October 19, 2010

Dr. Timothy Buckley, Chair
Dioxin Review Panel
Science Advisory Board
Environmental Protection Agency (EPA)
1200 Pennsylvania Ave., NW
Washington, DC 20460

Dear Dr. Buckley,

The Environmental Protection Agency (EPA) is poised to establish a safety standard for human exposure to 2,3,7,8-tetrachlorodibenzo-p-dioxin, a toxic chemical with well-documented adverse effects on human health, including immune system and hormonal changes and cancer. The Science Advisory Board (SAB) review is the final, key step before the EPA can finish its dioxin risk assessment, begun some 25 years ago.

Dioxin-releasing industries, corporate agricultural interests and those responsible for cleanup of dioxin-contaminated Superfund sites have put pressure on the EPA and have provided voluminous comments to the SAB suggesting that establishing a safety level for dioxin would result in "unwarranted and/or unnecessary concerns or actions" (ToxStrategies 2010). They argue that EPA should not be allowed to follow the science on dioxin on grounds that a finalized EPA assessment would somehow label all foods "unsafe" and "could result in unreasonable dioxin mitigation steps for the feed industry" (American Feed Industry Association 2010a, 2010b; Inside EPA 2010).

But in fact, Americans can easily minimize dioxin exposure and eat healthier, by taking a few key steps, chiefly, avoiding high-fat animal protein, especially red meat. Leading health authorities, including the U.S. government, advise people to lower their cholesterol levels by eating less meat and more grains, fruits and vegetables. This diet will also lower intake of dioxins (FDA 2010; Health Canada 2005; National Cancer Institute 2010). As well, it will benefit fruit and vegetable growers whose healthy foods are enjoying increased demand.

The EPA and U.S. Department of Agriculture already make use of effective tools for providing health guidance to consumers. For instance, EPA has issued consumer advisory about mercury in seafood (EPA 2004). This approach could be used to inform consumers about dioxin in meat and milk products.

Environmental Working Group (EWG) comments today highlight three specific points:

-- **EWG again emphasizes our strong support for the EPA assessment**. As our earlier comments to the SAB said, (EWG 2010), the safe exposure limit for dioxin (reference dose or RfD) proposed by the EPA is at the midpoint of the candidate RfD array derived by EPA from a

wide range of animal toxicity studies. This RfD represents a moderate estimated risk rather than the strongest, most health-protective position on dioxin exposure that EPA could have taken.

EWG recommends that the SAB affirm the EPA's chosen safe daily dose of 0.7 pg/kg-day of dioxin as a reliable, current number that incorporates both the extensive body of the science and the appropriate uncertainty factors for the protection of vulnerable populations. If any changes are recommended, we urge that the RfD be strengthened (lowered) from the current proposed value to provide even stronger incentives for health-based policies to reduce the public's exposures to this common food contaminant.

-- EWG urges SAB to support EPA's characterization of dioxin as carcinogenic to humans. In comments on the EPA Draft Reanalysis, the Department of Defense and some public participants have disagreed with the characterization of dioxin (TCDD) as "carcinogenic to humans" for all doses (DOD 2010). Such an opinion represents a minority view that does not take into account the full extent of data on dioxin carcinogenicity. In contrast, independent evaluations by the National Toxicology Program, the International Agency for Research on Cancer and a large volume of peer-reviewed literature on the subject have affirmed the status of dioxin as a known human carcinogen (IARC 1997; NTP 2005; Pesatori 2009; Steenland 2004).

-- Opposition to EPA's science-based assessment of dioxin toxicity and carcinogenicity contains spurious arguments. Some industry consultants have claimed that the RfD proposed by EPA would lead mothers to "opt to not breastfeed their infants and forgo the nutritional benefits to the baby" (ToxStrategies 2010). Certainly, the agency's long-standing practice is first to set public health standards informed by science, then to describe actions necessary to reduce emissions and exposures. Public health will not be served if the EPA shrinks from setting health-based standards because it is worried about how the issue will be communicated and understood.

EWG's analysis, which we presented to the panel in July, confirmed that infants and young children ingest more dioxins from food, relative to their body weight, than any other segment of the population. Children consume significantly more dioxin than the EPA's estimated reference dose. We also calculated that the general public may be exposed to as much as 1,200 more dioxin contamination in common foods than the amount considered negligible as a cancer risk. For all Americans, dioxin contamination of their food and their bodies, and the health risks this contamination entails, is a fact of life that does not change because of the opposition of the polluters to setting a dioxin standard.

EPA should be allowed and encouraged to complete its science assessment, free of bias caused by pressure from dioxin-releasing industries. Until EPA completes its assessment, other government agencies and environmental cleanup efforts will lack guidance to implement remediation measures critical to public health. Finalizing the dioxin assessment is essential for strong, coordinated federal and industry efforts towards cleaning up numerous Superfund sites fouled with dioxin and similar compounds.

As we know, the most significant ongoing source of dioxin is food; yet, food contamination arises from environmental contamination. Rather than delaying dioxin cleanup efforts by suggesting that breastfeeding mothers should not be informed about the risks of dioxin, it would

make a lot more sense from both science and public policy perspectives to set a strong, health-protective standard and then work out the strategies for how we as a society can begin to meet this standard.

EWG urges the SAB Dioxin Review Panel to support the EPA in its efforts to complete the process, issue final standards, provide much-needed science guidance for cleanup of dioxin-contaminated sites found all across the United States and advise the public about ways to reduce exposures. EWG realizes the importance and the great responsibility of the task that the members of the Dioxin Review Panel have undertaken. We thank you for your important service, and we urge you to help EPA finish this assessment as soon as possible.

Olga V. Naidenko, PhD
Senior Scientist, Environmental Working Group

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