WHEN PEOPLE LEAD POLICIES FOLLOW

Stephen U. Lester

Center for Health, Environment, and Justice, PO Box 6806, Falls Church, VA, 22040, USA

Introduction

The adverse health and environmental effects caused by exposure to the class of chemicals known as "dioxins" have been clearly defined by the United States Environmental Protection Agency (EPA)¹. According to the EPA, exposure to dioxins pose serious cancer and non cancer risks; exposure is primarily through food; and nearly all Americans carry a body burden of dioxins, in some case at levels that have been associated with exposures in workers. Despite these findings, the EPA has failed to finalize their health assessment on dioxins. Instead, they have focused on identifying sources of dioxins².

The EPA's failure to finalize their health assessment has prevented either as a matter of convenience or by intention most state regulatory agencies from using the risk assessment data included in this report to address dioxin contaminated sites. In most cases, state agencies take no action to address the risks from dioxin.

This lack of action has been frustrating to communities directly impacted by dioxin, especially given the overwhelming data in the EPA report linking dioxin to a wide range of adverse health problems. Most community leaders felt that there was sufficient information to make decisions to stop the release of dioxins into the environment. So groups decided not to wait on EPA. Communities began to identify sources of dioxin in their community and shut them down. One by one. They also organized national initiatives that led to state and local policies to reduce if not eliminate dioxin exposures. These activities have clearly contributed to a significant reduction in the release of dioxins into the environment. This paper identifies some of these efforts.

Method and Materials

Information on the activities of communities directly impacted by dioxins was obtained primarily from the Stop Dioxin Exposure Campaign which has recently been renamed the Alliance for Safe Alternatives. This campaign provides resources and information, networks groups, and tracks the efforts of local, state, and national organizations to stop dioxin exposure.

The campaign is coordinated by the Center for Health, Environment and Justice. CHEJ has published a number of reports describing the work of the campaign^{3,4,5,6} and participated in several national initiatives designed to stop dioxin exposures. Other important organizations that participated in these initiatives and whose resources were used included Waste Not, Environmental Research Foundation, and Health Care Without Harm. One of these national initiatives was to organize citizen conferences on dioxins. Grassroots leaders came together at these meetings to share their stories, information, and to develop strategies to stop dioxin

exposures^{6,7}. These initiatives led to the development of specific recommendations on policies to stop dioxin exposures⁸.

To assess the level of dioxin reduction coming from dioxin sources, we relied primarily on EPA's inventory of sources² and to a lesser on extent state inventories. EPA estimated the amount of dioxins released at two points in time: 1987 and 1995.

Results and Discussion

The EPA inventory of dioxin sources shows an overall decline in dioxin emissions from 1987 to 1995 of 77% 2 . Total dioxin emissions in 1987 were reported to be 13,998 grams $TEQ_{DF}WHO_{98}$ compared to 3,225 grams $TEQ_{DF}WHO_{98}$ in 1995. The two sources that show the greatest reductions were municipal and medical waste incinerators. The EPA has credited regulations they have put into effect during this time as the major reason for these reductions.

During this same time period several national initiatives emerged to provide organizing and technical assistance and to link local communities together which resulted in the mobilization of grassroots community groups across the country. Many of these community groups were effective in shutting down many incinerators. We found that over 200 municipal waste incinerators had either been shut down or blocked during the time period from 1987 to 1995. One of these facilities was the municipal waste incinerator in Columbus, Ohio. One sample from this incinerator contained 984 grams TEQ⁹ dioxin making it perhaps the largest single source of dioxin in the country. This incinerator was shut down in 1994 by strong community pressure⁴.

EPA's 1995 inventory identified medical waste incinerators as the number one source of dioxins. At that time there were roughly 2,400 hospital and commercial incinerators in operation. In 1996, Health Care Without Harm was formed to address this source of dioxin. As the result of their ongoing organizing efforts in communities across the country there are now less then 10% of these incinerators still in operation.

Not satisfied with just shutting down and blocking incinerators and other dioxin sources, community-based groups in Maine and Washington advocated for and won strong statewide policies and regulations aimed at reducing dioxin releases. Maine passed two noteworthy policies. First, the state passed a policy requiring paper mills to stop releasing any detectable quantity of dioxin into the state's waterways¹⁰. This policy had the effect of forcing the state's paper mills to stop using chlorine in their bleaching process and substitute chlorine dioxide for chlorine. Citizens were also able to convince legislators to pass a bill that bans all open burning of municipal solid waste in the state, funds a program to educate the public about open burning, dioxin and, polyvinyl chloride (PVC) in the waste stream that includes promoting alternatives to PVC, establishes a state policy to reduce total dioxin releases to the environment, and requires a study to assess the feasibility of diverting PVC in municipal solid waste away from incineration¹¹.

In Washington, citizens succeeded in getting local and state policies passed that reduce and eliminate persistent toxic chemicals that include dioxins¹². In December of 2000, the state Department of Ecology adopted a persistent bioaccumulative toxins (PBT) phase out initiative to reduce and where possible eliminate PBT chemicals by 2020 starting with a targeted list of nine substances, including dioxins and furans. At the local level, the City of Seattle voted unanimously

to pass a resolution focused on products containing persistent chemicals and those that create persistent pollution in their manufacture¹³. This resolution instructs the city to purchase products that don't contain persistent chemicals or result in releases of persistent pollution during manufacture, including products such as non-chlorine-bleached paper, PVC-free building materials and office supplies, and non-mercury auto switches. This resolution is the first in the nation to address the purchase and use of products containing persistent chemicals by a city.

In addition, the state of New Hampshire took the initiative to develop a Dioxin Reduction Strategy that identified the major dioxin sources in the state¹⁴. This strategy targeted medical waste incinerators and residential burning of domestic waste for regulations. It also included a new state rule regulating emissions of dioxin and mercury from hospital, medical, and infectious waste incinerators. This effort directly led to the closure of 6 of the state's 8 medical waste incinerators¹⁵. In addition, the state passed a law prohibiting the open burning of household trash.

Consumer and institutional purchasing power has also made a difference. Intimate Brands, Inc, who provides over a million bottles per year of personal care products to stores such as Victoria Secrets and Bath and Body Works has agreed to eliminate chlorine based PVC containers from their product line by the end of 2003. This came about through a consumer action campaign coordinated by Greenpeace and CHEJ that deluged Intimate Brands headquarters with over 6,000 emails, FAXes and letters in less than one month.

The health care institution Kaiser Permanente significantly shifted the market for health care products when they agreed to phase out the use of products containing PVC because of concern about the generation of dioxin¹⁶. Kaiser Permanente is one of the largest purchasers of health care medical products in the U.S. This agreement came about because of efforts by advocacy groups such as Health Care Without Harm.

The efforts of community organizations have had a significant impact in reducing dioxin emissions. More laws are needed and more are being spearheaded at the state and local level. But broad scale public health and environmental protection cannot be achieved site by site, incinerator by incinerator, town by town. Nor can it be achieved by setting regulatory controls on dioxin emissions. It is time for the EPA to take the necessary leadership – to develop and implement policies that will eliminate dioxin sources. It will only be with a federal level policy that is aggressively enforced that dioxin exposures will no longer be a serious threat to public health and the environment.

Conclusions

The activities of local grassroots community based organizations have helped create the changes that have led to reductions in dioxin emissions. As a result, the public is safer today than a decade ago from exposures to dioxins. It is evident that whether a person is living in the shadows of an incinerator or working in the state legislature the end goal is to eliminate dioxin at it's source and create laws that protect the health of their community. A national policy is needed in the U.S. to fully protect the public and the natural environment from exposures to dioxins. The American people will continue to work at the local and state levels and to join together through national initiatives to establish a precautionary approach to eliminating dioxin exposures at the production, distribution, consumer and disposal portions of the life cycle of products. This work will happen

with or without the leadership of the current administration which is under the influence of corporations that profit from dioxin discharges and emissions. These efforts clearly show that when the people lead, policies will follow.

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