CleanEarth4Kids.org



May 14, 2025

RE: Environmental Justice Advisory Committee (EJAC) Formation and Role

CleanEarth4Kids.org strongly supports environmental justice and we were a supporter of <u>AB 652</u> to require the Department of Pesticide Regulation (DPR) to convene an Environmental Justice Advisory Committee (EJAC) to engage with the communities most impacted by the use of synthetic pesticides.¹

CleanEarth4Kids.org supports the formation and role of its Environmental Justice Advisory Committee (EJAC) as outlined in the draft documents.

<u>Data</u> from the CalEnviroScreen (California Environmental Justice Screening Tool) clearly shows that the pollution burden from pesticide use has the greatest racial, ethnic, and income disparities in California.²

Environmental Justice

EPA defines environmental justice as the equitable treatment and meaningful involvement of all people regardless of race, color, national origin, or income, with respect to the development, implementation, and enforcement of environmental laws, regulations, and policies.³ The significance of environmental justice lies in the fundamental belief that every person has the right to a healthy and safe environment, particularly those who have been deprived of this right.⁴ For many years, some communities have long endured disproportionate exposure to harmful toxins, polluted air, and the adverse effects of climate change.⁵

<u>Environmental</u> racism is any policy, practice, or directive that differentially affects or disadvantages (where intended or unintended) individuals, groups, or communities based on race. The origins of environmental racism (environmental injustice) can be traced back to the late 1970s.⁶ A notable example was the <u>construction of waste</u> <u>facilities</u> in predominantly black communities in Houston, but not in the neighboring white communities, where only 25% of the total population was black.⁷ Despite some progress in addressing environmental injustice, the problem still persists. Many communities of color continue to face disproportionate exposure to pollution, toxic waste sites, industrial facilities, and other environmental hazards.

Environmental Injustice in California

¹ https://leginfo.legislature.ca.gov/faces/billNavClient.xhtml?bill_id=202320240AB652

² https://aiph.aphapublications.org/doi/full/10.2105/AJPH.2015.302643

³ https://www.epa.gov/environmentaljustice

⁴ https://www.nrdc.org/stories/environmental-justice-movement

⁵ https://www.whitehouse.gov/environmentaljustice/

⁶ http://news.unm.edu/news/the-complicated-history-of-environmental-racism

https://www.nationalgeographic.com/environment/article/environmental-justice-origins

In California, the distribution of pesticide exposure is far from equal, with low-income and communities of color facing significantly higher risks. Areas of the state with low proportions of low-income and communities of color receive little to no pesticide applications. Research by Californians for Pesticide Reform showed that over 95% of agricultural pesticide use occurred in areas with more than 50% people of color. Shockingly, in 2019, over 8 million pounds of pesticides linked to childhood cancers were used in 11 California counties that had a majority Latinx population, averaging 4.2 pounds per person. In contrast, only 770,000 pounds of the same pesticides were used in the 25 counties with the fewest Latinx population, averaging 0.35 pounds per person.

California's agricultural pesticide usage is nearly <u>4.5 times</u> ¹² the national average, exposing farmworkers <u>to pesticides</u> that have been linked to fatal poisoning and health problems like cancer, respiratory disease, and developmental disorders. ¹³ U.S. Department of Labor <u>data</u> shows 96% of these farmworkers are Hispanic, approximately one-third live below the poverty line, and around <u>75% are undocumented</u>. ^{14,15} Many <u>workers fear reporting</u> poisonings or regulatory violations due to potential consequences. ¹⁶

Two California studies showed an elevated risk of <u>childhood leukemia</u> and <u>nervous</u> <u>system tumors</u> associated with 13 agricultural pesticides applied within a range of up to 2.5 miles.^{17,18}

Astonishingly, only three of these pesticides are classified as <u>Restricted</u> in California.¹⁹ However, globally, 11 out of the 13 pesticides are prohibited in other countries, with 10 of them being banned in at least 28 countries. To explore the list of pesticides banned in other countries, PAN's (Pesticide Action Network) <u>list</u> of banned pesticides is a valuable resource.²⁰

It is concerning that the U.S. allows the use of numerous toxic pesticides that have been banned in other countries. The U.S. only bans 22 pesticides while China bans 55, and the EU bans 274.

Ignoring the voices of the affected communities is not only unjust but also unacceptable and must be stopped.

⁸ https://www.pesticidereform.org/environmental-justice/

⁹ https://www.ewg.org/news-insights/news-release/2022/09/study-communities-color-greatest-risk-pesticide-e https://www.pesticidereform.org/

¹¹ https://www.pesticidereform.org/wp-content/uploads/2021/12/FINAL-202111-CPR-Childhood-Cancer-v4.pdf

¹² https://www.ucsusa.org/resources/farmworkers-at-risk

https://clc.ucmerced.edu/files/page/documents/environmental influences on agricultural worker health.pdf

¹⁴ https://wdr.doleta.gov/research/FullText_Documents/ETAOP2022-15 NAWS_Research_Report_15_508c.pdf

¹⁵ https://clc.ucmerced.edu.672elmp01.blackmesh.com/farmworker-health-study

https://pmc.ncbi.nlm.nih.gov/articles/PMC5846675/

¹⁷ https://www.sciencedirect.com/science/article/abs/pii/S1438463919306212

¹⁸ https://pubmed.ncbi.nlm.nih.gov/33798513/

¹⁹ https://www.cdpr.ca.gov/docs/enforce/dpr-enf-013a.pdf

²⁰ https://pan-international.org/pan-international-consolidated-list-of-banned-pesticides/

It is obvious that current pesticide regulations are failing to protect low-income and communities of color, and that must change

Children Exposed to Pesticides

Children are more susceptible to the effects of environmental toxins like pesticides because they are still developing. In California, <u>Hispanic children</u> are 91% more likely than white children to attend schools located near areas where significant amounts of pesticides known to be harmful to human health are used. Additionally, they are 46% more likely than white children to attend schools within a quarter mile of the pesticide use. This discrepancy places <u>children of color</u> at a higher risk of pesticide exposure, thereby increasing their vulnerability to potential harm. The proximity to agricultural areas where pesticides are used is a crucial factor because these pesticides can <u>drift</u> miles, affecting the health of children and families living near <u>agricultural fields</u>. Pesticide drift <u>settles</u> on various surfaces such as playgrounds, porches, laundry, toys, pools, furniture, gardens, and lawns where people and children live, learn, and play. This widespread contamination exposes individuals, including children, pollinators, and wildlife, to potential harm through direct contact or ingestion of contaminated substances.

Moreover, children 12 and younger who work in agriculture are routinely exposed to toxic pesticides, which raises ethical concerns. Allowing child agricultural workers is morally bankrupt, as it subjects them to hazardous substances that can have long-lasting detrimental effects on their health and development. Despite the fact that children are more susceptible to the harms of chemical exposure, the EPA uses the same exposure standards as adults. Methodologies employed to assess exposure in children often use unjustifiable justifications, such as claiming that children work more slowly, resulting in reduced handling of crops, thus minimizing their potential exposure. These narratives often downplay the true extent of children's toxic pesticide exposure.

Pesticide Poisoning and Health Disparities Among Agricultural Workers

<u>Documented</u> pesticide poisonings, shorter lifespans, and serious health problems of farmworkers are of major concern.²⁹ <u>Long-term exposure to pesticides</u>³⁰ has been associated with various adverse effects, including impaired neurobehavioral function,

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²¹ https://trackingcalifornia.org/cms/file/agricultural-pesticides-near-schools/report

²² https://bmcpublichealth.biomedcentral.com/articles/10.1186/s12889-022-13057-4

https://europepmc.org/article/AGR/IND20460440

²⁴ https://pubmed.ncbi.nlm.nih.gov/11097803/

²⁵ https://www.epa.gov/reducing-pesticide-drift/introduction-pesticide-drift

https://www.aft.org/community/child-labor-united-states

²⁷ https://www.atsdr.cdc.gov/csem/pediatric-environmental-health/why_children.html

https://www.epa.gov/system/files/documents/2021-12/chpac-pesticide final-letter-12.21 508c 0.pdf

²⁹ https://www.farmworkerjustice.org/wp-content/uploads/2013/07/Exposed-and-Ignored-by-Farmworker

³⁰ https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6367668/#

respiratory disorders, obesity and diabetes, <u>convulsions</u>, <u>coma</u>, <u>and even death</u>. Shockingly, every year, an estimated 300,000 farm workers in the United States are affected by pesticide poisoning, yet a significant number of these cases go unreported.

Additionally, physicians diagnose between 10,000 to 20,000 cases of pesticide poisoning among U.S. farm workers. It is alarming that the average life <u>expectancy of farm workers</u>³² is a mere 49 years, significantly lower than the <u>national average of 76.1 years</u>. 33

These statistics highlight the stark disparity in health outcomes and the challenging working conditions faced by farm workers, emphasizing the urgent need for attention and action to protect their well-being.

Support Organic Agriculture! Stop Toxic Pesticides!

Regenerative and organic <u>agricultural practices</u> have demonstrated that poisons like neonicotinoids, organophosphates, or dicamba are not necessary.³⁴ Many cultural, mechanical, and biological solutions can be used for <u>effective pest control</u> in our homes, parks, and farms.³⁵

<u>Organic farming practices</u> do not use synthetic pesticides, fertilizers, or GMOs. Instead, this practice includes methods such as cover crops, manure, crop rotation, and natural pest controls like neem oil that can repel pests and maintain soil health.³⁶

Regenerative agriculture practices focus on soil health, biodiversity, and the water cycle by using cover crops, managed grazing, reduced tilling, and planting a wide variety of crops to better close the carbon cycle.³⁷ Synthetic pesticides, fertilizers, and GMOs are not standard practices in regenerative agriculture.³⁸

Permaculture is a form of land management that encourages working with natural ecosystems to provide diversity, stability, and resilience. Bill Mollison, the "Grandfather of Permaculture," describes it as <u>working with nature rather than</u> <u>against it</u> to combine landscapes, plants, animals, and humans in a symbiotic relationship.³⁹

Companion planting, water harvesting, and agroforestry are all important <u>components of permaculture</u>, and there are no uses for anything not made in

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³¹ https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5606636/

³² https://farmworkerfamily.org/information#

³³ https://www.cdc.gov/nchs/pressroom/nchs press releases/2022/20220831.htm

https://cleanearth4kids.org/farming-regenerative

³⁵ https://cleanearth4kids.org/stop-pesticides#ipm

³⁶ https://www.sare.org/resources/transitioning-to-organic-production/#:~:text=More%

https://regenerationinternational.org/2017/02/24/what-is-regenerative-agriculture/

³⁸ https://civileats.com/with-regenerative-agriculture-booming-the-question-of-pesticide-use-looms-large/

³⁹ https://www.nomos.net/post/what-is-permaculture-farming-a-simplified-guide

nature.40

<u>Organic pest control methods</u> and agricultural practices are effective at controlling pests without using toxic chemicals.⁴¹

Pesticide companies don't want the public to know about the successes of organic and regenerative farming processes because it means less profits for them.

Microbial pesticides and parasitic insects can be used through a method called biological control. <u>Biological controls</u> use an insect's natural enemies, such as other insects, bacteria, viruses, nematodes, or fungi, to control the pest population.⁴²

This method can be particular, targeting a specific pest, thereby eliminating indirect harm. Biological control methods are also economically <u>self-sufficient</u> in the long term, making them a more viable option than synthetic pesticides on multiple levels.⁴³

Physical control methods reduce chemical pesticide use, improve crop quality, reduce environmental contamination, and protect human health.

Companion planting, or polyculture, is another natural and sustainable way to deter pests. Many plants have innate capabilities to discourage pests, making them natural repellents.

While <u>monoculture</u> is encouraged and prioritized in United States agriculture, polyculture can prove to be a biological pest control system.⁴⁴ For instance, the Ilium species (onions, garlic, leeks) <u>can protect vegetables</u> such as tomatoes and carrots by repelling aphids, slugs, carrot flies, and Japanese beetles, while petunias repel aphids, tomato hornworms, and squash bugs.⁴⁵

By dedicating funding and research to companion planting and polyculture, the need for synthetic pesticides will decrease, and there will be increased protection for human health and the environment.

Many other natural pest management methods must be promoted or widely used because they do not contribute funds to the chemical industry. Natural plant oils, organic matter, solarization, and parasites are all methods shown to control pests, even on large scales, sustainably.

Sustaining clean soil is another integral part of natural pest control and upholding sustainable gardens and landscapes: <u>food production</u>, <u>water filtration</u>, <u>groundwater</u>

⁴⁰ https://www.nomos.net/post/what-is-permaculture-farming-a-simplified-guide

⁴¹ https://extension.sdstate.edu/organic-pest-control-methods

⁴² https://www.ars.usda.gov/oc/utm/biological-green-alternatives-to-chemical-pesticides/

https://www.nifa.usda.gov/grants/programs/biological-control-program

⁴⁴ https://cupola.gettysburg.edu/cgi/viewcontent.cgi?article=1045&context=gssr

⁴⁵ https://magazine.scienceconnected.org/2022/04/organic-gardening-alternatives-pesticides/

replenishment, and the breakdown and recycling of numerous crucial nutrients are required throughout the entire food chain.⁴⁶

All of these factors depend on <u>healthy soils</u>.⁴⁷ Maintaining clean soil and natural pest control includes watering plants in the morning to keep them healthy, controlling weeds in gardens, cutting out faded blooms and decaying plant matter, adding beneficial insects (biological control), and practicing crop rotation.

To protect the health and safety of the environment and the people of Missouri, all synthetic pesticides must be banned, and alternative pest control methods must be researched and implemented.

Please see our page <u>Team 5: Regenerative Farming, Permaculture, Agroecology,</u> Organics & Healthy Soil for more information.⁴⁸

Soils and Climate Change

<u>Soil's vital functions</u> sustain planetary, animal, and plant life. It also regulates water flow, filters and buffers pollutants, cycles nutrients, and provides physical stability and sort. Soil is an essential ally in fighting the threats of climate change. <u>Carbon sequestration</u> has been a relatively natural way of removing carbon dioxide from the atmosphere with a less harmful impact on land, water, energy, and cost. 50

Currently, our soils remove about 25% of the world's fossil fuel emissions annually. Large-scale agricultural practices that disturb <u>soil tillage</u>,⁵¹ mono-crop planting, <u>crop residue removal</u>,⁵² excessive use of fertilizers and pesticides, along with overgrazing, <u>expose the atmosphere</u> to carbon found in soil; this carbon combines with oxygen, allowing it to burn into the atmosphere.⁵³

Reducing the disturbances on managed lands by practicing no-till farming, harvesting forests less frequently, and leaving green space in urban areas can reduce carbon emissions from soils, ensuring that carbon is not released back into the atmosphere.⁵⁴

Industrial Agriculture and the Impacts on Our Soils

<u>Soil</u> is the very foundation of agricultural practices.⁵⁵ Although soil is essential to the cultivation of thriving food systems, most industrial crop production includes

⁴⁶ https://indiana.clearchoicescleanwater.org/pledges/healthy-soils/why-soil-matters/

⁴⁷ https://indiana.clearchoicescleanwater.org/pledges/healthy-soils/why-soil-matters

⁴⁸ https://cleanearth4kids.org/farming-regenerative

⁴⁹ https://www.nrcs.usda.gov/resources/education-and-teaching-materials/what-is-soil

https://www.usgs.gov/faqs/what-carbon-sequestration

⁵¹ https://crops.extension.iastate.edu/encyclopedia/frequent-tillage-and-its-impact-soil-quality

⁵² https://cropwatch.unl.edu/2017/residue-removal-impacts-yield

https://news.climate.columbia.edu/2018/02/21/can-soil-help-combat-climate-change/

https://www.soils.org/files/sssa/ivs/november-soils-overview.pdf

https://www.isric.org/discover/about-soils/why-are-soils-important

synthetic fertilizer application and monocropping.⁵⁶

These practices degrade the soil over time, destroying the delicate balance of the soil ecosystem and negatively impacting our climate.

What is Organic Farming?

Organic food production has been an established industry in the United States since the late 1940s. This method of cultivating food started as small-scale personal farming practices and eventually transitioned to the majority of large farms with an abundance of products under a specific <u>organic</u> label.⁵⁷ More than 40 private organizations and state agencies certify <u>organic food</u>.⁵⁸

Organic Farming and Climate Resiliency

Our ever-changing climate poses many risks for farmers and ranchers due to the endangered soil, water, and other resources that food depends on.

Increased temperatures have caused intense drought seasons, heat waves, and stronger storms, making it increasingly difficult to grow crops and maintain livestock. Many of our current farms follow the "get big or get out" mentality, where the system is petroleum-dependent.⁵⁹ This dependency decreases biodiversity and creates weak landscapes that are less susceptible to climate change's ravages.

Healthy Soil Practices:

- <u>Ecological pest management</u>: limiting pest damage while enhancing farm biodiversity, practices that create a healthy crop habitat, and <u>reducing off-farm inputs</u>.⁶⁰
- Rotational grazing and pasture management: sustainable livestock management on rangelands and pastures to both maintain land health and enhance the quality of their forages while still meeting their business goals.⁶¹
- <u>Conservation tillage and health</u>: <u>strip-till</u> and <u>no-till</u> help prevent soil loss from wind and water erosion. These tillage systems also minimize soil compaction, conserve water, and store carbon to aid in offsetting greenhouse gas emissions.^{62,63}

⁵⁶ https://foodrevolution.org/blog/monocropping-monoculture/

⁵⁷ https://www.usda.gov/media/blog/2012/03/22/organic-101-what-usda-organic-label-means

https://www.ams.usda.gov/resources/organic-certifying-agents

⁵⁹ https://grist.org/article/the-butz-stops-here/

⁶⁰ https://www.sare.org/wp-content/uploads/A Whole-Farm Approach to Managing Pests.pdf

⁶¹ https://www.sare.org/resources/what-is-sustainable-agriculture/

https://www.ag.ndsu.edu/publications/crops/strip-till-for-field-crop-production

https://www.scientificamerican.com/article/no-till/.

- <u>Cover crops</u>: Growing plants such as rye or clover after harvesting a cash crop suppresses weeds and pests and aids in carbon storage, erosion control, and <u>overall improved soil health</u>.⁶⁴
- <u>Nutrient management</u>: manure and legume <u>cover crops</u> that are properly applied on farms build soil and protect water quality.⁶⁵

To achieve this, we urge you to work with and prioritize increasing technical assistance from organizations such as <u>Pesticide Action Network</u>, ⁶⁶ <u>Beyond Pesticides</u>, ⁶⁷ <u>Center for Biological Diversity</u>, ⁶⁸ <u>Californians For Pesticide Reform</u>, ⁶⁹ <u>Rodale Institute</u>, ⁷⁰ <u>CleanEarth4Kids.org</u> and existing regenerative, organic farmers, and those working in agroecology and permaculture throughout the world. ⁷¹

Farmers need resources and support to transition to regenerative, organic agriculture, agroecology, and permaculture <u>methods</u>.⁷² Empowering farmers and farmworkers with knowledge and encouraging them to adopt sustainable practices benefits the environment and the workers.

Breaking Industry Influence: Ensuring Public Interest in DPR

It is crucial to put an end to the undue influence of industry on DPR. Three out of the last 5 <u>DPR directors</u>⁷³ work with industry. For instance, Jim Wells, who served as director from 1991-1999, now works as a consultant catering to clients like Dow AgroSciences. Mary-Ann Warmerdam, director from 2004-2011, joined Clorox after her tenure, and <u>Val Dolcini</u>, director from 2019-2021, now works for pesticide manufacturer Syngenta.⁷⁴

DPR must take decisive action to prioritize the well-being of people over profits, severing partnerships with industry.

DPR must take proactive measures to genuinely listen to and address the concerns of those who are being adversely affected by pesticide exposure.

Support Environmental Justice Advisory Committee (EJAC)

CleanEarth4Kids.org supports the formation and role of its Environmental Justice Advisory Committee (EJAC) as outlined in the draft documents.

⁶⁴ https://edis.ifas.ufl.edu/publication/AG277

⁶⁵ https://www.sare.org/resources/cover-crops/

⁶⁶ https://www.panna.org/campaign/international/

⁶⁷ https://www.beyondpesticides.org/

⁶⁸ https://www.biologicaldiversity.org/

⁶⁹ https://www.pesticidereform.org/

⁷⁰ https://rodaleinstitute.org/

⁷¹ http://CleanEarth4Kids.org

https://acsess.onlinelibrary.wiley.com/doi/full/10.1002/agj2.20814

⁷³ https://revealnews.org/article-legacy/californias-pesticide-chiefs-where-are-they-now/

⁷⁴ https://www.agri-pulse.com/articles/16187-dolcini-joins-syngentas-washington-office

We ask DPR to put people before profit and take action to fully support the transition of industrial, chemical-based agriculture to organic farming, stopping all uses of synthetic pesticides and fertilizers.

Toxic synthetic pesticides and synthetic fertilizers are known to harm children's health, public health, farmworkers, wildlife, water, and the environment.

Sincerely,

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