURT OF APPEALS FOR THE NINTH CIRCUIT

LEAGUE OF UNITED LATIN AMERICAN CITIZENS, et al.,

Petitioners,

STATE OF NEW YORK, et al.,

Petitioner-Intervenors,

V.

SCOTT PRUITT, ADMINISTRATOR OF UNITED STATES ENVIRONMENTAL PROTECTION AGENCY, $\it et al.$,

Respondents.

DECLARATION OF SHARON BOLTON

DECLARATION OF SHARON BOLTON

I, SHARON BOLTON, declare and state as follows:

- I have been a member of the Natural Resources Defense Council (NRDC) since
 and I support NRDC's efforts to compel the Environmental Protection Agency
 to protect the public from hazardous chemicals.
 - 2. I am 67 years old and I live in Tyler, Texas.
- 3. I have three children and three young grandchildren, all of whom reside in Tyler.
- 4. I am aware that organophosphate pesticides including chlorpyrifos are commonly applied to a variety of crops in the United States and represent a hazard to human health. I initially learned about the risks of pesticide exposure over forty years ago, and I am deeply concerned about the consequences of chlorpyrifos use to public health and the environment.
- 5. I am concerned about my and my family's exposure to chlorpyrifos and chemicals like it. I live near peach orchards, and I am worried that I may be exposed to chlorpyrifos and other organophosphate pesticides that are applied to those orchards. My children and grandchildren also live in this area, and I worry that exposure to these chemicals will adversely affect their health.
- 6. I have three young grandchildren, 4-year-old, an 8-year-old, and a 10-year-old. They frequently play outdoors, and I am concerned that exposure to chlorpyrifos and chemicals like it may adversely affect their health and development.
- 7. I am particularly worried about the hormone disrupting effects of chlorpyrifos. My niece resides in Elwood, Indiana, within twenty miles of many working farms. She experienced a hormone abnormality that required consistent medical treatment for the entirety of her childhood. I am concerned that exposure to chlorpyrifos and pesticides like it interfered with her hormone functions.
- 8. I am concerned about pesticide residues, including chlorpyrifos, on the fruit and vegetables that I consume. Because of this concern, I purchase organic produce whenever possible. Also, I do not use chlorpyrifos or chemicals like it at home. But I am concerned about exposure that is not within my control.
- 9. I drink tap water and believe that it should be free of hazardous concentrations of chlorpyrifos and other toxic chemicals. I am concerned that my tap water could be affected by chlorpyrifos.

- 10. I am worried about chronic effects of long-term exposure to chlorpyrifos and pesticides like it for my children and me. I was raised in Muncie, Indiana, and resided there until I was thirty years old. During that time, I lived in an agricultural area on property neighboring working farms. I am concerned that exposure to chlorpyrifos and pesticides like it during that time caused damage to my health. I lived in Indiana during my pregnancies and after the birth of my children, and I worry that my exposure to these chemicals adversely affected their health. In addition, I regularly observed aerial applications of chemicals to the com fields across the street from my home, which sometimes took place while my children were playing outdoors when they were young. Since then, I have been concerned about exposure resulting from drift and its long-term effect on my children and me.
- 11. I am aware that in 2007 NRDC and the Pesticide Action Network of North America petitioned EPA to revoke all tolerances and cancel all registrations for ehlorpyrifos.
- 12. I am worried about this administration's attack on our environment and environmental safeguards, such as the decision not to ban chlorpyrifos. I literally do not sleep well. I worry about waking up to find out what the administration has done to destroy our environment and environmental safeguards
- 13. EPA has proposed to ban chlorpyrifos and has never reversed its findings that support the proposed ban. If EPA banned chlorpyrifos, I think that would reduce my concerns about unwanted exposure to this dangerous pesticide. The longer EPA takes to act on chlorpyrifos, the longer my family and I risk being exposed to this dangerous chemical.

Pursuant to 28 U.S.C. § 1746, I declare under penalty of perjury that the foregoing is true and correct, to the best of my knowledge, information, and belief.

Executed this 19 day of January, 2018, at 5:15 p.m.

Sharon Boltor

SHARON BOLTON

UNITED STATES COURT OF APPEALS FOR THE NINTH CIRCUIT

LEAGUE OF UNITED LATIN AMERICAN CITIZENS, et al.,

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Respondents.

Declaration of Sylvia Youngblood

I, SYLVIA YOUNGBLOOD, declare and state as follows:

- I have been a member of the Learning Disabilities Association of America ("LDAA") for about six years, and I have been advocating for people with learning disabilities for over 25 years.
- 2. I live in El Monte, California, and I am very active in my community, particularly in working with other parents who have children with learning disabilities. I am the mother of four children, now ages 16 to 28, who all have specific learning disabilities. I am part of our local community advisory on special education, and I worked with our Soroptimist chapter to develop a scholarship fund for students with disabilities.

- 3. As a member of LDAA, I participate on a number of committees. I am the chair of our justice committee, where we talk about how learning disabilities funnel children into the school-to-prison pipeline. I am also on our public policy committee, finance committee and our development committee, and I serve on our Healthy Children Project. LDAA created the Healthy Children Project to raise awareness, promote policies and practices, and to build a nationwide network of LDAA members to protect children's health and reduce toxic exposures. Our mission is to: 1) Raise awareness of environmental factors, particularly toxic chemicals, that can harm brain development, contributing to learning disabilities and behavior disorders; 2) Promote policies and practices to prevent toxic chemical exposures, especially among pregnant women and children; and 3) Build a nationwide network of LDA members working to protect children's health and reduce toxic exposures that may lead to learning disabilities in current and future generations. I also advocate on behalf of individuals with learning disabilities and educate community members from a parent and advocate standpoint. I help parents navigate the school system, which is especially hard for parents of children with disabilities.
- 4. Raising children with learning disabilities is a challenge to say the least. Once you accept that this is your "normal," it gets a little easier, but it is always a fight and always a battle. I don't have the experience of just packing a lunch, sending my kids off to school, and talking about our days at dinner. I would go to work and get calls from the school telling me I need to pick up my kids, that they are being suspended, that they got "F" report cards. Some days at work I just look at the phone and hope that it won't ring. Being at my children's school is part of my day-to-day life, and I've had to get to know the school, the teachers, and the administrators very well. It can be really stressful and I have had to work to develop my advocacy skills. Sometimes I would just burst into tears wondering why the school hated my

child. I have had school staff tell me directly that they don't want my kid there. As a parent, you take that personally because that is your child. It is very emotional.

- 5. Chemicals like chlorpyrifos that can cause learning disabilities should not be allowed to be used on our food. It is cruel to inflict those harms on families. At my son's high school, they have a salad bar, which is wonderful, but I worry about what chemicals are on that produce. I do not know that he is always, or ever, receiving organic foods. I appreciate that we are pushing fruits and vegetables on our kids while they're at school, but I want to know that they are actually healthy and that my son is not being exposed to harmful pesticides.
- 6. If EPA knows that chlorpyrifos has the potential to create these effects in pregnant women and children, and I understand that EPA has made such findings, then shame on them for manufacturing kids with learning disabilities. They do not understand the real effects and costs that their action (or lack of action) creates in terms of medical costs, educational costs, and prison costs, as well as emotional costs to families. I urge the Court to order EPA to take long overdue action and protect our children from chlorpyrifos.

Pursuant to 28 U.S.C. § 1746, I declare under penalty of perjury that the foregoing is true and correct to the best of my knowledge.

Yourselvery plant

Executed on this 16 day of January, 2018, in El Monte, California.

UNITED STATES COURT OF APPEALS FOR THE NINTH CIRCUIT

LEAGUE OF UNITED LATIN AMERICAN CITIZENS, et al.,

Petitioners.

STATE OF NEW YORK, et al.,

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v.

SCOTT PRUITT, ADMINISTRATOR OF UNITED STATES ENVIRONMENTAL PROTECTION AGENCY, et al.,

Respondents.

Declaration of Virginia Ruiz

I, VIRGINIA RUIZ, declare and state as follows:

1. I am the Director of Occupational and Environmental Health at Farmworker Justice ("FJ"), a national advocacy and education organization whose mission is to support farmworkers in their efforts to improve their living and working conditions. My job responsibilities include educating the public, government officials and lawmakers about the adverse health impacts to farmworkers and their families from exposure to pesticides, and the need to reduce their exposure to such toxins. I work with farmworkers and community-based organizations across the U.S. to help workers and their families understand these occupational hazards and how to prevent pesticide-related illness and injuries. I also assist legal services programs and community organizations with developing outreach materials, accessing and

understanding pesticide and work safety laws and regulations.

- 2. I submit this declaration based on my personal knowledge and based on more than 20 years' experience as a farmworker advocate. I have been working in my current position for 17 years, advocating to protect workers from pesticide poisoning and other workplace hazards. Prior to working at FJ, I was Staff Attorney for California Rural Legal Assistance's Indigenous Project, representing indigenous migrants from southern Mexico and Guatemala. I have a law degree from Stanford Law School.
- 3. FJ has long advocated for more comprehensive protection of workers from exposure to pesticides, particularly the highly toxic organophosphates such as chlorpyrifos. The organization has submitted numerous and extensive comments during the registration review process for chlorpyrifos and other pesticides, and during the rulemaking process for worker protection regulations.
- 4. FJ helped prepare comments that were submitted to EPA on January 5, 2016, on behalf of a large coalition of farmworker unions, farmworker advocates, and environmental advocates. The comments supported EPA's proposed rule to revoke all food tolerances of chlorpyrifos. *See* 80 Fed. Reg. 69,080 (Nov. 6, 2015).
- 5. In November 2016, EPA published its Revised Human Health Risk Assessment of chlorpyrifos, which found, among other things, that there are no safe levels of the pesticide in food or water, that unsafe exposures to farmworkers continue on average 18 days after applications, and that workers who mix and apply chlorpyrifos are exposed to unsafe levels even when using protective gear and engineering controls.
- 6. Consistent with its mission, FJ was pleased with EPA's findings, and we were hopeful that farmworkers' exposure to chlorpyrifos would soon end. FJ submitted comments

to EPA on January 17, 2017, along with other farmworker and environmental advocates, urging EPA to revoke all food tolerances of chlorpyrifos.

- 7. We were outraged when EPA announced on March 29, 2017 that it would not ban any current uses of chlorpyrifos, despite the overwhelming evidence that the pesticide harms children, workers and the environment. FJ is very concerned that continued use of chlorpyrifos puts thousands of farmworkers and their families at risk for serious injury or illness every day.
- 8. EPA's failure to adequately assess and constrain the risks of chlorpyrifos results in adverse health impacts among workers and their families, and contamination of their communities. FJ will continue to provide technical assistance to farmworkers and farmworker advocates to help farmworker communities avoid exposure to chlorpyrifos and prevent adverse health effects. FJ will devote scarce resources to protect workers from chlorpyrifos, through legal support, research, and advocacy on their behalf. If fewer people were exposed to chlorpyrifos, FJ could devote more time and resources to other important issues impacting farmworkers, including other workplace hazards, substandard wages, discrimination in the workplace, and sexual harassment.

Pursuant to 28 U.S.C. § 1746, I declare under penalty of perjury that the foregoing is true and correct.

Executed this 19th day of January 2018, in Washington, DC.

Virginia Ruiz