CALIFORNIA NURSES ASSOCIATION
National Nurses United
A Voice for Nurses. A Vision for Healthcare.

OAKLAND
2000 Franklin Street
Oakland CA 94612
phone: 510-273-2200
fax: 510-663-1625

SACRAMENTO
Government Relations
770 L Street
Suite 1480
Sacramento CA 95814
phone: 916-446-5019
fax: 916-446-3880

July 28, 2015

Brian Leahy, Director
George Farnsworth, Chief of Enforcement
Department of Pesticide Regulation (DPR)
P.O. Box 4015
Sacramento, CA 95812-4015
Emails: brian.leahy@cdpr.ca.gov george.farnsworth@cdpr.ca.gov

RE: Limit pesticide use near schools & promote innovative agriculture

Dear Director Leahy and Chief Farnsworth,

The California Nurses Association (CNA) urges DPR to address the problem of pesticide use near schools. In a report released last year, the Department of Public Health (DPH) found soil fumigants and other pesticides that are known to cause cancer, harm to the brain and nervous system, and harmful reproductive and respiratory effects being used in large quantities within ¼ mile of many California schools. The serious health risks associated with this kind of pesticide use cannot be tolerated for California's children.

CNA represents more than 86,000 registered nurses throughout the state and routinely engages with state agencies on matters involving public health. As registered nurses, CNA members are often on the front line in caring for people whose health is compromised by environmental degradation and harmful industrial practices. As patient advocates, a guiding principle for our members is the view that healthcare is a human right and that where environmental problems jeopardize human health, we have an obligation to help protect people from those health risks. As such, CNA has serious concerns about heavy agricultural pesticide use near schools throughout California. We urge DPR to take a precautionary approach and move quickly towards adopting new protections for schoolchildren from hazardous and volatile pesticides.

CNA nurses are dedicated to preventing all forms of illness, protecting health, and alleviating human suffering. In keeping with our vision of health care for all, we are deeply concerned about the ways in which racial disparities and discrimination can contribute to adverse health outcomes and access to health services. As such, CNA is particularly concerned about the disproportionate exposure of Latino schoolchildren to hazardous and volatile pesticides. This unacceptable pattern was documented last year in a report by the Department of Public Health (DPH), which showed that Latino children are almost twice as likely as white children to attend schools near the heaviest agricultural pesticide use. This is an example of environmental racism and a civil rights violation that DPR must remedy by decreasing the risk of pesticide exposure at schools across the state.

WORKSAFE
safety, health, and justice for workers
seguridad, salud, y justicia para los trabajadores

July 28, 2015

Brian Leahy, Director
George Farnsworth, Chief of Enforcement
Department of Pesticide Regulation (DPR)
P.O. Box 4015
Sacramento, CA 95812-4015
Emails: brian.leahy@cdpr.ca.gov george.farnsworth@cdpr.ca.gov

RE: Limit pesticide use near schools & promote innovative agriculture

Dear Director Leahy and Chief Farnsworth,

Worksafe welcomes DPR's attention to the problem of pesticide use near schools due to serious concerns. By 2016, DPR should move swiftly to adopt new protections for schoolchildren from hazardous and volatile pesticides and find new ways to promote and support sustainable, cutting-edge agriculture.

Worksafe is a statewide organization dedicated to protecting people from job-related injuries, illnesses, and death. We have worked over the years to protect teachers and other school employees from various hazards including lead and asbestos, as well as supporting an initiative by NIOSH to urge schools to reduce their own use of pesticides by switching to integrated pest management. Many of us are also parents of school-age children, and so are also concerned about the serious threat posed by pesticide drift.

We are particularly concerned about the disproportionate exposure of Latino schoolchildren, a fact documented by a Department of Public Health (DPH) report released last year. Latino children are almost twice as likely as white children to attend schools near the heaviest agricultural pesticide use. This is a civil rights violation that DPR must rectify by decreasing the risk of pesticide exposure at schools across the state. The DPH report also found soil fumigants and other pesticides which are known to cause cancer, reproductive system effects, harm to the brain and nervous system, and respiratory effects being used in large quantities within ¼ mile of many California schools.

DPR should require one-mile protection zones (buffer zones) between fields where pesticides of public health concern are used and schools, childcare centers, school bus stops, and known school routes. Pesticides of public health concern include pesticides that show evidence of causing cancer, reproductive damage, harm to the brain and nervous system, and asthma and other respiratory problems. Protection zones of ¼ mile currently required in some counties are simply not adequate for health protection. The UC Davis MIND Institute recently showed that mothers who lived within a mile of fields where chlorpyrifos and other pesticides were sprayed while pregnant show a 60% higher chance of having children with autism. The DPH report documented that chlorpyrifos was the 8th most common pesticide used within ¼ mile of schools in 2010.

Second, no-spray protection zones around schools should be enforced at all times for ground, air blast, as well as for aircraft applications, because students, teachers and community members are often on school

55 Harrison Street, Suite 400 • Oakland, CA 94607
P: 510 302 1011 • F: 510 663 5132 • www.worksafe.org

grounds for scheduled events and unscheduled activities when school is not formally in session. Furthermore, pesticides can evaporate off the crop plants for an extended period after they are applied, and pesticide contaminated dust can be blown onto school grounds and tracked into classrooms.

Third, once the new no-spray protection zones are in place, DPR should conduct ongoing air monitoring at half a dozen schools around the state that have been identified as having the most pesticides of public health concern applied nearby. Any exceedances of health screening levels detected by air monitors should be immediately reported to local school and county officials, parents, and teachers, and should trigger an expansion of the protection zone.

Fourth, while large, one-mile buffer zones are essential for reducing exposure and protecting children's health, if <u>any</u> pesticide use continues to be allowed within 1 mile of schools, advance notification should be provided to the schools. Schools should then be required to notify teachers and use the robo-call systems to notify parents.

Finally, while these are important first steps, your department needs to devote significant resources and attention, in collaboration with other agencies and universities, to reducing the use of and phasing out the use of soil fumigants and other high toxicity, drift-prone pesticides and helping farmers obtain resources to assist with this transition. Through innovation in agriculture, we can help California farmers adopt cutting-edge practices and tools that keep agriculture prosperous.

Thank you for your commitment to the state's children and to the success of our farmers.

Sincerely,

Gail Bateson
Executive Director
Worksafe

Social Justice Committee ~ Faith in Action ~
Unitarian Universalist Church of the Monterey Peninsula, 490 Aguajito Rd., Carmel, CA 93923

Brian Leahy, Director and George Farnsworth, Chief of Enforcement
Department of Pesticide Regulation (DPR)
P.O. Box 4015
Sacramento, CA 95812-4015

24 July 2015

SUPPORT: 1 Mile buffer zone around schools

Dear Director Leahy and Chief Farnsworth:

We welcome DPR's attention to the problem of pesticide use near schools because as a concerned organization we have serious concerns about heavy agricultural pesticide use near local schools. Our close neighbors in Salinas face some of the heaviest usage of the most harmful pesticides.

As a committee of a faith organization committed to "justice, equity, and compassion in human relations" as well as respect for "the interdependent web of all creation of which we are a part", we are called to step forward and speak on this matter.

We are particularly concerned about the disproportionate exposure of Latino schoolchildren, a fact documented by the Department of Public Health (DPH) report released last year. Latino children are almost twice as likely as white children to attend schools near the heaviest agricultural pesticide use. This is a civil rights violation that DPR must rectify by decreasing the risk of pesticide exposure at schools in the midst of agricultural fields. The DPH report also found soil fumigants and other pesticides which are known to cause cancer, reproductive system effects, harm to the brain and nervous system and respiratory effects being used in large quantities within 1/4 mile of many rural California schools.

DPR should require one mile protection zones (buffer zones) between fields where pesticides of public health concern are used and schools, childcare centers, school bus stops, and known school routes. Pesticides of public health concern include pesticides that show evidence of causing cancer, reproductive damage, harm to the brain and nervous system, and asthma and other respiratory problems. Protection zones of ¼ mile currently required in some counties are simply not adequate for health protection.

1 mile buffer zones are essential for reducing exposure and protecting children's health, if <u>any</u> pesticide use continues to be allowed within 1 mile of schools, advance notification should be provided to the schools and schools should be required to in turn notify teachers and use the robo-call systems to notify parents.

Your department needs to devote significant resources and attention to reducing the use of and phasing out the use of soil fumigants and other high toxicity, drift-prone pesticides and helping farmers obtain resources to assist with this transition.

Sincerely,
Mibs McCarthy
Mibs McCarthy, Chair
UUCMP Social Justice Committee
~ Faith in Action ~

UNITED STEELWORKERS

UNITY AND STRENGTH FOR WORKERS
LOCAL 675

Philip Baker
President
David W. Campbell
Secretary-Treasurer

July 27, 2015

Brian Leahy, Director
George Farnsworth, Chief of Enforcement
Department of Pesticide Regulation (DPR)
P.O. Box 4015
Sacramento, CA 95812-4015
Emails: brian.leahy@cdpr.ca.gov george.farnsworth@cdpr.ca.gov

RE: Limit pesticide use near schools & promote innovative agriculture

Dear Director Leahy and Chief Farnsworth,

We welcome DPR's attention to the problem of pesticide use near schools because as union representatives of petroleum refining workers we have serious concerns about heavy agricultural pesticide use near local schools. By 2016, DPR should move swiftly to adopt new protections for schoolchildren from hazardous and volatile pesticides and find new ways to promote and support sustainable, cutting-edge agriculture.

We are particularly concerned about the disproportionate exposure of Latino schoolchildren, a fact documented by the Department of Public Health (DPH) report released last year. Latino children are almost twice as likely as white children to attend schools near the heaviest agricultural pesticide use. This is a civil rights violation that DPR must rectify by decreasing the risk of pesticide exposure at schools across the state. The DPH report also found soil fumigants and other pesticides which are known to cause cancer, reproductive system effects, harm to the brain and nervous system and respiratory effects being used in large quantities within ¼ mile of many California schools.

DPR should require one-mile protection zones (buffer zones) between fields where pesticides of public health concern are used and schools, childcare centers, school bus stops, and known school routes. Pesticides of public health concern include pesticides that show evidence of causing cancer, reproductive damage, harm to the brain and nervous system, and asthma and other respiratory problems. Protection zones of ¼ mile currently required in some counties are simply not adequate for health protection. The UC Davis MIND Institute recently showed that mothers who lived within a mile of fields where chlorpyrifos and other pesticides were sprayed while pregnant show a 60% higher chance

of having children with autism. The DPH report documented that chlorpyrifos was the 8th most common pesticide used within ¼ mile of schools in 2010.

Second, no-spray protection zones around schools should be enforced at all times for ground, air blast, as well as for aircraft applications, because students, teachers and community members are often on school grounds for scheduled events and unscheduled activities when school is not formally in session. Furthermore, pesticides can evaporate off the crop plants for an extended period after they are applied and pesticide contaminated dust can be blown onto school grounds and tracked into classrooms.

Third, once the new no-spray protection zones are in place, DPR should conduct ongoing air monitoring at half a dozen schools around the state that have been identified as having the most pesticides of public health concern applied nearby. Any exceedances of health screening levels detected by air monitors should be immediately reported to local school and county officials, parents and teachers and should trigger an expansion of the protection zone.

Fourth, while large, one-mile buffer zones are essential for reducing exposure and protecting children's health, if <u>any</u> pesticide use continues to be allowed within 1 mile of schools, advance notification should be provided to the schools. Schools should then be required to notify teachers and use the robo-call systems to notify parents.

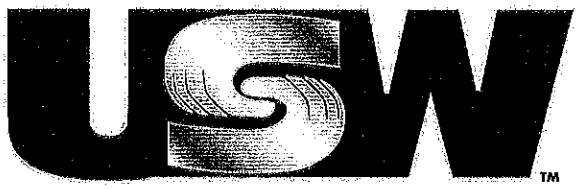
Finally, while these are important first steps, your department needs to devote significant resources and attention, in collaboration with other agencies and universities, to reducing the use of and phasing out the use of soil fumigants and other high toxicity, drift-prone pesticides and helping farmers obtain resources to assist with this transition. Through innovation in agriculture, we can help California farmers adopt cutting-edge practices and tools that keep agriculture prosperous.

Thank you for your commitment to the state's children and to the success of our farmers.

Sincerely,

David W. Campbell
Secretary-Treasurer

UNITED STEELWORKERS



UNITY AND STRENGTH FOR WORKERS
LOCAL 675

Philip Baker
President
David W. Campbell
Secretary-Treasurer

July 27, 2015

Brian Leahy, Director
George Farnsworth, Chief of Enforcement
Department of Pesticide Regulation (DPR)
P.O. Box 4015
Sacramento, CA 95812-4015
Emails: brian.leahy@cdpr.ca.gov george.farnsworth@cdpr.ca.gov

RE: Limit pesticide use near schools & promote innovative agriculture

Dear Director Leahy and Chief Farnsworth,

We welcome DPR's attention to the problem of pesticide use near schools because as union representatives of petroleum refining workers we have serious concerns about heavy agricultural pesticide use near local schools. By 2016, DPR should move swiftly to adopt new protections for schoolchildren from hazardous and volatile pesticides and find new ways to promote and support sustainable, cutting-edge agriculture.

We are particularly concerned about the disproportionate exposure of Latino schoolchildren, a fact documented by the Department of Public Health (DPH) report released last year. Latino children are almost twice as likely as white children to attend schools near the heaviest agricultural pesticide use. This is a civil rights violation that DPR must rectify by decreasing the risk of pesticide exposure at schools across the state. The DPH report also found soil fumigants and other pesticides which are known to cause cancer, reproductive system effects, harm to the brain and nervous system and respiratory effects being used in large quantities within ¼ mile of many California schools.

DPR should require one-mile protection zones (buffer zones) between fields where pesticides of public health concern are used and schools, childcare centers, school bus stops, and known school routes. Pesticides of public health concern include pesticides that show evidence of causing cancer, reproductive damage, harm to the brain and nervous system, and asthma and other respiratory problems. Protection zones of ¼ mile currently required in some counties are simply not adequate for health protection. The UC Davis MIND Institute recently showed that mothers who lived within a mile of fields where chlorpyrifos and other pesticides were sprayed while pregnant show a 60% higher chance

of having children with autism. The DPH report documented that chlorpyrifos was the 8th most common pesticide used within ¼ mile of schools in 2010.

Second, no-spray protection zones around schools should be enforced at all times for ground, air blast, as well as for aircraft applications, because students, teachers and community members are often on school grounds for scheduled events and unscheduled activities when school is not formally in session. Furthermore, pesticides can evaporate off the crop plants for an extended period after they are applied and pesticide contaminated dust can be blown onto school grounds and tracked into classrooms.

Third, once the new no-spray protection zones are in place, DPR should conduct ongoing air monitoring at half a dozen schools around the state that have been identified as having the most pesticides of public health concern applied nearby. Any exceedances of health screening levels detected by air monitors should be immediately reported to local school and county officials, parents and teachers and should trigger an expansion of the protection zone.

Fourth, while large, one-mile buffer zones are essential for reducing exposure and protecting children's health, if <u>any</u> pesticide use continues to be allowed within 1 mile of schools, advance notification should be provided to the schools. Schools should then be required to notify teachers and use the robo-call systems to notify parents.

Finally, while these are important first steps, your department needs to devote significant resources and attention, in collaboration with other agencies and universities, to reducing the use of and phasing out the use of soil fumigants and other high toxicity, drift-prone pesticides and helping farmers obtain resources to assist with this transition. Through innovation in agriculture, we can help California farmers adopt cutting-edge practices and tools that keep agriculture prosperous.

Thank you for your commitment to the state's children and to the success of our farmers.

Sincerely,

David W. Campbell
Secretary-Treasurer

UFCW 5

One Vision • One Voice • One Union

John Nunes
President

Jack Landes
Secretary - Treasurer

Main Office:
United Food & Commercial Workers Union, Local 5
240 South Market Street
San Jose, CA 95113-2382
(408) 998-0428
Fax: (408) 971-8355
Toll Free: (877) 655-FIVE
www.ufcw5.org

28870 Mission Blvd.
Hayward, CA 94544
(510) 889-0870
Fax: (510) 889-6415

208 Miller Avenue
So. San Francisco, CA 94080
(650) 871-5730
Fax: (650) 871-3590

4121 Alhambra Ave.
Martinez, CA 94553
(925) 228-8800
Fax: (925) 228-8355

1145 North Main St.
Salinas, CA 93906
(831) 757-3094
Fax: (831) 757-9115

323 Geary Street, Room 709
San Francisco, CA 94102
(415) 693-0143
Fax: (415) 693-9352

85 Galli Drive, Suite H
Novato, CA 94949
(415) 883-6833
Fax: (415) 883-1043

840 E Street, Suite 8
Eureka, CA 95501
(707) 442-1751
Fax: (707) 442-9572

July 21, 2015

Brian Leahy, Director
George Farnsworth, Chief of Enforcement
Department of Pesticide Regulation (DPR)
P.O. Box 4015
Sacramento, CA 95812-4015
Emails: brian.leahy@cdpr.ca.gov george.farnsworth@cdpr.ca.gov

RE: Limit pesticide use near schools & promote innovative agriculture

Dear Director Leahy and Chief Farnsworth,

UFCW Local 5 welcomes DPR's attention to the problem of pesticide use near schools because as a organization who has farm workers as members of this Union who deal with pesticides on a daily basis we want to make sure that they are not exposed and have serious concerns about heavy agricultural pesticide use near local schools. By 2016, DPR should move swiftly to adopt new protections for schoolchildren from hazardous and volatile pesticides and find new ways to promote and support sustainable, cutting-edge agriculture.

UFCW Local 5 is has a membership of over 30,000 members the of that 3000 are members of the Agricultural Division of Local 5 working in agriculture. The members that we represent work on farms throughout California and as part of our representation of these members we have negotiated language in our contracts that protects them from exposure of deadly pesticides and we don't see any reason why we should not do the same for schoolchildren.

We are particularly concerned about the disproportionate exposure of Latino schoolchildren, a fact documented by the Department of Public Health (DPH) report released last year. Latino children are almost twice as likely as white children to attend schools near the heaviest agricultural pesticide use. This is a civil rights violation that DPR must rectify by decreasing the risk of pesticide exposure at schools across the state. The DPH report also found soil fumigants and other pesticides which are known to cause cancer, reproductive system effects, harm to the brain and nervous system and respiratory effects being used in large quantities within ¼ mile of many California schools.

DPR should require one-mile protection zones (buffer zones) between fields where pesticides of public health concern are used and schools, childcare centers, school bus stops, and known school routes. Pesticides of public health concern include pesticides that show evidence of causing cancer, reproductive damage, harm to the brain and nervous system, and asthma and other respiratory problems. Protection zones of ¼ mile currently required in some counties are simply not adequate for health protection. The UC Davis MIND Institute recently showed that mothers who lived within a mile of fields where chlorpyrifos and other pesticides were sprayed while pregnant show a 60% higher chance of having children with autism. The DPH report documented that chlorpyrifos was the 8th most common pesticide used within ¼ mile of schools in 2010.

Second, no-spray protection zones around schools should be enforced at all times for ground, air blast, as well as for aircraft applications, because students, teachers and community members are often on school grounds for scheduled events and unscheduled activities when school is not formally in session. Furthermore, pesticides can evaporate off the crop plants for an extended period after they are applied and pesticide contaminated dust can be blown onto school grounds and tracked into classrooms.

Third, once the new no-spray protection zones are in place, DPR should conduct ongoing air monitoring at half a dozen schools around the state that have been identified as having the most pesticides of public health concern applied nearby. Any exceedances of health screening levels detected by air monitors should be immediately reported to local school and county officials, parents and teachers and should trigger an expansion of the protection zone.

Fourth, while large, one-mile buffer zones are essential for reducing exposure and protecting children's health, if <u>any</u> pesticide use continues to be allowed within 1 mile of schools, advance notification should be provided to the schools. Schools should then be required to notify teachers and use the robo-call systems to notify parents.

Finally, while these are important first steps, your department needs to devote significant resources and attention, in collaboration with other agencies and universities, to reducing the use of and phasing out the use of soil fumigants and other high toxicity, drift-prone pesticides and helping farmers obtain resources to assist with this transition. Through innovation in agriculture, we can help California farmers adopt cutting-edge practices and tools that keep agriculture prosperous,

Thank you for your commitment to the state's children and to the success of our farmers.

Sincerely,

Pete Maturino

Pete Maturino
UFCW Local 5 Agricultural Division Director

UNIVERSITY OF CALIFORNIA, DAVIS

BERKELEY • DAVIS • IRVINE • LOS ANGELES • MERCED • RIVERSIDE • SAN DIEGO • SAN FRANCISCO SANTA BARBARA • SANTA CRUZ

DEPARTMENT OF PUBLIC HEALTH SCIENCES
UNIVERSITY OF CALIFORNIA
ONE SHIELDS AVENUE
DAVIS, CALIFORNIA 95616-8638
(530) 752-3025
FAX: (530) 752-3239
http://www.phs.ucdavis.edu
ihp@ucdavis.edu

July 29, 2015

Brian Leahy, Director
George Farnsworth, Chief of Enforcement
Department of Pesticide Regulation (DPR)
P.O. Box 4015
Sacramento, CA 95812-4015
Emails: brian.leahy@cdpr.ca.gov george.farnsworth@cdpr.ca.gov

RE: Limit pesticide use near schools & promote innovative agriculture

Dear Director Leahy and Chief Farnsworth,

As a scientist studying effects on the population from environmental chemicals with the goal to identify what is and what is not harmful to health and development, I read with great interest the recent report, "Agricultural Pesticide Use Near Public Schools in California", from California DPR and the California DPH Environmental Health Tracking Program (hereafter referred to as "the CDPR/CDPH Report on Pesticides and Schools" or simply "the Report". My background includes a Masters in Public Health, a Masters in Biostatistics, and a PhD in Epidemiology from UC Berkeley. Prior to my entry into the field of public health, I also taught in high schools in several districts in California. I have over 25 years of experience as a Professor of Epidemiology, with the last 13 of those at UC Davis in the Division of Environmental and Occupational Health. I have published over 250 scientific papers addressing environmental exposures, such as air pollutants, PCBs, metals and pesticides, and their effects on cancer, cardiovascular conditions, pregnancy, the newborn, and early child health and development.

In considering the CDPR/CDPH Report, I closely examined it from a scientific and technical standpoint. I found the research to be superbly well done: the design and analytic methods used were well-established and up-to-date. The authors clearly stated the strengths of the study and what can be learned from it, and also the areas in which further work might be helpful to elucidate questions raised. It is in the context of this strong methodology that I then examined the findings.

The results of the report can be summarized briefly as showing that a significant proportion of children in California attend schools located within close proximity (1/4 mile) of pesticide applications, and that

the schools located near the highest use of such pesticides are heavily weighted towards having a larger proportion of Latinos. These results are particularly disconcerting in light of several epidemiologic studies that indicate families residing near agricultural pesticide applications are at risk for adverse birth and child developmental outcomes, including congenital anomalies, intellectual disabilities, and autism (Rull et al 2006, Bell et al 2001, Roberts et al 2007, Shelton et al 2014).

Therefore, it is good news that DPR is examining the problem of pesticide use near schools. The situation calls for action to adopt and implement measures that will protect school children from hazardous and volatile pesticides. This also the time to move towards sustainable methods that will protect our state's agricultural economy, our food supply, and our children's health and brain development. It is feasible, and imperative to make these changes within the next year.

That the siting of schools in close proximity to agricultural pesticide applications affects Latino schoolchildren disproportionately appears to be, de facto, discriminatory. The CDPR/CDPH Report on pesticides and schools documented clearly that Latino children are almost twice as likely as white children to attend schools near the heaviest agricultural pesticide use. This is a civil rights violation that DPR must rectify by decreasing the risk of pesticide exposure at schools across the state. These pesticides that are being used within ¼ mile of many California schools include soil fumigants, organophosphates, organochlorines and other chemicals which are known to cause cancer, reproductive system effects, harm to the brain and nervous system and respiratory effects.

The problem is clear. What are the solutions?

First, a significant improvement would be for *DPR to require one-mile protection zones (buffer zones) between fields where pesticides of public health concern are used and any of the following: schools, childcare centers, school bus stops, and known school routes*. Research has shown that pesticide applications in agriculture in California correlate strongly with levels of the same compounds in communities located nearby (Wofford et al 2014). Thus, there is sufficient evidence to conclude that pesticide drift occurs, easily reaching much farther than ¼ mile. There is no evidence that "protection zones" of ¼ mile currently required in some counties are adequate for health protection, particularly for school children, whose brains are still developing. Recent work conducted by scientists at the UC Davis MIND Institute recently showed that pregnant women residing within a mile of fields where chlorpyrifos was sprayed show a 60% higher chance of delivering a child who develops autism (Shelton et al 2014). The Report documented that chlorpyrifos was the 8th most common pesticide used within ¼ mile of schools in 2010.

Further measures are also needed: No-spray protection zones around schools should be enforced at all times for ground, air blast, as well as for aircraft applications, because *students, teachers and community members are often on school grounds for scheduled events and unscheduled activities when school is not formally in session*. Furthermore, exposures can occur even after the application activity ends: for example, pesticides can evaporate off crop plants for an extended period after they are applied and pesticide contaminated dust and small particles can be blown onto school grounds and tracked into classrooms.

Third, once the new no-spray protection zones are in place, it is essential that DPR conduct ongoing air monitoring, sampling from schools around the state that have been identified as having a heavy burden

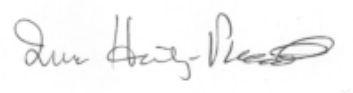
of pesticides of public health concern applied nearby. Any exceedances of health screening levels detected by air monitors should be immediately reported to local school and county officials, parents and teachers and should trigger an expansion of the protection zone and more widespread and intensive monitoring.

Fourth, while large, one-mile buffer zones are essential for reducing exposure and protecting children's health, if any pesticide use continues to be allowed within 1 mile of schools, advance notification needs to be provided to the schools. Schools should then be required to notify teachers and use the robo-call systems to notify parents.

Finally, while these are important first steps needed to alleviate the immediate hazards for school children as well as teachers and other school personnel, longer term measures are needed aimed at reducing and ultimately phasing out use of soil fumigants and other highly toxic drift-prone pesticides, and assisting farmers in obtaining resources to make this transition feasible. DPR, universities such as UC Davis and other agricultural institutions, along with other state, county and local agencies should engage in a concerted collaboration to develop comprehensive plans for sustainable agricultural production that ensures a safe working environment, a healthy food supply, and a prosperous agricultural economy. California can be at the cutting edge of this shift.

In closing, I would like to thank you for your efforts to date and look forward to a future California where our agriculture and our children can reach their full potential through collectively identifying solutions that can bring us to this goal.

Sincerely,



Irva Hertz-Picciotto, Ph.D., M.P.H.
Professor & Director
UC Davis MIND Institute Program in Environmental Epidemiology of Autism and Neurodevelopment
Division of Environmental and Occupational Health
Department of Public Health Sciences
University of California Davis

Dear Director Leahy and Chief Farnsworth,

We welcome DPR's attention to the problem of pesticide use near schools because as an organization, we have serious concerns about heavy agricultural pesticide use near local schools. By 2016, DPR should move swiftly to adopt new protections for schoolchildren from hazardous and volatile pesticides and find new ways to promote and support sustainable, cutting-edge agriculture.

TriCounty Watchdogs is a 501(c)(3) non-profit in the Mountain Communities. Its mission is to promote protection of our natural and cultural resources, empowerment of all residents, environmental justice, ecotourism, and responsible growth.

We are particularly concerned about the disproportionate exposure of Latino schoolchildren, a fact documented by the Department of Public Health (DPH) report released last year. Latino children are almost twice as likely as white children to attend schools near the heaviest agricultural pesticide use. This is a civil rights violation that DPR must rectify by decreasing the risk of pesticide exposure at schools across the state. The DPH report also found soil fumigants and other pesticides which are known to cause cancer, reproductive system effects, harm to the brain and nervous system and respiratory effects being used in large quantities within ¼ mile of many California schools.

DPR should require one-mile protection zones (buffer zones) between fields where pesticides of public health concern are used and schools, childcare centers, school bus stops, and known school routes. Pesticides of public health concern include pesticides that show evidence of causing cancer, reproductive damage, harm to the brain and nervous system, and asthma and other respiratory problems. Protection zones of ¼ mile currently required in some counties are simply not adequate for health protection. The UC Davis MIND Institute recently showed that mothers who lived within a mile of fields where chlorpyrifos and other pesticides were sprayed while pregnant show a 60% higher chance of having children with autism. The DPH report documented that chlorpyrifos was the 8th most common pesticide used within ¼ mile of schools in 2010.

Second, no-spray protection zones around schools should be enforced at all times for ground, air blast, as well as for aircraft applications, because students, teachers and community members are often on school grounds for scheduled events and unscheduled activities when school is not formally in session. Furthermore, pesticides can evaporate off the crop plants for an extended period after they are applied and pesticide contaminated dust can be blown onto school grounds and tracked into classrooms.

Third, once the new no-spray protection zones are in place, DPR should conduct ongoing air monitoring at half a dozen schools around the state that have been identified as having the most pesticides of public health concern applied nearby. Any exceedances of health screening levels detected by air monitors should be immediately reported to local school and county officials, parents and teachers and should trigger an expansion of the protection zone.

Fourth, while large, one-mile buffer zones are essential for reducing exposure and protecting children's health, if <u>any</u>pesticide use continues to be allowed within 1 mile of schools, advance notification should be provided to the schools. Schools should then be required to notify teachers and use the robo-call systems to notify parents.

Finally, while these are important first steps, your department needs to devote significant resources and attention, in collaboration with other agencies and universities, to reducing the use of and phasing out the use of soil fumigants and other high toxicity, drift-prone pesticides and helping farmers obtain resources to assist with this transition. Through innovation in agriculture,

we can help California farmers adopt cutting-edge practices and tools that keep agriculture prosperous.
Thank you for your commitment to the state's children and to the success of our farmers.

Sincerely,
Tri County Watchdogs

OTILIO FARMS, LLC
1901 HOLSER WALK #300, OXNARD, CA 93036
PHONE : (805) 981-9908 FAX : (805) 981-0199

July 31, 2015

Mr. George Farnsworth,
Enforcement Branch
Department of Pesticide Regulation
Post Office Box 4015
Sacramento, CA 95812-4015

Mr. Farnsworth,

I want to thank you and your team from the Department of Pesticide Regulation (DPR) for visiting with the farming communities and the public during the series of regional workshops to address pesticide use near schools.

I found the workshops to be very informative and necessary for farmers and the public to provide input on issues regarding pesticide usage near schools. I appreciate the opportunity to provide written comments.

I have been farming conventional and organic strawberries in Ventura County for 25 years and have been a licensed Pest Control Advisor since 1982. I have had the opportunity over the years to advise many strawberry and vegetable farmers whose operations are in close proximity to schools. As a farmer I have the responsibility to protect my employees, neighbors, and the environment. As a Pest Control Advisor I have the responsibility when I sign a recommendation that I have considered alternatives and mitigating measures to lessen any impact on the environment. For many years I have worked closely with the County Agricultural Commissioner, communicated with residential neighbors, and communicated with school officials when working near schools. Farm operations by their very nature have an impact on those around them and it is important to be good neighbors.

The land we farm on is of the highest value and I am concerned that if DPR enacts regulations which are too restrictive, many farms near schools may become a thing of the past as access to prime farmland becomes more difficult. The state's regulatory program has been entrusted with protecting worker safety, public health and the environment. That record speaks for itself in a state so diverse in agricultural commodities with thousands of acres near cities and schools. California's pesticide regulatory system already provides the highest level of protection in the country. Farmers are required to be in strict compliance with federal, state, and county regulations in addition to food safety requirements placed upon them by their customers.

Farmers need to make decisions based on sound science and I am concerned new DPR regulations may be made based on public opinion and not factual information. This is an opportunity for all involved with farming near schools to better communicate the risk using factual information.

Again, I thank DPR for taking the time to visit and share accurate information with the public and the farm community and receiving feedback on DPR's Concepts to Address Pesticide Use near Schools.

Sincerely,

Hector Gutierrez
Member
Otilio Farms, LLC

SFU

Faculty of Health Sciences

Bruce Lanphear, MD, MPH
Senior Scientist, CFRI
Professor, Simon Fraser University

Blusson Hall
888 University Drive
Burnaby BC Canada
V5A 1S6

t: 778.387-3939
blanphear@sfu.ca

July 29, 2015

Brian Leahy, Director
George Farnsworth, Chief of Enforcement
Department of Pesticide Regulation (DPR)
P.O. Box 4015
Sacramento, CA 95812-4015

RE: Limiting pesticide use near schools

Dear Director Leahy and Chief Farnsworth:

I would like to applaud and support DPR's efforts to reduce pesticide use near schools in California. By 2016, DPR should move swiftly to adopt new protections for schoolchildren from hazardous and volatile pesticides and find new ways to promote and support sustainable, cutting-edge agriculture.

As a public health physician and environmental epidemiologist, I have spent over 15 years studying the impact of environmental toxins, such as lead, tobacco and pesticides, o brain development.

am particularly concerned about the disproportionate exposure of vulnerable populations, such as Latino schoolchildren. Latino children are almost two-times more likely than white children to attend schools in proximity to the heaviest agricultural pesticide use.

support regulations that would require one-mile buffer zones between fields where pesticides of public health concern are used and schools and childcare facilities. The UC Davis MIND Institute recently showed that pregnant mothers who lived within a mile of fields where chlorpyrifos and other pesticides were sprayed were 60% more likely to have a child who was later diagnosed to have autism. also support advance notification for parents and teachers in schools and child care facilities.

Thank you for your commitment to the state's children.

Best regards,

Bruce P. Lanphear, M.D., M.P.H.
Senior Principal Investigator, HOME Study
Clinician Scientist, Child & Family Research Institute, B Children's Hospital
Professor, Faculty of Health Sciences, Simon Fraser University

July 30, 2015

Brian Leahy, Director
George Farnsworth, Chief of Enforcement
Department of Pesticide Regulation (DPR)
P.O. Box 4015
Sacramento, CA 95812-4015
Emails: brian.leahy@cdpr.ca.gov george.farnsworth@cdpr.ca.gov

RE: Limit pesticide use near schools & promote innovative agriculture

Dear Director Leahy and Chief Farnsworth,

We welcome DPR's attention to the problem of pesticide use near schools because as *concerned parents, grandparents,* we have serious concerns about heavy agricultural pesticide use near local Richland and Kern High School Districts. By 2016, DPR should move swiftly to adopt new protections for schoolchildren from hazardous and volatile pesticides and find new ways to promote and support sustainable, cutting-edge agriculture. Shafter LULAC is an organization advocating for the health and welfare of Shafter area residents.

We are particularly concerned about the disproportionate exposure of Latino schoolchildren, a fact documented by the Department of Public Health (DPH) report released last year. Latino children are almost twice as likely as white children to attend schools near the heaviest agricultural pesticide use. This is a civil rights violation that DPR must rectify by decreasing the risk of pesticide exposure at schools across the state. The DPH report also found soil fumigants and other pesticides which are known to cause cancer, reproductive system effects, harm to the brain and nervous system and respiratory effects being used in large quantities within ¼ mile of many California schools.

DPR should require one-mile protection zones (buffer zones) between fields where pesticides of public health concern are used and schools, childcare centers, school bus stops, and known school routes. Pesticides of public health concern include pesticides that show evidence of causing cancer, reproductive damage, harm to the brain and nervous system, and asthma and other respiratory problems. Protection zones of ¼ mile currently required in some counties are simply not adequate for health protection. The UC Davis MIND Institute recently showed that mothers who lived within a mile of fields where chlorpyrifos and other pesticides were sprayed while pregnant show a 60% higher chance of having children with autism. The DPH report documented that chlorpyrifos was the 8th most common pesticide used within ¼ mile of schools in 2010.

Second, no-spray protection zones around schools should be enforced at all times for ground, air blast, as well as for aircraft applications, because students, teachers and community members are often on school grounds for scheduled events and unscheduled activities when school is not formally in session. Furthermore, pesticides can evaporate off

the crop plants for an extended period after they are applied and pesticide contaminated dust can be blown onto school grounds and tracked into classrooms.

Third, once the new no-spray protection zones are in place, DPR should conduct ongoing air monitoring at half a dozen schools around the state that have been identified as having the most pesticides of public health concern applied nearby. Any exceedances of health screening levels detected by air monitors should be immediately reported to local school and county officials, parents and teachers and should trigger an expansion of the protection zone.

Fourth, while large, one-mile buffer zones are essential for reducing exposure and protecting children's health, if <u>any</u> pesticide use continues to be allowed within 1 mile of schools, advance notification should be provided to the schools. Schools should then be required to notify teachers and use the robo-call systems to notify parents.

Finally, while these are important first steps, your department needs to devote significant resources and attention, in collaboration with other agencies and universities, to reducing the use of and phasing out the use of soil fumigants and other high toxicity, drift-prone pesticides and helping farmers obtain resources to assist with this transition. Through innovation in agriculture, we can help California farmers adopt cutting-edge practices and tools that keep agriculture prosperous.

Thank you for your commitment to the state's children and to the success of our farmers.

Sincerely,

Gary Rodriguez-President
Shafter LULAC

Physicians for Social Responsibility
2288 Fulton St., Suite 307
Berkeley, CA 94704-1449
510-845-8395 · Fax: 510-845-8476
info@sfbaypsr.org · www.sfbaypsr.org

July 21, 2015

Brian Leahy, Director
George Farnsworth, Chief of Enforcement
Department of Pesticide Regulation (DPR)
P.O. Box 4015
Sacramento, CA 95812-4015
brian.leahy@cdpr.ca.gov
george.farnsworth@cdpr.ca.gov

RE: Limit pesticide use near schools & promote innovative agriculture

Dear Director Leahy and Chief Farnsworth,

San Francisco Bay Area Physicians for Social Responsibility (SF Bay Area PSR) welcomes the Department of Pesticide Regulation's (DPR) attention to the problem of pesticide use near schools. As an organization of health professionals, we have serious concerns about heavy agricultural pesticide use near schools and its health consequences to schoolchildren. By 2016, DPR should move swiftly to adopt new protections for schoolchildren from hazardous and volatile pesticides and find new ways to promote and support sustainable, cutting-edge agriculture.

SF Bay Area PSR is a non-profit education and advocacy organization. With approximately 2,500 members, our organization combines the power of community activism with the knowledge and credibility of physicians and other health professionals to promote public policies that support human health.

As physicians, we are intensely aware of the toll that asthma, cancer, and other illnesses related to air pollution including pesticides take on children, poor communities and communities of color. We are greatly concerned about the disproportionate pesticide exposure Latino schoolchildren experience. [i] Latino children are almost twice as likely to attend schools near the heaviest agricultural pesticide use as are white children.[ii] Soil fumigants and other pesticides which are known to cause cancer, reproductive system effects, harm to the brain and nervous system and respiratory effects are used in large quantities within ¼ mile of many California schools.[iii]

Require one-mile protection zones for pesticides of public health concern.

DPR should require one-mile protection zones (buffer zones) between schools, childcare centers, school bus stops, and known school routes, and fields where pesticides of public health concern are used. Pesticides of public health concern include those that show evidence of causing cancer, reproductive damage, harm to the brain and nervous system, and asthma and other respiratory problems. Minimal zones of ¼ mile currently required in some counties ostensibly to provide protection from pesticide exposures are simply not adequate to ensure health protection. A UC Davis MIND Institute study recently showed that pregnant women who lived

within a mile of fields where chlorpyrifos and other pesticides were sprayed show a 60% higher chance of having children with autism.[iv] In 2010, chlorpyrifos was the 8th most common pesticide used within ¼ mile of schools where children and potentially pregnant staff spend a good deal of time. [v]

No-spray zones should be enforced at all times of the day.

No-spray protection zones around schools should be enforced at all times for ground, air blast, as well as for aircraft applications, because students, teachers and community members are often on school grounds for scheduled events and unscheduled activities when school is not formally in session. Furthermore, pesticides can evaporate off the crop plants for an extended period after they are applied and pesticide contaminated dust can be blown onto school grounds and tracked into classrooms.

DPR should monitor and vigorously enforce no-spray zones.

Once the new no-spray protection zones are in place, DPR should conduct ongoing air monitoring at half a dozen schools around the state that have been identified as having the most pesticides of public health concern applied nearby. Any exceeding of health screening levels detected by air monitors should be immediately reported to local school and county officials, parents, and teachers, and should trigger an expansion of the protection zone.

Notice should be required for any pesticide application within the one-mile protection zone.

While large, one-mile buffer zones are essential for reducing exposure and protecting children's health, if <u>any</u> pesticide use continues to be allowed within 1 mile of schools, advance notification should be provided to the schools. Schools should then be required to notify teachers and use the robo-call systems to notify parents.

Finally, while these are important first steps, we recommend your department devote significant resources and attention, in collaboration with other agencies and universities, to reducing and phasing out the use of soil fumigants and other high toxicity, drift-prone pesticides, and helping farmers obtain resources to assist with this transition. Through innovation in agriculture, we can help California farmers adopt cutting-edge practices and tools that keep agriculture prosperous but do not harm human health.

Thank you for your commitment to the health of the state's children.

Sincerely,

Robert M. Gould, M.D.
President, San Francisco Bay Area PSR

---

[i] California Environmental Health Tracking Program, *Agricultural Pesticide Use Near Public Schools in California*, April 2014. http://cehtp.org/projects/ehss01/pesticides_and_schools/Pesticides_Schools_Report_April2014.pdf

[ii] Id. at 20-21.

[iii] Id. at 15.

[iv] Janie F. Shelton, Estella M. Geraghty, Daniel J. Tancredi, Lora D. Delwiche, Rebecca J. Schmidt, Beate Ritz,Robin L. Hansen, and Irva Hertz-Picciotto. Neurodevelopmental Disorders and Prenatal Residential Proximity to Agricultural Pesticides: The CHARGE Study. October 2014. http://ehp.niehs.nih.gov/1307044/

[v] *Agricultural Pesticide Use Near Public Schools,* at 16.

LOCAL 521
SEIU
Stronger Together

SERVICE EMPLOYEES INTERNATIONAL UNION
CTW-CLC

SAN JOSE H.Q.
2302 Zanker Road
San Jose, CA 95131
Phone: 408-678-3300
Fax: 408-954-1538

BAKERSFIELD
1001 17th Street
Bakersfield, CA 93301
Phone: 661-321-4160
Fax: 661-325-7814

FRESNO
5228 E. Pine Avenue
Fresno, CA 93727
Phone: 559-447-2560
Fax: 559-261-9308

HANFORD
101 N. Irwin St., Suite 205
Hanford, CA 93230
Phone: 559-587-1521
Fax: 559-587-1524

SALINAS
334 Monterey Street
Salinas, CA 93901
Phone: 831-784-2560
Fax: 831-757-1863

SAN CARLOS
981 Industrial Rd., Suite A
San Carlos, CA 94070
Phone: 650-801-3500
Fax: 650-595-1930

SANTA CRUZ
517B Mission Street
Santa Cruz, CA 95060
Phone: 831-824-9255
Fax: 831-459-0756

VISALIA
1811 W. Sunnyside Avenue
Visalia, CA 93277
Phone: 559-635-3720
Fax: 559-733-5006

www.seiu521.org

Brian Leahy, Director
George Farnsworth, Chief of Enforcement
Department of Pesticide Regulation (DPR)
P.O. Box 4015
Sacramento, CA 95812-4015
Emails: brian.leahy@cdpr.ca.gov george.farnsworth@cdpr.ca.gov

Dear Director Leahy and Chief Farnsworth:

We welcome DPR's attention to the problem of pesticide use near schools because as an organization with 55,000 members in central California we have serious concerns about heavy agricultural pesticide use near local schools. Many of our members are classified employees in schools around the state, and many of us are parents of school aged children.

SEIU Local 521 has always been concerned about making sure we have safe workplaces for our members and a safe environment for our community. We are particularly concerned about the disproportionate exposure of Latino school children, a fact documented by the Department of Public Health (DPH) report released last year. Latino children are almost twice as likely as white children to attend schools near the heaviest agricultural pesticide use. This is a civil rights violation that DPR must rectify by decreasing the risk of pesticide exposure at schools in the midst of agricultural fields. The DPH report also found soil fumigants and other pesticides which are known to cause cancer, reproductive system effects, harm to the brain and nervous system and respiratory effects being used in large quantities within 1/4 mile of many rural California schools.

First, DPR should require one mile buffer zones between fields where pesticides of public health concern are used and schools, childcare centers, school bus stops, and known school routes. Pesticides of public health concern include ones that show evidence of causing cancer, reproductive damage, harm to the brain and nervous system, and asthma and other respiratory problems. Protection zones of ¼ mile currently required in some counties are simply not adequate for health protection. The UC Davis MIND Institute recently showed that mothers who lived within a mile of fields where chlorpyrifos and other pesticides were sprayed while pregnant, show a 60% higher chance of having children with autism. The DPH report documented that chlorpyrifos was the 8th most common pesticide used within ¼ mile of schools in 2010.

Second, protection zones around schools should be enforced at all times for ground as well as for aircraft applications, because students, teachers and community members are often on school grounds for scheduled events and unscheduled activities when school is not in session. Furthermore, pesticides can evaporate off the crop plants for an extended

period after they are applied and pesticide contaminated dust can be blown onto school grounds and tracked into classrooms.

Third, once the new protection zones are in place, DPR should conduct ongoing air monitoring at half a dozen schools around the state that have been identified as having the most pesticides of public health concern applied nearby. Any exceedances of health screening levels caught by air monitors should be immediately reported to local school and county officials, parents and teachers and should trigger an expansion of the protection zone.

Fourth, while 1 mile buffer zones are essential for reducing exposure and protecting children's health, if <u>any</u> pesticide use continues to be allowed within 1 mile of schools, advance notification should be provided to the schools and schools should be required to, in turn, notify teachers and use the robo-call systems to notify parents.

Finally, while these are important first steps, your department needs to devote significant resources and attention to reducing the use of, and phasing out the use of soil fumigants and other high toxicity, drift-prone pesticides, as well as helping farmers obtain resources to assist with this transition.

Sincerely,

Gwyn Harshaw, President
SEIU Local 521

Luisa Blue,
Chief Elected Officer
SEIU Local 521

Santa Cruz Council of Classified Employees, AFT Local 6084
501 Mission Street, Suite 11
Santa Cruz, CA 95060-3531

July 20, 2015

Brian Leahy, Director
George Farnsworth, Chief of Enforcement
Department of Pesticide Regulation (DPR)
P.O. Box 4015
Sacramento, CA 95812-4015
Emails: brian.leahy@cdpr.ca.gov george.farnsworth@cdpr.ca.gov

RE: Limit pesticide use near schools & promote innovative agriculture

Dear Director Leahy and Chief Farnsworth,

We welcome DPR's attention to the problem of pesticide use near schools, because as a union of school employees, we have serious concerns about heavy agricultural pesticide use near local schools. By 2016, DPR should move swiftly to adopt new protections for schoolchildren from hazardous and volatile pesticides and find new ways to promote and support sustainable, cutting-edge agriculture.

The Santa Cruz Council of Classified Employees is a labor union of 750 workers who are the educational support staff members employed in the Santa Cruz City Schools and Soquel High School.

We are particularly concerned about the disproportionate exposure of Latino schoolchildren, a fact documented by the Department of Public Health (DPH) report released last year. Latino children are 3.2 times as likely as white children to attend schools near the heaviest agricultural pesticide use in neighboring Monterey County (Santa Cruz was not included in the DPH study). This is a civil rights violation that DPR must rectify by decreasing the risk of pesticide exposure at schools across the state. The DPH report also found soil fumigants and other pesticides which are known to cause cancer, reproductive system effects, harm to the brain and nervous system and respiratory effects being used in large quantities within ¼ mile of many California schools.

DPR should require one-mile protection zones (buffer zones) between fields where pesticides of public health concern are used and schools, childcare centers, school bus stops, and known school routes. Pesticides of public health concern include pesticides that show evidence of causing cancer, reproductive damage, harm to the brain and nervous

system, and asthma and other respiratory problems. Protection zones of ¼ mile currently required in some counties are simply not adequate for health protection. The UC Davis MIND Institute recently showed that mothers who lived within a mile of fields where chlorpyrifos and other pesticides were sprayed while pregnant show a 60% higher chance of having children with autism. The DPH report documented that chlorpyrifos was the 8th most common pesticide used within ¼ mile of schools in 2010.

Second, no-spray protection zones around schools should be enforced at all times for ground, air blast, as well as for aircraft applications, because students, teachers and community members are often on school grounds for scheduled events and unscheduled activities when school is not formally in session. Furthermore, pesticides can evaporate off the crop plants for an extended period after they are applied and pesticide contaminated dust can be blown onto school grounds and tracked into classrooms.

Third, once the new no-spray protection zones are in place, DPR should conduct ongoing air monitoring at half a dozen schools around the state that have been identified as having the most pesticides of public health concern applied nearby. Any exceedances of health screening levels detected by air monitors should be immediately reported to local school and county officials, parents and teachers and should trigger an expansion of the protection zone.

Fourth, while large, one-mile buffer zones are essential for reducing exposure and protecting children's health, if <u>any</u> pesticide use continues to be allowed within 1 mile of schools, advance notification should be provided to the schools. Schools should then be required to notify teachers and use the robo-call systems to notify parents.

Finally, while these are important first steps, your department needs to devote significant resources and attention, in collaboration with other agencies and universities, to reducing the use of and phasing out the use of soil fumigants and other high toxicity, drift-prone pesticides and helping farmers obtain resources to assist with this transition. Through innovation in agriculture, we can help California farmers adopt cutting-edge practices and tools that keep agriculture prosperous.

Thank you for your commitment to the state's children and to the success of our farmers.

Sincerely,

Robert Chacanaca
President SCCCE Local 6084

CHACANACA
SCCCE L. 6084
501 MISSION ST #11
SANTA CRUZ CA 95060

SAN JOSE CA 950
21 JUL 2015 PM 1 1

BRIAN LEAHY & GEORGE FARNSWORTH
DEP OF PESTICIDE REGULATION
PO BOX 4015
SACRAMENTO CA 95812-4015

95812401515

Salinas Elementary Teachers Council
11 West Laurel, Suite 201
Salinas, CA 93906
Phone: (831) 442-8314 • Fax: (831) 442-8314

July 29, 2015

Brian Leahy, Director
George Farnsworth, Chief of Enforcement
Department of Pesticide Regulation (DPR)
P.O. Box 4015
Sacramento, CA 95812-4015
Emails: brian.leahy@cdpr.ca.gov george.farnsworth@cdpr.ca.gov

Dear Director Leahy and Chief Farnsworth:

We welcome DPR's attention to the problem of pesticide use near schools because as teachers we have serious concerns about heavy agricultural pesticide use near local schools.

As teachers of the Salinas City Elementary School District we are well aware of the problems faced by our community in regards to pesticide use. Our District is made up of nearly 90% Hispanic students, many the children of field workers.

We are particularly concerned about the disproportionate exposure of Latino schoolchildren, a fact documented by the Department of Public Health (DPH) report released last year. Latino children are almost twice as likely as white children to attend schools near the heaviest agricultural pesticide use. This is a civil rights violation that DPR must rectify by decreasing the risk of pesticide exposure at schools in the midst of agricultural fields. The DPH report also found soil fumigants and other pesticides which are known to cause cancer, reproductive system effects, harm to the brain and nervous system and respiratory effects being used in large quantities within 1/4 mile of many rural California schools.

DPR should require one mile protection zones (buffer zones) between fields where pesticides of public health concern are used and schools, childcare centers, school bus stops, and known school routes. Pesticides of public health concern include pesticides that show evidence of causing cancer, reproductive damage, harm to the brain and nervous system, and asthma and other respiratory problems. Protection zones of ¼ mile currently required in some counties are simply not adequate for health protection. The UC Davis MIND Institute recently showed that mothers who lived within a mile of fields where chlorpyrifos and other pesticides were sprayed while pregnant show a 60% higher chance of having children with autism. The DPH report documented that chlorpyrifos was the 8th most common pesticide used within ¼ mile of schools in 2010.

Second, protection zones around schools should be enforced at all times for ground as well as for aircraft applications, because students, teachers and community members are often

on school grounds for scheduled events and unscheduled activities when school is not in session. Furthermore, pesticides can evaporate off the crop plants for an extended period after they are applied and pesticide contaminated dust can be blown onto school grounds and tracked into classrooms.

Third, once the new protection zones become are in place, DPR should conduct ongoing air monitoring at half a dozen schools around the state that have been identified as having the most pesticides of public health concern applied nearby. Any exceedances of health screening levels caught by air monitors should be immediately reported to local school and county officials, parents and teachers and should trigger an expansion of the protection zone.

Fourth, while large, 1 mile buffer zones are essential for reducing exposure and protecting children's health, if <u>any</u> pesticide use continues to be allowed within 1 mile of schools, advance notification should be provided to the schools and schools should be required to in turn notify teachers and use the robo-call systems to notify parents.

Finally, while these are important first steps, your department needs to devote significant resources and attention to reducing the use of and phasing out the use of soil fumigants and other high toxicity, drift-prone pesticides and helping farmers obtain resources to assist with this transition.

Sincerely,

Carol M. Rodrigues
President, Salinas Elementary
Teachers' Council

July 24, 2015

Brian Leahy, Director
George Farnsworth, Chief of Enforcement
Department of Pesticide Regulation (DPR)
P.O. Box 4015
Sacramento, CA 95812-4015
Emails: brian.leahy@cdpr.ca.gov george.farnsworth@cdpr.ca.gov

RE: Limit pesticide use near schools & promote innovative agriculture

Dear Director Leahy and Chief Farnsworth,

Planned Parenthood Mar Monte welcomes DPR's attention to the problem of pesticide use near schools because as a health care provider we have serious concerns about heavy agricultural pesticide use near local schools. By 2016, DPR should move swiftly to adopt new protections for schoolchildren from hazardous and volatile pesticides and find new ways to promote and support sustainable, cutting-edge agriculture.

Planned Parenthood Mar Monte provides over 460,000 health care visits annually at over 35 health centers & satellite services sites in sixteen California counties that serve individuals from 29 counties throughout the state. Many of our patients live/work in agricultural communities, and we are familiar with, and concerned about the negative health impacts due to their exposure to harmful pesticides.

As a provider of family health care services in addition to reproductive health care, we are particularly concerned about the disproportionate exposure of Latino schoolchildren, a fact documented by the Department of Public Health (DPH) report released last year. Latino children are almost twice as likely as white children to attend schools near the heaviest agricultural pesticide use. This is a civil rights violation that DPR must rectify by decreasing the risk of pesticide exposure at schools across the state. The DPH report also found soil fumigants and other pesticides which are known to cause cancer, reproductive system effects, harm to the brain and nervous system and respiratory effects being used in large quantities within ¼ mile of many California schools.

DPR should require one-mile protection zones (buffer zones) between fields where pesticides of public health concern are used and schools, childcare centers, school bus stops, and known school routes. Pesticides of public health concern include pesticides that show evidence of causing cancer, reproductive damage, harm to the brain and nervous system, and asthma and other respiratory problems. Protection zones of ¼ mile currently required in some counties are simply not adequate for health protection. The UC Davis MIND Institute recently showed that mothers who lived within a mile of fields where chlorpyrifos and other pesticides were sprayed while pregnant show a 60% higher chance of having children with autism. The DPH report documented that chlorpyrifos was the 8th most common pesticide used within ¼ mile of schools in 2010.

Second, no-spray protection zones around schools should be enforced at all times for ground, air blast, as well as for aircraft applications, because students, teachers and community members are often on school grounds for scheduled events and unscheduled activities when school is not formally in session. Furthermore, pesticides can evaporate off the

crop plants for an extended period after they are applied and pesticide contaminated dust can be blown onto school grounds and tracked into classrooms.

Third, once the new no-spray protection zones are in place, DPR should conduct ongoing air monitoring at half a dozen schools around the state that have been identified as having the most pesticides of public health concern applied nearby. Any exceedances of health screening levels detected by air monitors should be immediately reported to local school and county officials, parents and teachers and should trigger an expansion of the protection zone.

Fourth, while large, one-mile buffer zones are essential for reducing exposure and protecting children's health, if any pesticide use continues to be allowed within 1 mile of schools, advance notification should be provided to the schools. Schools should then be required to notify teachers and use the robo-call systems to notify parents.

Finally, while these are important first steps, your department needs to devote significant resources and attention, in collaboration with other agencies and universities, to reducing the use of and phasing out the use of soil fumigants and other high toxicity, drift-prone pesticides and helping farmers obtain resources to assist with this transition. Through innovation in agriculture, we can help California farmers adopt cutting-edge practices and tools that keep agriculture prosperous.

Thank you for your commitment to the state's children and to the success of our farmers.

Respectfully,

Patsy Montgomery
Associate Vice President for Legislative Campaigns
Planned Parenthood Mar Monte

Physicians for Social Responsibility/Sacramento
10 Dumfries Court
Sacramento, California 95831
www.sacpsr.org • info@sacpsr.org
916 955-6333

July 30, 2015

Brian Leahy, Director
George Farnsworth, Chief of Enforcement
Department of Pesticide Regulation (DPR)
P.O. Box 4015
Sacramento, CA 95812-4015
Emails: brian.leahy@cdpr.ca.gov george.farnsworth@cdpr.ca.gov

RE: Limit pesticide use near schools & promote innovative agriculture

Dear Director Leahy and Chief Farnsworth,

I am writing on behalf of the 700 members of the Sacramento chapter of Physicians for Social Responsibility. We welcome DPR's attention to the problem of pesticide use near schools because we have serious concerns about heavy agricultural pesticide use near local schools. By 2016, DPR should move swiftly to adopt new protections for schoolchildren from hazardous and volatile pesticides and find new ways to promote and support sustainable, cutting-edge agriculture.

We are particularly concerned about the disproportionate exposure of Latino schoolchildren. Latino children are almost twice as likely as white children to attend schools near the heaviest agricultural pesticide use, according to the DPH report released last year. This is a civil rights violation that DPR must rectify by decreasing the risk of pesticide exposure at schools across the state. The DPH report also found soil fumigants and other pesticides which are known to cause cancer, reproductive system effects, harm to the brain and nervous system and respiratory effects being used in large quantities within ¼ mile of many California schools.

We ask that DPR require:

- One-mile protection zones (buffer zones) between fields where pesticides of public health concern are used and schools, childcare centers, school bus stops, and known school routes. This is necessary because of research showing that pesticide exposures are linked to causing cancer, reproductive damage, harm to the brain and nervous system, and asthma and other respiratory problems.
- 24-hour enforcement of no-spray protection zones around schools at all times for ground, air blast, as well as for aircraft applications. This is necessary because students, teachers and community members are often on school grounds for scheduled events and unscheduled activities when school is not formally in session.
- Ongoing air monitoring at half a dozen schools around the state that have been identified as having the most pesticides of public health concern applied nearby. Any exceedances of health screening levels detected by air monitors should be immediately reported to local school and county officials, parents and teachers and should trigger an expansion of the protection zone.
- Advance notification of any pesticide use within 1 mile of schools. Schools should be required to notify teachers and use the robo-call systems to notify parents.

Finally, while these are important first steps, we ask that your department devote significant resources and attention, in collaboration with other agencies and universities, to reducing the use of and phasing out the use of soil fumigants and other high toxicity, drift-prone pesticides and helping farmers obtain resources to assist with this transition. Through innovation in agriculture, we can help California farmers adopt cutting-edge practices and tools that keep agriculture prosperous.

Thank you for your commitment to the state's children and to the success of our farmers.

Sincerely,

Harry Wang MD

Harry Wang, MD, Vice-President
Physicians for Social Responsibility/Sacramento

PALMER WESTBROOK, INC.

550 WESTBROOK LANE ~ P.O.BOX 130
SMITH RIVER, CA 95567
Office (707)487-3843 ~ Fax (707)487-1342
pwincranches@yahoo.com

July 30, 2015

George Farnsworth, Branch Chief
Enforcement Branch
California Department of Pesticide Regulation
P.O. Box 4015
Sacramento, CA 95812-4012

Mr. George Farnsworth

With regards to the opportunity to comment on adoption of pesticide regulations potentially requiring additional buffers and notification;

I am part of a small family owned and operated Easter lily farm in the Smith River area of Northern California. We plant and harvest roughly 100 acres of Easter lilies annually. Given the rural and confined nature of our community many of the fields are located near the one school, and several homes in the area. We have farmed Easter lilies and used pesticides in this area; under EPA and DPR, state and federal, past and present regulations without one documented incident since the late 1940's.

Our primary fumigants are Telone and Metam Sodium. The Telone is applied; by a private California certified applicator, via shank injection at roughly 12" to 14" inches into the soil. We custom apply the Metam Sodium with a Rototill and Roll method. DPR has done extensive testing during many of our fumigant applications and have found no scientific results that merit the current buffer zones and regulations we operate under. In other words the fumigation methods we employ are far safer than the federal and state's current requirements.

In addition to our safe practices, the agricultural land in this area is buffered by strips of trees and other dense vegetation. The school, homes, and streams in the vicinity of any producing fields have a built in buffer. To add additional buffer zones in a small agricultural area would decrease my production by 20%. This would have great financial impact on my operation, all farming in this valley, and the local community.

The idea of addressing local needs and safety has long been a priority of our operation. We work very diligently with the county agricultural department to make sure we avoid any hazards before they can occur. We have taken great pains and costs to conform to state and federal regulations that are already overly extensive of our practices. Given the unique aspects of this community; it would be a big financial and logistical burden to try to force a statewide generic regulation on its local farming practices.

Will Westbrook, VP/Sec.
Palmer Westbrook, Inc.

PAJARO VALLEY FEDERATION OF TEACHERS
AFL • CIO
LOCAL 1936 • P.O. BOX 1222 • WATSONVILLE, CA 95077 • TEL. 831-722-2331

July 27, 2015

Brian Leahy, Director
George Farnsworth, Chief of Enforcement
Department of Pesticide Regulation (DPR)
P.O. Box 4015
Sacramento, CA 95812-4015
Emails: brian.leahy@cdpr.ca.gov george.farnsworth@cdpr.ca.gov

RE: Limit pesticide use near schools & promote innovative agriculture

Dear Director Leahy and Chief Farnsworth,

The Pajaro Valley Federation of Teachers, CFT, AFT 1936, represents teachers and other certificated personnel of the Pajaro Valley Unified School District, which is located in North Monterey County and South Santa Cruz County. Seven of our schools are directly adjacent to agricultural fields where heavy pesticide use is or has been the practice, with other schools being near fields where crops are grown through conventional practices. Our district is about 20,0000 students, 80% of which are Latino and over half the student population is of low social economic status, qualifying for free and reduced meals.

We are particularly concerned about the disproportionate exposure of Latino schoolchildren to pesticides, a fact documented by the Department of Public Health (DPH) report released last year. Latino children are almost twice as likely as white children to attend schools near the heaviest agricultural pesticide use. This is a civil rights violation that DPR must rectify by decreasing the risk of pesticide exposure at schools across the state. The DPH report also found soil fumigants and other pesticides which are known to cause cancer, reproductive system effects, harm to the brain and nervous system and respiratory effects being used in large quantities within ¼ mile of many California schools.

DPR should require one-mile protection zones (buffer zones) between fields where pesticides of public health concern are used and schools, childcare centers, school bus stops, and known school routes. Pesticides of public health concern include pesticides that show evidence of causing cancer, reproductive damage, harm to the brain and nervous system, and asthma and other respiratory problems. Protection zones of ¼ mile currently required in some counties are simply not adequate for health protection. The UC Davis MIND Institute recently showed that mothers who lived within a mile of fields where chlorpyrifos and other pesticides were sprayed while pregnant show a 60% higher chance

of having children with autism. The DPH report documented that chlorpyrifos was the 8th most common pesticide used within ¼ mile of schools in 2010.

Second, no-spray protection zones around schools should be enforced at all times for ground, air blast, as well as for aircraft applications, because students, teachers and community members are often on school grounds for scheduled events and unscheduled activities when school is not formally in session. Furthermore, pesticides can evaporate off the crop plants for an extended period after they are applied and pesticide contaminated dust can be blown onto school grounds and tracked into classrooms.

Third, once the new no-spray protection zones are in place, **DPR should conduct ongoing air monitoring** at half a dozen schools around the state that have been identified as having the most pesticides of public health concern applied nearby. Any excesses of health screening levels detected by air monitors should be immediately reported to local school and county officials, parents and teachers and should trigger an expansion of the protection zone.

Fourth, while large, one-mile buffer zones are essential for reducing exposure and protecting children's health, **if any pesticide use continues to be allowed within 1 mile of schools, advance notification should be provided to the schools**. Schools should then be required to notify teachers and use the robo-call systems to notify parents.

Finally, while these are important first steps, your department needs to devote significant resources and attention, in collaboration with other agencies and universities, to **reducing the use of and phasing out the use of soil fumigants and other high toxicity, drift-prone pesticides and helping farmers obtain resources to assist with this transition**. Through innovation in agriculture, we can help California farmers adopt cutting-edge practices and tools that keep agriculture prosperous.

Thank you for your commitment to the state's children and to the success of our farmers.

Sincerely,

Francisco Rodriguez D.

President, Pajaro Valley Federation of Teachers, CFT, AFT 1936

PAJARO VALLEY
FEDERATION OF
TEACHERS
AFL • CIO
LOCAL 1936 • P.O. BOX 1222 • WATSONVILLE, CA 95077 • TEL. 831-722-2331

July 27, 2015

Brian Leahy, Director
George Farnsworth, Chief of Enforcement
Department of Pesticide Regulation (DPR)
P.O. Box 4015
Sacramento, CA 95812-4015
Emails: brian.leahy@cdpr.ca.gov george.farnsworth@cdpr.ca.gov

RE: Limit pesticide use near schools & promote innovative agriculture

Dear Director Leahy and Chief Farnsworth,

The Pajaro Valley Federation of Teachers, CFT, AFT 1936, represents teachers and other certificated personnel of the Pajaro Valley Unified School District, which is located in North Monterey County and South Santa Cruz County. Seven of our schools are directly adjacent to agricultural fields where heavy pesticide use is or has been the practice, with other schools being near fields where crops are grown through conventional practices. Our district is about 20,0000 students, 80% of which are Latino and over half the student population is of low social economic status, qualifying for free and reduced meals.

We are particularly concerned about the disproportionate exposure of Latino schoolchildren to pesticides, a fact documented by the Department of Public Health (DPH) report released last year. Latino children are almost twice as likely as white children to attend schools near the heaviest agricultural pesticide use. This is a civil rights violation that DPR must rectify by decreasing the risk of pesticide exposure at schools across the state. The DPH report also found soil fumigants and other pesticides which are known to cause cancer, reproductive system effects, harm to the brain and nervous system and respiratory effects being used in large quantities within ¼ mile of many California schools.

DPR should require one-mile protection zones (buffer zones) between fields where pesticides of public health concern are used and schools, childcare centers, school bus stops, and known school routes. Pesticides of public health concern include pesticides that show evidence of causing cancer, reproductive damage, harm to the brain and nervous system, and asthma and other respiratory problems. Protection zones of ¼ mile currently required in some counties are simply not adequate for health protection. The UC Davis MIND Institute recently showed that mothers who lived within a mile of fields where chlorpyrifos and other pesticides were sprayed while pregnant show a 60% higher chance

of having children with autism. The DPH report documented that chlorpyrifos was the 8th most common pesticide used within ¼ mile of schools in 2010.

Second, no-spray protection zones around schools should be enforced at all times for ground, air blast, as well as for aircraft applications, because students, teachers and community members are often on school grounds for scheduled events and unscheduled activities when school is not formally in session. Furthermore, pesticides can evaporate off the crop plants for an extended period after they are applied and pesticide contaminated dust can be blown onto school grounds and tracked into classrooms.

Third, once the new no-spray protection zones are in place, **DPR should conduct ongoing air monitoring** at half a dozen schools around the state that have been identified as having the most pesticides of public health concern applied nearby. Any excesses of health screening levels detected by air monitors should be immediately reported to local school and county officials, parents and teachers and should trigger an expansion of the protection zone.

Fourth, while large, one-mile buffer zones are essential for reducing exposure and protecting children's health, **if any pesticide use continues to be allowed within 1 mile of schools, advance notification should be provided to the schools**. Schools should then be required to notify teachers and use the robo-call systems to notify parents.

Finally, while these are important first steps, your department needs to devote significant resources and attention, in collaboration with other agencies and universities, to **reducing the use of and phasing out the use of soil fumigants and other high toxicity, drift-prone pesticides and helping farmers obtain resources to assist with this transition**. Through innovation in agriculture, we can help California farmers adopt cutting-edge practices and tools that keep agriculture prosperous.

Thank you for your commitment to the state's children and to the success of our farmers.

Sincerely,

Francisco Rodriguez D.

President, Pajaro Valley Federation of Teachers, CFT, AFT 1936

July 31, 2015

George Farnsworth
Assistant Director
California Department of Pesticide Regulation
P.O. Box 4015
Sacramento, CA 95812-4015

Sent via email to: George.Farnsworth@cdpr.ca.gov

RE: Agricultural Pesticide Use Near Schools

Dear Mr. Farnsworth,

Thank you for the opportunity to comment on the Department of Pesticide Regulation's (DPR) draft concepts regarding agricultural pesticide use near schools. We commend DPR for initiating a process to develop regulations to better protect the health of schoolchildren from exposure to hazardous pesticides used near public schools, an issue about which we, as public health scientists, have serious concerns. It is essential that DPR adopt strong, health protective regulations and conduct studies to evaluate the ongoing risks to children posed by pesticides used near schools.

The Natural Resources Defense Council (NRDC) is a non-profit organization with over 2.4 million members and activists, 380,000 of whom are Californians. NRDC has no financial interest in any of the chemicals or products that may be the subject of these comments.

Existing regulations, labels, and policies are not sufficient to protect CA children
Pesticides, including those identified as "pesticides of public health concern" in the 2014 California Department of Public Health (DPH) report "Agricultural Pesticide Use Near Public Schools in California[1]," present a risk when used in proximity to sensitive sites and vulnerable populations. Sensitive sites include schools, day care centers, school bus routes, bus stops, and known routes used by children to walk to school.

In a 2005 study, 30% of acute illnesses associated with pesticide exposure at school were caused by pesticides drifting from nearby farmland[2]. The fact that numerous incidents of acute illness result from pesticide drift, even when pesticides are applied following current label directions, demonstrates that current buffer distances on labels are inadequate. For example, the Washington State Department of Health documented several instances of acute symptoms resulting from chlorpyrifos applications that were much farther removed than the buffer distances currently required[3]. In one case, air-blast spraying sickened occupants of a residence that was 260 feet removed from the spray site. In another case, workers were sickened by an air-blast application in an orchard that was almost *1 mile* away from their work

site. The maximum buffer distance required for air blast applications of chlorpyrifos is 50 feet[4].

Furthermore, these incident reports of acute poisonings represent just the tip of the iceberg of health threats because they do not include health impacts from chronic, low-level exposures to pesticides. Children are more vulnerable to pesticide exposures and potential health effects because of their behavior, developing bodies, and body size. Exposure to certain pesticides in early life is associated with cancer[5] and neurodevelopmental impacts[6] like loss of IQ, attention problems, and developmental delay.

Communities have a right to know in advance about pesticide applications within a mile of schools. Schools should be notified, and communicate this information to teachers and parents, at minimum a week in advance of fumigations and at minimum 48 hours prior to other pesticide applications.

<u>However, notification, alone, does not mitigate the risks associated with application of hazardous pesticides near sensitive sites. DPR must use the following types of policies to help mitigate the above risks:</u>

1. **Require greater distance between pesticide applications and sensitive sites by mandating a protective buffer zone.**

Buffer zones can decrease the likelihood that bystanders will be exposed to pesticide drift[7]. Imperial County already requires buffer zones of 1 mile between aerial applications of restricted use pesticide and sensitive sites. To ensure protection from exposure to pesticides applied near schools, DPR must comprehensively evaluate pesticide applications for the potential to cause exposures at sensitive sites during worst-case conditions. Buffer zones of at least 1 mile around sensitive sites should be required unless a comprehensive evaluation suggests that the zone of impact is smaller, or larger.

Comprehensive evaluations must address all routes by which pesticide applications can result in off-site exposures including drift, volatilization, and entrainment in dust. Additionally, models must take into account formulation, application methods, ingredient volatility, and real-world meteorological and geographical conditions. These models must then be groundtruthed with comprehensive on-site monitoring at sensitive sites during spray applications under a variety of meteorological conditions and correlated with pesticide use reporting data for the neighboring fields.

Adequate buffer zones are especially important for protection from pesticides that may cause or exacerbate asthma. A recent study of children from the CHAMACOS cohort in the Salinas valley found that early life exposure to organophosphate pesticides is associated with asthma-like respiratory problems[8]. Childhood asthma caused by preventable toxic exposures is estimated to cost California $208 million every year and result in over a million missed school days for kids[9]. The 2014 DPH report found that Latino children were 91% more likely than white children to go to schools within ¼ mile of the highest use of pesticides of public health concern. Increased buffer zones are needed to ensure that Latino school children can enjoy the same environmental quality at school as White children in California.

2. **Restrict the use of application methods that increase the risk of pesticide drift and exposure near sensitive sites.**

Aerial, air-blast and other upward-directed pesticide application methods should be restricted in the vicinity of sensitive sites. Pesticides applied with these methods are far more likely to drift off target and result in bystander exposure.

Additionally, in order to evaluate ongoing risks and whether mitigations are effective, DPR should:

1. **Conduct air and dust monitoring at schools and day care centers**

There is a need for comprehensive on-site monitoring to quantify the impacts of spray drift and post-application drift/ volatilization on the air and dust at schools and day care centers. Analysis of the air and dust of California early childhood education environments finds that facilities in agricultural areas have higher air and dust concentrations of at least one agricultural pesticide[10]. A recent review of non-occupational pesticide exposure pathways found strong evidence that drift contributed to presence and concentrations of pesticides in indoor dust[11]. Pesticides in indoor dust can contribute significantly to children's exposure – for children three to five years of age, exposure models indicated that dust ingestion was the primary route of exposure to chlorpyrifos among farmworkers' children from an agricultural community in California[12].

2. **Make improvements to the air monitoring network**

Of the three DPR and Air Resources Board (ARB) air monitoring sites at schools, only selected soil fumigants are monitored at two (in Oxnard and Watsonville). More comprehensive monitoring should be conducted at these sites. The third site, Shafter High School, is an appreciable distance from fields. No agricultural pesticide use was reported in the same 1 square mile section in 2011, 2012 or 2013. The monitor should be relocated to a school closer to intensive agricultural pesticide use. Additional monitoring should be deployed at sensitive sites based on a comprehensive, air-shed approach which identifies those sites most vulnerable to pesticides as a function of proximity to application of priority pesticides and meteorological conditions.

3. **Conduct ongoing surveillance of the use of pesticides of public health concern near schools and day care centers and complete an annual report detailing the findings.**

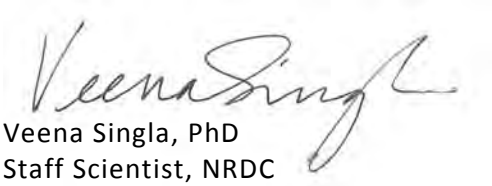
In order to conduct this analysis and for transparency, there is a need, as recommended in the DPH report, for "Routine and standardized collection, digitization, and reporting of data on agricultural field locations of each pesticide use permit, which could then be made publicly accessible via the PUR system in a format convenient for Geographic Information Systems."

Finally, though the above actions can help to mitigate pesticide risks, ultimately the most effective way to protect children from harmful pesticide exposure is to reduce and eliminate the use of fumigants, chlorpyrifos and other highly hazardous drift prone pesticides. School protection or buffer zones are opportunity zones for trials of safer replacement pest control methods. DPR needs to work with other state and federal agencies to maintain and increase investment in helping farmers transition away from fumigants and chlorpyrifos by 2020, and promote sustainable agriculture over the longer term.

We appreciate the opportunity to comment on this important issue. We believe that in order to protect the health of California school children and ensure equity for Latino students, DPR must adopt regulations which mandate protective buffer zones and restrictions on drift-prone application methods around sensitive sites. We look forward to working with DPR on policies that improve health protections for California's agricultural communities.

Sincerely,

Miriam Rotkin-Ellman, MPH
Senior Scientist, NRDC



Veena Singla, PhD
Staff Scientist, NRDC

Cc: Brian Leahy, Director, Department of Pesticide Regulation

---

[1] California Department of Public Health, California Environmental Health Tracking Program, and Public Health Institute. "Agricultural Pesticide Use near Public Schools in California," April 2014. http://www.ehib.org/page.jsp?page_key=1040.

[2] Alarcon WA, Calvert GM, Blondell JM, and et al. "Acute Illnesses Associated with Pesticide Exposure at Schools." JAMA 294, no. 4 (July 27, 2005): 455–65. doi:10.1001/jama.294.4.455.

[3] Morrissey, Barbara, and Joanne Prado. "Comment on US EPA's Revised Human Health Risk Assessment for Chlorpyrifos Registration Review." Washington State Department of Health, May 8, 2015. http://www.regulations.gov/#!documentDetail;D=EPA-HQ-OPP-2008-0850-0842.

[4] "Spray Drift Mitigation Decision for Chlorpyrifos (059101) July 2012." US Environmental Protection Agency, July 16, 2012. http://www.regulations.gov/#!documentDetail;D=EPA-HQ-OPP-2008-0850-0103.

[5] Carozza, Susan E., Bo Li, Kai Elgethun, and Ryan Whitworth. "Risk of Childhood Cancers Associated with Residence in Agriculturally Intense Areas in the United States." Environmental Health Perspectives 116, no. 4 (April 2008): 559–65. doi:10.1289/ehp.9967.

[6] Muñoz-Quezada, María Teresa, Boris A. Lucero, Dana B. Barr, Kyle Steenland, Karen Levy, P. Barry Ryan, Veronica Iglesias, et al. "Neurodevelopmental Effects in Children Associated with Exposure to Organophosphate Pesticides: A Systematic Review." Neurotoxicology 39 (December 2013): 158–68. doi:10.1016/j.neuro.2013.09.003.

[7] "Soil Fumigant Mitigation Factsheet: Buffer Zones (EPA 735-F-12-003)." US Environmental Protection Agency, March 2012. http://www2.epa.gov/sites/production/files/2013-10/documents/sfm-buffer-zones-2012.pdf.

[8] Raanan, Rachel, Kim G. Harley, John R. Balmes, Asa Bradman, Michael Lipsett, and Brenda Eskenazi. "Early-Life Exposure to Organophosphate Pesticides and Pediatric Respiratory Symptoms in the CHAMACOS Cohort." Environmental Health Perspectives, November 4, 2014. doi:10.1289/ehp.1408235.

[9] California Environmental Health Tracking Program, and Public Health Institute. "Costs of Environmental Health Conditions in California Children," June 2015. http://www.phi.org/uploads/files/2015ROI_CEHTP.pdf.

[10] Bradman, Asa, Fraser Gaspar, Rosemary Castorina, Elodie Tong-Lin, Thomas E McKone, and Randy Maddalena. "Environmental Exposures in Early Childhood Education Environments." Berkeley, CA: Center for Environmental Research and Children's Health, University of California Berkeley for the California Air Resources Board, 2012.

[11] Deziel, Nicole C., Melissa C. Friesen, Jane A. Hoppin, Cynthia J. Hines, Kent Thomas, and Laura E. Beane Freeman. "A Review of Nonoccupational Pathways for Pesticide Exposure in Women Living in Agricultural Areas." Environmental Health Perspectives, January 30, 2015. doi:10.1289/ehp.1408273.

[12] Beamer, Paloma I., Robert A. Canales, Alesia C. Ferguson, James O. Leckie, and Asa Bradman. "Relative Pesticide and Exposure Route Contribution to Aggregate and Cumulative Dose in Young Farmworker Children." International Journal of Environmental Research and Public Health 9, no. 1 (January 3, 2012): 73–96. doi:10.3390/ijerph9010073.

July 31, 2015

Brian Leahy, Director
George Farnsworth, Chief of Enforcement
Department of Pesticide Regulation (DPR)
P.O. Box 4015
Sacramento, CA 95812-4015
Emails: brian.leahy@cdpr.ca.gov george.farnsworth@cdpr.ca.gov

RE: Limit pesticide use near schools & promote innovative agriculture

Dear Director Leahy and Chief Farnsworth,

The National Farm to School Network (NFSN) welcomes DPR's attention to the problem of pesticide use near schools because as an organization supporting both farmers and kids, we have serious concerns about heavy agricultural pesticide use near local schools. By 2016, DPR should move swiftly to adopt new protections for schoolchildren from hazardous and volatile pesticides and find new ways to promote and support sustainable, cutting-edge agriculture.

NFSN is an information, advocacy and networking hub for communities working to bring local food sourcing and food and agriculture education into schools and preschools. Farm to school empowers children and their families to make informed food choices while strengthening the local economy and contributing to vibrant communities.

We are particularly concerned about the disproportionate exposure of Latino schoolchildren, a fact documented by the Department of Public Health (DPH) report released last year. Latino children are almost twice as likely as white children to attend schools near the heaviest agricultural pesticide use. This is a civil rights violation that DPR must rectify by decreasing the risk of pesticide exposure at schools across the state. The DPH report also found soil fumigants and other pesticides which are known to cause cancer, reproductive system effects, harm to the brain and nervous system and respiratory effects being used in large quantities within ¼ mile of many California schools.

DPR should require one-mile protection zones (buffer zones) between fields where pesticides of public health concern are used and schools, childcare centers, school bus stops, and known school routes. Pesticides of public health concern include pesticides that show evidence of causing cancer, reproductive damage, harm to the brain and nervous system, and asthma and other respiratory problems. Protection zones of ¼ mile currently required in some counties are simply not adequate for health protection. The UC Davis MIND Institute recently showed that mothers who lived within a mile of fields where chlorpyrifos and other pesticides were sprayed while

pregnant show a 60% higher chance of having children with autism. The DPH report documented that chlorpyrifos was the 8th most common pesticide used within ¼ mile of schools in 2010.

Second, no-spray protection zones around schools should be enforced at all times for ground, air blast, as well as for aircraft applications, because students, teachers and community members are often on school grounds for scheduled events and unscheduled activities when school is not formally in session. Furthermore, pesticides can evaporate off the crop plants for an extended period after they are applied and pesticide contaminated dust can be blown onto school grounds and tracked into classrooms.

Third, once the new no-spray protection zones are in place, DPR should conduct ongoing air monitoring at half a dozen schools around the state that have been identified as having the most pesticides of public health concern applied nearby. Any exceedances of health screening levels detected by air monitors should be immediately reported to local school and county officials, parents and teachers and should trigger an expansion of the protection zone.

Fourth, school gardens, a pillar of farm to school programming, are especially vulnerable to spray from the area. Children often eat directly from these plants and schools are unable to follow typical pesticide guidelines if they are not aware of or controlling the spray. We urge you to protect these gardens as they are both sources of food for the cafeteria and educational tools.

Finally, while these are important first steps, your department needs to devote significant resources and attention, in collaboration with other agencies and universities, to reducing the use of and phasing out the use of soil fumigants and other high toxicity, drift-prone pesticides and helping farmers obtain resources to assist with this transition. Through innovation in agriculture, we can help California farmers adopt cutting-edge practices and tools that keep agriculture prosperous.

Thank you for your commitment to the state's children and to the success of our farmers.

Sincerely,

Anupama Joshi, Executive Director and Co-Founder
National Farm to School Network

Erin McGuire, Policy Director
National Farm to School Network

Nagata Bros. Farms, Inc.
P.O. Box 220
San Luis Rey, CA 92068
(760) 966-2870 Fax: (760) 966-2673

July 31, 2015

Mr. George Farnsworth,
Enforcement Branch Department of Pesticide Regulation Post Office Box 4015
Sacramento, CA 95812-4015

Mr. Farnsworth,

I am a strawberry grower in San Diego County. I want to thank you and the Department of Pesticide Regulation (DPR) for your outreach to share accurate information about pesticide regulation. And provide an opportunity to receive feedback on DPR's Concepts to Address Pesticide Use Near Schools as presented in the series of regional workshops held from May 28 through June 9, 2015.

I was not able to participate in the workshops as the workshops were far from my district and conducted during a busy time, making it difficult for me to attend. However, I appreciate the opportunity to provide written comments.

I am third generation California strawberry grower. My family has been growing strawberries since 1920. I am one of 400 family farmers growing strawberries in the state. In addition to growing almost 90% of the nation's strawberries, strawberry farmers help protect the state's remaining farmland. I take this responsibility very seriously which is why I am concerned that if DPR were to enact regulations which are too restrictive, these regulations could unintentionally render prime agricultural land near schools useless.

I abide by safe farming practices in strict compliance with federal, state, and county regulations and restrictions. My family and I live directly on the strawberry farm. Protecting my family, my employees, my neighbors and their children, is my first priority. We live and neighborhood children go to school in the very same community where I grow strawberries. It is important to understand that when we have to treat a field we must take into consideration the location and any potential hazards that can be associated with a pesticide application. This is especially true around schools.

I am concerned that when you conducted the workshops, many community members are unfamiliar with agriculture and did not understand the high level of sophistication and safety built into a growers pesticide application decisions. Further, they do not understand California's pesticide regulatory system, which provides the highest level of protection in the country for pesticide applications.

The state's pesticide regulatory program has an impressive record of protecting public health. It is my understanding that DPR surveyed County Agricultural Commissioners (CAC) regarding pesticide inquiries received about schools between September 2011 and September 2014. Responses were received from 46 counties. Of the 1,779 pesticide inquiries received by CAC regarding schools, each incident was investigated and the result was that, "None of the investigations discovered an exposure incident or illness." Further, DPR stated at the workshops that, "DPR's evaluation indicates that the risk to schoolchildren is low in most cases."

I am concerned that the lack of factual risk communication, coupled with uninformed public perception, may be driving DPR to create new state-wide requirements pertaining to agricultural pesticide applications near schools; and that for the first time, DPR is basing a regulation on the perception of risk and not by science.

California strawberry farmers follow safe farming practices in strict compliance federal, state, and county regulations and restrictions. These regulations and restrictions work to keep children safe. DPR has not presented any scientific data to support the need for additional restrictions. What is required is additional risk communication, presented in a simple to understand format. This will allow the greater understanding that the community is not at risk.

I want to thank you and your department for sharing accurate information about pesticide regulation and receiving feedback on DPR's Concepts to Address Pesticide Use Near Schools.

Sincerely,

Neil Nagata

July 16, 2015

Brian Leahy, Director
George Farnsworth, Chief of Enforcement
Department of Pesticide Regulation (DPR)
P.O. Box 4015
Sacramento, CA 95812-4015
Emails: brian.leahy@cdpr.ca.gov george.farnsworth@cdpr.ca.gov

RE: Limit pesticide use near schools & promote innovative agriculture

Dear Director Leahy and Chief Farnsworth,

I am writing as co-founder and steering committee co-chair of MOMS Advocating Sustainability (MOMAS), a Bay Area-based grassroots organization of parents dedicated to reducing the amount of environmental toxins that children are exposed to.

Our organization has serious concerns about heavy agricultural pesticide use near local schools. DPR must move swiftly to adopt new protections for schoolchildren from hazardous and volatile pesticides, and find new ways to promote and support sustainable, cutting-edge, agro ecological based agriculture.

We are particularly concerned about the disproportionate exposure of Latino schoolchildren, a fact documented by the Department of Public Health (DPH) report released last year. Latino children are almost twice as likely as white children to attend schools near the heaviest agricultural pesticide use. This is a civil rights violation that DPR must rectify by decreasing the risk of pesticide exposure at schools across the state. The DPH report also found soil fumigants and other pesticides which are known to cause cancer, reproductive system effects, harm to the brain and nervous system and respiratory effects being used in large quantities within ¼ mile of many California schools.

DPR should require a minimum of one-mile protection zones (buffer zones) between fields where pesticides of public health concern are used and schools, childcare centers, school bus stops, and known school routes. Pesticides of public health concern include pesticides that show evidence of causing cancer, reproductive damage, harm to the brain and nervous system, and asthma and other respiratory problems. Protection zones of ¼ mile currently required in some counties are not adequate for health protection. The UC Davis MIND

Institute recently showed that mothers who lived within a mile of fields where chlorpyrifos and other pesticides were sprayed while pregnant show a 60% higher chance of having children with autism. The DPH report documented that chlorpyrifos was the 8th most common pesticide used within ¼ mile of schools in 2010.

Second, no-spray protection zones around schools should be enforced at all times for ground, air blast, as well as for aircraft applications, because students, teachers and community members are often on school grounds for scheduled events and unscheduled activities when school is not formally in session. Furthermore, pesticides can evaporate off the crop plants for an extended period after they are applied and pesticide contaminated dust can be blown onto school grounds and tracked into classrooms.

Third, once the new no-spray protection zones are in place, DPR should conduct ongoing air monitoring at half a dozen schools around the state that have been identified as having the most pesticides of public health concern applied nearby. Reports that exceed health-screening levels detected by air monitors should be immediately reported to local school and county officials, parents and teachers and should trigger an expansion of the protection zone.

Fourth, while large, one-mile buffer zones are essential for reducing exposure and protecting children's health, if <u>any</u> pesticide use continues to be allowed within 1 mile of schools, advance notification should be provided to the schools. Schools should then be required to notify teachers and use the robo-call systems to notify parents.

Finally, and most critically, while these are important ***first steps***, your department needs to devote significant resources and attention, in collaboration with other agencies and universities, to reducing the use of and phasing out the use of soil fumigants and other high toxicity, drift-prone pesticides and helping farmers obtain resources to assist with this transition. Through innovation in agro ecological agricultural methods, we can help California farmers adopt cutting-edge practices and tools that keep agriculture prosperous, sequester carbon, limit water runoff, and provide nutritious food to our world which relies on CA agriculture.

Thank you for your commitment to the state's children and to the success of our farmers.

Sincerely,

Debbie Friedman
Steering Committee Co-Chair & Co-Founder
MOMS Advocating Sustainability

www.momsadvocatingsustainability.org

PO Box 625, Chico, CA 95927 Phone (530) 570- 6872

July 17, 2015

Brian Leahy, Director
George Farnsworth, Chief of Enforcement
Department of Pesticide Regulation (DPR)
Emails: brian.leahy@cdpr.ca.gov george.farnsworth@cdpr.ca.gov

Dear Director Leahy and Chief Farnsworth:

We have serious concerns about heavy agricultural pesticide use near local schools.

We are a statewide organization focusing primarily on GMO food labeling, but also support all food sovereignty and food justice efforts. Pesticide use is one of our top concerns, particularly when it concerns children.

We are particularly concerned about the disproportionate exposure of Latino schoolchildren. Latino children are almost twice as likely as white children to attend schools near the heaviest agricultural pesticide use. This is a civil rights violation that DPR must rectify.

DPR should require one mile protection zones (buffer zones) between fields where pesticides of public health concern are used and schools, childcare centers, school bus stops, and known school routes.

Protection zones around schools should be enforced at all times for ground as well as for aircraft applications, because students, teachers and community members are often on school grounds for scheduled events and unscheduled activities when school is not in session. Furthermore, pesticides can evaporate off the crop plants for an extended period after they are applied and pesticide contaminated dust can be blown onto school grounds and tracked into classrooms.

Once the new protection zones become are in place, DPR should conduct ongoing air monitoring at half a dozen schools around the state that have been identified as having the most pesticides of public health concern applied nearby. Any exceedances of health screening levels caught by air monitors should be immediately reported to local school and county officials, parents and teachers and should trigger an expansion of the protection zone.

Fourth, while large, 1 mile buffer zones are essential for reducing exposure and protecting children's health, if any pesticide use continues to be allowed within 1 mile of schools, advance notification should be provided to the schools and schools should be required to in turn notify teachers and use the robo-

Finally, while these are important first steps, your department needs to devote significant resources and attention to reducing the use of and phasing out the use of soil fumigants and other high toxicity, drift-prone pesticides and helping farmers obtain resources to assist with this transition.

Sincerely,

Pamm Larry
Director, Labelgmos.org
plarry@labelgmos.org
530 – 570 - 6872

KERN COUNTY FARM BUREAU

801 South Mount Vernon Avenue
Bakersfield, CA 93307-2888
www.KernCFB.com

Phone: (661) 397-9635
Fax: (661) 397-3403
Email: kcfb@kerncfb.com

Greg Wegis
President

Jeff Rasmussen
1st Vice President

Catalino "Tito" Martinez
2nd Vice President

Beatris Espericueta Sanders
Executive Director

June 18, 2015

George Farnsworth
Department of Pesticide Regulation
PO Box 4015
Sacramento, CA 95812-4015

Re: Department of Pesticide Regulations – Kern County workshop review

Dear Mr. Farnsworth:

On behalf of 1,400 members of the Kern County Farm Bureau, I am writing to thank you for proactively hosting the recent grower meeting in Lamont on Friday, June 5. We appreciate your time and commitment in regards to the safety of pesticide applications and practices around schools in Kern County. The many growers who attended the meeting provided good suggestions and comments as to their current practices in applications, specifically around Kern County schools. Keeping schools and children safe is already a priority for our growers.

Over the years as California's population has increased, many schools have been built (and continue to be built), on already existing prime agricultural land next to farming operations. Placing schools so close to farms places the burden on growers to provide buffers to prevent the dust, noise and smells that are an inherent part of producing food, fiber, fuel and flowers. We can understand why people may have questions about applications near schools, but the concern is due to the lack of education and this is what DPR needs to address. It is without hesitation that we can confidently state that Kern County growers follow the strictest and most comprehensive application regulations in the nation; the current regulations are working. There is no evidence to demonstrate that any changes in regulations are needed.

Kern County is the second largest agricultural producing county in the nation. We take pride in the diversity of our crops we grow for the nation, our efficient water use and most importantly our pesticide applications. As stated before, many of our growers and labor crews live in the middle of orchards or have children who attend schools neighboring agriculture. Since 2007, the Kern County farming industry has had no incidents that involved the improper use of pesticides while students were present during school hours.

It is for all the reasons mentioned above that we suggest the Department of Pesticide Regulations help Kern County residents and educate the schools and public on the safe practices of pesticide applications. DPR's goal should be to have an open line of communication between the school district staff and provide education tools much like our Kern County growers have done with the "Spray Safe" conference. We would love to work with you to incorporate your involvement in next year's "Spray Safe" in January 2016 or even creating a "Spray Safe" conference specifically for the school districts. Kern County agriculture needs to proactively engage the public to reduce their fears of pesticide applications. DPR is the most ideal outlet to help us with this process of educating and engaging our citizens. We hope we can continue this dialogue with you and our local school districts to provide meaningful solutions on educating the public on pesticide applications.

Sincerely,

Greg Wegis
President

John Allen Farms, Inc.

9301 Shafter Road
Bakersfield, California 93311-9766

July 28, 2015

George Farnsworth
Assistant Director
California Department of Pesticide Regulation
PO Box 4015
Sacramento, CA 95812-4015

RE: Proposed Regulations for Pesticide Applications Near Schools

Dear Mr. Farnsworth:

I am a Kern County almond grower. I farm across the street from a K – 8 school that has a pool and a gym that are magnets for community activities throughout the week. In 25 years we have never had an exposure incident or any complaints that I have been aware of. I have notified the school of my intentions to spray and adjusted my schedule to enable my business to function without creating problems or drawing attention. I pay close attention to weather conditions, especially the wind. We only spray when we are downwind from the school. Sometimes we spray at night. I prefer to minimize this, because even well-lit areas are more prone to employee injuries and it is much more difficult to know where spray material is going in the dark.

I live with my family in the middle of our 230 acres of orchards and we look out for our own wellbeing as we do our neighbors and the school. We use the "softest" effective chemicals available, even at higher cost. However, some pests require chemicals that are dangerous. In these instances, I have paid for neighbors to stay in hotels for the night, and we use contract spray operators and ask that they spray at night or weekends. In any event, treating trees with pesticides requires air blast spray equipment or aerial application (helicopters).

The San Bernardino County regulations would make it impossible for me to grow almonds within ¼ of the school. That would take 65 acres out of production. The market value of almonds has reached $35,000 per acre. Even organic almonds require multiple sprays by air blast or aerial sprayers. These rules are excessive, unworkable and unnecessary.

I understand that there have been incidents and that CDPR is under pressure to write the Regs to enforce State law. My request is that such rules give flexibility to growers, applicators, schools and delegate County jurisdiction over this matter. Factors such as weather, especially wind direction and velocity, risk level of materials applied, timing, communication between growers and school officials should be recognized as legitimate means to mitigate/eliminate risk to school occupants. If notification requirements go beyond school administration, I have no practical way to do this. Careful thought is needed here to balance enabling public awareness and avoiding instigation of unneeded fear or anxiety. Please do not adopt ham fisted, one size fits all approach to this matter.

Tel: 661-834-8439 Mob: 661-332-2838 Fax: 661-834-8088 e-mail: allen_farms@msn.com

Sincerely,

John M Allen,

Vice President Operations, CFO, Secretary

International Brotherhood of Electrical Workers

LOCAL UNION NO. 234
10300 Merritt Street
Castroville, CA 95012
www.ibew234.org

(800) 499-4239
(831) 633-2311
Fax (831) 633-0570

The Electrician's Union for Monterey, San Benito, and Santa Cruz County

July 9, 2015

SENT VIA EMAIL TO brian.leahy@cdpr.ca.gov george.farnsworth@cdpr.ca.gov

Department of Pesticide Regulation (DPR)
P.O. Box 4015
Sacramento, CA 95812-4015

Dear Director Leahy and Chief Farnsworth:

IBEW Local 234 is the Electrician's Union for Santa Cruz, San Benito, and Monterey County. The membership of Local 234's recently voted to encourage DPR's attention to the problem of pesticide use near schools because as members of our community we have serious concerns about heavy agricultural pesticide use near local schools.

DPR should require one mile protection zones (buffer zones) between fields where pesticides of public health concern are used and schools, childcare centers, school bus stops, and known school routes. Pesticides of public health concern include pesticides that show evidence of causing cancer, reproductive damage, harm to the brain and nervous system, and asthma and other respiratory problems. Protection zones of ¼ mile currently required in some counties are simply not adequate for health protection. The UC Davis MIND Institute recently showed that mothers who lived within a mile of fields where chlorpyrifos and other pesticides were sprayed while pregnant show a 60% higher chance of having children with autism. The DPH report documented that chlorpyrifos was the 8th most common pesticide used within ¼ mile of schools in 2010.

Second, protection zones around schools should be enforced at all times for ground as well as for aircraft applications, because students, teachers and community members are often on school grounds for scheduled events and unscheduled activities when school is not in session. Furthermore, pesticides can evaporate off the crop plants for an extended period after they are applied and pesticide contaminated dust can be blown onto school grounds and tracked into classrooms.

Third, once the new protection zones become are in place, DPR should conduct ongoing air monitoring at half a dozen schools around the state that have been identified as having the most pesticides of public health concern applied nearby. Any exceedances of health screening levels caught by air monitors should be immediately reported to local school and county officials, parents and teachers and should trigger an expansion of the protection zone.

Fourth, while large, 1 mile buffer zones are essential for reducing exposure and protecting children's health, if <u>any</u> pesticide use continues to be allowed within 1 mile of schools, advance notification should be provided to the schools and schools should be required to in turn notify teachers and use the robo-call systems to notify parents.

Finally, while these are important first steps, your department needs to devote significant resources and attention to reducing the use of and phasing out the use of soil fumigants and other high toxicity, drift-prone pesticides and helping farmers obtain resources to assist with this transition.

Sincerely,

Andy Hartmann
Business Manager/Financial Secretary

7-28-14

Brian Leahy, Director
California Department of Pesticide Regulation
1001 I Street, PO Box 4015
Sacramento, CA 95812-4015

RE: Designating school safe zones and putting incentives in place to help farmers shift away from outdated use of hazardous pesticides.

Dear Director Leahy,

I am writing to provide public input for minimizing agriculture pesticide exposure near schools.

Problem Statement

Even though California's multibillion-dollar irrigated agriculture has become more environmentally sustainable with its regulatory leadership, reporting and state's pesticide laws formulated to reduce pesticide risks, problems relating to application of agricultural chemicals and resulting drift residues still occur, particularly near sensitive populations like schools.

For example, many agrochemicals and their byproducts may remain in the environment after they are applied to nearby crops. Because of agrochemical persistence near vulnerable populations, there may be implications for chronic exposure risks and delayed adverse health outcomes to children. Therefore, school children proximity to agricultural chemical hazards and the possibility of disproportionate or mis-specified environmental health impacts due to risks of spray drift and persistent low-level exposure from agrochemicals is a problem facing many rural and peri-urban schools in the Central Valley, and elsewhere throughout the United States where rural communities and intense agricultural management co-exist.

Problem Significance

Studies have shown that much of the occurrence of pesticides in the atmosphere can be attributed to agricultural use because of the large acreage involved and the large chemical quantities used. For example, of all the counties in California from 1998-2007, Kern County (my current county of residence), which is located in the southern region of the Central Valley, was ranked first with the most confirmed cases of illness from agricultural pesticide drift (835 incidents), and second in pesticide use. Additionally, researchers have mapped geographic distribution of pesticide use density by block groups using the percentiles of the statewide distribution by annual average 1991-1994, with results indicating the highest use areas were primarily in the Central Valley (Sacramento and San Joaquin) areas which correspond well with the heaviest agricultural counties in the state based on farm revenue.

As you know, drift is the unintentional airborne movement of pesticides to non-target areas such as residential areas, schools, and other spaces. Atmospheric pesticide inputs typically occur during the agricultural application process (e.g., spraying through airblast, boom, and aerial) through evaporation and drift, and post-application through volatilization and wind erosion. Volatilization is a common pathway for pesticides to enter the environment.

Pesticide exposure, whether from acute poisoning or persistent/chronic effects, may induce chronic health complications in preadolescents, including neurodevelopmental or behavioral problems, birth defects, asthma, and cancer. Children are particularly vulnerable and at risk to the adverse health effects of pesticide exposure due to their size, their rapidly growing bodies, and the special ways they physically interact with their school environment and other students such as spending more time outdoors, playing on the ground, and putting objects in their mouths.

Environmental hazard assessments in intensive agricultural practices are profoundly shaped by the use and application of pesticides near vulnerable, receptor populations. As you are aware of, three major types of agrochemicals that contribute to atmospheric pesticide contamination are herbicides, insecticides, and fungicides, and the atmosphere is considered as the major pathway by which pesticides are transported and deposited in off-target areas.

Even though scientists recognize that almost every agricultural pesticide application produces some amount of drift, that may or may not be harmful or illegal, the proper management of pesticides is important for public safety and the health of the environment. For instance, pesticide spray incidents in the past have subjected many people to toxic contaminants, often without their knowledge.

Lastly, pesticide and volatilization drift can occur hours or even days following the initial application, and constitutes a large source of potential human exposure, especially in children who are particularly vulnerable to this type of inhalation. Studies have shown that children are particularly vulnerable to inhalation of pesticide volatilization and they are the most susceptible to chemical toxicity and most likely to suffer irreparable harm from exposure.

Solutions for Minimizing Potential Exposure to Agricultural Pesticides

One solution to ameliorate potential pesticide exposure is to require 1 mile buffer zones. A second solution is to use Ag precision techniques with a pre-assessment of potential pesticide exposure by performing air dispersion modeling for industrial agricultural sites that are close to vulnerable receptor populations like schools prior to spraying.

For example, since industrial agrochemical pollution is derived from specific sources and usually spreads out with progressively lower concentrations, showing considerable systematic spatial variation, a GIS-based modeling approach can be used to model and assess potential levels of exposure to agrochemicals. Likewise, since aerial pesticide applications are known to drift between 500 and 1,000 meters and boom-type sprayers can drift between 300 and 800 meters, agrochemical atmospheric dispersion can often be modeled as a plume. The plume typically shows a normal or Gaussian distribution of concentration in the vertical and horizontal direction downwind and is appropriate when modeling in the near field with simple to moderate terrain. Greatest pesticide emission is normally concentrated in a short period and is generally located in the immediate surroundings of the application area.

By adding 1 mile buffer zones and performing this type of Ag precision assessment and modeling prior to agrochemical spraying would greatly reduce the chance of pesticide exposure from agricultural practices near schools.

Sincerely,

Vince Zaragoza

Vince Zaragoza, AICP, GISP

July 29, 2015

Brian Leahy, Director
George Farnsworth, Chief of Enforcement
Department of Pesticide Regulation (DPR)
P.O. Box 4015
Sacramento, CA 95812-4015

RE: Limit pesticide use near schools & promote innovative agriculture

Dear Director Leahy and Chief Farnsworth,

We welcome DPR's attention to the problem of pesticide use near schools because many of our more than 600,000 members and supporters are parents and teachers and have serious concerns about heavy agricultural pesticide use near local schools. By 2016, DPR should move swiftly to adopt new protections for schoolchildren from hazardous and volatile pesticides and find new ways to promote and support sustainable, cutting-edge agriculture.

Friends of the Earth is a hard-hitting, progressive environmental organization that defends the environment and champions a healthy and just world. We're part of Friends of the Earth International, a federation of groups working in 74 countries on today's most urgent environmental and social issues. Our current campaigns focus on promoting clean energy and solutions to climate change, ensuring the food we eat and products we use are safe for our health and the environment, and protecting marine ecosystems and the people who live and work near them.

We are particularly concerned about the disproportionate exposure of Latino schoolchildren, a fact documented by the Department of Public Health (DPH) report released last year. Latino children are almost twice as likely as white children to attend schools near the heaviest agricultural pesticide use. This is a civil rights violation that DPR must rectify by decreasing the risk of pesticide exposure at schools across the state. The DPH report also found soil fumigants and other pesticides which are known to cause cancer, reproductive system effects, harm to the brain and nervous system and respiratory effects being used in large quantities within ¼ mile of many California schools.

DPR should require one-mile protection zones (buffer zones) between fields where pesticides of public health concern are used and schools, childcare centers, school bus stops, and known school routes. Pesticides of public health concern include pesticides that show evidence of causing cancer, reproductive damage, harm to the brain and nervous system, and asthma and other respiratory problems. Protection zones of ¼ mile currently required in some counties are simply not adequate for health protection. The UC Davis MIND Institute recently showed that mothers who lived within a mile of fields where chlorpyrifos and other pesticides were sprayed while pregnant show a 60% higher chance of having children with autism. The DPH report documented that chlorpyrifos was the 8th most common pesticide used within ¼ mile of schools in 2010.

1100 15th Street, NW · 11th Floor · Washington, DC 20005
202.783.7400 · 202.783.0444 fax · 877.843.8687 toll free · www.foe.org
2150 Allston Way, Suite 240 · Berkeley, CA 94704
510-900-3150 · 510-900-3155 fax · 866.217.8499 toll free

Second, no-spray protection zones around schools should be enforced at all times for ground, air blast, as well as for aircraft applications, because students, teachers and community members are often on school grounds for scheduled events and unscheduled activities when school is not formally in session. Furthermore, pesticides can evaporate off the crop plants for an extended period after they are applied and pesticide contaminated dust can be blown onto school grounds and tracked into classrooms.

Third, once the new no-spray protection zones are in place, DPR should conduct ongoing air monitoring at half a dozen schools around the state that have been identified as having the most pesticides of public health concern applied nearby. Any exceedances of health screening levels detected by air monitors should be immediately reported to local school and county officials, parents and teachers and should trigger an expansion of the protection zone.

Fourth, while large, one-mile buffer zones are essential for reducing exposure and protecting children's health, if any pesticide use continues to be allowed within 1 mile of schools, advance notification should be provided to the schools. Schools should then be required to notify teachers and use the robo-call systems to notify parents.

Finally, while these are important first steps, your department needs to devote significant resources and attention, in collaboration with other agencies and universities, to reducing the use of and phasing out the use of soil fumigants and other high toxicity, drift-prone pesticides and helping farmers obtain resources to assist with this transition. Through innovation in agriculture, we can help California farmers adopt cutting-edge practices and tools that keep agriculture prosperous.

Thank you for your commitment to the state's children and to the success of our farmers.

Sincerely,

Tiffany Finck-Haynes
Food futures campaigner
Friends of the Earth-U.S.

FOOD
EMPOWERMENT
PROJECT
Because your food choices can change the world

July 14, 2015

Brian Leahy, Director
George Farnsworth, Chief of Enforcement
Department of Pesticide Regulation (DPR)
P.O. Box 4015
Sacramento, CA 95812-4015
Emails: brian.leahy@cdpr.ca.gov george.farnsworth@cdpr.ca.gov

Dear Director Leahy and Chief Farnsworth:

We appreciate DPR's attention to the problem of pesticide use near schools as we have serious concerns about the use of heavy agricultural chemicals in close proximity to where children live, go to school or play.

We are particularly concerned about the disproportionate exposure of Latino schoolchildren, a fact documented by the Department of Public Health (DPH) report released last year. Latino children are almost twice as likely as white children to attend schools that are located where the heaviest agricultural chemicals are being used. This is a civil rights violation that DPR must rectify by decreasing the risk of pesticide exposure at schools in the midst of agricultural fields. The DPH report also found that within ¼ mile of many rural California schools, soil fumigants and other pesticides, known to cause cancer, reproductive system effects, harm to the brain and nervous system and respiratory effects, were being used in large quantities.

We encourage DPR to:

- require a minimum of one-mile protection zones (buffer zones) between fields where pesticides of public health concern are being used and schools, childcare centers, school bus stops, and known school routes because protection zones of ¼ mile that are currently required in some counties are simply not adequate for health protection.
- create protection zones around schools that should be enforced at all times for ground as well as for aircraft applications, because students, teachers and community members are often at school for scheduled events and unscheduled activities when school is not in session. Furthermore, pesticides can evaporate off the crop plants for an extended period after they are applied and pesticide contaminated dust can be blown onto school grounds and tracked into classrooms.
- conduct ongoing air monitoring at half a dozen schools around the state that have been identified as having the most pesticides of public health concern applied nearby. Any health screening levels caught by air monitors that exceed the limits should be

immediately reported to local school and county officials, parents and teachers and should trigger an expansion of the protection zone.

- also provide advance notification to schools if any pesticide use continues to be allowed within 1 mile of schools, and schools should be required to in turn notify teachers and use the robo-call systems to notify parents.

Finally, while these are important first steps, your department needs to devote significant resources and attention to reducing and phasing out the use of soil fumigants and other high toxicity, drift-prone toxic chemicals and help farmers obtain resources to assist with this transition.

Thank you for your attention to this important matter.

Sincerely,

lauren Ornelas
Founder/Executive Director
Food Empowerment Project

July 31, 2015

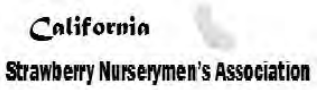
George Farnsworth
Assistant Director
California Department of Pesticide Regulation
P.O. Box 4015
Sacramento, CA 95812-4015
George.Farnsworth@cdpr.ca.gov

California Association of Nurseries and Garden Centers

Re: Comments on DPR's Pesticide Use Near Schools Workshops

Dear Mr. Farnsworth,

It is the collective opinion of the signatories below that the Department of Pesticide Regulation's (DPR) own database, scientific reports, risk evaluations and risk management measures argue convincingly against the adoption of additional regulations as suggested in DPR's Concepts to Address Pesticide Use Near Schools.



Concerns regarding this issue have been related to a study published last year by the Department of Public Health (DPH) that used data from DPR's Pesticide Use Report to estimate the amount of pesticide use within a certain distance of California schools. In summary, the study says "This study methodology does not attempt to measure schoolchildren's exposures to pesticides and, therefore, study results cannot be used to predict possible health impacts." Despite this caveat, advocates for additional regulation cited the study in their workshop comments.

Family farmers care deeply about safety. They carefully follow all regulations governing use of pesticides. Safety of workers, families and surrounding neighbors is critical.

California Pear Growers Association

When the facts are considered it is evident that clear, significant protections are in place to assure pesticides registered in California are used safely and

VENTURA COUNTY AGRICULTURAL ASSOCIATION

AMERICAN PISTACHIO GROWERS

CALIFORNIA Tomato GROWERS ASSOCIATION

California Agricultural Aircraft Association

Grower Shipper ASSOCIATION of Santa Barbara and San Luis Obispo Counties

NFL NISEI FARMERS LEAGUE

FARM BUREAU MONTEREY

KERN COUNTY FARM BUREAU

Riverside County Farm Bureau

SANTA BARBARA COUNTY FARM BUREAU

SAN DIEGO COUNTY FARM BUREAU

effectively. DPR has historically deployed the best science to develop regulations governing pesticides in California. It is also clear from follow up monitoring and evaluation performed by DPR that regulations are successful in protecting public health and the environment.

Federal and State Registration

Pesticides can only be registered for use in California after an extensive scientific review process to confirm no unreasonable adverse effect will occur from their legal use; first by U.S. Environmental Protection Agency (U.S. EPA) and then by DPR. Both agencies also have a process for continuous evaluation of registered pesticides.

Federally, before registration all pesticides undergo a human health risk evaluation. Hazards are identified through animal testing, selecting the most sensitive endpoint and corresponding point of departure for relevant populations, taking into account duration and exposure routes. Hazards are identified through animal testing studies using two or three dosing levels. Employing scientific methodologies, data from these studies are used to estimate exposure levels protective of populations that may be exposed to the compound in question. Agency scientists then consider application of various safety factors. Depending on safety factors applied, the dose with the lowest adverse effect could be reduced for children safety by 10,000-fold.

There are other methods for estimating safe human exposure levels that consider young children and sensitive subpopulations. These also take into account duration of the animal studies and its relation to life stages. For example, data might address a one-time exposure to juveniles or the potential for exposure over a lifetime.

Routes of exposure are assessed including dermal, oral, and inhalation. Potential health risks to children get special attention, such as turf products because of children's tendency to lay or play on lawns. The likely repeated dermal exposure to residues on their skin as well as oral exposure through hand-to-mouth behaviors is thoroughly assessed.

In 1995, U.S. EPA adopted the Policy on Evaluating Health Risks to Children, which requires U.S. EPA to consider risks of infants and children as part of their risk assessments and decision making process. In addition, U.S. EPA established the Office of Children's Health Protection (OCHP) in 1997 in response to an executive order issued by President Clinton. For twenty years, it has worked under both the policy and OCHP to ensure pesticide risk assessments are protective of children's health.

In addition to federal registration, DPR conducts independent scientific evaluations of all pesticides registered in California and full risk assessments on various pesticides, focusing on those with the greatest risk potential. DPR may require pesticide registrants to conduct additional studies and submit additional data. These studies often assess exposure to people or the environment under unique California conditions.

The National Academy of Sciences recently confirmed in a report and subsequent book titled *Review of California's Risk-Assessment Process for Pesticides*, U.S. EPA's pesticide registration process as thorough and scientifically sound and commended DPR for its additional assessment of California specific issues.

Mitigation

During the federal registration process, U.S. EPA classifies each pesticide as "general use pesticide" or "restricted use pesticide" based on potential adverse effects on human health or the environment. Restricted use pesticides can only be used by a trained certified pesticide applicator or under the direct supervision of certified applicators. For all pesticides, restrictions and mitigation measures required by U.S. EPA are included on approved labels and must be followed.

DPR's independent evaluation process may identify risks to health or the environment under California conditions that are not adequately mitigated by the federal labels and may refuse to register a pesticide or impose additional restrictions on its use. In addition, DPR continuously evaluates registered pesticides and adopts regulations as necessary to assure safe use. For example, California established buffer zones, restricted entry intervals, and other regulatory requirements before they were adopted at the federal level.

At the local level, all California counties have County Agricultural Commissioners (CAC) appointed by their respective Boards of Supervisors, who are responsible for overseeing use of pesticides in the county. CACs may require additional mitigation measures based on weather, topography and other specific local situations. Pesticides designated under California law as "Restricted Materials" can only be applied under a CAC permit and by licensed or certified applicators. California is the only state with a permitting system. Permits are time and site specific, allowing CACs to use their knowledge of local conditions to avoid potential adverse effects.

To address drift, federal and state laws require pesticides with drift potential to undergo further exposure assessments through spray drift testing. As far back as 1970, DPR developed spray drift management techniques for aerial and air carrier application methods and continues to collaborate with U.S. EPA, U.S. Department of Agriculture (USDA), U.S. Army, U.S. Forest Service and

countless universities and private researchers. In 1990, U.S. EPA created a Spray Drift Task Force which led to USDA's development of the AgDrift model to determine pesticide drift potential. Manufacturers may be required to change pesticide formulations or modify application methods to include drift reduction technologies.

Evidence Does Not Justify Regulatory Changes

DPR has elaborate surveillance programs in place to ensure pesticides are not causing adverse effects including groundwater and surface water programs, air monitoring program and illness surveillance program. Based on evidence collected by DPR, its regulations have proven effective.

Air Monitoring Network

An analysis of DPR's multi-year statewide air monitoring network May 2015 draft report verifies that DPR's regulations and the care of growers and pesticide applicators are successful in preventing off-field exposures.

Between 2011 and 2014, monitoring stations were established in three California regions that were selected to represent intensive agricultural areas. In each of the years, 32 to 34 pesticides and 5 pesticide breakdown products were sampled weekly at all locations for 24-hour periods. This resulted in a total of 23,677 individual analyses.

Pesticides or pesticide breakdown products were only detected in 7% of the analyses. Of these detections, 4% were at trace levels (too low to be quantified) and only 3% were high enough to be quantified. The vast majority of detections were low relative to Health Screening Levels established by DPR.

None of the detections exceeded screening levels for acute exposure and only one pesticide exceeded DPR's sub-chronic health screening level in one location in one year. (*Note: DPR defines health screening level as (paraphrase) a concentration above the screening level does not necessarily indicate a health concern but is a trigger for further and more refined evaluation of the pesticide's use.*)

One pesticide exceeded a DPR regulatory target level at one location in two years. Additional mitigation measures were established for that pesticide.

Pesticide Illness Surveillance Program

California doctors are required to report any known or suspected illness caused by pesticide exposure, and CAC must investigate and provide results to DPR for evaluation and classification.

Based on DPR's Pesticide Use Reports, between 2002 through 2012 California had approximately 24.4 million pesticide applications. During that same period DPR's Pesticide Illness Surveillance Program database shows only 8 incidents related to agricultural pesticide use near schools. Of those 8, only 3 involved school children. These incidents were attributed to applicator violations and enforcement action was taken. Symptoms were non-life threatening.

School Pesticide Inquiries

The lack of incidents involving off-site applications was further confirmed by DPR through a survey of CACs for school pesticide inquiries received between September 2011 and September 2014. Of the 1,779 reported inquiries, only 3 percent resulted from pesticides applied outside of school campuses and none of the investigations discovered an exposure incident or illness.

Additional Notification Requirements to Schools Unnecessary

Notification of pesticides and scheduled applications should directly relate to potential risk of exposure and serve as a mitigating tool.

Mandating notices without considering their relationship to potential risk is a disservice to the science-based process that could mislead and unnecessarily alarm the public.

School Siting Needs More Review and Accountability

California law does not require school siting by local government to coordinate with local general plans nor does it protect zoning ordinances. The irony is that local jurisdictions, many of which are reliant on agriculture for jobs and their overall economy, authorize construction of schools in agricultural areas which in turn invites complaints that agricultural practices place students in jeopardy.

Farming, whether conventional or organic, includes pest management practices that are unfamiliar to urban dwellers. Establishment of schools in rural farming communities without proper attention to the realities of production agriculture sets the stage for tension and misunderstanding in these urban-rural interfaces. This problem has been recognized by not only the public and DPR, but by the Ventura County Supervisors during its June 16, 2015 meeting.

The solution to this problem is not more restrictions on pesticides but rather greater coordination between local governments, CACs and DPR.

Conclusion

Thank you for the opportunity to present our concerns about any changes to regulations governing applications of pesticides near schools. Our groups support DPR's current science-based regulations which were developed using the best available science and continue to protect the public and the environment.

Sincerely,

Paul Wenger, President
California Farm Bureau Federation

Mark Martinez, Vice President, Public Policy
California Strawberry Commission

Matthew Allen, Director, CA Government Affairs
Western Growers Association

Bob Tipton, Chairperson
California Strawberry Nursery Association

Renee Pinel, President/CEO
Western Plant Health Association

Lynne Figone, President
California Women for Agriculture

Chukou Thao, Executive Director
National Hmong American Farmers

Claire Wineman, President
Grower-Shipper Association of Santa Barbara and San Luis Obispo Counties

Terry Gage, President
California Agricultural Aircraft Association

Emily Rooney, President
Agricultural Council of California

Joel Nelsen, President
California Citrus Mutual

Kelly Covello, President
Almond Hullers & Processors Association

Mike Stoker, Director of Government Affairs
UnitedAg

Roger Isom, President
California Cotton Ginners and Growers Associations

Roger Isom, President
Western Agricultural Processors Association

Chris Zanobini, President
California Association of Nurseries and Garden Centers

Manuel Cunha, President
Nisei Farmers League

Will Scott, President
African American Farmers of California

Mike Montna, President
California Tomato Growers Association

Richard Matoian, Executive Director
American Pistachio Growers

Kasey Cronquist, CEO
California Cut Flower Commission

Barry Bedwell, President
California Fresh Fruit Association

Rob Roy, President
Ventura County Agricultural Association

Debra Murdock, President
California Pear Growers Association

John Aguirre, President
California Association of Winegrape Growers

Victor Tognazzini, President
Santa Barbara County Farm Bureau

Norm Groot, Executive Director
Monterey County Farm Bureau

Richard Schmid. President
Riverside County Farm Bureau

Greg Wegis, President
Kern County Farm Bureau

Jeff Merwin, President
Yolo County Farm Bureau

Eric Larson, Executive Director
San Diego County Farm Bureau

Tricia Stever Blattler, Executive Director
Tulare County Farm Bureau

Wayne Reeves, President
Contra Costa County Farm Bureau

Frost Pauli, President
Mendocino County Farm Bureau

Robert Miller, President
Del Norte County Farm Bureau

Bob Giampaoli, President
Merced County Farm Bureau

Mark Lathrop, President
Shasta County Farm Bureau

Will Harrison, President
Orange County Farm Bureau

Darin Titus, President
Glenn County Farm Bureau

Jon Munger, President
Yuba-Sutter Farm Bureau

Shaun Crook, President
Tuolumne County Farm Bureau

Michael Vasey, President
Tehama County Farm Bureau

BJ Burns, President
San Mateo County Farm Bureau

Larry Cox, President
Imperial County Farm Bureau

Brendon Flynn, President
Sacramento Valley Landowners Association

Kenneth Elwood
Elizabeth Elwood Ponce, Owners
Lassen Canyon Nursery, Inc.

Sacramento Office
1107 9th Street
Suite 625
Zip: 95814
Ph:916-333-0566

July 9, 2015

Brian Leahy, Director
George Farnsworth, Chief of Enforcement
Department of Pesticide Regulation (DPR)
P.O. Box 4015
Sacramento, CA 95812-4015

RE: Limit pesticide use near schools & promote innovative agriculture

Dear Director Leahy and Chief Farnsworth,

The Environmental Working Group welcomes DPR's attention to the problem of pesticide use near schools because as a organization that informs consumers about pesticides in foods and that advocates for increased scrutiny on the use of pesticides in agriculture, we have serious concerns about heavy pesticide use near schools. By 2016, DPR should move swiftly to adopt new protections for schoolchildren from hazardous and volatile pesticides and find new ways to promote and support sustainable, cutting-edge agriculture.

We are particularly concerned about the disproportionate exposure of Latino schoolchildren, a fact documented by the Department of Public Health (DPH) report released last year. Latino children are almost twice as likely as white children to attend schools near the heaviest agricultural pesticide use. This is a civil rights violation that DPR must rectify by decreasing the risk of pesticide exposure at schools across the state. The DPH report also found soil fumigants and other pesticides which are known to cause cancer, reproductive system effects, harm to the brain and nervous system and respiratory effects being used in large quantities within ¼ mile of many California schools.

DPR should require <u>one-mile</u> protection zones (buffer zones) between fields where pesticides of public health concern are used and schools, childcare centers, school bus stops, and known school routes. Pesticides of public health concern include pesticides that show evidence of causing cancer, reproductive damage, harm to the brain and nervous system, and asthma and other respiratory problems. Protection zones of ¼ mile currently required in some counties are simply not adequate for health protection. The UC Davis MIND Institute recently showed that mothers who lived within a mile of fields where chlorpyrifos and other pesticides were sprayed while pregnant show a 60% higher chance of having children with autism. The DPH report documented that chlorpyrifos was the 8th most common pesticide used within ¼ mile of schools in 2010.

Second, no-spray protection zones around schools should be enforced at all times for ground, air blast, as well as for aircraft applications, because students, teachers and community members are often on school grounds for scheduled events and unscheduled activities when school is not formally in session. Furthermore, pesticides can evaporate off the crop plants for an extended period after they are applied and pesticide contaminated dust can be blown onto school grounds and tracked into classrooms.

DPR

Third, once the new no-spray protection zones are in place, DPR should conduct ongoing air monitoring at half a dozen schools around the state that have been identified as having the most pesticides of public health concern applied nearby. Any exceedances of health screening levels detected by air monitors should be immediately reported to local school and county officials, parents and teachers and should trigger an expansion of the protection zone.

Fourth, while large, one-mile buffer zones are essential for reducing exposure and protecting children's health, if any pesticide use continues to be allowed within 1 mile of schools, advance notification should be provided to the schools. Schools should then be required to notify teachers and use the robo-call systems to notify parents.

Finally, while these are important first steps, your department needs to devote significant resources and attention, in collaboration with other agencies and universities, to reducing the use of and phasing out the use of soil fumigants and other high toxicity, drift-prone pesticides and helping farmers obtain resources to assist with this transition. Through innovation in agriculture, we can help California farmers adopt cutting-edge practices and tools that keep agriculture prosperous.

Thank you for your commitment to the state's children and to the success of our farmers.

Sincerely,

Bill Allayaud
California Director of Governmental Affairs
Environmental Working Group

July 29, 2015

Brian Leahy, Director
George Farnsworth, Chief of Enforcement
Department of Pesticide Regulation
P.O. Box 4015
Sacramento, CA 95812-4015
Emails: brian.leahy@cdpr.ca.gov george.farnsworth@cdpr.ca.gov

RE: Eliminate hazardous pesticides near schoolchildren, spur ag innovation zones

Dear Director Leahy and Chief Farnsworth,

On behalf of Environment California and our thousands of members across the state, we urge the Department of Pesticide Regulation to press forward with comprehensive new rules to protect the state's children from hazardous pesticides use and to finalize and implement those rules by next school year (2016).

At Environment California, we believe all Californians have a right to clean air, clean water and open spaces. As a result, we are particularly concerned about the chemicals linked to cancer and developmental delays in children are found in close proximity to California schools, in the air and water. And we believe open spaces near schools should be preserved ensuring the success of sustainable agriculture.

As a result, we support the same recommendations put forth by dozens of environmental, environmental justice, sustainable farming, food justice, children's health and health professional organizations.

In particular, we stress the following:

DPR should require one-mile protection zones (buffer zones) between fields where pesticides of public health concern are used and schools, childcare centers, school bus stops, and known school routes. Pesticides of public health concern include pesticides that show evidence of causing cancer, reproductive damage, harm to the brain and nervous system, and asthma and other respiratory problems. Protection zones of ¼ mile currently required in some counties are simply not adequate for health protection. The UC Davis MIND Institute recently showed that mothers who lived within a mile of fields where

chlorpyrifos and other pesticides were sprayed while pregnant show a 60% higher chance of having children with autism. The DPH report documented that chlorpyrifos was the 8th most common pesticide used within ¼ mile of schools in 2010.

Second, no-spray protection zones around schools should be enforced at all times for ground, air blast, as well as for aircraft applications, because students, teachers and community members are often on school grounds for scheduled events and unscheduled activities when school is not formally in session. Furthermore, pesticides can evaporate off the crop plants for an extended period after they are applied and pesticide contaminated dust can be blown onto school grounds and tracked into classrooms.

Third, once the new no-spray protection zones are in place, DPR should conduct ongoing air monitoring at half a dozen schools around the state that have been identified as having the most pesticides of public health concern applied nearby. Any exceedances of health screening levels detected by air monitors should be immediately reported to local school and county officials, parents and teachers and should trigger an expansion of the protection zone.

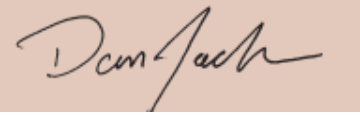
Fourth, while large, one-mile buffer zones are essential for reducing exposure and protecting children's health, if <u>any</u> pesticide use continues to be allowed within 1 mile of schools, advance notification should be provided to the schools. Schools should then be required to notify teachers and use the robo-call systems to notify parents.

Finally, while these are important first steps, your department needs to devote significant resources and attention, in collaboration with other agencies and universities, to reducing the use of and phasing out the use of soil fumigants and other high toxicity, drift-prone pesticides and helping farmers obtain resources to assist with this transition. Through innovation in agriculture, we can help California farmers adopt cutting-edge practices and tools that keep agriculture prosperous.

Thank you for your commitment to protecting the air and water the state's children breathe and drink and to promoting the success of sustainable agriculture practices that work in harmony with the environment.

Please feel free to contact me with any questions at 213-251-3688.

Sincerely,



Dan Jacobson
Stateenvironmental Director

Brian Leahy, Director
George Farnsworth, Chief of Enforcement
Department of Pesticide Regulation (DPR),
P.O. Box 4015, Sacramento, CA 95812-4015
brian.leahy@cdpr.ca.gov; george.farnsworth@cdpr.ca.gov

Dear Director Leahy and Chief Farnsworth,

We welcome DPR's attention to the problem of pesticide use near schools. As an organization, we represent a vast network that includes farmers, concerned parents and community members, as well as schoolteachers and students who participate in school garden programs. We have serious concerns about heavy agricultural pesticide use near local schools.

The mission of the Ecological Farming Association (EcoFarm) is to nurture healthy, just, and ecologically sustainable farms, food systems, and communities by bringing people together for education, alliance building, advocacy, and celebration. Questions of pesticide use in agriculture are critically important to us for the purpose of protecting our community members, our farmers, and our environment. There can be no hesitation when the health of our school children is at risk.

We are particularly concerned about the disproportionate exposure of Latino schoolchildren, a fact documented by the Department of Public Health (DPH) report released last year. Latino children are almost twice as likely as white children to attend schools near the heaviest agricultural pesticide use. This is a civil rights violation that DPR must rectify by decreasing the risk of pesticide exposure at schools in the midst of agricultural fields. The DPH report also found soil fumigants and other pesticides which are known to cause cancer, reproductive system effects, harm to the brain and nervous system and respiratory effects being used in large quantities within 1/4 mile of many rural California schools.

DPR should require one mile protection zones (buffer zones) between fields where pesticides of public health concern are used and schools, childcare centers, school bus stops, and known school routes. Pesticides of public health concern include pesticides that show evidence of causing cancer, reproductive damage, harm to the brain and nervous system, and asthma and other respiratory problems. Protection zones of ¼ mile currently required in some counties are simply not adequate for health protection. The UC Davis MIND Institute recently showed that mothers who lived within a mile of fields where chlorpyrifos and other pesticides were sprayed while pregnant show a 60% higher chance of having children with autism. The DPH report documented that chlorpyrifos was the 8th most common pesticide used within ¼ mile of schools in 2010.

Second, protection zones around schools should be enforced at all times for ground as well as for aircraft applications, because students, teachers and community members are often on school grounds for scheduled events and unscheduled activities when school is not in session. Furthermore, pesticides can evaporate off the crop plants for an extended period after they are applied and pesticide contaminated dust can be blown onto school grounds and tracked into classrooms.

Third, once the new protection zones become are in place, DPR should conduct ongoing air monitoring at half a dozen schools around the state that have been identified as having the most pesticides of public health concern applied nearby. Any exceedances of health screening levels caught by air monitors should be immediately reported to local school and county officials, parents and teachers and should trigger an expansion of the protection zone.

Fourth, while large, 1 mile buffer zones are essential for reducing exposure and protecting children's health, if <u>any</u> pesticide use continues to be allowed within 1 mile of schools, advance notification should be provided to the schools and schools should be required to in turn notify teachers and use the robo-call systems to notify parents.

Finally, while these are important first steps, your department needs to devote significant resources and attention to reducing the use of and phasing out the use of soil fumigants and other high toxicity, drift-prone pesticides and helping farmers obtain resources to assist with this transition.

Sincerely,
Ken Dickerson

Executive Director
Ecological Farming Association

July 27, 2015

George Farnsworth, Branch Chief
Enforcement Branch
California Department of Pesticide Regulation
P.O. Box 4015
Sacramento, CA 95812-4012

Mr. George Farnsworth,

Pesticides Use Near Schools

Thank you for the opportunity to comment on adoption of pesticide regulations that will require a notification provision and additional protective measures.

The Del Norte Farm Bureau is not in support of additional notification or protective measures and finds it difficult to comment on potential regulations as a statewide approach is not practicable. In Del Norte County we have four Easter Lily Growers in Smith River, CA. suppling close to 100 % of all field grown lilies for the Easter Holiday. The acreage that allows us to grow Easter Lilies is unique to soil and climate, reducing greatly the available land for this crop. The town is called, "Smith River, Easter Lily Capitol of the World". Also, the small number of applicators allows a very close working relationship with our County Agriculture Commissioner.

Our fumigant product is Telone and Metam Sodium. Our applications are started and completed in 2 weeks, during the last week of July and first week of August. We have ONE school in Smith River. It is not a year around school and is out of session when fumigants are applied. Our Metam Sodium is Rototill and Roll and has been tested by DPR with no off site results. There has never been an application complaint from the Smith River School. Other uses of chemicals in this industry are fungicides. To implement a one mile notification through the school system would be time consuming for the school as this would take in a large portion of useable lily acreage and population in the suggested mile zone.

Del Norte Farm Bureau supports existing pesticide application requirements on science. There is no science to support increased buffers or notification of pesticide usage. Del Norte Farm Bureau supported the current law that allows CAC to place conditions on pesticide application in order to address LOCAL needs with respect to timing, notifications and method of application.

Without science to support additional regulations, Del Norte Farm Bureau recommends DPR implement public education on the existing regulations. "One size statewide does not work".

Robert Miller
President, Del Norte Farm Bureau

COMMUNITY WATER CENTER
EL CENTRO COMUNITARIO POR EL AGUA

July 31, 2015

Brian Leahy, Director
George Farnsworth, Chief of Enforcement
Department of Pesticide Regulation (DPR)
P.O. Box 4015
Sacramento, CA 95812-4015

RE: Limit pesticide use near schools & promote innovative agriculture

Dear Director Leahy and Chief Farnsworth,

As an environmental justice organization, we are dedicated to securing a sustainable and equitable future for California. We welcome DPR's attention to the problem of pesticide use near schools because as an organization, we have serious concerns about heavy agricultural pesticide use near local schools in the San Joaquin Valley and across the state. By 2016, DPR should move swiftly to adopt new protections for schoolchildren from hazardous and volatile pesticides and find new ways to promote and support sustainable, cutting-edge agriculture. California can be a leader in showing how we can both have safe communities and productive, more sustainable agriculture.

Since opening our doors in 2006, the Community Water Center (CWC) has worked with local residents from over 80 California communities to improve access to safe, clean, and affordable water. We have trained thousands of residents as clean water advocates and provided technical and legal assistance to over 50 local water boards and community-based organizations struggling with how to manage efficient and accountable water systems in their communities. As a result, at least 18 communities have successfully secured over $17 million in state funding for drinking water projects, advancing sustainable safe drinking water solutions for approximately 13,340 residents in the San Joaquin Valley.

We also coordinate the coalition Asociación de Gente Unida por el Agua (AGUA), which is comprised of representatives from 20 local impacted communities and nine nonprofit organizations, as well as youth and community-based organizations, all focused on addressing the root causes of unsafe and unaffordable drinking water for local communities. From our experiences working with schools and communities impacted by the health risks of pesticides and pesticide byproducts, we know how important it is to reduce agricultural pesticide use near schools.

We are particularly concerned about the disproportionate exposure of Latino schoolchildren, a fact documented by the Department of Public Health (DPH) report released last year. Latino children are almost twice as likely as white children to attend schools near the heaviest agricultural pesticide use. This is a civil rights violation that DPR must rectify by decreasing the risk of pesticide exposure at schools across the state. The DPH report also found soil fumigants and other pesticides which are known to cause cancer, reproductive system effects, harm to the brain and nervous system and respiratory effects being used in large quantities within ¼ mile of many California schools.

311 W. Murray Avenue
Visalia, CA 93291
(559) 733-0219

www.communitywatercenter.com

909 12th Street, Suite 200
Sacramento, CA 95814
(916) 706-3346

DPR should require one-mile protection zones (buffer zones) between fields where pesticides of public health concern are used and schools, childcare centers, school bus stops, and known school routes. Pesticides of public health concern include pesticides that show evidence of causing cancer, reproductive damage, harm to the brain and nervous system, and asthma and other respiratory problems. Protection zones of ¼ mile currently required in some counties are simply not adequate for health protection. The UC Davis MIND Institute recently showed that mothers who lived within a mile of fields where chlorpyrifos and other pesticides were sprayed while pregnant show a 60% higher chance of having children with autism. The DPH report documented that chlorpyrifos was the 8th most common pesticide used within ¼ mile of schools in 2010.

Second, no-spray protection zones around schools should be enforced at all times for ground, air blast, as well as for aircraft applications, because students, teachers and community members are often on school grounds for scheduled events and unscheduled activities when school is not formally in session. Furthermore, pesticides can evaporate off the crop plants for an extended period after they are applied and pesticide contaminated dust can be blown onto school grounds and tracked into classrooms.

Third, once the new no-spray protection zones are in place, DPR should conduct ongoing air monitoring at half a dozen schools around the state that have been identified as having the most pesticides of public health concern applied nearby. Any exceedances of health screening levels detected by air monitors should be immediately reported to local school and county officials, parents and teachers and should trigger an expansion of the protection zone.

Fourth, while large, one-mile buffer zones are essential for reducing exposure and protecting children's health, if <u>any</u> pesticide use continues to be allowed within 1 mile of schools, advance notification should be provided to the schools. Schools should then be required to notify teachers and use the robo-call systems to notify parents.

Finally, while these are important first steps, your department needs to devote significant resources and attention, in collaboration with other agencies and universities, to reducing the use of and phasing out the use of soil fumigants and other high toxicity, drift-prone pesticides and helping farmers obtain resources to assist with this transition. Through innovation in agriculture, we can help California farmers adopt cutting-edge practices and tools that keep agriculture prosperous.

Thank you for your commitment to the state's children and to the success of our farmers.

Sincerely,

Laurel Firestone

Laurel Firestone, Co-Executive Director and Attorney at Law, Community Water Center

Carmel Valley Association

To preserve, protect, and defend the natural beauty, resources, and rural character of Carmel Valley

Since 1949

Board of Directors

Priscilla Walton, President

Rich Fox, Vice President

Sandy Schachter, Secretary

Steve Brabeck, Treasurer

Mibs McCarthy, President Emerita

Luana Conley, Newsletter Production Manager

Frank Hennessy

Donna Kneeland

Marlene Martin

Margaret Robbins

Eric Sand

Tim Sanders

Dick Stott

Karin Strasser Kauffman

- Eleanor Avila, Historian
- Janet Brennan, Advisor

July 23, 2015

Brian Leahy, Director
George Farnsworth, Chief of Enforcement
Department of Pesticide Regulation (DPR)
P.O. Box 4015
Sacramento, CA 95812-4015

Dear Director Leahy and Chief Farnsworth:

The Carmel Valley Association strongly supports DPR's focus on the problem of pesticide use near schools. We have serious concerns about the health hazards of heavy agricultural pesticide use near our local schools and appreciate your current attention to the issue.

The Carmel Valley Association is the oldest, largest, and arguably most successful community organization in Monterey County. We are entirely volunteer, with no paid employees. Our mission is to defend the beauty, resources and rural character of our beautiful valley. We do that by working with residents, businesses, and government. When necessary, we speak out on important issues affecting the county's well being as a whole. Pesticide use is one of those issues.

We are particularly concerned about the disproportionate exposure of Latino schoolchildren, a fact documented by the Department of Public Health (DPH) report released last year. The application of these known neurotoxins would instantly become a political outrage were it taking place near our largely white, wealthy schools in Carmel and Carmel Valley. Latino children are almost twice as likely as white children to attend schools near the heaviest agricultural pesticide use. This is a civil rights violation that DPR must rectify by decreasing the risk of pesticide exposure at schools in the midst of agricultural fields. The DPH report also found soil fumigants and other pesticides which are known to cause cancer, reproductive system effects, harm to the brain and nervous system and respiratory effects being used in large quantities within 1/4 mile of many rural California schools.

First, DPR must require one-mile protection zones (buffer zones) between fields where pesticides of public health concern are used and schools, childcare centers, school bus stops, and known school routes. Pesticides of public health concern include pesticides that show evidence of causing cancer, reproductive damage, harm to the brain and nervous system, and

asthma and other respiratory problems. Protection zones of ¼ mile currently required in some counties are simply not adequate for health protection. The UC Davis MIND Institute recently showed that pregnant women who lived within a mile of fields where chlorpyrifos and other pesticides were sprayed show a 60% higher chance of having children with autism. The DPH report documented that chlorpyrifos was the 8th most common pesticide used within ¼ mile of schools in 2010.

Second, protection zones around schools must be enforced at all times for ground as well as for aircraft applications, because students, teachers and community members are often on school grounds for scheduled events and unscheduled activities when school is not in session. Furthermore, pesticides can evaporate off the crop plants for an extended period after they are applied and pesticide contaminated dust can be blown onto school grounds and tracked into classrooms.

Third, once the new protection zones are in place, DPR must conduct ongoing air monitoring at half a dozen schools around the state that have been identified as having the most pesticides of public health concern applied nearby. Any exceedances of health screening levels caught by air monitors must be immediately reported to local school and county officials, parents and teachers and must trigger an expansion of the protection zone.

Fourth, one-mile buffer zones are essential for reducing exposure and protecting children's health, but if <u>any</u> pesticide use continues to be allowed within one mile of schools, advance notification must be provided to the schools, and schools must be required to in turn notify teachers, and use the robo-call systems to notify parents.

Finally, while these are important first steps, your department needs to devote significant resources and attention to reducing and phasing out the use of soil fumigants and other high toxicity, drift-prone pesticides and helping farmers obtain resources to assist with this transition.

Sincerely,

Priscilla Walton, President
Carmel Valley Association

cc:
Eric Lauritzen, Monterey County Agricultural Commissioner

CALIFORNIA TEACHERS ASSOCIATION
SALINAS REGIONAL RESOURCE CENTER

July 8, 2015

Brian Leahy, Director
George Farnsworth, Chief of Enforcement
Department of Pesticide Regulation (DPR)
P.O. Box 4015
Sacramento, CA 95812-4015
Emails: brian.leahy@cdpr.ca.gov george.farnsworth@cdpr.ca.gov

Dear Director Leahy and Chief Farnsworth:

I welcome DPR's attention to the problem of pesticide use near schools because as a teacher representative, I have serious concerns about heavy agricultural pesticide use near local schools, especially here in Monterey County

I am particularly concerned about the disproportionate exposure of Latino schoolchildren, a fact documented by the Department of Public Health (DPH) report released last year. Latino children are almost twice as likely as white children to attend schools near the heaviest agricultural pesticide use. This is a civil rights violation that DPR must rectify by decreasing the risk of pesticide exposure at schools in the midst of agricultural fields. The DPH report also found soil fumigants and other pesticides which are known to cause cancer, reproductive system effects, harm to the brain and nervous system and respiratory effects being used in large quantities within 1/4 mile of many rural California schools.

DPR should require one mile protection zones (buffer zones) between fields where pesticides of public health concern are used and schools, childcare centers, school bus stops, and known school routes. Pesticides of public health concern include pesticides that show evidence of causing cancer, reproductive damage, harm to the brain and nervous system, and asthma and other respiratory problems. Protection zones of ¼ mile currently required in some counties are simply not adequate for health protection. The UC Davis MIND Institute recently showed that mothers who lived within a mile of fields where chlorpyrifos and other pesticides were sprayed while pregnant show a 60% higher chance of having children with autism. The DPH report documented that chlorpyrifos was the 8th most common pesticide used within ¼ mile of schools in 2010.

Second, protection zones around schools should be enforced at all times for ground as well as for aircraft applications, because students, teachers and community members are often on school grounds for scheduled events and unscheduled activities when school is not in session. Furthermore, pesticides can evaporate off the crop plants for an extended period after they are applied and pesticide contaminated dust can be blown onto school grounds and tracked into classrooms.

928 EAST BLANCO ROAD, SUITE 100, SALINAS, CA 93901
831.783.3200 • FAX: 831.783.3211 • WWW.CTA.ORG

Third, once the new protection zones become are in place, DPR should conduct ongoing air monitoring at half a dozen schools around the state that have been identified as having the most pesticides of public health concern applied nearby. Any exceedances of health screening levels caught by air monitors should be immediately reported to local school and county officials, parents and teachers and should trigger an expansion of the protection zone.

Fourth, while large, 1 mile buffer zones are essential for reducing exposure and protecting children's health, if <u>any</u> pesticide use continues to be allowed within 1 mile of schools, advance notification should be provided to the schools and schools should be required to in turn notify teachers and use the robo-call systems to notify parents.

Finally, while these are important first steps, your department needs to devote significant resources and attention to reducing the use of and phasing out the use of soil fumigants and other high toxicity, drift-prone pesticides and helping farmers obtain resources to assist with this transition.

Sincerely,

Jim Gutman

CALIFORNIA TEACHERS ASSOCIATION
CENTRAL COAST COUNTIES SERVICE CENTER COUNCIL

July 14, 2015

Brian Leahy, Director
George Farnsworth, Chief of Enforcement
Department of Pesticide Regulation (DPR)
P.O. Box 4015
Sacramento, CA 95812-4015
Emails: brian.leahy@cdpr.ca.gov george.farnsworth@cdpr.ca.gov

RE: Limit pesticide use near schools & promote innovative agriculture

Dear Director Leahy and Chief Farnsworth,

On behalf of over 4500 public school teachers in Monterey, Santa Cruz, and San Benito Counties, I appreciate the DPR's attention to the problem of pesticide use near schools because, as the chairperson of the Central Coast Counties Service Center Council, I have serious concerns about heavy agricultural pesticide use near our local schools in the tri-county area. By 2016, the DPR should move swiftly to adopt new protections for schoolchildren from hazardous and volatile pesticides and find new ways to promote and support sustainable, cutting-edge agriculture.

Teachers are particularly concerned about the disproportionate exposure of Latino schoolchildren, a fact documented by the Department of Public Health (DPH) report released last year. Latino children are almost twice as likely as white children to attend schools near the heaviest agricultural pesticide use. This is a civil rights violation that DPR must rectify by decreasing the risk of pesticide exposure at schools across the state. The DPH report also found soil fumigants and other pesticides which are known to cause cancer, reproductive system effects, harm to the brain and nervous system and respiratory effects being used in large quantities within ¼ mile of many California schools.

DPR should require one-mile protection zones (buffer zones) between fields where pesticides of public health concern are used and schools, childcare centers, school bus stops, and known school routes. Pesticides of public health concern include pesticides that show evidence of causing cancer, reproductive damage, harm to the brain and nervous system, and asthma and other respiratory problems. Protection zones of ¼ mile currently required in some counties are simply not adequate for health protection. The UC Davis MIND Institute recently showed that mothers who lived within a mile of fields where chlorpyrifos and other pesticides were sprayed while pregnant show a 60% higher chance of having children with autism. The DPH report documented that chlorpyrifos was the 8th most common pesticide used within ¼ mile of schools in 2010.

928 E. BLANCO ROAD, SUITE 100, SALINAS, CA 93901

831-783-3200 • 831-373-5155 • 831-429-9495 • 408-685-7224 • FAX: 831.783.3211

nea

Second, no-spray protection zones around schools should be enforced at all times for ground, air blast, as well as for aircraft applications, because students, teachers and community members are often on school grounds for scheduled events and unscheduled activities when school is not formally in session. Furthermore, pesticides can evaporate off the crop plants for an extended period after they are applied and pesticide contaminated dust can be blown onto school grounds and tracked into classrooms.

Third, once the new no-spray protection zones are in place, DPR should conduct ongoing air monitoring at half a dozen schools around the state that have been identified as having the most pesticides of public health concern applied nearby. Any exceedances of health screening levels detected by air monitors should be immediately reported to local school and county officials, parents and teachers and should trigger an expansion of the protection zone.

Fourth, while large, one-mile buffer zones are essential for reducing exposure and protecting children's health, if <u>any</u> pesticide use continues to be allowed within 1 mile of schools, advance notification should be provided to the schools. Schools should then be required to notify teachers and use the robo-call systems to notify parents.

Finally, while these are important first steps, your department needs to devote significant resources and attention, in collaboration with other agencies and universities, to reducing the use of and phasing out the use of soil fumigants and other high toxicity, drift-prone pesticides and helping farmers obtain resources to assist with this transition. Through innovation in agriculture, we can help California farmers adopt cutting-edge practices and tools that keep agriculture prosperous.

Thank you for your commitment to the state's children and to the success of our farmers.

Sincerely,

Virginia Causey

Virginia Causey
Chairperson

CALIFORNIA TEACHERS ASSOCIATION

GOVERNMENTAL RELATIONS
1118 10th Street, Sacramento, CA 95814-3504
phone 916.325.1500

LEGISLATIVE RELATIONS DEPARTMENT
fax 916.325.1583 and 916.325.1584

July 29, 2015

Mr. Brian Leahy, Director
Mr. George Farnsworth, Chief of Enforcement
Department of Pesticide Regulation (DPR)
P.O. Box 4015
Sacramento, CA 95812-4015

RE: Limit Pesticide Use Near Schools & Promote Innovative Agriculture

Dear Mr. Leahy and Mr. Farnsworth:

The California Teachers Association, education employees and concerned parents welcome the Department of Pesticide Regulation's (DPR) attention to the serious problem of heavy pesticide use near local schools sites. By 2016, DPR should move swiftly to adopt new protections for schoolchildren and education employees from hazardous and volatile pesticides and find new ways to promote and support sustainable, cutting-edge agriculture.

We are particularly concerned about the disproportionate exposure of Latino schoolchildren, a fact documented by the Department of Public Health (DPH) report released last year. Latino children are almost twice as likely as white children to attend schools near the heaviest agricultural pesticide use. This is a civil rights violation that DPR must rectify by decreasing the risk of pesticide exposure at schools across the state. The DPH report also found soil fumigants and other pesticides that are known to cause cancer, reproductive system effects, harm to the brain and nervous system and respiratory effects being used in large quantities within ¼ mile of many California schools.

DPR should require buffer zones between fields where pesticides of public health concern are used and schools, childcare centers, school bus stops, and known school routes.

We also strongly recommend DPR conduct ongoing air monitoring at half a dozen schools around the state that have been identified as having the most pesticides of public health concern applied nearby. Any exceedances of health screening levels detected by air monitors should be immediately reported to local school and county officials, parents and teachers and should trigger an expansion of the protection zone.

Going forward, DPR needs to devote significant resources and attention, in collaboration with other agencies and universities, to reducing the use of and phasing out the use of soil fumigants and other high toxicity, drift-prone pesticides and helping farmers obtain resources to assist with this transition. Through innovation in agriculture, we can help California farmers adopt cutting-edge practices and tools that keep agriculture prosperous.

Thank you for your commitment to the state's children and to the success of our farmers.

Sincerely,

A. Trigueiro

Toni Trigueiro
Legislative Advocate

I:\Toni\Pesticide Use Near Schools 7.15.docx

CRPE Center on Race, Poverty & the Environment

July 30, 2015

Brian Leahy, Director
George Farnsworth, Chief of Enforcement
Department of Pesticide Regulation (DPR)
P.O. Box 4015
Sacramento, CA 95812-4015
Emails: brian.leahy@cdpr.ca.gov george.farnsworth@cdpr.ca.gov

RE: Limit pesticide use near schools & promote innovative agriculture

Dear Director Leahy and Chief Farnsworth,

We welcome DPR's attention to the problem of pesticide use near schools because as an environmental justice organization. We have serious concerns about heavy agricultural pesticide use near local schools. By 2016, DPR should move swiftly to adopt new protections for schoolchildren from hazardous and volatile pesticides and find new ways to promote and support sustainable, cutting-edge agriculture.

CRPE has long dedicated organizing and litigation resources to address the harmful impacts that pesticide use has on our air quality and our health and safety. The San Joaquin Valley suffers from some of the worst air quality in the country. Children with respiratory illnesses, children who are active outdoors at home and at school, and adults who engage in heavy manual labor or vigorous exercise are particularly vulnerable to adverse health effects from pesticide exposure.

We are particularly concerned about the disproportionate exposure of Latino schoolchildren, a fact documented by the Department of Public Health (DPH) report released last year. Latino children are almost twice as likely as white children to attend schools near the heaviest agricultural pesticide use. This is a civil rights violation that DPR must rectify by decreasing the risk of pesticide exposure at schools across the state. The DPH report also found soil fumigants and other pesticides which are known to cause cancer, reproductive system effects, harm to the brain and nervous system and respiratory effects being used in large quantities within ¼ mile of many California schools.

DPR should require one-mile protection zones (buffer zones) between fields where pesticides of public health concern are used and schools, childcare centers, school bus

stops, and known school routes. Pesticides of public health concern include pesticides that show evidence of causing cancer, reproductive damage, harm to the brain and nervous system, and asthma and other respiratory problems. Protection zones of ¼ mile currently required in some counties are simply not adequate for health protection. The UC Davis MIND Institute recently showed that mothers who lived within a mile of fields where chlorpyrifos and other pesticides were sprayed while pregnant show a 60% higher chance of having children with autism. The DPH report documented that chlorpyrifos was the 8th most common pesticide used within ¼ mile of schools in 2010.

Second, no-spray protection zones around schools should be enforced at all times for ground, air blast, as well as for aircraft applications, because students, teachers and community members are often on school grounds for scheduled events and unscheduled activities when school is not formally in session. Furthermore, pesticides can evaporate off the crop plants for an extended period after they are applied and pesticide contaminated dust can be blown onto school grounds and tracked into classrooms.

Third, once the new no-spray protection zones are in place, DPR should conduct ongoing air monitoring at half a dozen schools around the state that have been identified as having the most pesticides of public health concern applied nearby. Any exceedances of health screening levels detected by air monitors should be immediately reported to local school and county officials, parents and teachers and should trigger an expansion of the protection zone.

Fourth, while large, one-mile buffer zones are essential for reducing exposure and protecting children's health, if <u>any</u> pesticide use continues to be allowed within 1 mile of schools, advance notification should be provided to the schools. Schools should then be required to notify teachers and use the robo-call systems to notify parents.

Finally, while these are important first steps, your department needs to devote significant resources and attention, in collaboration with other agencies and universities, to reducing the use of and phasing out the use of soil fumigants and other high toxicity, drift-prone pesticides and helping farmers obtain resources to assist with this transition. Through innovation in agriculture, we can help California farmers adopt cutting-edge practices and tools that keep agriculture prosperous.

Thank you for your commitment to the state's children and to the success of our farmers.

Sincerely,

The Center on Race, Poverty, and the Environment

CPR
Californians For
Pesticide Reform

July 31, 2015

Brian Leahy, Director
George Farnsworth, Chief of Enforcement
Department of Pesticide Regulation
P.O. Box 4015
Sacramento, CA 95812-4015
Emails: brian.leahy@cdpr.ca.gov, george.farnsworth@cdpr.ca.gov

RE: Californians for Pesticide Reform coalition comments on recommended school buffer zones and notification

Dear Director Leahy and Chief Farnsworth:

Thank you for hosting the recent series of workshops and providing excellent simultaneous translation. At the workshops, DPR heard from hundreds of teachers and parents who have serious concerns about pesticide use near rural schools and are asking for protection to get students, teachers and school staff out of harm's way and address the disparate exposure of Latino school children.

Among those who expressed concerns was Maria Brito, a mother from Orosi who attended the Lamont hearing. She stated, "More protection is needed so other parents don't go through what I'm going through with my kids. I have to be very careful with their health and I'm worried when my daughter tells me that she can smell poison when she's at school." Maria's children have asthma and her eldest child has been diagnosed with autism. Sarah Henne, a teacher with the Pajaro Valley Unified School District declared, "We brought a busload of teachers during the last week of school, this is how important this is. We have 20,000 students, 1,200 teachers being exposed to 20 years of pesticide use if they choose to stay at a school close to a field. That's a lot of years. Some counties have a quarter-mile buffer zone, but that's not nearly adequate. Kids come on weekends. We have to know when pesticides are being applied and we need the buffer zones."[1] When third-grade teacher Melissa Dennis writes report cards, she's surprised how many students can't keep up. "I work with students every day that are struggling because they don't understand concepts in the classroom," she said. "We all suspect prolonged exposure to pesticides is causing a lot of the difficulties we're seeing with kids learning."[2]

Strong scientific evidence documents adverse health impacts associated with exposure to pesticides, particularly for young children in close proximity to pesticide applications. Early

[1] Quote from the Monterey County Herald, 6/2/2015.
[2] Quote from the Monterey County Weekly, 6/4/2015.

1611 Telegraph, Suite 1200, Oakland, CA 94612
510-788-9025 • Fax: 415-981-2727 • www.PesticideReform.org

childhood exposure to certain pesticides has been associated with elevated rates of cancer,[3] autism,[4] ADHD[5] and other learning disorders.[6] Among the top 5 pesticides applied in close proximity to California schools in 2010 were the soil fumigants chloropicrin and the methyl isothiocyanate (MITC)-generating metam sodium and metam potassium. They are all potent respiratory irritants, and studies authored by DPR scientists[7] provide evidence that exposure to these fumigants can exacerbate asthma. University of California researchers recently found an association between higher levels of organophosphate pesticide urinary metabolites in 5 or 7 year-old children and respiratory symptoms consistent with asthma in the previous 12 months in the CHAMACOS cohort of children of Salinas area farmworkers.[8] At the workshops, many community members expressed great concern about the prevalence of asthma in young children and the costs of medical treatment and missed school days.

DPR has no basis for the repeated claim that comprehensive evaluation of pesticide risks indicates low risk to most schools *because no comprehensive evaluation of pesticide risks at schools has ever been conducted*. Air monitoring sites are not representative of the most heavily-impacted schools, no dust monitoring has been conducted, and the department has a substantial backlog of unfinished risk assessments.

We recognize that pesticide use near schools is not a direct measure of exposure, but given the limited availability of air monitoring data, pesticide use data is the *best* predictor of possible exposure available. The report released last year by the California Department of Public Health, "Agricultural Pesticide Use Near Public Schools in California," found that significant quantities of

---

[3] Nielsen, Susan Searles, et al. "Childhood Brain Tumors, Residential Insecticide Exposure, and Pesticide Metabolism Genes." *Environmental Health Perspectives*, October 5, 2009. doi:10.1289/ehp.0901226.

Carozza, Susan E., Bo Li, Kai Elgethun, and Ryan Whitworth. "Risk of Childhood Cancers Associated with Residence in Agriculturally Intense Areas in the United States." *Environmental Health Perspectives* 116, no. 4 (January 10, 2008): 559–65. doi:10.1289/ehp.9967.

[4] Shelton, Janie F., et al. "Neurodevelopmental Disorders and Prenatal Residential Proximity to Agricultural Pesticides: The CHARGE Study." *Environmental Health Perspectives*, June 23, 2014. doi:10.1289/ehp.1307044.

[5] London, Leslie, Cheryl Beseler, Maryse F. Bouchard, David C. Bellinger, Claudio Colosio, Philippe Grandjean, Raul Harari, et al. "Neurobehavioral and Neurodevelopmental Effects of Pesticide Exposures." *NeuroToxicology* 33, no. 4 (August 2012): 887–96. doi:10.1016/j.neuro.2012.01.004.

[6] Muñoz-Quezada, María Teresa, et al. "Neurodevelopmental Effects in Children Associated with Exposure to Organophosphate Pesticides: A Systematic Review." *NeuroToxicology* 39 (December 2013): 158–68. doi:10.1016/j.neuro.2013.09.003.

[7] O'Malley, Michael et al. "Modeling of Methyl Isothiocyanate Air Concentrations Associated with Community Illnesses Following a Metam Sodium Sprinkler Application." *American Journal of Industrial Medicine*, 46:1-15. 2004.

Oriel, Michel, et al. "Illnesses Associated with Chloropicrin Use in California Agriculture, 1992-2003" *Reviews of Environmental Contamination and Toxicology*, Volume 200 2009.

[8] Raanan, Rachel et al. "Early-life Exposure to Organophosphate Pesticides and Pediatric Respiratory Symptoms in the CHAMACOS Cohort." *Environmental Health Perspectives*, Volume 123:2, February 2015: 179-185.

agricultural pesticides of public health concern are used in very close proximity to hundreds of public schools. The report also found that Latino schoolchildren were 91% more likely than white children to go to schools within ¼ mile of the highest use of pesticides of public health concern.

In light of this evidence of risk to children's health and disparate exposure of Latino school children, California must take strong and swift action to protect children's health by implementing large health protective buffer zones around public and private schools. To better protect children, these protections should also cover licensed day care facilities as defined in the Healthy Schools Act[9] and school bus stops and routes. Buffer or protection zones are known to decrease the potential risk of exposure to pesticides. The U.S. EPA acknowledges that "buffer[s] will reduce the chances that air concentrations where bystanders [such as children] are located will cause acute adverse health effects."[10]

It is not acceptable to delay implementation of protections around schools until 2017. These protections need to be implemented no later than August of 2016 to prevent an additional school year of exposure. In addition, DPR should recognize the opportunity and work with its partner state and federal agencies and academic institutions to support farmers as they move away from the use of hazardous pesticides and toward sustainable, less hazardous, cutting-edge alternatives.

Detailed Comments

DPR's Concept Draft is misleading and substantially underestimates exposure and potential risk

DPR cannot legitimately claim that comprehensive evaluation of pesticide risks indicates low risk to most schools – because the department's air monitoring has been very limited, no dust monitoring has been conducted, and the department has a substantial backlog of unfinished risk assessments.

Of the three DPR and Air Resources Board (ARB) air monitoring sites at schools, only selected soil fumigants are monitored at two (in Oxnard and Watsonville), and 4-year-average 1,3-dichloropropene air levels exceed DPR's cancer concern level at the Oxnard school. The third site – Shafter High School – is an appreciable distance from fields, with no agricultural pesticide use reported in the same 1-square-mile section in 2011, 2012 or 2013. Even so, 4-year-average air levels of the fumigant 1,3-dichloropropene exceeded DPR's level for cancer risk concern. There were also a large number of detections of pesticides chlorothalonil, chlorpyrifos, MITC and carbon disulfide. Chlorpyrifos levels reached 1/3 of DPR's acute screening level, and in 2013 the combined levels of organophosphate pesticides approached DPR's level of concern. This unfortunately suggests potential for higher risk at schools located near the heaviest pesticide use. DPR has yet to conduct <u>any</u> analysis of how pesticide use in the immediate vicinity of monitoring sites relates to air monitoring results.

---

[9] The Healthy Schools Act applies to all licensed day care facilities except family day care homes.

[10] USEPA Buffer Zone Fact Sheet May 27, 2009. http://www.epa.gov/pesticides/reregistration/x-soil-fum-HOLD/buffer-zones-fs.htm.

A recent review of non-occupational pesticide exposure[11] found evidence supporting contribution of agricultural pesticide drift, as measured by proximity to treated fields to levels of pesticides in household dust. Dust exposure is an exposure pathway that DPR has never attempted to quantify.

We recognize that pesticide use near schools is not a direct measure of exposure but given the limited availability of air monitoring data, pesticide use data is the *best* predictor of possible exposure available. The DPH report released last year estimated that 538,912 pounds of pesticides of public health concern were applied within ¼ mile of public schools in 2010 in the 15 California counties reporting the highest agricultural pesticide use. At 2,511 schools attended by 1,457,230 students use within ¼ mile was at least 319 pounds and the maximum use estimated within ¼ mile of a school was 28,979 pounds. It is troubling that these findings were not even mentioned in the DPR concept draft or workshop presentations. CalEnviroScreen maps also show that many of California's rural schools are located in areas of high use of volatile, higher-toxicity pesticides.

Limitations of survey of county pesticide enquiries

Before scheduling these workshops, DPR surveyed County Agricultural Commissioners (CACs) about pesticide enquiries around schools between 2011 and 2014. The 46 counties that returned surveys reported receiving a total of 1,779 pesticide-related enquiries, but only 1.5 percent of these were related to pesticide applications on school grounds and another 3 percent related to pesticide use near schools. The nature of the remainder of the pesticide enquiries was not reported so we have no way of knowing whether the majority of enquiries were herbicide, drift-related crop loss complaints from farmers or enquiries from the general public.

Reportedly none of these enquiries uncovered an exposure or illness but there was a lot of interest in more information. Yet even a brief anthropological study of only 13 people conducted in 2014 over the course of a few months[12] revealed incidents of exposure and illness; of even greater concern, the study revealed patterns of illness that almost never get reported. Of the 13 Central Coast and Central Valley residents interviewed, five of the participants have worked in public schools. All five said there have been pesticide drift incidents at the schools where they've worked. In fact they consider pesticide-related symptoms "seasonal," coinciding with the agricultural schedule. An administrator from Madera explained, "Headaches vary around whenever agriculture season starts from March to November, it's pretty bad. That's because our agriculture here is fully active. It starts from March. Here where I'm at right now, they cut grapes until December to January. So where I'm working, it's almost the whole year around, [March to November]. That's when we suffer from headaches. [Headaches stop in] December because that's when we are on vacation. I go back to work at my

---

[11] Deziel, NC et al (2015) "A Review of Non-occupational Pathways for Pesticide Exposure in Women Living in Agricultural Areas". *Environmental Health Perspectives* Vol. 123. No. 6. pg. 515-524.

[12] Romero, Maria S, "A Critical Medical Anthropology Approach to Advocating for Social Justice and Policy Change in Pesticide Use and Practice to Reduce Health Risks Among Hispanic/Latinos in Central California," University of North Texas, Department of Anthropology, August 2015.

school and my headaches continues. My headaches continue all the way to December." Mary Flodin, a retired teacher, expressed the same concern when she was a teacher in Santa Cruz County: "One of the most pervasive health effects that we found was a constant flu like feeling. It always started around back-to-school, then ended around Christmas and then it would start up again in the spring. Finally we realized that's the fumigation schedule. This whole cough, runny nose, difficulty breathing, headache, lethargy, cloudy disoriented mind. Teachers would go to doctor after doctor, get antibiotics, 'Why isn't this working? Why don't I get better?'"

Of the five school and former school staff, two reported pesticide drift onto their school just in the last two years: one due to pesticides applied on a windy day when students were at recess, affecting secretaries inside the school as well as teachers and students; and the other, which caused dizziness and vomiting among students immediately after they got off the bus at school. A Madera administrator reported the latter incident, noting that, "Because there were [CAC] inspectors out in the field they were going to come back in a few hours to check what happened. Since there were kids involved they made it a priority but it still took them a few hours before they got here. They set up these machines to read the air and went around the whole school taking readings. They said whatever was up there it was so minute they couldn't detect it. They said there was something there but they couldn't detect it. They smelled it themselves but the machine couldn't pick it up. It was probably the residue."

In addition, the CAC survey results provide little information of value because of the recognized low rate of reporting of suspected pesticide illnesses. Many residents fear retribution from employers and government, face linguistic barriers with CAC offices that have limited or no bilingual staff, or most frequently, simply do not know where to make a report.

In fact, in 2006 when CPR surveyed 321 community members in public places such as grocery stores in Tulare County, the responses documented a consistent problem with exposure incidents, yet few people even knew where to report:

- 41% of people said that they had been drifted on. Of these people, 23% said that they had been drifted on once; 53% said that they had been drifted on two to five times; 14% said they had been drifted on five to nine times; 10% of people said that they had been drifted on more than 10 times.
- 90 people said that their children attended schools near orchards or fields. Of these, 24 people (27%) said their children had complained about spraying.
- 80% of people said they did not know who to report pesticide drift to (of the 20% who said they knew where to report it, only several correctly identified the County Agricultural Commissioner).

This problem has remained the same over time. In 2012, the organization Organización en California de Líderes Campesinas, Inc., conducted an additional 253 surveys with community members from the counties of Coachella, Madera, Oxnard, Salinas and Sonoma, finding results similar to those found in Tulare County in 2006:

- 52% of people said that they had been drifted on. Of these people, 15% said that they had been drifted on once; 37% said that they had been drifted on two to five times; 15% said they had been drifted on five to ten times; 34% of people said that

they had been drifted on more than 10 times.

- Only 3% of all survey respondents said they had ever reported a pesticide incident to local authorities.
- 50 people said that their children attended schools near orchards or fields. Of these, 18 people (36%) said their children had complained about spraying.
- 68% of people said they did not know who to report pesticide drift to (with many others who said they did know where to report identifying the wrong entity).

Although limited in size and scope, these surveys provide a sketch of community members' experiences with pesticide exposure and reporting. The results are consistent with what CPR coalition members who work in rural agricultural areas of the Central Coast and the San Joaquin Valley hear from community members regularly.

Finally, community residents who *do* know to call a CAC office and who have tried to report have reported being met with "hostility and resistance" or dismissed by CAC staff and told to learn English, that they have to work with their neighbors, or that "you have to learn to live with ag." Or, as in one of the incidents described above, the investigation is not conducted in a timely or proper manner with equipment with low detection limits. Understandably, people become frustrated and see no point in reporting.

But of greatest concern, is the fact that exposure to pesticide vapors and dusts *can occur completely unnoticed* and pose serious, *chronic* health risks without immediate illness symptoms or observation of the actual pesticide application. Increasingly, scientific evidence points to a wide range of chronic impacts on children's health from pesticide exposure, including cancers, ADHD and autism, and asthma, which DPR's survey does not account for.

Protection zones of 1 mile around schools and day care facilities should be required for all applications of pesticides of public health concern, pesticides labeled "Danger-Poison," and pesticides designated as California-restricted materials

A number of counties have already found the need to implement buffer zones of ¼ mile around schools for applications of restricted pesticides. Imperial County permit conditions go further and specify protection or buffer zones of 1 mile for aerial applications and MITC-soil injection applications and ½ mile for ground applications of restricted pesticides. San Luis Obispo County requires ½-mile protection zones for aerial applications of restricted pesticides. Kern County requires ¼-mile protection zones for all applications of restricted pesticides. The DPR-favored San Bernardino County Ordinance requires up to ¼-mile protection zones that apply only to *adjacent properties*[13] for most applications of pesticide products labeled "Danger-Poison" and aerial and orchard air-blast and other upward-directed pesticide applications of other restricted and un-restricted pesticides around schools.

These are commendable first steps, but the UC Davis MIND Institute study[14], the UC Berkeley

[13] The buffer zones in the San Bernardino ordinance apply only to properties adjacent to schools.
[14] Shelton, Janie F., et al. "Neurodevelopmental Disorders and Prenatal Residential Proximity to Agricultural Pesticides: The CHARGE Study." *Environmental Health Perspectives*, June 23, 2014. doi:10.1289/ehp.1307044.

CHAMACOS study[15], and the California Childhood Leukemia Study[16], all conducted in California, have shown that ¼-mile buffer zones are insufficient to protect California's children from unsafe pesticide exposures. The UC Davis MIND Institute study documented significantly increased rates of autism in children of mothers who lived up to one mile from fields. The CHAMACOS study has documented chlorpyrifos contamination in homes up to 1.8 miles from treated fields and the California Childhood Leukemia study found elevated concentrations of several pesticides in the dust of homes up to 0.75 miles from treated fields.

To ensure adequate protection, buffer zones around schools and day care facilities should be required statewide and expanded to a distance of one mile for pesticides of public health concern to better protect children from pesticide drift and contaminated dust that can drift onto school grounds and be tracked inside classrooms. Pesticides of public health concern as delineated in the 2014 DPH report "Agricultural Pesticide Use Near Public Schools in California" include carcinogens, reproductive and developmental toxicants, cholinesterase inhibitors, toxic air contaminants, fumigants and priority pesticides for assessment and monitoring. Any additional pesticides that are labeled "Danger-Poison" or designated as California-restricted materials should also be included in this 1-mile buffer zone category.

Protection Zones of 1/8 to ¼ mile should be required for all other pesticide applications
We recommend use of the San Bernardino ordinance as a starting point for setting a buffer zone of ¼ mile around schools and day care facilities for aerial, air-blast and other upward-directed applications of <u>all other</u> pesticides of lower health concern. It is particularly important to require a significant buffer zone for pesticides with known respiratory effects such as sulfur and pyrethroids. The buffer zone distance should apply to *all* farming operations within ¼ mile of a school, not just the adjacent property because pesticide drift does not observe property boundaries.

A buffer zone of at least 1/8 mile should be required for downward directed ground applications of all pesticides of lower health concern because these can still move off-site to some extent in mist, volatilized drift and dust.

Some buffer zone is necessary for all pesticide applications because some children may have allergic reactions to even lower-toxicity, biologically-based pesticides or inert ingredients. In addition, pesticides are sometimes reclassified as more hazardous as new health effects information is collected. For example, new toxicology information recently led the World Health Organization to designate widely-used glyphosate a "probable carcinogen."

Protection zones must remain in effect for extended periods
The majority of school protection zones now in place are only enforced from an hour before school starts until 2 hours after classes end. Some specify that the protection zones must also be observed during scheduled school events or when children are present. This is not adequate

---

Harnly, ME, et. al. "Pesticides in dust from homes in an agricultural area" *Environmental Science and Technology*, 43:8767-8774. 2009.

[16] Gunier, RB, et. al. "Determinants of agricultural pesticide concentrations in carpet dust." *Environmental Health Perspectives*, 119:970-976, 2011.

for protecting children, teachers and school staff before, during, or after school and work hours. At the Sacramento Workshop, Rose Alba who works at the Courtland YMCA Day Care Center reported that farmworker parents must drop their children off early in the morning and pick them up late after they finish work in the fields. Community members at the Oxnard workshop observed that maintenance workers are on school grounds late at night when pesticides are frequently applied and that students at track practice often see nearby pesticide applications. In addition, restricting applications to times when grounds are expected to be occupied does not account for exposure while pesticides evaporate from fields after application or when pesticides are entrained in dust that is deposited on school grounds and blown or tracked into school buildings where residues can persist for extended periods.

The San Bernardino ordinance and several county permit conditions appropriately prohibit aerial applications within the protection or buffer zone at all times in recognition of the impossibility of preventing drift from aerial applications. Buffer zones should also be enforced at all times for all applications of pesticides of public health concern as well as for "Danger-poison" and California-restricted materials pesticides. For other pesticides, buffer zones should be enforced for – at minimum – the length of the Restricted Entry Interval. This incentivizes use of lower toxicity pesticides with 4 hour or 12 hour REIs.

Protection zones are needed for school bus routes and known routes used by children to walk to school

Children are also at risk of exposure to pesticide drift while waiting for the school bus and walking and riding to school. To provide for safe routes to and from school, we recommend requiring a ¼ mile buffer zone around school bus stops, bus routes and known school walking routes during the 2 hours before school and after school for aerial and air-blast applications of all pesticides.

Improved and expanded air monitoring is needed to ground-truth protection zones

Follow-up air monitoring and inside dust monitoring at schools in high pesticide use areas is needed to ground-truth protection zones. Current DPR Air Monitoring Network locations should be relocated to schools located closer to intensive agricultural pesticide use than the current sites, and more comprehensive monitoring should be conducted at Ohlone Elementary and Rio Mesa High School.

Use caps are needed around schools to reduce cumulative exposure to multiple pesticides

The only guaranteed way to reduce exposure to pesticides at schools and day care facilities is to control the total amount of nearby pesticide use. Caps that limit the amount of pesticides that can be applied within 1 mile of schools and day care facilities need to be imposed. DPR should use both the DPH report and CalEnviroScreen to help identify schools with high pesticide use nearby that are located in the most impacted and vulnerable communities statewide – then take immediate steps to cap pesticide use around those schools.

Notification is not a substitute for keeping kids out of harm's way

To protect children's health, exposure needs to be prevented by requiring substantial buffer zones around schools. However, for any pesticide use that continues to be allowed within 1

mile of schools, advance notification should be provided to schools. Those schools, in turn, should then be required to notify teachers and other school staff as well as use their robo-call systems to notify parents. This notification should be provided at least one week before fumigations and at least 48 hours before any other pesticide applications. At the workshops, many farmers stated that they are already notifying schools of planned spraying on a voluntary basis. As a result, a clear and coordinated system across the state should be relatively easy to implement.

Provide annual data on pesticide use near schools and work with schools to improve reporting

Annual data should also be compiled on pesticide use near schools and day care centers in agricultural areas, and this data should be posted online in a user-friendly format. In addition, DPR should require CACs in counties with the heaviest agricultural pesticide use near schools to work with schools in their counties to post pesticide incident response information in every classroom and notify parents about pesticides generally, including how to detect and report drift or poisoning and what to do if poisoning occurs.

Phase out uses of highly hazardous pesticides and promote safer alternatives

Reducing the use of, and phasing out, fumigants and other highly-hazardous, drift-prone pesticides are the most effective ways to protect children and others from harmful pesticide exposure. School protection or buffer zones should be viewed as opportunity zones for trials of safer replacement pest control methods. DPR needs to work with other state and federal agencies to sustain and increase investment in helping farmers transition away from fumigants and chlorpyrifos by 2020, and promote sustainable agriculture over the longer term.

We thank DPR for hosting listening workshops across the state, and investing the staff resources in ground-truthing the reality of what many communities are facing, especially *chronic* health effects that are often undocumented in existing surveys and monitoring. The reality is that pesticides of public health concern are too often used in heavy amounts near California schools, and place Latino schoolchildren at a disproportionate risk of exposure. This environmental injustice needs to be addressed and we look forward to the state's proposal to address this problem by August 2016, including necessary protections and new incentives to support and reward modern farming.

Sincerely,

Sarah Aird
Acting Executive Director
Californians for Pesticide Reform

CPR Steering Committee Member Organizations:

California Rural Legal Assistance Foundation
Advocates For Justice

CEH
center for environmental health

CRPE
Center on Race, Poverty & the Environment

CNC
EDUCATION FUND

EL QUINTO SOL
DE AMERICA

FRESNO METRO MINISTRY

Pesticide Action Network
NORTH AMERICA

PSR LA
Physicians for Social Responsibility
Los Angeles

CAN

July 28, 2015

Brian Leahy, Director
George Farnsworth, Chief of Enforcement
Department of Pesticide Regulation (DPR)
P.O. Box 4015
Sacramento, CA 95812-4015
Emails: brian.leahy@cdpr.ca.gov george.farnsworth@cdpr.ca.gov

RE: Limit pesticide use near schools & promote innovative agriculture

Dear Director Leahy and Chief Farnsworth,

I welcome DPR's attention to the problem of pesticide use near schools because as a concerned representative of the Community Agroecology Network, parent and citizen, I have serious concerns about heavy agricultural pesticide use near local schools. By 2016, DPR should move swiftly to adopt new protections for schoolchildren from hazardous and volatile pesticides and find new ways to promote and support sustainable, cutting-edge agriculture.

The Community Agroecology Network (CAN) is an international non-governmental organization whose mission is to sustain rural livelihoods and environments in the global south through the integration of collaborative research, agroecological education, and locally-informed development strategies. We operate as a network partnering with community-based organizations, farmers' cooperatives, nonprofits, and universities. Together, we promote food security and sovereignty in rural communities through agroecological farming practices; local control over food production, distribution and consumption; alternative trade models; and the empowerment of local and Indigenous youth and women in the leadership of these initiatives. Most recently, we have launched an action research initiative focused on food security and community well-being among farm working families in Santa Cruz County.

I am particularly concerned about the disproportionate exposure of Latino schoolchildren, a fact documented by the Department of Public Health (DPH) report released last year. Latino children are almost twice as likely as white children to attend schools near the heaviest agricultural pesticide use. This is a civil rights violation that DPR must rectify by decreasing the risk of pesticide exposure at schools across the state. The DPH report also found soil fumigants and other pesticides which are known to cause cancer, reproductive system effects, harm to the brain and nervous system and respiratory effects being used in large quantities within ¼ mile of many California schools.

DPR should require one-mile protection zones (buffer zones) between fields where pesticides of public health concern are used and schools, childcare centers, school bus stops, and known school routes. Pesticides of public health concern include pesticides that show evidence of causing cancer, reproductive damage, harm to the brain and nervous system, and asthma and other respiratory problems. Protection zones of ¼ mile currently required in some counties are simply not adequate for health protection. The UC Davis MIND Institute recently showed that mothers who lived within a mile of fields where chlorpyrifos and other pesticides were sprayed while pregnant show a 60%

higher chance of having children with autism. The DPH report documented that chlorpyrifos was the 8th most common pesticide used within ¼ mile of schools in 2010.

Second, no-spray protection zones around schools should be enforced at all times for ground, air blast, as well as for aircraft applications, because students, teachers and community members are often on school grounds for scheduled events and unscheduled activities when school is not formally in session. Furthermore, pesticides can evaporate off the crop plants for an extended period after they are applied and pesticide contaminated dust can be blown onto school grounds and tracked into classrooms.

Third, once the new no-spray protection zones are in place, DPR should conduct ongoing air monitoring at half a dozen schools around the state that have been identified as having the most pesticides of public health concern applied nearby. Any exceedances of health screening levels detected by air monitors should be immediately reported to local school and county officials, parents and teachers and should trigger an expansion of the protection zone.

Fourth, while large, one-mile buffer zones are essential for reducing exposure and protecting children's health, if any pesticide use continues to be allowed within 1 mile of schools, advance notification should be provided to the schools. Schools should then be required to notify teachers and use the robo-call systems to notify parents.

Finally, while these are important first steps, your department needs to devote significant resources and attention, in collaboration with other agencies and universities, to reducing the use of and phasing out the use of soil fumigants and other high toxicity, drift-prone pesticides and helping farmers obtain resources to assist with this transition. Through innovation in agriculture, we can help California farmers adopt cutting-edge practices and tools that keep agriculture prosperous.

Thank you for your commitment to the state's children and to the success of our farmers.

Sincerely,

Roseann Cohen
Executive Director
Community Agroecology Network
rose@canunite.org

CSMC
Communities for Sustainable Monterey County

June 8, 2015

Brian Leahy, Director
George Farnsworth, Chief of Enforcement
Department of Pesticide Regulation (DPR)
P.O. Box 4015
Sacramento, CA 95812-4015

Dear Director Leahy and Chief Farnsworth:

We welcome DPR's attention to the problem of pesticide use near schools because, as the representative of Communities for Sustainable Monterey County, we have serious concerns about agricultural pesticide use near local schools.

We are a state-registered 501(c)(3). We provide organizational and fiscal sponsorship and oversight for 9 active community-based groups and 2 regional projects in Monterey County. We have over 6,000 supporters. We provide environmental education and promote land, water, and energy conservation, community gardens, and strongly support sustainable organic farming.

The DPR must require one mile protection zones (buffer zones) between fields where pesticides of public health concern are used and schools, childcare centers, school bus stops, and known school routes. Pesticides of public health concern include pesticides that show evidence of causing cancer, reproductive damage, harm to the brain and nervous system, and asthma and other respiratory problems. Protection zones of ¼ mile currently required in some counties are simply not adequate for health protection. The UC Davis MIND Institute recently showed that mothers who lived within a mile of fields where chlorpyrifos and other pesticides were sprayed while pregnant show a 60% higher chance of having children with autism. The DPH report documented that chlorpyrifos was the 8th most common pesticide used within ¼ mile of schools in 2010.

Second, protection zones around schools must be enforced at all times for ground as well as for aircraft applications, because students, teachers and community members are often on school grounds for scheduled events and unscheduled activities when school is not in session. Furthermore, pesticides can evaporate off the crop plants for an extended period after they are applied and pesticide contaminated dust can be blown onto school grounds and tracked into classrooms.

sustainablemontereycounty.org
831-643-0707
283 Grove Acre Ave. Pacific Grove, CA 93950

Third, once the new protection zones become are in place, DPR must conduct ongoing air monitoring at half a dozen schools around the state that have been identified as having the most pesticides of public health concern applied nearby. Any exceedances of health screening levels caught by air monitors must be immediately reported to local school and county officials, parents and teachers and be the immediate trigger for an expansion of the protection zone.

Fourth, while large, 1 mile buffer zones are essential for reducing exposure and protecting children's health, if <u>any</u> pesticide use continues to be allowed within 1 mile of schools, advance notification must be provided to the schools and schools must be required to in turn notify teachers and use the robo-call systems to notify parents.

Finally, while these are important first steps, your department needs to devote significant resources and attention to ending the use of soil fumigants and other high toxicity, drift-prone pesticides, and play a significant role in helping farmers obtain resources to assist with this transition.

Sincerely,

Luana M. Conley
Director
Communities for Sustainable Monterey County
283 Grove Acre Ave.
Pacific Grove, CA 93950

sustainablemontereycounty.org
831-643-0707
283 Grove Acre Ave. Pacific Grove, CA 93950

Dear Director Leahy and Chief Farnsworth,

I welcome DPR's attention to the problem of pesticide use near schools. I have serious concerns about heavy agricultural pesticide use near local schools in Delano. By 2016, DPR should move swiftly to adopt new protections for schoolchildren from hazardous and volatile pesticides and find new ways to promote and support sustainable, cutting-edge agriculture.

I am particularly concerned about the disproportionate exposure of Latino schoolchildren, a fact documented by the Department of Public Health (DPH) report released last year. Latino children are almost twice as likely as white children to attend schools near the heaviest agricultural pesticide use. This is a civil rights violation that DPR must rectify by decreasing the risk of pesticide exposure at schools across the state. The DPH report also found soil fumigants and other pesticides which are known to cause cancer, reproductive system effects, harm to the brain and nervous system and respiratory effects being used in large quantities within ¼ mile of many California schools.

DPR should require one-mile protection zones (buffer zones) between fields where pesticides of public health concern are used and schools, childcare centers, school bus stops, and known school routes. Pesticides of public health concern include pesticides that show evidence of causing cancer, reproductive damage, harm to the brain and nervous system, and asthma and other respiratory problems. Protection zones of ¼ mile currently required in some counties are simply not adequate for health protection. The UC Davis MIND Institute recently showed that mothers who lived within a mile of fields where chlorpyrifos and other pesticides were sprayed while pregnant show a 60% higher chance of having children with autism. The DPH report documented that chlorpyrifos was the 8th most common pesticide used within ¼ mile of schools in 2010.

Second, no-spray protection zones around schools should be enforced at all times for ground, air blast, as well as for aircraft applications, because students, teachers and community members are often on school grounds for scheduled events and unscheduled activities when school is not formally in session. Furthermore, pesticides can evaporate off the crop plants for an extended period after they are applied and pesticide contaminated dust can be blown onto school grounds and tracked into classrooms.

Third, once the new no-spray protection zones are in place, DPR should conduct ongoing air monitoring at half a dozen schools around the state that have been identified as having the most pesticides of public health concern applied nearby. Any exceedances of health screening levels detected by air monitors should be immediately reported to local school and county officials, parents and teachers and should trigger an expansion of the protection zone.

Fourth, while large, one-mile buffer zones are essential for reducing exposure and protecting children's health, if <u>any</u> pesticide use continues to be allowed within 1 mile of schools, advance notification should be provided to the schools. Schools should then be required to notify teachers and use the robo-call systems to notify parents.

Finally, while these are important first steps, your department needs to devote significant resources and attention, in collaboration with other agencies and universities, to reducing the use of and phasing out the use of soil fumigants and other high toxicity, drift-prone pesticides and helping farmers obtain resources to assist with this transition. Through innovation in agriculture, we can help California farmers adopt cutting-edge practices and tools that keep agriculture prosperous.

Thank you for your commitment to the state's children and to the success of our farmers.

Sincerely,

on behalf of Committee for a Better Shafter
Shafter, California

Dear Director Leahy and Chief Farnsworth,

We welcome DPR's attention to the problem of pesticide use near schools because as an organization, we have serious concerns about heavy agricultural pesticide use near local schools. By 2016, DPR should move swiftly to adopt new protections for schoolchildren from hazardous and volatile pesticides and find new ways to promote and support sustainable, cutting-edge agriculture. Committee for a Better Arvin is made of concerned community members that want to see change. We are particularly concerned about the disproportionate exposure of Latino schoolchildren, a fact documented by the Department of Public Health (DPH) report released last year. Latino children are almost twice as likely as white children to attend schools near the heaviest agricultural pesticide use. This is a civil rights violation that DPR must rectify by decreasing the risk of pesticide exposure at schools across the state. The DPH report also found soil fumigants and other pesticides which are known to cause cancer, reproductive system effects, harm to the brain and nervous system and respiratory effects being used in large quantities within ¼ mile of many California schools.

DPR should require one-mile protection zones (buffer zones) between fields where pesticides of public health concern are used and schools, childcare centers, school bus stops, and known school routes. Pesticides of public health concern include pesticides that show evidence of causing cancer, reproductive damage, harm to the brain and nervous system, and asthma and other respiratory problems. Protection zones of ¼ mile currently required in some counties are simply not adequate for health protection. The UC Davis MIND Institute recently showed that mothers who lived within a mile of fields where chlorpyrifos and other pesticides were sprayed while pregnant show a 60% higher chance of having children with autism. The DPH report documented that chlorpyrifos was the 8th most common pesticide used within ¼ mile of schools in 2010.

Second, no-spray protection zones around schools should be enforced at all times for ground, air blast, as well as for aircraft applications, because students, teachers and community members are often on school grounds for scheduled events and unscheduled activities when school is not formally in session. Furthermore, pesticides can evaporate off the crop plants for an extended period after they are applied and pesticide contaminated dust can be blown onto school grounds and tracked into classrooms.

Third, once the new no-spray protection zones are in place, DPR should conduct ongoing air monitoring at half a dozen schools around the state that have been identified as having the most pesticides of public health concern applied nearby. Any exceedances of health screening levels detected by air monitors should be immediately reported to local school and county officials, parents and teachers and should trigger an expansion of the protection zone.

Fourth, while large, one-mile buffer zones are essential for reducing exposure and protecting children's health, if <u>any</u> pesticide use continues to be allowed within 1 mile of schools, advance notification should be provided to the schools. Schools should then be required to notify teachers and use the robo-call systems to notify parents.

Finally, while these are important first steps, your department needs to devote significant resources and attention, in collaboration with other agencies and universities, to reducing the use of and phasing out the use of soil fumigants and other high toxicity, drift-prone pesticides and helping farmers obtain resources to assist with this transition. Through innovation in agriculture, we can help California farmers adopt cutting-edge practices and tools that keep agriculture prosperous. Thank you for your commitment to the state's children and to the success of our farmers.

Sincerely,

Committee for a Better Arvin

COALITION FOR CLEAN AIR

July 21, 2015

Brian Leahy, Director
George Farnsworth, Chief of Enforcement
Department of Pesticide Regulation (DPR)
P.O. Box 4015
Sacramento, CA 95812-4015
Emails: brian.leahy@cdpr.ca.gov george.farnsworth@cdpr.ca.gov

RE: Limit pesticide use near schools

Dear Director Leahy and Chief Farnsworth,

The Coalition for Clean Air is concerned about heavy agricultural pesticide use causing air pollution near local schools, putting our children at risk, especially in Latino communities. DPR should move swiftly in the next year to adopt new protections for schoolchildren from hazardous and volatile pesticides and find new ways to promote and support sustainable, cutting-edge agriculture.

We support the following measures:

1. One-mile (buffer zones between fields where pesticides of public health concern are used and schools, childcare centers, school bus stops, and known school routes.
2. No-spray protection zones around schools should be enforced at all times for ground, air blast, as well as for aircraft applications.
3. Ongoing air monitoring at half a dozen schools around the state that have been identified as having the most pesticides of public health concern applied nearby.
4. If any pesticide use continues to be allowed within 1 mile of schools, advance notification should be provided to the schools. Schools should then be required to notify teachers and use the robo-call systems to notify parents.
5. Phasing out the use of soil fumigants and other high toxicity, drift-prone pesticides and helping farmers obtain resources to assist with this transition. Through innovation in agriculture, we can help California farmers adopt cutting-edge practices and tools that keep agriculture prosperous.

Respectfully,

Bill Magavern

Bill Magavern
Policy Director

800 Wilshire Boulevard, Suite 1010
Los Angeles, California 90017
(213) 223-6860

1107 Ninth Street, Suite 440
Sacramento, California 95814
(916) 527-8048

www.ccair.org

CALIFORNIA NURSES ASSOCIATION
National Nurses United
A Voice for Nurses. A Vision for Healthcare.

OAKLAND
2000 Franklin Street
Oakland CA 94612
phone: 510-273-2200
fax: 510-663-1625

SACRAMENTO
Government Relations
770 L Street
Suite 1480
Sacramento CA 95814
phone: 916-446-5019
fax: 916-446-3880

July 28, 2015

Brian Leahy, Director
George Farnsworth, Chief of Enforcement
Department of Pesticide Regulation (DPR)
P.O. Box 4015
Sacramento, CA 95812-4015
Emails: brian.leahy@cdpr.ca.gov george.farnsworth@cdpr.ca.gov

RE: Limit pesticide use near schools & promote innovative agriculture

Dear Director Leahy and Chief Farnsworth,

The California Nurses Association (CNA) urges DPR to address the problem of pesticide use near schools. In a report released last year, the Department of Public Health (DPH) found soil fumigants and other pesticides that are known to cause cancer, harm to the brain and nervous system, and harmful reproductive and respiratory effects being used in large quantities within ¼ mile of many California schools. The serious health risks associated with this kind of pesticide use cannot be tolerated for California's children.

CNA represents more than 86,000 registered nurses throughout the state and routinely engages with state agencies on matters involving public health. As registered nurses, CNA members are often on the front line in caring for people whose health is compromised by environmental degradation and harmful industrial practices. As patient advocates, a guiding principle for our members is the view that healthcare is a human right and that where environmental problems jeopardize human health, we have an obligation to help protect people from those health risks. As such, CNA has serious concerns about heavy agricultural pesticide use near schools throughout California. We urge DPR to take a precautionary approach and move quickly towards adopting new protections for schoolchildren from hazardous and volatile pesticides.

CNA nurses are dedicated to preventing all forms of illness, protecting health, and alleviating human suffering. In keeping with our vision of health care for all, we are deeply concerned about the ways in which racial disparities and discrimination can contribute to adverse health outcomes and access to health services. As such, CNA is particularly concerned about the disproportionate exposure of Latino schoolchildren to hazardous and volatile pesticides. This unacceptable pattern was documented last year in a report by the Department of Public Health (DPH), which showed that Latino children are almost twice as likely as white children to attend schools near the heaviest agricultural pesticide use. This is an example of environmental racism and a civil rights violation that DPR must remedy by decreasing the risk of pesticide exposure at schools across the state.

In light of all this, CNA urges DPR to take certain precautionary measures as soon as possible to protect the health of California's children. First, DPR should require one-mile protection zones (buffer zones) between fields where pesticides of public health concern are used and schools, childcare centers, school bus stops, and known school routes. Pesticides of public health concern include pesticides that show evidence of causing cancer, reproductive damage, harm to the brain and nervous system, and asthma and other respiratory problems. Some counties currently require buffer zones of ¼ mile, but research indicates that this range is not adequate to protect children's health. The UC Davis MIND Institute recently showed that mothers who lived within a mile of fields where chlorpyrifos and other pesticides were sprayed while pregnant show a 60% higher chance of having children with autism. The DPH report documented that chlorpyrifos was the 8th most common pesticide used within ¼ mile of schools in 2010.

Second, DPR should insist that no-spray protection zones around schools are enforced **at all times** for ground, air blast, and aircraft applications, because students, teachers and community members are often on school grounds for scheduled and unscheduled events even when school is not formally in session. Furthermore, pesticides can evaporate off the crop plants even after they are applied and pesticide contaminated dust can blow onto school grounds and travel into classrooms.

Third, once the new no-spray protection zones are in place, DPR should conduct ongoing air monitoring at half a dozen schools around the state that have been identified as having the most pesticides of public health concern applied nearby. If air monitors detect that health screening levels have been exceeded, a report should be made to local school and county officials, parents, and teachers, and the protection zone should be expanded.

Fourth, in the event that <u>any</u> pesticide use continues to be allowed within 1 mile of schools, there should be advance notification provided to the schools, teachers, and parents.

While each of these measures are important first steps, your department, in collaboration with other agencies and universities, also needs to devote resources and attention to reducing and phasing out the use of high toxicity, drift-prone pesticides. Through innovation in agriculture, you can help California farmers adopt cutting-edge practices and tools that keep agriculture prosperous while protecting the health and well-being of California children and citizens.

Thank you for your attention to this important issue.

Sincerely,

Donald W. Nielsen
Director, Government Relations
California Nurses Association

CLEAN WATER ACTION
CALIFORNIA

July 17, 2015

Brian Leahy, Director
George Farnsworth, Chief of Enforcement
Department of Pesticide Regulation
P.O. Box 4015
Sacramento, CA 95812-4015
Submitted via email

RE: Limit pesticide use near schools and promote innovative agriculture

Dear Director Leahy and Chief Farnsworth:

A report from the Department of Public Health released last year found soil fumigants and other pesticides which are known to cause cancer, reproductive harm, brain and nervous system impairment, and respiratory effects being used within one quarter mile of many California schools. I am writing on behalf of Clean Water Action and our 55,000 California members, to call on the Department of Pesticide Regulation (DPR) to adopt new protections for schoolchildren from hazardous and volatile pesticides by 2016. In addition, finding new ways to reduce toxins in agriculture will protect local communities and farm workers, as well as benefit the future of an industry that is important to the state's economy.

As an organization that works with impacted communities in California's agricultural regions to address the often times disproportionate impacts of toxic chemicals on human health, we see this as a core social justice issue. The DPH report clearly demonstrates that Latino children are almost twice as likely as white children to attend schools near the heaviest agricultural pesticide use. DPR has a responsibility to rectify this fundamental civil rights violation.

Specifically, Clean Water Action advocates for the following to be included in a plan and rules to protect *all* California children and communities impacted by heavy pesticide use:

- California should create health protective one-mile no-spray buffer zones around schools.
- No-spray buffer zones should be enforced around schools at all times, and are especially needed for outdated and drift-prone application methods like aerial and air blast applications.
- State officials should conduct ongoing air monitoring around schools. If high levels of pesticides are found in the air, they should trigger notification of school officials and local electeds, as well as an expanded no-spray buffer.
- If any pesticide use takes place within a mile of a school; parents, teachers, and staff should be notified in a timely manner.
- The state should create "agricultural innovation zones" around schools, supporting and investing in cutting-edge and sustainable farming that reduces and phases out use of soil fumigants and other toxic pesticides.

Protecting our children, helping our farmers, and creating a cutting edge agricultural industry is an overall win for California and we thank the Department for taking on this issue and considering our comments.

Sincerely,

Andria Ventura

Andria Ventura
Toxics Program Manager
Clean Water Action

CH1LDREN NOW

1404 FRANKLIN STREET \ SUITE 700
OAKLAND CALIFORNIA 94612
T.510 763 2444 F.510 763 1974

CHILDRENNOW.ORG

ADDITIONAL OFFICES
LOS ANGELES SACRAMENTO

August 5, 2015

Brian Leahy, Director
George Farnsworth, Chief of Enforcement
Department of Pesticide Regulation (DPR)
P.O. Box 4015
Sacramento, CA 95812-4015
Emails: brian.leahy@cdpr.ca.gov george.farnsworth@cdpr.ca.gov

RE: Limit pesticide use near schools & promote innovative agriculture

Dear Director Leahy and Chief Farnsworth,

Children Now welcomes DPR's attention to the problem of pesticide use near schools. By 2016, DPR should move swiftly to adopt new protections for schoolchildren from hazardous and volatile pesticides and find new ways to promote and support sustainable, cutting-edge agriculture.

Children Now is the state's leading nonpartisan research, policy development, and advocacy organization dedicated to promoting children's health and education in California.

We are particularly concerned about the disproportionate exposure of Latino schoolchildren, a fact documented by the Department of Public Health (DPH) report released last year. Latino children are almost twice as likely as white children to attend schools near the heaviest agricultural pesticide use. This is a civil rights violation that DPR must rectify by decreasing the risk of pesticide exposure at schools across the state. The DPH report also found soil fumigants and other pesticides which are known to cause cancer, reproductive system effects, harm to the brain and nervous system and respiratory effects being used in large quantities within ¼ mile of many California schools.

DPR should require one-mile protection zones (buffer zones) between fields where pesticides of public health concern are used and schools, childcare centers, school bus stops, and known school routes. Pesticides of public health concern include pesticides that show evidence of causing cancer, reproductive damage, harm to the brain and nervous system, and asthma and other respiratory problems. Protection zones of ¼ mile currently required in some counties are simply not adequate for health protection. The UC Davis MIND Institute recently showed that mothers who lived within a mile of fields where chlorpyrifos and other pesticides were sprayed while pregnant show a 60% higher chance of having children with autism. The DPH report documented that chlorpyrifos was the 8th most common pesticide used within ¼ mile of schools in 2010.

Second, no-spray protection zones around schools should be enforced at all times for ground, air blast, as well as for aircraft applications, because students, teachers and community members are often on school grounds for scheduled events and unscheduled activities when school is not formally in session. Furthermore, pesticides can evaporate off the crop plants for an extended period after they are applied and pesticide contaminated dust can be blown onto school grounds and tracked into classrooms.

Third, once the new no-spray protection zones are in place, DPR should conduct ongoing air monitoring at half a dozen schools around the state that have been identified as having the most pesticides of public health concern applied nearby. Any exceedances of health screening levels detected by air monitors should be immediately reported to local school and county officials, parents and teachers and should trigger an expansion of the protection zone.

Fourth, while large, one-mile buffer zones are essential for reducing exposure and protecting children's health, if any pesticide use continues to be allowed within 1 mile of schools, advance notification should be provided to the schools. Schools should then be required to notify teachers and use the robo-call systems to notify parents.

Finally, while these are important first steps, your department needs to devote significant resources and attention, in collaboration with other agencies and universities, to reducing the use of and phasing out the use of soil fumigants and other high toxicity, drift-prone pesticides and helping farmers obtain resources to assist with this transition. Through innovation in agriculture, we can help California farmers adopt cutting-edge practices and tools that keep agriculture prosperous.

Thank you for your commitment to the state's children and to the success of our farmers.

Sincerely,

Ted Lempert
President

CENTER FOR
FOOD SAFETY

July 20, 2015

Brian Leahy, Director
George Farnsworth, Chief of Enforcement
Department of Pesticide Regulation (DPR)
P.O. Box 4015
Sacramento, CA 95812-4015
Emails: brian.leahy@cdpr.ca.gov george.farnsworth@cdpr.ca.gov

Re: Limit pesticide use near schools & promote innovative agriculture

Dear Director Leahy and Chief Farnsworth,

Center for Food Safety welcomes DPR's attention to the problem of pesticide use near schools because of our serious concerns about heavy agricultural pesticide use near local schools. By 2016, DPR should move swiftly to adopt new protections for schoolchildren from hazardous and volatile pesticides and find new ways to promote and support sustainable, cutting-edge agriculture.

Center for Food Safety (CFS) is a nationwide consumer and environmental nonprofit organization with two offices in California, working to protect human health and the environment from potentially harmful agricultural production methods. CFS has over 700,000 members including hundreds of thousands of members in California. CFS has also done extensive groundbreaking research on pesticide use, most recently in our report "Pesticides in Paradise: Hawai`i's Health and Environment at Risk." As a result of this research, CFS worked with the Hawai`i legislature to introduce legislation to require buffer zones and notification near schools and areas with other sensitive populations and is considering similar legislation in other states.

In California, CFS is particularly concerned about soil fumigants and other pesticides which are known to cause cancer, reproductive system effects, harm to the brain and nervous system and respiratory effects being used in large quantities within ¼ mile of many California schools, a fact documented in the DPH report released last year.

CFS recommends that DPR should require one-mile protection zones (buffer zones) between fields where pesticides of public health concern are used and schools, childcare centers, school bus stops, and known school routes. Pesticides of public health concern include pesticides that show evidence of causing cancer, reproductive damage, harm to the brain and nervous system, and asthma and other respiratory problems. Protection zones of ¼ mile currently required in some counties are

NATIONAL HEADQUARTERS
660 Pennsylvania Avenue, SE, Suite 302
Washington, D.C. 20003
T: 202-547-9359 F: 202-547-9429

CALIFORNIA OFFICE
303 Sacramento Street, 2nd Floor
San Francisco, CA 94111
T: 415-826-2770 F: 415-826-0507

PACIFIC NORTHWEST OFFICE
917 SW Oak Street, Suite 300
Portland, OR 97205
T: 971-271-7372 F: 971-271-7374

HAWAI'I OFFICE
1132 Bishop Street, Suite 2107
Honolulu, Hawaii 96813
T: 808-681-7688

office@centerforfoodsafety.org centerforfoodsafety.org

CENTER FOR
FOOD SAFETY

303 Sacramento Street 2nd Floor, San Francisco, CA 94111

UNITED STATES POSTAGE
PITNEY BOWES
02 1P $ 000.48[5]
0001864589 JUL 22 2015
MAILED FROM ZIP CODE 94111

UD

Brian Leahy
George Farnsworth
Department of Pesticide Regulation
P.O. Box 4015
Sacramento, CA 95812-4015

95812-4015

CENTER *for* BIOLOGICAL DIVERSITY

July 31, 2015

Brian Leahy, Director
George Farnsworth, Branch Chief
Enforcement Branch
California Department of Pesticide Regulation
P.O. Box 4015
Sacramento, CA 95812-4015
Brian.Leahy@cdpr.ca.gov
George.Farnsworth@cdpr.ca.gov

Sent Via Email and USPS

RE: Restrict Pesticide Use and Promote Innovative Agriculture Around Schools

Dear Director Leahy and Chief Farnsworth:

The Center for Biological Diversity ("Center") welcomes the California Department of Pesticide Regulation's ("CDPR") attention to the regulation of pesticide use near schools. The application of toxic pesticides near schools and their impacts on children, especially in Ventura, Fresno, Tulare, and Monterey counties, is an ongoing serious environmental health and environmental justice threat that must be addressed.

The Center for Biological Diversity ("Center") is a non-profit environmental organization with offices in Oakland, CA and elsewhere in the United States dedicated to the protection of diverse native species and their habitats through science, policy, education and law. The Center for Biological Diversity has over 900,000 members and online activists throughout the United States, including over 111,195 in California. Recognizing that pesticides are one of the foremost threats to the environment, biodiversity, and public health, the Center works to prevent and reduce the use of harmful pesticides and to promote sound pest management strategies.

ISSUE OVERVIEW

The toxic human and environmental effects of pesticides use around schools are indisputable. In 2010 alone, 538,912 pounds of dangerous pesticides were applied within a quarter mile of 2,511 schools in 15 California counties and many of these chemical agents are known to cause cancer and harm to reproductive, neurological, and respiratory systems.[1] The top five pesticides used within a quarter mile of schools are all fumigants,

[1] California Environmental Health Tracking Program, California Department of Public Health. Agricultural Pesticide Use Near Public Schools in California. p.15. April 2014. Available at:

namely Chloropicrin, 1,3-Dichloropropene, Methyl bromide, Metam-sodium, and Potassium n-methyldithiocarbamate.[2] These pesticides are categorized as developmental toxicants and carcinogens, have high drift potential, and are still applied more heavily on a pounds per acre basis than other pesticides.[3] Chloropyrifos, a toxie organophosphate that is known to cause developmental and learning defects, is still the 8th most heavily applied pesticide within a quarter mile of schools in California.[4]

Latino schoolchildren are disproportionately exposed to pesticides; indeed, they are almost twice as likely as white children to attend schools near the heaviest agricultural pesticide use.[5] This is an environmental injustice that CDPR can rectify by taking decisive action.

In addition to harming schoolchildren, high rates of pesticide application on California farms also kills a diverse array of wildlife, including pollinators and amphibians.[6]

Please note that while this comment letter is focused on reducing pesticides use near schools, the Center urges CDPR to expand the scope of its upcoming regulatory action to also include registered child care facilities. Young children are especially vulnerable to the harms of pesticides due to their rapid physical and mental development.

RECOMMENDED ACTIONS

The detrimental public health and environmental harms resulting from pesticide use near schools can be drastically reduced. The Center proposes the following five regulatory actions CDPR can take to ensure that both children and wildlife are safe from toxic pesticides:

I. CDPR should create no-spray buffer zones around schools of one mile;

II. No-spray buffer zones should be enforced around schools at all times;

III. CDPR and County Agricultural Commissioners ("CACs") should conduct ongoing air monitoring around schools and immediately notify teachers, staff, and parents when pesticide concentrations exceed health screening levels;

---

http://www.thenation.com/wp-content/uploads/2015/05/Pesticides_Schools_Report_April2014.pdf [hereinafter 2014 DPH Report].

[2] 2014 DPH Report at 16.

[3] 2014 DPH Report at 16; *see also* Californians for Pesticide Reform. 2003 Secondhand Pesticides: Airborne Pesticide Drift in California. Available at: http://www.pesticideresearch.com/site/docs/SecondhandPcides.pdf.

[4] 2014 DPH Report at 16; *see also* Pesticide Action Network. Three New Separate Studies Confirm: Common Pesticides Harm Kids' Cognition. Available at: http://www.panna.org/blog/3-new-separate-studies-confirm-common-pesticides-harm-kids-cognition.

[5] 2014 DPH Report at 21.

[6] *See* Californians for Pesticide Reform. Disrupting the Balance: Ecological Impacts of Pesticides in California. 1999. Available at: http://www.pesticideresearch.com/site/docs/disrupting.pdf.

IV. CDPR and CACs should immediately notify teachers, staff, and parents if any pesticide use takes place within a mile of a school; and

V. CDPR should create agricultural innovation zones around schools, supporting and investing in cutting-edge sustainable farming.

By adopting these five recommended actions, CDPR will ensure it meets its mission to protect human health and the environment by reducing children's exposure to toxic pesticides.

I. CDPR should create no-spray buffer zones around schools of one mile.

CDPR should require, at a minimum, one-mile buffer zones between schools and fields where pesticides of public health concern are used. The protection zones of a quarter mile currently required in some counties are simply not adequate to protect our children. The most heavily applied pesticides in the state are known to cause cancer, reproductive damage, harm to the brain and nervous system, as well as asthma and other respiratory problems. There is no question that pesticide drift is a major public health threat. One mile no-spray buffer zones will protect children from exposure to pesticides with high drift potential such as 1,3-Dichloropropene and Methyl bromide, as well as help reduce pesticide contamination of local groundwater supplies that at least 420 schools rely on.[7] Thus, establishing one-mile buffer zones will drastically reduce children's exposure to pesticides in the air as well as in their drinking water.

Additionally, CDPR should establish no-spray buffer zones around childcare facilities as well as school pick-up locations and bus stops.

CDPR acknowledges that many counties and districts have already established buffer zones of half a mile and even one mile.[8] Now, CDPR must show true leadership and protect California's children by establishing statewide, one mile buffer zones surrounding schools within which pesticides cannot be sprayed.

II. No-spray buffer zones should be enforced around schools at all times.

CDPR, in collaboration with local CACs, should enforce no-spray protection zones around schools at all times for ground, air blast, as well as for aircraft applications. Students are often on school grounds for scheduled events and unscheduled activities when school is not formally in session, thus maintaining no-spray buffer zones at all times is necessary to truly protect children from exposure. Additionally, eight of the ten most used pesticides in California have extended half lives of more than a week, and dust

---

[7] State Water Resources Control Board. Communities That Rely on a Contaminated Groundwater Source for Drinking Water. p.31. January 2013. Available at: http://www.swrcb.ca.gov/gama/ab2222/docs/ab2222.pdf.

[8] California Department of Pesticide Regulation, California Environmental Protection Agency. Concepts to Address Pesticide Use Near School. p.6 and Appendix 2. May 20, 2015. Available at: http://www.cdpr.ca.gov/docs/legbills/pesticide_concepts.pdf; http://www.cdpr.ca.gov/docs/legbills/complaints_summary.pdf.

contaminated with these pesticides can be blown onto school grounds and tracked into classrooms.[9] A precaution-based regulatory scheme that takes into account not only the drift distance but also the persistence of pesticides is thus necessary.

III. CDPR and CACs should conduct ongoing air monitoring around schools and immediately notify teachers, staff, and parents when pesticide concentrations exceed health screening levels.

CDPR and CACs should conduct ongoing air monitoring at schools around the state that have been identified as having pesticides of public health concern applied nearby. Any exceedance of health screening levels detected by air monitors should be immediately reported to local school and county officials as well as teachers, staff, and parents.

This would be consistent with a 2014 report by the Department of Public Health ("DPH"), which recommends "ongoing surveillance of the use of pesticides of public health concern near schools and other sensitive populations and land uses (e.g., women of reproductive age and childcare centers, respectively)..." to prevent acute and chronic exposure and to consistently track and study pesticide application impacts.[10]

This regulatory action would also be consistent with the recommendations to conduct "[r]outine and standardized collection, digitization, and reporting of data on agricultural field locations of each pesticide use permit, which could then be made publicly accessible via the PUR system in a format convenient for Geographic Information Systems,"[11] as well as to establish "an accurate, complete, and publicly accessible statewide database on all pesticides applied on school properties, including those pesticides applied by school maintenance staff."[12]

Notification should be provided via multiple mechanisms ways to ensure maximum public notice: CACs should work with schools to provide notices regarding the location and extent of health screening level exceedance by email; mobile phone text alerts; and phone calls.

IV. CDPR and CACs should immediately notify teachers, staff, and parents if any pesticide use takes place within a mile of a school.

While large, one-mile buffer zones are essential for reducing exposure and protecting children's health, if <u>any</u> pesticide use occurs within one mile of schools, for example, in a public health emergency, advance notification should be provided to teachers, staff, and parents. CACs should post notices on school district websites, and also provide notice via email; text messages; and phone calls.

---

[9] 2014 DPH Report at 16.
[10] 2014 DPH Report at 40.
[11] 2014 DPH Report at 39.
[12] 2014 DPH Report at 39.

V. CDPR should create agricultural innovation zones around schools, supporting and investing in cutting-edge sustainable farming.

Finally, we urge CDPR, in collaboration with CACs and farmers, to devote appropriate resources and attention to reducing the use of and eventually phasing out soil fumigants and other highly toxic, drift-prone pesticides. For instance, CDPR can urge and even incentivize the implementation of fumigant alternatives in strawberry farming such as solarization, use of cover crops, and crop rotation, particularly within the one-mile school protection zones. Through innovation in agriculture, CDPR can play a leading role in helping California's farmers adopt effective practices and tools to keep agriculture prosperous while reducing harm to public health and the environment. Sustainable agricultural zones surrounding schools could also be used as a model for implementation around sensitive habitat areas and waterways.

Thank you for your commitment to the state's children, the success of our farmers, and the future of our environment.

Sincerely,

Chelsea Tu
Staff Attorney
Center for Biological Diversity
(510) 844-7120
ctu@biologicaldiversity.org
1212 Broadway Suite 800
Oakland, CA 94612

The California Environmental Health Initiative

Science at the intersection of human health and agriculture

July 17, 2015

Brian Leahy, Director
George Farnsworth, Chief of Enforcement
Department of Pesticide Regulation
P.O. Box 4015
Sacramento, CA 95812-4015
via email: brian.leahy@cdpr.ca.gov george.farnsworth@cdpr.ca.gov

RE: Limiting pesticide use near schools & promoting innovative agriculture

Dear Director Leahy and Chief Farnsworth,

The California Environmental Health Initiative (CEHI) is writing to urge the Department of Pesticide Regulation (DPR) to act rapidly to protect schoolchildren from pesticide exposure and to promote and support sustainable, ecological agricultural practices that will reduce pesticide exposures.

CEHI's mission is to ensure that decisions about agricultural practices are based on sound science and give first priority to protecting human health. We advocate a shift to sustainable, ecological agriculture and away from dependence on pesticides. Because children, with their rapidly growing bodies and immature detoxification capabilities, are especially vulnerable to the adverse effects of toxins, we are particularly concerned about their exposure to pesticide applications on agricultural land that is immediately adjacent to schools, as has been documented in recent media coverage.

A Department of Public Health (DPH) report released last year documented that, in particular, Latino children are almost twice as likely as white children to attend schools near the heaviest agricultural pesticide use, a clear environmental injustice. The DPH report also found that, within ¼ mile of many California schools, large quantities of soil fumigants and other pesticides are being used that are known to cause cancer and harm to the reproductive nervous and respiratory systems as well as the brain

To remedy these unacceptable exposures, we first ask DPR to require one-mile protection zones (buffer zones) between fields where pesticides of public health concern are used and schools, childcare centers, school bus stops, and known school routes. Pesticides of public health concern include pesticides that show evidence of causing cancer, reproductive damage, harm to the brain and nervous system, and asthma and other respiratory problems.

Protection zones of ¼ mile currently required in some counties are not adequate for health protection. The University of California, Davis MIND Institute recently showed that mothers who lived within a mile of fields where chlorpyrifos and other pesticides were sprayed while pregnant show a 60% higher chance of having children with autism. The DPH report documented that chlorpyrifos was the 8th most common pesticide used within ¼ mile of schools in 2010.

Second, we ask that no-spray protection zones around schools be enforced at all times for ground, air blast, and aircraft applications because students, teachers and community members are often on school grounds for both scheduled events and unscheduled activities when school is not formally in session. Furthermore, pesticides can evaporate off crop plants for an extended period after they are applied, and pesticide contaminated dust can be blown onto school grounds and tracked into classrooms.

Third, once the new no-spray protection zones are in place, we ask DPR to conduct ongoing air monitoring at half a dozen schools around the state where the largest quantities of pesticides of public health concern are documented to be applied nearby. Any exceedances of health screening levels detected by air monitors should be immediately reported to local school and county officials, parents, and teachers and should trigger an expansion of the protection zone.

Fourth, if any pesticide use continues to be allowed within one mile of schools, advance notification must be provided to the schools, which should then be required to notify teachers and use robo-call systems to notify parents.

Finally, the recommendations above are important first steps, but we ask DPR to devote significant resources and attention, in collaboration with other agencies and universities, to reducing and phasing out the use of soil fumigants and other high-toxicity, drift-prone pesticides. As part of this phase-out, we ask you to support programs that help farmers obtain resources to assist with this transition. Through innovation in agriculture, we can help California farmers adopt cutting-edge practices and tools that keep agriculture prosperous.

Thank you for your commitment to the state's children and to the success of our farmers.

Sincerely,

Nan Wishner, Board Member

c/o Pesticide Action Network
1611 Telegraph Ave., Suite 1200
Oakland CA 94612
www.cal-ehi.org

CENTER *for* BIOLOGICAL DIVERSITY

July 31, 2015

Brian Leahy, Director
George Farnsworth, Branch Chief
Enforcement Branch
California Department of Pesticide Regulation
P.O. Box 4015
Sacramento, CA 95812-4015
Brian.Leahy@cdpr.ca.gov
George.Farnsworth@cdpr.ca.gov

Sent Via Email and USPS

RE: Restrict Pesticide Use and Promote Innovative Agriculture Around Schools

Dear Director Leahy and Chief Farnsworth:

The Center for Biological Diversity ("Center") welcomes the California Department of Pesticide Regulation's ("CDPR") attention to the regulation of pesticide use near schools. The application of toxic pesticides near schools and their impacts on children, especially in Ventura, Fresno, Tulare, and Monterey counties, is an ongoing serious environmental health and environmental justice threat that must be addressed.

The Center for Biological Diversity ("Center") is a non-profit environmental organization with offices in Oakland, CA and elsewhere in the United States dedicated to the protection of diverse native species and their habitats through science, policy, education and law. The Center for Biological Diversity has over 900,000 members and online activists throughout the United States, including over 111,195 in California. Recognizing that pesticides are one of the foremost threats to the environment, biodiversity, and public health, the Center works to prevent and reduce the use of harmful pesticides and to promote sound pest management strategies.

ISSUE OVERVIEW

The toxic human and environmental effects of pesticides use around schools are indisputable. In 2010 alone, 538,912 pounds of dangerous pesticides were applied within a quarter mile of 2,511 schools in 15 California counties and many of these chemical agents are known to cause cancer and harm to reproductive, neurological, and respiratory systems.[1] The top five pesticides used within a quarter mile of schools are all fumigants,

[1] California Environmental Health Tracking Program, California Department of Public Health. Agricultural Pesticide Use Near Public Schools in California. p.15. April 2014. Available at:

namely Chloropicrin, 1,3-Dichloropropene, Methyl bromide, Metam-sodium, and Potassium n-methyldithiocarbamate.[2] These pesticides are categorized as developmental toxicants and carcinogens, have high drift potential, and are still applied more heavily on a pounds per acre basis than other pesticides.[3] Chloropyrifos, a toxic organophosphate that is known to cause developmental and learning defects, is still the 8th most heavily applied pesticide within a quarter mile of schools in California.[4]

Latino schoolchildren are disproportionately exposed to pesticides; indeed, they are almost twice as likely as white children to attend schools near the heaviest agricultural pesticide use.[5] This is an environmental injustice that CDPR can rectify by taking decisive action.

In addition to harming schoolchildren, high rates of pesticide application on California farms also kills a diverse array of wildlife, including pollinators and amphibians.[6]

Please note that while this comment letter is focused on reducing pesticides use near schools, the Center urges CDPR to expand the scope of its upcoming regulatory action to also include registered child care facilities. Young children are especially vulnerable to the harms of pesticides due to their rapid physical and mental development.

RECOMMENDED ACTIONS

The detrimental public health and environmental harms resulting from pesticide use near schools can be drastically reduced. The Center proposes the following five regulatory actions CDPR can take to ensure that both children and wildlife are safe from toxic pesticides:

I. CDPR should create no-spray buffer zones around schools of one mile;

II. No-spray buffer zones should be enforced around schools at all times;

III. CDPR and County Agricultural Commissioners ("CACs") should conduct ongoing air monitoring around schools and immediately notify teachers, staff, and parents when pesticide concentrations exceed health screening levels;

---

http://www.thenation.com/wp-content/uploads/2015/05/Pesticides_Schools_Report_April2014.pdf [hereinafter 2014 DPH Report].

[2] 2014 DPH Report at 16.

[3] 2014 DPH Report at 16; *see also* Californians for Pesticide Reform. 2003 Secondhand Pesticides: Airborne Pesticide Drift in California. Available at: http://www.pesticideresearch.com/site/docs/SecondhandPcides.pdf.

[4] 2014 DPH Report at 16; *see also* Pesticide Action Network. Three New Separate Studies Confirm: Common Pesticides Harm Kids' Cognition. Available at: http://www.panna.org/blog/3-new-separate-studies-confirm-common-pesticides-harm-kids-cognition.

[5] 2014 DPH Report at 21.

[6] *See* Californians for Pesticide Reform. Disrupting the Balance: Ecological Impacts of Pesticides in California. 1999. Available at: http://www.pesticideresearch.com/site/docs/disrupting.pdf.

IV. CDPR and CACs should immediately notify teachers, staff, and parents if any pesticide use takes place within a mile of a school; and

V. CDPR should create agricultural innovation zones around schools, supporting and investing in cutting-edge sustainable farming.

By adopting these five recommended actions, CDPR will ensure it meets its mission to protect human health and the environment by reducing children's exposure to toxic pesticides.

I. CDPR should create no-spray buffer zones around schools of one mile.

CDPR should require, at a minimum, one-mile buffer zones between schools and fields where pesticides of public health concern are used. The protection zones of a quarter mile currently required in some counties are simply not adequate to protect our children. The most heavily applied pesticides in the state are known to cause cancer, reproductive damage, harm to the brain and nervous system, as well as asthma and other respiratory problems. There is no question that pesticide drift is a major public health threat. One mile no-spray buffer zones will protect children from exposure to pesticides with high drift potential such as 1,3-Dichloropropene and Methyl bromide, as well as help reduce pesticide contamination of local groundwater supplies that at least 420 schools rely on.[7] Thus, establishing one-mile buffer zones will drastically reduce children's exposure to pesticides in the air as well as in their drinking water.

Additionally, CDPR should establish no-spray buffer zones around childcare facilities as well as school pick-up locations and bus stops.

CDPR acknowledges that many counties and districts have already established buffer zones of half a mile and even one mile.[8] Now, CDPR must show true leadership and protect California's children by establishing statewide, one mile buffer zones surrounding schools within which pesticides cannot be sprayed.

II. No-spray buffer zones should be enforced around schools at all times.

CDPR, in collaboration with local CACs, should enforce no-spray protection zones around schools at all times for ground, air blast, as well as for aircraft applications. Students are often on school grounds for scheduled events and unscheduled activities when school is not formally in session, thus maintaining no-spray buffer zones at all times is necessary to truly protect children from exposure. Additionally, eight of the ten most used pesticides in California have extended half lives of more than a week, and dust

---

[7] State Water Resources Control Board. Communities That Rely on a Contaminated Groundwater Source for Drinking Water. p.31. January 2013. Available at: http://www.swrcb.ca.gov/gama/ab2222/docs/ab2222.pdf.

[8] California Department of Pesticide Regulation, California Environmental Protection Agency. Concepts to Address Pesticide Use Near School. p.6 and Appendix 2. May 20, 2015. Available at: http://www.cdpr.ca.gov/docs/legbills/pesticide_concepts.pdf; http://www.cdpr.ca.gov/docs/legbills/complaints_summary.pdf.

contaminated with these pesticides can be blown onto school grounds and tracked into classrooms.[9] A precaution-based regulatory scheme that takes into account not only the drift distance but also the persistence of pesticides is thus necessary.

III. CDPR and CACs should conduct ongoing air monitoring around schools and immediately notify teachers, staff, and parents when pesticide concentrations exceed health screening levels.

CDPR and CACs should conduct ongoing air monitoring at schools around the state that have been identified as having pesticides of public health concern applied nearby. Any exceedance of health screening levels detected by air monitors should be immediately reported to local school and county officials as well as teachers, staff, and parents.

This would be consistent with a 2014 report by the Department of Public Health ("DPH"), which recommends "ongoing surveillance of the use of pesticides of public health concern near schools and other sensitive populations and land uses (e.g., women of reproductive age and childcare centers, respectively)..." to prevent acute and chronic exposure and to consistently track and study pesticide application impacts.[10]

This regulatory action would also be consistent with the recommendations to conduct "[r]outine and standardized collection, digitization, and reporting of data on agricultural field locations of each pesticide use permit, which could then be made publicly accessible via the PUR system in a format convenient for Geographic Information Systems,"[11] as well as to establish "an accurate, complete, and publicly accessible statewide database on all pesticides applied on school properties, including those pesticides applied by school maintenance staff."[12]

Notification should be provided via multiple mechanisms ways to ensure maximum public notice: CACs should work with schools to provide notices regarding the location and extent of health screening level exceedance by email; mobile phone text alerts; and phone calls.

IV. CDPR and CACs should immediately notify teachers, staff, and parents if any pesticide use takes place within a mile of a school.

While large, one-mile buffer zones are essential for reducing exposure and protecting children's health, if <u>any</u> pesticide use occurs within one mile of schools, for example, in a public health emergency, advance notification should be provided to teachers, staff, and parents. CACs should post notices on school district websites, and also provide notice via email; text messages; and phone calls.

---

[9] 2014 DPH Report at 16.
[10] 2014 DPH Report at 40.
[11] 2014 DPH Report at 39.
[12] 2014 DPH Report at 39.

V. CDPR should create agricultural innovation zones around schools, supporting and investing in cutting-edge sustainable farming.

Finally, we urge CDPR, in collaboration with CACs and farmers, to devote appropriate resources and attention to reducing the use of and eventually phasing out soil fumigants and other highly toxic, drift-prone pesticides. For instance, CDPR can urge and even incentivize the implementation of fumigant alternatives in strawberry farming such as solarization, use of cover crops, and crop rotation, particularly within the one-mile school protection zones. Through innovation in agriculture, CDPR can play a leading role in helping California's farmers adopt effective practices and tools to keep agriculture prosperous while reducing harm to public health and the environment. Sustainable agricultural zones surrounding schools could also be used as a model for implementation around sensitive habitat areas and waterways.

Thank you for your commitment to the state's children, the success of our farmers, and the future of our environment.

Sincerely,

Chelsea Tu
Staff Attorney
Center for Biological Diversity
(510) 844-7120
ctu@biologicaldiversity.org
1212 Broadway Suite 800
Oakland, CA 94612

Central Coast Alliance United for a Sustainable Economy
CAUSE regional power in action
Counties of Ventura • Santa Barbara • San Luis Obispo • Monterey • Santa Cruz • San Benito

BOARD OF DIRECTORS
Dr. Gregory Freeland
President
California Lutheran University
Feliciano Aguilar
Vice President
School Counselor
Tricia Keen
Secretary
Habitat for Humanity
David Pollock
Treasurer
Council Member
Danny Carrillo
SEIU Local 721
Dick Flacks, Ph.D.
Professor Emeritus UCSB
Gaye T. Johnson Ph.D.
Professor UCSB
Edward J. Lacey Esq., Ret.
Community Leader
Julie Pena
Realtor
Murray Rosenbluth
Ret. Council Member
Kaia Tollefson PhD
Professor, CSUCI
Julie Tumamait-Stenslie
Chumash Elder
Alma Wilson
Guadalupe THRIVE

STAFF
Maricela Morales M.A.
Executive Director
Cameron Yee
Interim Deputy Director
Vicky Curtis
Finance Administrator
Hazel Davalos
Organizing Director
Rigoberto Gutierrez
Community Organizer
Miguel Hernandez
Community Organizer
Aracely Preciado
Community Organizer
Miguel Rodriguez
Community Organizer
Jovita Valdez
Fund Development Director
Refugio Valencia
Community Organizer
Lucas Zucker
Researcher & Organizer

July 31, 2015

Brian Leahy, Director
George Farnsworth, Chief of Enforcement
Department of Pesticide Regulation (DPR)
P.O. Box 4015
Sacramento, CA 95812-4015
Emails: brian.leahy@cdpr.ca.gov george.farnsworth@cdpr.ca.gov

RE: Limit pesticide use near schools & promote innovative agriculture

Dear Director Leahy and Chief Farnsworth,

CAUSE welcome's DPR's attention to the problem of pesticide use near schools because as an organization dedicated to environmental justice there are serious concerns about heavy agricultural pesticide use near local schools the disproportionately expose children and Latino farmworkers, including the reproductive health of farmworker women and their children from the time they are in utero. By 2016, DPR should move swiftly to adopt new protections for schoolchildren from hazardous and volatile pesticides and find new ways to promote and support sustainable, cutting-edge agriculture.

For nearly a decade CAUSE has worked with local residents to protect against the onslaught of environmental hazards in Ventura County that disproportionately impact historically disenfranchised low-income, immigrant and Latino communities. With regards to the environmental *injustice* posed by hazardous pesticides, CAUSE has created a coalition of concerned organizations including Mixteco Indigenous Community Organizing Procject (MICOP), Lideres Campesinas (Women Farmworker Leaders) and Planned Parenthood of Santa Barbara, Ventura and San Luis Obispo. The disproportionate exposure of Latino schoolchildren, is a fact documented by the Department of Public Health (DPH) report released last year. Latino children are almost twice as likely as white children to attend schools near the heaviest agricultural pesticide use. This is a civil rights violation that DPR must rectify by decreasing the risk of pesticide exposure at schools across the state. The DPH report also found soil fumigants and other pesticides that are known to cause cancer, reproductive system effects, harm to the brain and nervous system and respiratory effects being used in large quantities within ¼ mile of many California schools.

There is the specific problem in Ventura County with the use of 1,3 Dichloropropene that includes a banking system that increases exposure to school children and farmworkers. From

www.causenow.org • 2021 Sperry Ave., Ventura, CA 93003 • 402 South Miller St., Santa Maria, CA 93454
(805) 658-0810 • 4225 Saviers Rd., Oxnard, CA 93033 • 601 E Montecito St., Santa Barbara, CA 93103

1995 to 2012, an almost 20 year period, in Ventura County areas that are predominantly Latino, 1, 3 Dichloroprene annual applications exceeded the 90,250 pound safety limit 23 times; 1,3 Dichloroprene was applied over 180,500 pounds on 14 occasions and there were 15 times when applications of 1, 3 Dichloroprene resulted in creating a deficit beyond what was allowable even with the banking system. A banking system for any hazardous pesticide (restricted material) should never be allowed at all.

Secondly, DPR should require one-mile protection zones (buffer zones) between fields where pesticides of public health concern are used and schools, childcare centers, school bus stops, and known school routes. Pesticides of public health concern include pesticides that show evidence of causing cancer, reproductive damage, harm to the brain and nervous system, and asthma and other respiratory problems. Protection zones of ¼ mile currently required in some counties are simply not adequate for health protection. The UC Davis MIND Institute recently showed that mothers who lived within a mile of fields where chlorpyrifos and other pesticides were sprayed while pregnant show a 60% higher chance of having children with autism. The DPH report documented that chlorpyrifos was the 8th most common pesticide used within ¼ mile of schools in 2010.

Third, no-spray protection zones around schools should be enforced at all times for ground, air blast, as well as for aircraft applications, because students, teachers and community members are often on school grounds for scheduled events and unscheduled activities when school is not formally in session. Furthermore, pesticides can evaporate off the crop plants for an extended period after they are applied and pesticide contaminated dust can be blown onto school grounds and tracked into classrooms.

Fourth, once the new no-spray protection zones are in place, DPR should conduct ongoing air monitoring at half a dozen schools around the state that have been identified as having the most pesticides of public health concern applied nearby. Any exceedances of health screening levels detected by air monitors should be immediately reported to local school and county officials, parents and teachers and should trigger an expansion of the protection zone.

Next, while large, one-mile buffer zones are essential for reducing exposure and protecting children's health, if <u>any</u> pesticide use continues to be allowed within 1 mile of schools, advance notification should be provided to the schools. Schools should then be required to notify teachers and use the robo-call systems to notify parents.

Finally, while these are important first steps, your department needs to devote significant resources and attention, in collaboration with other agencies and universities, to reducing the use of and phasing out the use of soil fumigants and other high toxicity, drift-prone pesticides and helping farmers obtain resources to assist with this transition. Through innovation in agriculture, we can help California farmers adopt cutting-edge practices and tools that keep agriculture prosperous.

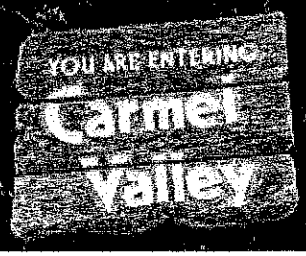
Thank you for your commitment to the state's children and to the success of our farmers.

Sincerely,

Maricela Morales
Executive Director

Carmel Valley Association

To preserve, protect, and defend the natural beauty, resources, and rural character of Carmel Valley



Since 1949

Board of Directors

Priscilla Walton, President

Rich Fox, Vice President

Sandy Schachter, Secretary

Steve Brabeck, Treasurer

Mibs McCarthy, President Emerita

Luana Conley, Newsletter Production Manager

Frank Hennessy

Donna Kneeland

Marlene Martin

Margaret Robbins

Eric Sand

Tim Sanders

Dick Stott

Karin Strasser Kauffman

- Eleanor Avila, Historian
- Janet Brennan, Advisor

July 23, 2015

Brian Leahy, Director
George Farnsworth, Chief of Enforcement
Department of Pesticide Regulation (DPR)
P.O. Box 4015
Sacramento, CA 95812-4015

Dear Director Leahy and Chief Farnsworth:

The Carmel Valley Association strongly supports DPR's focus on the problem of pesticide use near schools. We have serious concerns about the health hazards of heavy agricultural pesticide use near our local schools and appreciate your current attention to the issue.

The Carmel Valley Association is the oldest, largest, and arguably most successful community organization in Monterey County. We are entirely volunteer, with no paid employees. Our mission is to defend the beauty, resources and rural character of our beautiful valley. We do that by working with residents, businesses, and government. When necessary, we speak out on important issues affecting the county's well being as a whole. Pesticide use is one of those issues.

We are particularly concerned about the disproportionate exposure of Latino schoolchildren, a fact documented by the Department of Public Health (DPH) report released last year. The application of these known neurotoxins would instantly become a political outrage were it taking place near our largely white, wealthy schools in Carmel and Carmel Valley. Latino children are almost twice as likely as white children to attend schools near the heaviest agricultural pesticide use. This is a civil rights violation that DPR must rectify by decreasing the risk of pesticide exposure at schools in the midst of agricultural fields. The DPH report also found soil fumigants and other pesticides which are known to cause cancer, reproductive system effects, harm to the brain and nervous system and respiratory effects being used in large quantities within 1/4 mile of many rural California schools.

First, DPR must require one-mile protection zones (buffer zones) between fields where pesticides of public health concern are used and schools, childcare centers, school bus stops, and known school routes. Pesticides of public health concern include pesticides that show evidence of causing cancer, reproductive damage, harm to the brain and nervous system, and

asthma and other respiratory problems. Protection zones of ¼ mile currently required in some counties are simply not adequate for health protection. The UC Davis MIND Institute recently showed that pregnant women who lived within a mile of fields where chlorpyrifos and other pesticides were sprayed show a 60% higher chance of having children with autism. The DPH report documented that chlorpyrifos was the 8th most common pesticide used within ¼ mile of schools in 2010.

Second, protection zones around schools must be enforced at all times for ground as well as for aircraft applications, because students, teachers and community members are often on school grounds for scheduled events and unscheduled activities when school is not in session. Furthermore, pesticides can evaporate off the crop plants for an extended period after they are applied and pesticide contaminated dust can be blown onto school grounds and tracked into classrooms.

Third, once the new protection zones are in place, DPR must conduct ongoing air monitoring at half a dozen schools around the state that have been identified as having the most pesticides of public health concern applied nearby. Any exceedances of health screening levels caught by air monitors must be immediately reported to local school and county officials, parents and teachers and must trigger an expansion of the protection zone.

Fourth, one-mile buffer zones are essential for reducing exposure and protecting children's health, but if <u>any</u> pesticide use continues to be allowed within one mile of schools, advance notification must be provided to the schools, and schools must be required to in turn notify teachers, and use the robo-call systems to notify parents.

Finally, while these are important first steps, your department needs to devote significant resources and attention to reducing and phasing out the use of soil fumigants and other high toxicity, drift-prone pesticides and helping farmers obtain resources to assist with this transition.

Sincerely,

Priscilla Walton, President
Carmel Valley Association

cc:
Eric Lauritzen, Monterey County Agricultural Commissioner

California State Guild

3830 U Street, Sacramento, CA. 95817
916-454-5805 • Fax 916-739-8189

July 25, 2015

Brian Leahy, Director
George Farnsworth, Chief of Enforcement
Department of Pesticide Regulation (DPR)
P.O. Box 4015
Sacramento, CA 95812-4015
Emails: brian.leahy@cdpr.ca.gov george.farnsworth@cdpr.ca.gov

RE: Limit pesticide use near schools & promote innovative agriculture

Dear Director Leahy and Chief Farnsworth,

I/we welcome DPR's attention to the problem of pesticide use near schools because as a (*concerned parent, teacher, representative of organization, etc)* I/we have serious concerns about heavy agricultural pesticide use near local schools (*add personal example if possible*). By 2016, DPR should move swiftly to adopt new protections for schoolchildren from hazardous and volatile pesticides and find new ways to promote and support sustainable, cutting-edge agriculture.

Add short description of the organization you represent if applicable.

I am/ We are particularly concerned about the disproportionate exposure of Latino schoolchildren, a fact documented by the Department of Public Health (DPH) report released last year. Latino children are almost twice as likely as white children to attend schools near the heaviest agricultural pesticide use. This is a civil rights violation that DPR must rectify by decreasing the risk of pesticide exposure at schools across the state. The DPH report also found soil fumigants and other pesticides which are known to cause cancer, reproductive system effects, harm to the brain and nervous system and respiratory effects being used in large quantities within ¼ mile of many California schools.

DPR should require one-mile protection zones (buffer zones) between fields where pesticides of public health concern are used and schools, childcare centers, school bus stops, and known school routes. Pesticides of public health concern include pesticides that show evidence of causing

cancer, reproductive damage, harm to the brain and nervous system, and asthma and other respiratory problems. Protection zones of ¼ mile currently required in some counties are simply not adequate for health protection. The UC Davis MIND Institute recently showed that mothers who lived within a mile of fields where chlorpyrifos and other pesticides were sprayed while pregnant show a 60% higher chance of having children with autism. The DPH report documented that chlorpyrifos was the 8th most common pesticide used within ¼ mile of schools in 2010.

Second, no-spray protection zones around schools should be enforced at all times for ground, air blast, as well as for aircraft applications, because students, teachers and community members are often on school grounds for scheduled events and unscheduled activities when school is not formally in session. Furthermore, pesticides can evaporate off the crop plants for an extended period after they are applied and pesticide contaminated dust can be blown onto school grounds and tracked into classrooms.

Third, once the new no-spray protection zones are in place, DPR should conduct ongoing air monitoring at half a dozen schools around the state that have been identified as having the most pesticides of public health concern applied nearby. Any exceedances of health screening levels detected by air monitors should be immediately reported to local school and county officials, parents and teachers and should trigger an expansion of the protection zone.

Fourth, while large, one-mile buffer zones are essential for reducing exposure and protecting children's health, if <u>any</u> pesticide use continues to be allowed within 1 mile of schools, advance notification should be provided to the schools. Schools should then be required to notify teachers and use the robo-call systems to notify parents.

Finally, while these are important first steps, your department needs to devote significant resources and attention, in collaboration with other agencies and universities, to reducing the use of and phasing out the use of soil fumigants and other high toxicity, drift-prone pesticides and helping farmers obtain resources to assist with this transition. Through innovation in agriculture, we can help California farmers adopt cutting-edge practices and tools that keep agriculture prosperous.

Thank you for your commitment to the state's children and to the success of our farmers.

Sincerely,

Bob McFarland

CALIFORNIA NURSES ASSOCIATION
National Nurses United
A Voice for Nurses. A Vision for Healthcare.

OAKLAND
2000 Franklin Street
Oakland CA 94612
phone: 510-273-2200
fax: 510-663-1625

SACRAMENTO
Government Relations
770 L Street
Suite 1480
Sacramento CA 95814
phone: 916-446-5019
fax: 916-446-3880

July 28, 2015

Brian Leahy, Director
George Farnsworth, Chief of Enforcement
Department of Pesticide Regulation (DPR)
P.O. Box 4015
Sacramento, CA 95812-4015
Emails: brian.leahy@cdpr.ca.gov george.farnsworth@cdpr.ca.gov

RE: Limit pesticide use near schools & promote innovative agriculture

Dear Director Leahy and Chief Farnsworth,

The California Nurses Association (CNA) urges DPR to address the problem of pesticide use near schools. In a report released last year, the Department of Public Health (DPH) found soil fumigants and other pesticides that are known to cause cancer, harm to the brain and nervous system, and harmful reproductive and respiratory effects being used in large quantities within ¼ mile of many California schools. The serious health risks associated with this kind of pesticide use cannot be tolerated for California's children.

CNA represents more than 86,000 registered nurses throughout the state and routinely engages with state agencies on matters involving public health. As registered nurses, CNA members are often on the front line in caring for people whose health is compromised by environmental degradation and harmful industrial practices. As patient advocates, a guiding principle for our members is the view that healthcare is a human right and that where environmental problems jeopardize human health, we have an obligation to help protect people from those health risks. As such, CNA has serious concerns about heavy agricultural pesticide use near schools throughout California. We urge DPR to take a precautionary approach and move quickly towards adopting new protections for schoolchildren from hazardous and volatile pesticides.

CNA nurses are dedicated to preventing all forms of illness, protecting health, and alleviating human suffering. In keeping with our vision of health care for all, we are deeply concerned about the ways in which racial disparities and discrimination can contribute to adverse health outcomes and access to health services. As such, CNA is particularly concerned about the disproportionate exposure of Latino schoolchildren to hazardous and volatile pesticides. This unacceptable pattern was documented last year in a report by the Department of Public Health (DPH), which showed that Latino children are almost twice as likely as white children to attend schools near the heaviest agricultural pesticide use. This is an example of environmental racism and a civil rights violation that DPR must remedy by decreasing the risk of pesticide exposure at schools across the state.

In light of all this, CNA urges DPR to take certain precautionary measures as soon as possible to protect the health of California's children. First, DPR should require one-mile protection zones (buffer zones) between fields where pesticides of public health concern are used and schools, childcare centers, school bus stops, and known school routes. Pesticides of public health concern include pesticides that show evidence of causing cancer, reproductive damage, harm to the brain and nervous system, and asthma and other respiratory problems. Some counties currently require buffer zones of ¼ mile, but research indicates that this range is not adequate to protect children's health. The UC Davis MIND Institute recently showed that mothers who lived within a mile of fields where chlorpyrifos and other pesticides were sprayed while pregnant show a 60% higher chance of having children with autism. The DPH report documented that chlorpyrifos was the 8th most common pesticide used within ¼ mile of schools in 2010.

Second, DPR should insist that no-spray protection zones around schools are enforced **at all times** for ground, air blast, and aircraft applications, because students, teachers and community members are often on school grounds for scheduled and unscheduled events even when school is not formally in session. Furthermore, pesticides can evaporate off the crop plants even after they are applied and pesticide contaminated dust can blow onto school grounds and travel into classrooms.

Third, once the new no-spray protection zones are in place, DPR should conduct ongoing air monitoring at half a dozen schools around the state that have been identified as having the most pesticides of public health concern applied nearby. If air monitors detect that health screening levels have been exceeded, a report should be made to local school and county officials, parents, and teachers, and the protection zone should be expanded.

Fourth, in the event that <u>any</u> pesticide use continues to be allowed within 1 mile of schools, there should be advance notification provided to the schools, teachers, and parents.

While each of these measures are important first steps, your department, in collaboration with other agencies and universities, also needs to devote resources and attention to reducing and phasing out the use of high toxicity, drift-prone pesticides. Through innovation in agriculture, you can help California farmers adopt cutting-edge practices and tools that keep agriculture prosperous while protecting the health and well-being of California children and citizens.

Thank you for your attention to this important issue.

Sincerely,

Donald W. Nielsen
Director, Government Relations
California Nurses Association

CALIFORNIA TEACHERS ASSOCIATION

GOVERNMENTAL RELATIONS
1118 10th Street, Sacramento, CA 95814-3504
phone 916.325.1500

LEGISLATIVE RELATIONS DEPARTMENT
fax 916.325.1583 and 916.325.1584

July 29, 2015

Mr. Brian Leahy, Director
Mr. George Farnsworth, Chief of Enforcement
Department of Pesticide Regulation (DPR)
P.O. Box 4015
Sacramento, CA 95812-4015

RE: Limit Pesticide Use Near Schools & Promote Innovative Agriculture

Dear Mr. Leahy and Mr. Farnsworth:

The California Teachers Association, education employees and concerned parents welcome the Department of Pesticide Regulation's (DPR) attention to the serious problem of heavy pesticide use near local schools sites. By 2016, DPR should move swiftly to adopt new protections for schoolchildren and education employees from hazardous and volatile pesticides and find new ways to promote and support sustainable, cutting-edge agriculture.

We are particularly concerned about the disproportionate exposure of Latino schoolchildren, a fact documented by the Department of Public Health (DPH) report released last year. Latino children are almost twice as likely as white children to attend schools near the heaviest agricultural pesticide use. This is a civil rights violation that DPR must rectify by decreasing the risk of pesticide exposure at schools across the state. The DPH report also found soil fumigants and other pesticides that are known to cause cancer, reproductive system effects, harm to the brain and nervous system and respiratory effects being used in large quantities within ¼ mile of many California schools.

DPR should require buffer zones between fields where pesticides of public health concern are used and schools, childcare centers, school bus stops, and known school routes.

We also strongly recommend DPR conduct ongoing air monitoring at half a dozen schools around the state that have been identified as having the most pesticides of public health concern applied nearby. Any exceedances of health screening levels detected by air monitors should be immediately reported to local school and county officials, parents and teachers and should trigger an expansion of the protection zone.

Going forward, DPR needs to devote significant resources and attention, in collaboration with other agencies and universities, to reducing the use of and phasing out the use of soil fumigants and other high toxicity, drift-prone pesticides and helping farmers obtain resources to assist with this transition. Through innovation in agriculture, we can help California farmers adopt cutting-edge practices and tools that keep agriculture prosperous.

Thank you for your commitment to the state's children and to the success of our farmers.

Sincerely,

A. Trigueiro

Toni Trigueiro
Legislative Advocate

I:\Toni\Pesticide Use Near Schools 7.15.docx

California Federation of Teachers
AFT, AFL-CIO
A Union of Professionals

Representing faculty and classified workers in public and private schools and colleges, from early childhood through higher education

SACRAMENTO OFFICE
1107 9th Street, Suite 460
Sacramento, CA 95814
916-446-2788
916-446-2401 fax
www.cft.org

American Federation of Teachers, AFL-CIO

July 29, 2015

Brian Leahy, Director
George Farnsworth, Chief of Enforcement
Department of Pesticide Regulation (DPR)
P.O. Box 4015
Sacramento, CA 95812-4015

RE: Limit pesticide use near schools & promote innovative agriculture

Dear Director Leahy and Chief Farnsworth,

The California Federation of Teachers welcomes DPR's attention to the problem of pesticide use near schools because we have serious concerns about heavy agricultural pesticide use near local schools. By 2016, DPR should move swiftly to adopt new protections for schoolchildren from hazardous and volatile pesticides and find new ways to promote and support sustainable, cutting-edge agriculture.

The Federation is particularly concerned about the disproportionate exposure of Latino schoolchildren, a fact documented by the Department of Public Health (DPH) report released last year. Latino children are almost twice as likely as white children to attend schools near the heaviest agricultural pesticide use. This is a civil rights violation that DPR must rectify by decreasing the risk of pesticide exposure at schools across the state. The DPH report also found soil fumigants and other pesticides that are known to cause cancer, reproductive system effects, harm to the brain and nervous system and respiratory effects being used in large quantities within one quarter mile of many California schools.

DPR should require one-mile protection zones (buffer zones) between fields where pesticides of public health concern are used and schools, childcare centers, school bus stops, and known school routes. Pesticides of public health concern include pesticides that show evidence of causing cancer, reproductive damage, harm to the brain and nervous system, and asthma and other respiratory problems. Protection zones of one quarter mile currently required in some counties are simply not adequate for health protection. The UC Davis MIND Institute recently showed that mothers who lived within a mile of fields where chlorpyrifos and other pesticides were sprayed while pregnant show a 60% higher chance of having children with autism. The DPH report documented that chlorpyrifos was the 8th most common pesticide used within one quarter mile of schools in 2010.

Second, no-spray protection zones around schools should be enforced at all times for ground, air blast, as well as for aircraft applications, because students, teachers and community members are often on school grounds for scheduled events and unscheduled activities when school is not formally in session. Furthermore, pesticides can evaporate off the crop plants for an extended period after they are applied and pesticide contaminated dust can be blown onto school grounds and tracked into classrooms.

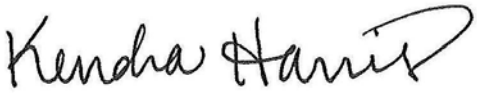
Third, once the new no-spray protection zones are in place, DPR should conduct ongoing air monitoring at half a dozen schools around the state that have been identified as having the most pesticides of public health concern applied nearby. Any exceedances of health screening levels detected by air monitors should be immediately reported to local school and county officials, parents and teachers and should trigger an expansion of the protection zone.

Fourth, while large, one-mile buffer zones are essential for reducing exposure and protecting children's health, if any pesticide use continues to be allowed within one mile of schools, advance notification should be provided to the schools. Schools should then be required to notify teachers and use the robo-call systems to notify parents.

Finally, while these are important first steps, your department needs to devote significant resources and attention, in collaboration with other agencies and universities, to reducing the use of and phasing out the use of soil fumigants and other high toxicity, drift-prone pesticides and helping farmers obtain resources to assist with this transition. Through innovation in agriculture, we can help California farmers adopt cutting-edge practices and tools that keep agriculture prosperous.

Thank you for your commitment to the state's children and to the success of our farmers.

Sincerely,



Kendra Harris
Legislative Representative
KH/dlb:opeiu29:afl-cio

BETTER WORLD GROUP, INC.

www.betterworldgroup.com

HEADQUARTERS
1612 W. Olive Ave., #302
Burbank, CA 91506
ph 818.563.9111
fax 818.563.4943

SILICON VALLEY
560 S. Winchester Blvd., #19
San Jose, CA 95128
ph 408.236.7420

SACRAMENTO
980 9th St., 16th Floor
Sacramento, CA 95814
ph 916.498.9411

July 15, 2015

Brian Leahy, Director
George Farnsworth, Chief of Enforcement
Department of Pesticide Regulation (DPR)
P.O. Box 4015
Sacramento, CA 95812-4015
Emails: brian.leahy@cdpr.ca.gov george.farnsworth@cdpr.ca.gov

RE: Limit pesticide use near schools & promote innovative agriculture

Dear Director Leahy and Chief Farnsworth,

The Better World Group (BWG) welcomes DPR's attention to the problem of pesticide use near schools because as a concerned business and community residents, we have serious concerns about heavy agricultural pesticide use near local schools. By 2016, DPR should move swiftly to adopt new protections for schoolchildren from hazardous and volatile pesticides and find new ways to promote and support sustainable, cutting-edge agriculture.

Founded in 1999, BWG is an environmental policy and communications firm that focuses on air quality, climate change, advanced transportation, clean energy technologies, livable communities and other leading environmental policy issues.

We are particularly concerned about the disproportionate exposure of pesticides on Latino schoolchildren, a fact documented by the Department of Public Health (DPH) report released last year. Latino children are almost twice as likely as white children to attend schools near the heaviest agricultural pesticide use. This is a civil rights violation that DPR must rectify by decreasing the risk of pesticide exposure at schools across the state. The DPH report also found soil fumigants and other pesticides which are known to cause cancer, reproductive system effects, harm to the brain and nervous system and respiratory effects being used in large quantities within ¼ mile of many California schools.

DPR should require one-mile protection zones (buffer zones) between fields where pesticides of public health concern are used and schools, childcare centers, school bus stops, and known school routes. Pesticides of public health concern include pesticides that show evidence of causing cancer, reproductive damage, harm to the brain and nervous system, and asthma and other respiratory

problems. Protection zones of ¼ mile currently required in some counties are simply not adequate for health protection. The UC Davis MIND Institute recently showed that mothers who lived within a mile of fields where chlorpyrifos and other pesticides were sprayed while pregnant show a 60% higher chance of having children with autism. The DPH report documented that chlorpyrifos was the 8th most common pesticide used within ¼ mile of schools in 2010.

Second, no-spray protection zones around schools should be enforced at all times for ground, air blast, as well as for aircraft applications, because students, teachers and community members are often on school grounds for scheduled events and unscheduled activities when school is not formally in session. Furthermore, pesticides can evaporate off the crop plants for an extended period after they are applied and pesticide contaminated dust can be blown onto school grounds and tracked into classrooms.

Third, once the new no-spray protection zones are in place, DPR should conduct ongoing air monitoring at half a dozen schools around the state that have been identified as having the most pesticides of public health concern applied nearby. Any exceedances of health screening levels detected by air monitors should be immediately reported to local school and county officials, parents and teachers and should trigger an expansion of the protection zone.

Fourth, while large, one-mile buffer zones are essential for reducing exposure and protecting children's health, if <u>any</u> pesticide use continues to be allowed within one mile of schools, advance notification should be provided to the schools. Schools should then be required to notify teachers and use the robo-call systems to notify parents.

Finally, while these are important first steps, we would request that your department devote significant resources and attention, in collaboration with other agencies and universities, to reducing the use of and phasing out the use of soil fumigants and other high toxicity, drift-prone pesticides and helping farmers obtain resources to assist with this transition. Through innovation in agriculture, we can help California farmers adopt cutting-edge practices and tools that keep agriculture prosperous.

Thank you for your commitment to the state's children, to the success of our farmers, and all Californians.

Sincerely,

Wendy James, CEO
The Better World Group, Inc.

Susan Frank, President & COO
The Better World Group, Inc.

Association of Irritated Residents
29389 Fresno Ave
Shafter, CA 93263

July 27, 2015

Department of Pesticide Regulation

Dear Director Leahy and Chief Farnsworth,

We welcome DPR's attention to the problem of pesticide use near schools because as an organization, we have serious concerns about heavy agricultural pesticide use near local schools. Some members of the Association of Irritated Residents (AIR) either work at schools or have children that attend schools which are located within a mile of agricultural fields which are sprayed regularly. While at these schools they have experienced strong smells associated with chemical spraying of crops. During the winter, dormant spraying of orchards can leave pesticide smells lingering in the air for many hours, especially on days when we have the notorious valley fog and there is no dispersal of the air. Headaches from these smells are common and the dangers of continued exposure over many years is a threat everyone at these schools. By 2016, DPR should move swiftly to adopt new protections for schoolchildren from hazardous and volatile pesticides and find new ways to promote and support sustainable, cutting-edge agriculture.

The Association of Irritated Residents is an environmental justice group focusing on air and water quality issues in the San Joaquin Valley. Members reside in Kern, Tulare, Kings, Fresno, and Stanislaus Counties.

We are particularly concerned about the disproportionate exposure of Latino schoolchildren, a fact documented by the Department of Public Health (DPH) report released last year. Latino children are almost twice as likely as white children to attend schools near the heaviest agricultural pesticide use. This is a civil rights violation that DPR must rectify by decreasing the risk of pesticide exposure at schools across the state. The DPH report also found soil fumigants and other pesticides which are known to cause cancer, reproductive system effects, harm to the brain and nervous system and respiratory effects being used in large quantities within ¼ mile of many California schools.

DPR should require one-mile protection zones (buffer zones) between fields where pesticides of public health concern are used and schools, childcare centers, school bus stops, and known school routes. Pesticides of public health concern include pesticides that show evidence of causing cancer, reproductive damage, harm to the brain and nervous system, and asthma and other respiratory problems. Protection zones of ¼ mile currently required in some counties are simply not adequate for health protection. The UC Davis MIND Institute recently showed that mothers who lived within a mile of fields where chlorpyrifos and other pesticides were sprayed while pregnant show a 60% higher chance of having children with autism. The DPH report documented that chlorpyrifos was the 8th most common pesticide used within ¼ mile of schools in 2010.

Second, no-spray protection zones around schools should be enforced at all times for ground, air blast, as well as for aircraft applications, because students, teachers and community members are often on school grounds for scheduled events and unscheduled

activities when school is not formally in session. Furthermore, pesticides can evaporate off the crop plants for an extended period after they are applied and pesticide contaminated dust can be blown onto school grounds and tracked into classrooms.

Third, once the new no-spray protection zones are in place, DPR should conduct ongoing air monitoring at half a dozen schools around the state that have been identified as having the most pesticides of public health concern applied nearby. Any exceedances of health screening levels detected hy air monitors should be immediately reported to local school and county officials, parents and teachers and should trigger an expansion of the protection zone.

Fourth, while large, one-mile buffer zones are essential for reducing exposure and protecting children's health, if any pesticide use continues to be allowed within 1 mile of schools, advance notification should be provided to the schools. Schools should then be required to notify teachers and use the robo-call systems to notify parents.
Finally, while these are important first steps, your department needs to devote significant resources and attention, in collaboration with other agencies and universities, to reducing the use of and phasing out the use of soil fumigants and other high toxicity, drift-prone pesticides and helping farmers obtain resources to assist with this transition. Through innovation in agriculture, we can help California farmers adopt cutting-edge practices and tools that keep agriculture prosperous.

Thank you for your commitment to the state's children and to the success of our farmers.

Sincerely,

Tom Frantz, President
Association of Irritated Residents

In light of all this, CNA urges DPR to take certain precautionary measures as soon as possible to protect the health of California's children. First, DPR should require one-mile protection zones (buffer zones) between fields where pesticides of public health concern are used and schools, childcare centers, school bus stops, and known school routes. Pesticides of public health concern include pesticides that show evidence of causing cancer, reproductive damage, harm to the brain and nervous system, and asthma and other respiratory problems. Some counties currently require buffer zones of ¼ mile, but research indicates that this range is not adequate to protect children's health. The UC Davis MIND Institute recently showed that mothers who lived within a mile of fields where chlorpyrifos and other pesticides were sprayed while pregnant show a 60% higher chance of having children with autism. The DPH report documented that chlorpyrifos was the 8th most common pesticide used within ¼ mile of schools in 2010.

Second, DPR should insist that no-spray protection zones around schools are enforced **at all times** for ground, air blast, and aircraft applications, because students, teachers and community members are often on school grounds for scheduled and unscheduled events even when school is not formally in session. Furthermore, pesticides can evaporate off the crop plants even after they are applied and pesticide contaminated dust can blow onto school grounds and travel into classrooms.

Third, once the new no-spray protection zones are in place, DPR should conduct ongoing air monitoring at half a dozen schools around the state that have been identified as having the most pesticides of public health concern applied nearby. If air monitors detect that health screening levels have been exceeded, a report should be made to local school and county officials, parents, and teachers, and the protection zone should be expanded.

Fourth, in the event that <u>any</u> pesticide use continues to be allowed within 1 mile of schools, there should be advance notification provided to the schools, teachers, and parents.

While each of these measures are important first steps, your department, in collaboration with other agencies and universities, also needs to devote resources and attention to reducing and phasing out the use of high toxicity, drift-prone pesticides. Through innovation in agriculture, you can help California farmers adopt cutting-edge practices and tools that keep agriculture prosperous while protecting the health and well-being of California children and citizens.

Thank you for your attention to this important issue.

Sincerely,

Donald W. Nielsen
Director, Government Relations
California Nurses Association

Leahy, Brian@CDPR

From: Nathan <nathan@albafarmers.org>
Sent: Thursday, July 16, 2015 3:11 PM
To: Leahy, Brian@CDPR
Cc: 'Carole Erickson'; chris@albafarmers.org
Subject: Recommendations to DPR
Attachments: SKMBT_42315071614070.pdf

Director Leahy,

ALBA is in favor of increased protection of human health and the environment in the communities that we serve. Please see the attached letter regarding specific recommendations in response to DPR's attention to the problem of pesticide use near schools throughout California.

Kindest regards,

Nathan Harkleroad

Nathan Harkleroad
Outreach and Education Program Manager

PO Box 6264
Salinas, CA 93912
Office: (831) 758-1469 x.11
Fax: (831) 758-3665
http://www.albafarmers.org

ALBA's mission is to advance economic viability, social equity and ecological land management among limited-resource and aspiring farmers.

Brian Leahy, Director
Department of Pesticide Regulation
P.O. Box 4015
Sacramento, California 95812-4015

Director Leahy,

DPR's recent attention to the problems of pesticide use near schools throughout the state requires response. The Agriculture and Land-based Training Association in a non-profit organization based in Salinas. Our mission is to advance economic viability, social equity and ecological land management among limited-resource and aspiring farmers. We work to create opportunities for family farms while providing education and demonstration on conservation, habitat restoration, marketing and whole farm planning. The majority of our participants are current or former farm laborers who live in the Salinas or Watsonville areas, which constitute a high-intensity multi-billion dollar agricultural industry with a focus on conventional vegetable row crops and berries.

We are in favor for increased protection of human health and the environment in our communities. The following are ways in which we feel DPR could have an impact:

- Mandating a larger buffer (> than 100 – 400 foot buffer zones now approved in Monterey County) to reduce the toxicity of pesticide drift;
- Schools and communities located near fields in which pesticide application is a year-round activity receive 1 full week notification of a permitted application for use of any pesticide. Already compromised children and their families may not be able to evacuate the area because of financial and childcare restraints but teachers, staff and parents can keep children indoors to avoid greater damage from exposure.
- Continue to evaluate the environmental and human health safety of chlorpyrifos. The U.S. Environmental Protection Agency recently issued a press release about considering an outright ban on chlorpyrifos due to its presence in waterways across the country.

We strongly urge your department to devote significant resources and attention to reducing and phasing out the use of soil fumigants and other high toxicity, drift-prone pesticides and helping farmers obtain resources to assist with the transition to effective and far safer practices, such as organic farming.

Sincerely,

Christopher Brown
Executive Director

AGRICULTURE AND LAND-BASED TRAINING ASSOCIATION
ALBA

Mailing Address:
P.O. Box 6264
Salinas, California
93912

Rural Development Center
Salinas
(831) 758-1469
(831) 758-3665 fax

Farm Training & Research Center at the Triple M Ranch, Watsonville
(831) 786-8760
(831) 786-8766 fax

ALBA Organics
Fresh Produce & CSA
Salinas
(831) 758-5958
(831) 758-5315 fax

www.albafarmers.org
alba@albafarmers.org