LIFE AT THE FENCELINE Understanding Cumulative Health Hazards in Environmental Justice Communities

THE PROBLEM

In Fresno County and across the United States, industrial and commercial facilities that can cause catastrophic harm through explosions or toxic releases operate often without the knowledge of the residents, business owners, schools, and medical facilities nearby. Serious chemical releases at the approximately 12,500 high-risk facilities that are part of the US Environmental Protection Agency's "Risk Management Plan" (RMP) program because they use or store highly hazardous chemicals are frighteningly common. From 2004-2013 there were over 1,500 reported chemical releases or explosions at RMP facilities that caused over \$2 billion in property damage, evacuation or "shelter in place" of half a million people, 17,099 injuries, and 58 deaths (US EPA). Fresno County includes 77 RMP facilities, including the Snowden Enterprises chemical distribution facility that creates a worst-case chemical release vulnerability zone 15 miles in radius with over 780,000 residents (*Who's in Danger*?, EJHA, 2014).

Many communities with concentrations of high-risk chemical facilities face multiple hazards, including potential chemical disasters, lack of access to healthy foods, daily exposure to toxic chemicals released into the air by industrial facilities, and even chemical exposures from everyday products in their homes. These health hazards are often amplified by other factors such as lack of access to health



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care; lack of quality public services and infrastructure; higher rates of diseases like diabetes and asthma; and stress from poverty, unemployment, and crime, among other factors.

Lideres Campesinas in California, and community organizations in eight other areas of the US, worked together through the Environmental Justice Health Alliance for Chemical Policy Reform (EJHA) to research who lives in the "fenceline" zones (within three miles) near high-risk RMP facilities, what hazards they face, and possible solutions. The research addressed several interconnected issues:

- Who lives in fenceline zones near high-risk chemical facilities included in the EPA's RMP program?
- What cancer risks and potential for respiratory illness related to toxic air pollution exposure (from both RMP facilities and other sources) do the people living in these fenceline zones face?
- What is the demographic profile of people living in areas within the fenceline zones that have Low Incomes and Low Access to healthy foods (known as LILA areas), two key indicators of unequal risks and health impacts?
- Where are important institutions, such as schools, hospitals and nursing facilities, and dollar stores (which in many areas are the only source of household products and food, and can contribute chemical exposures from the products they sell, or could choose to support health by selling nontoxic products and healthy foods) located in fenceline zones?

RESEARCH FINDINGS

Details on the study methodology are included in the full report *Life at the Fenceline: Understanding Cumulative Health Hazards in Environmental Justice Communities*, available at *www.ej4all.org/life-at-the-fenceline*.

Overall findings for the nine communities studied are:

- 1. In most of the areas researched, large majorities of the population live in fenceline zones around highly hazardous facilities, and most schools and medical institutions are located in these zones, at much greater rates than nationally.
- 2. Fenceline zones around hazardous facilities are disproportionately Black, Latino, and impoverished, and face multiple health hazards and risks.



Lideres Campesinas promotes the leadership of campesinas to serve as agents of political, social and economic change in the farmworker community.

3. The most vulnerable neighborhoods—areas that are both low income and have low access to healthy foods—are even more heavily and disproportionately impacted.

Specific research findings for Fresno County appear on page 4.

Cancer and Respiratory Hazard Data

In our findings, cancer risk from toxic air pollution, and potential for respiratory illness from air pollution, are based on EPA's National Air Toxics Assessment data, including the Respiratory Hazard Index (RHI). For a full explanation, see Appendix A (Methodology) of the full report.

SOLUTIONS: What can be done to address these health and safety risks?

In order to protect communities, workers, businesses, and the environment, the EJHA and Lideres Campesinas recommend that local, state, and federal governments:

- 1. Require that facilities that use or store hazardous chemicals adopt safer chemicals and processes whenever possible;
- 2. Ensure that facilities share information on hazards and solutions, and emergency response plans, with fenceline communities and workers;
- 3. Require that polluting facilities continuously monitor, report, and reduce their fenceline-area emissions and health hazards;
- 4. Prevent the construction of new or expanded chemical facilities near homes and schools, and

the siting of new homes and schools near facilities that use or store hazardous chemicals;

- 5. Require publicly accessible, formal health-impact assessments and mitigation plans to gauge the cumulative impact of hazardous chemical exposures on fenceline communities;
- 6. Strengthen the enforcement of existing environmental and workplace health and safety regulations.

In addition, dollar store chains should implement broad policies to remove hazardous chemicals from the products they sell, stock fresh and healthy foods, and source safer products and foods locally and regionally.



Hazardous Facility Fenceline Zones, Schools, and Race in Fresno County

RESULTS: FRESNO COUNTY, CALIFORNIA

There are 77 RMP facilities located in Fresno County.

KEY FINDINGS

- Almost 637,000 people, or 68% of Fresno County residents, live within 3 miles of an RMP facility, a 74% increase over the national rate.
- The percentage of Latinos in areas with low incomes and low access to healthy foods in fenceline zones is 23% greater than for Latinos in Fresno County overall.
- Average household income for those in areas with low incomes and low access to healthy foods is 29% less than for Fresno County overall.
- The potential for suffering respiratory illness from toxic air pollution exposure is 15% higher for those in areas with low incomes and low access to healthy foods within fenceline zones compared to Fresno County overall, while cancer risks are 7% greater.
- Sixty-eight percent of Fresno County schools and 71% of medical facilities are located within 3 miles of an RMP facility.
- Seventy-four percent of all dollar stores are within 3 miles of an RMP facility.



Members of Lideres Campesinas call on dollar stores to remove toxic chemicals from the products they sell.

Percent of Residents in Fenceline Zones Compared to National



Schools and Medical Facilities in Fenceline Zones



68% OF THE POPULATION OF Fresno County lives within 3 miles of an RMP facility.



For additional maps and other information about Fresno County, visit

Fresno County Data Summary

	Fresno Co. Totals	Fresno Co. 3 Mile Totals	Fresno 3 Mile LILA* Totals
Weighted Cancer	48.62	50.57	52.02
Weighted RHI	2.06	2.19	2.37
Percent Black	4.8%	4.9%	6.2%
Percent Hispanic	51.7%	54.2%	63.4%
Percent White	31.3%	27.8%	17.9%
Percent Children	29.0%	29.8%	31.6%
Percent Poverty	27.6%	29.4%	37.8%
Average Household Income	\$62,411	\$59,806	\$44,332
Average Home Value	\$221,576	\$206,867	\$155,918
Percent HS Graduate or Less	49.9%	51.9%	62.8%
Percent College Degree or More	17.6%	16.6%	9.0%

* LILA—Areas with Low-Income populations with Low Access to healthy foods. Note: Highlighted numbers indicate a substantial difference from the full city or county, and the full 3-mile areas data.

Critical Institutions and Students in Fresno County Fenceline Zones

	Fresno County Totals	Fresno County Fenceline Zones
Dollar Stores	61	45 (74%)
Medical Facilities	49	35 (71%)
Schools	389	266 (68%)
Students	202,988	150,847 (74%)

FIGHTING BACK

Community, worker, business, and health organizations in California and nationally are working to address these problems and implement safe, just, and sustainable solutions.

In Fresno County, Lideres Campesinas works to develop leadership among campesinas so that they serve as agents of political, social and economic change in the farmworker community.

Lideres Campesinas is part of the national Environmental Justice Health Alliance for Chemical Policy Reform (EJHA), a network of grassroots organizations in more than 13 states that advocates for just, sustainable solutions to the health and environmental hazards faced by communities disproportionately impacted by toxic chemicals.

EJHA works to prevent chemical disasters by uniting communities at the fenceline of hazardous chemical facilities with national allies and experts to prevent catastrophic chemical releases from the nation's highrisk chemical facilities through information disclosure, community and worker involvement, and transition to safer chemicals and technologies.



Hazardous Facility Fenceline Zones, Medical Faciliities, and Race in Fresno County

EJHA's Campaign for Healthier Solutions (CHS) works with discount retailers (dollar stores) to help them protect their customers and the communities in which they operate, and grow their businesses, by implementing corporate policies to phase out harmful chemicals in the products they sell, and by stocking safer products and healthier foods that support the communities in which their stores operate.

EJHA is part of the Coming Clean collaborative, which works to reform the toxic chemical and fossil fuel industries so they are no longer a source of harm, and to secure the systemic changes necessary for clean production, safe renewable energy, and a sustainable economy to flourish.

Critical Institutions and Students in Fresno County Fenceline Zones Compared to National Rate







LEARN MORE & GET INVOLVED

Visit *www.ej4all.org/life-at-the-fenceline* to:

- Read the full *Life at the Fenceline* report
- Check the interactive map to find out if where you, your family, and friends live, work, or go to school is near a dangerous chemical facility

Read EJHA reports on chemical facility risks and dollar store products:

- Who's In Danger: Race, Poverty, and Chemical Disasters https://ej4all.org/assets/media/documents/ ej4all-Who'sInDangerReport.pdf
- A Day Late and a Dollar Short: Discount Retailers are Falling Behind on Safer Chemicals https://ej4all.org/assets/media/ documents/Report_ ADayLateAndADollarShort.pdf

Contact Lideres Campesinas at *www.liderescampesinas.org* or (808) 486-7776 ext. 1005.

Environmental Justice Health Alliance for Chemical Policy Reform

coming clean

Healthier Solutions



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Coming Clean is a national environmental health and justice collaborative of 200 organizations working to reform the chemical and fossil fuels industries so they are no longer a source of harm, and to secure systemic changes that allow a safe chemical and clean energy economy to flourish. Learn more at *www.comingcleaninc.org*.

The Environmental Justice Health Alliance for Chemical Policy Reform supports diverse movement towards safe chemicals and clean energy that leaves no community or worker behind. EJHA is a network of grassroots environmental justice organizations in communities that are disproportionately impacted by toxic chemicals, from old contaminated sites, ongoing exposure to polluting facilities, and toxic chemicals in household products and foods. Learn more at *www.ej4all.org*.

The Campaign for Healthier Solutions, hosted by Coming Clean and EJHA, is made up of interested organizations, dollar store customers, and investors who seek to work with discount retailers to help them protect their customers and the communities in which they operate, and also grow their business, by implementing corporate policies to identify and phase out harmful chemicals in the products they sell. Learn more at *www.nontoxicdollarstores.org*.

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