

THE AMERICAN PEOPLE'S FINAL REASSESSMENT OF DIOXIN

Stephen U. Lester

Center For Health, Environment and Justice, P.O. Box 6806, Falls Church, VA 22040, USA. 703-237-2247 (ph); 703-237-8389 (fax); slester@essential.org

Dioxin is considered one of the most toxic chemicals ever tested (1). It is also a potent endocrine disruptor (2) and a "known human carcinogen" according to the International Agency for Research on Cancer (IARC) (3). In 1994, the United States Environmental Protection Agency (USEPA) released a draft reassessment report on dioxin which updated the scientific data and understanding of the adverse health effects that result from exposure to dioxins (4). Included among the conclusion of this report was the fact that at levels currently present in the average American, dioxin has been found to suppress the immune system, decrease testes size, reduce testosterone which effects male fertility, and alter glucose tolerance which increases the risk of diabetes.

In the five years since the release of the draft report, the agency has dragged its feet, promising and then deferring the release of the report time and time again. Meanwhile, new regulations for dioxin-emitting industries are being promulgated, discharge permits are being issued, and new facilities are being sited without the benefit of this report that would provide up-to-date information on the dangers of dioxin.

The delay of the release of USEPA's final reassessment document represents a serious problem to state, local and national level advocates across the country who are trying to strengthen regulations governing dioxin releases. The lack of a final reassessment report has become regulators' "excuse of preference" for delaying regulatory changes for dioxin producing and discharging facilities. It has significantly limited our ability to make use of the collective strength of clear, scientific health and environmental studies that challenge the wisdom of building new facilities that discharge dioxin into the environment.

As a result of these continuous delays, the Center for Health, Environment and Justice (CHEJ), as part of our Stop Dioxin Exposure Campaign (5), has undertaken a project to complete the American People's Final Reassessment on Dioxin and Dioxin-like Compounds. We have asked a team of scientists with varying expertise to update information on the science of dioxin that was originally prepared as part of a lay interpretation of the EPA's 1994 draft reassessment document (6). Chapter topics include deposition and pharmacokinetics, toxic equivalency factors (TEFs), sources of dioxin releases, mechanism of action, daily intake and body burden levels, immunotoxicity, carcinogenicity, developmental and reproductive toxicity, other effects, and risk characterization. The report will be peer reviewed before being finalized.

In addition, CHEJ is coordinating the efforts of grassroots community activists, policy makers and scientists to prepare a set of policy recommendations for reducing dioxin exposures. Work groups prepared draft policy recommendations for 12 of the main sources of dioxin.

This work was accomplished using a closed internet bulletin board and at a roundtable meeting held in April. Sources addressed included medical waste incinerators, pulp and paper mills, municipal and hazardous waste incinerators, cement kilns, pesticides, wood waste burning, and polyvinyl chloride (PVC) plastic. The impact on workers affected by specific policy recommendations was addressed as part of this effort.

With the completion of the scientific report and policy recommendations, a series of town meetings will be held across the United States to provide the information directly to the American people. The purpose of these meetings is to educate the American people about the dangers of dioxin and to develop coalitions to address and eliminate dioxin exposures. There will be at least 13 of these town meetings held in all 10 EPA regions across the U.S. The locations of these hearings will be selected based on concern over local dioxin exposure problems including contamination hot spots and major point source releases. We will utilize the ability of our large network of grassroots community-based groups to turn out and to engage large numbers of people as part of this effort.

The American People's Final Reassessment of Dioxin is part of the larger Stop Dioxin Exposure Campaign which began in 1994 as a nationwide educational effort in response to the release of USEPA's draft dioxin reassessment. The goal of this campaign is to achieve a sustainable society in which there is no dioxin in our food or breast milk because there is no dioxin formation, discharge or exposure. This goal was defined by 40 participants who attended a national roundtable meeting in 1995. These participants included grassroots activists, scientists, policy makers, and representatives from labor and national environmental groups. At this meeting, collective strategies for a grassroots effort to stop dioxin exposure were developed.

Key elements of the campaign included 1) stopping all forms of incineration including burning medical, municipal, hazardous, and military waste; 2) exposing and challenging all dioxin assaults on low income communities and communities of color; 3) phasing out industrial uses of chlorine including its use in pulp and paper manufacturing and in PVC plastics; 4) including provisions for workers; 5) identifying more clearly the many sources of dioxin; 6) determining the levels of dioxin in food and breast milk; and 7) promoting safe, alternative jobs, products and technologies.

These goals and objectives are being achieved through building local coalitions, public education, keeping communities connected, working with labor unions, supporting pollution prevention laws and programs, initiating procurement campaigns that encourage governments, institutions and consumers to buy products that don't lead to the creation of dioxin, and by opposing all forms of incineration, especially of medical waste.

The strategies developed at the national roundtable meeting were turned into an guidebook called *Dying from Dioxin: A Citizen's Guide to Reclaiming Our Health and Rebuilding Democracy* (6). Sixty-three individuals collaborated in writing this book including all of the roundtable participants. The first nine chapters put into plain English the scientific and medical knowledge about dioxin and dioxin-like substances. Most of these chapters were written by scientists outside of CHEJ who had expertise in the topics covered. The second half of the book covers organizing strategies for building organizations and coalitions to stop dioxin exposure. *Dying from Dioxin*

was published in 1995 and over 12,000 copies have been sold. The scientific portion of this book has been translated into Russian, Spanish, and Japanese.

A major element of the campaign is to develop specific strategies to stop dioxin exposure that could be applied in local communities. These strategies were defined by nearly 600 activists who attended the Third Citizen's Conference on Dioxin held in Baton Rouge, Louisiana in March 1996. At this meeting, strategies were developed to address incineration; pulp and paper mills; PVC; dioxin contaminated sites; dioxin in food; the availability to the public of scientific expertise on dioxin; identifying allies affected by dioxin; and educating the public and the media about the hazards of dioxin. These strategies were published in *Taking Action to Stop Dioxin Exposure: Strategy Recommendations from the 3rd Citizens Conference on Dioxin and Other Synthetic Hormones (7)*. This handbook has been translated into Russian.

Out of this meeting came the formation of a national steering committee which is still active on an intermittent basis. CHEJ coordinates the efforts of this group and publishes *Dioxin Digest*, an update on dioxin that is distributed internationally to more than 1,000 dioxin activists.

As a result of the Stop Dioxin Exposure Campaign, the American public as well as communities across the world are more aware of the dangers of dioxin. Across the U.S. numerous dioxin emitting facilities have been shut down including many medical and municipal waste incinerators. With the release of the American People's Final Reassessment and Policy Recommendations, more ways to stop dioxin exposures, as defined by grassroots activists who live near dioxin emitting facilities, will be identified. As made clear by the evidence that body burden levels in the general U.S. population are at or near the concentration where effects might be expected to occur, we now have little or no "margin of exposure" and every effort must be made to eliminate all dioxin exposures.

References

- (1) *Dioxins and Health*, edited by Arnold Schecter, Plenum Press, 1994.
- (2) *Our Stolen Future*, Theo Colborn, Diane Dumanoski, and John Peter Myers, Dutton Books, 1996.
- (3) *IARC Monographs on the Evaluation of Carcinogenic Risks to Humans, Volume 69, Polychlorinated Dibenzo-para-Dioxins and Polychlorinated Dibenzofurans*, February 1997.
- (4) *USEPA Health Assessment Document for 2,3,7,8-tetrachlorodibenzo-p-dioxin (TCDD) and Related Compounds*, External Review Draft, Volume I, EPA/600/BP-92/001a, June, 1994, Volume II, EPA/600/BP-92/001b, June, 1994, and Volume III, EPA/600/BP-92/001c, August 1994.
- (5) "Stop Dioxin Exposure Campaign," Stephen Lester, presented at the 17th International Symposium on Chlorinated Dioxins and related Compounds, Vol 31: 460- 464, Indianapolis, IN, USA, August 25-29, 1997.

(6) *Dying from Dioxin: A Citizens Guide to Reclaiming Our Health and Rebuilding Democracy*, Lois Gibbs and the staff of the Citizens Clearinghouse for Hazardous Waste, South End Press, 1995.

(7) *Taking Action to Stop Dioxin Exposure: Strategy Recommendations from the 3rd Citizens Conference on Dioxin and Other Synthetic Hormone Disruptors*, Salsedo Press, 1996.