



NATURAL RESOURCES DEFENSE COUNCIL  
THE EARTH'S BEST DEFENSE

January 27, 2012

The Honorable Lisa P. Jackson  
Administrator  
U.S. Environmental Protection Agency  
1200 Ariel Rios Building  
Washington, DC 20460

Dear EPA Administrator Jackson:

We write to you on behalf of our 1.3 million members and online activists at the Natural Resources Defense Council (NRDC). Thank you for your attention to dioxin. The Dioxin Reassessment document is extremely important to the health of the American people and we applaud your efforts to bring this long delayed process to closure. We urge you to stay on the timeline you established in the August 29, 2011 EPA media release, completing the non-cancer assessment of dioxin by the end of this month, and the cancer assessment "as expeditiously as possible after the non-cancer assessment is posted to the IRIS database".<sup>1</sup>

As you know, the term "dioxin" refers to a family of chemicals that contain one or more chlorine atoms attached to a double ring of carbon atoms. The most toxic and potent of the dioxins is 2,3,7,8-tetrachlorodibenzo-p-dioxin (2,3,7,8-TCDD). High levels can cause liver damage and a host of other problems, most visibly including a skin condition called chloracne. However, animal and human studies show that even very low levels of 2,3,7,8-TCDD -- levels many people contain in their bodies today -- can cause a variety of health problems, including immunologic impairments, and hormonal alterations. The hormone alterations and immune dysfunction increase risks of reduced fertility, birth defects, and cancer. For example, animal studies have found that the chemical can reduce sperm production, alter sex hormone levels, and increase miscarriage rates.

2,3,7,8-TCDD can also cause birth defects such as skeletal deformities, kidney defects, and learning and behavioral problems. More recent studies have found a potential link to increased diabetes risk. In 1997, the International Agency for Research on Cancer (IARC) determined that 2,3,7,8-TCDD was carcinogenic to humans (Group 1), a scientific determination that is even stronger now based on new data since that time.<sup>2,3</sup> 2,3,7,8-TCDD has been on the federal National Toxicology Program list of chemicals "known to be a human carcinogen" since 2001.<sup>4</sup>

Food is a significant source of dioxin exposure. Because dioxins accumulate in fat, the foods that contain the highest amounts are meat, dairy products, and fish. All people have some level of dioxin stored in their body fat, according to a representative sampling of people in the U.S. conducted by the U.S. Centers for Disease Control and Prevention (CDC). It takes at least 7 years to excrete half of the 2,3,7,8-

TCDD load, so clearing the body of the chemical takes a long time and most of us are being continually re-exposed through our diets.

Since 1985, efforts by EPA to assess the risks of dioxin have been delayed time and time again despite overwhelming scientific evidence supporting EPA's assessment, and approval in 2010 by EPA's independent Scientific Advisory Board.<sup>5</sup> On August 29, 2011, EPA announced its final plan for completing the Dioxin Reassessment. EPA committed to completing the non-cancer portion of the reanalysis and posting it to the IRIS database by the end of January 2012 and to then complete the cancer portion of the reanalysis "as quickly as possible." EPA stated that once the Agency completes both the non-cancer and cancer portions of the Reanalysis, the Dioxin Reassessment would be considered final.

The chemical and food industry arguments against finalizing the non-cancer assessment are hypocritical and transparent attempts to further delay the day of reckoning it has always dreaded, when the public will be told the truth about the health dangers posed by exposure to dioxin. For example:

- The industry is in a lather over EPA's imminent release of the non-cancer portion of its assessment of dioxin with a non-cancer risk estimate (i.e. reference dose, RfD), rather than waiting until completion of its cancer assessment. The Food Industry terms this a "break from longstanding international science-based dioxin standards." The Food Industry fails to note that EPA's development of a reference dose for the non-cancer assessment was done based upon the recommendation of the National Academy of Sciences. If EPA ignored that recommendation, no doubt the industry would use it to justify a call for additional delay by EPA, and perhaps a legislative rider to prevent the EPA from moving forward without another review by the NAS. However, after nearly three decades of work on the dioxin assessment, EPA's procedural decision to issue the portion of the assessment it has completed will provide the public and regulators with a clear consensus statement on the most current estimated risk associated with dioxin exposure, and the supporting scientific evidence and rationale. Industry's disparagement of EPA's release of the assessment in two parts as a "split-decision" makes about as much sense as criticizing J.K. Rowling for not waiting to complete all seven Harry Potter books before releasing the first one.
- The industry, despite its frequent exhortation to EPA to use the most recently available science to address an issue, absurdly compares EPA's proposed RfD to a 20-year old level established by Canada, as well as other outdated levels set by Japan and the WHO. Only favoring the use of the most recent scientific data when it is exculpatory hardly complies with "accepted international standards."
- Although the industry accuses EPA of "cherry-picking" amongst the NAS recommendations on dioxin – without offering any specifics – industry itself is constantly selectively picking and choosing which NAS recommendations it believes EPA should implement. Whereas the NAS, in its groundbreaking report, Science and Decisions (2009), clearly recommends, "that cancer and noncancer responses be assumed to be linear as a default" (NAS at 180) so that no threshold, or "safe" level of exposure is assumed, the chemical industry is calling for the opposite. ACC was quoted in the trade press as saying EPA should use a less conservative, non-linear model for both cancer and non-cancer effects.<sup>6</sup> Despite the overheated rhetoric of more than a dozen food industry trade associations, the fact remains that EPA's approach to dioxin has been reviewed, improved, and approved – multiple times- by both the National Academy of Sciences and its own Science Advisory Board, with many opportunities for public review and comment.

- Industry suggests that, because our environment and our bodies are already contaminated with so much toxic dioxin that “background” levels exceed health-based limits, we should not inform the public about those limits, for fear that the public would demand measures to lessen the amount of dioxin in our food supply. Again, the industry is in direct opposition to recommendations of the NAS; Science and Decisions specifically recommends that background exposures be incorporated to “account for additional sources of exposure to the same chemical or to similarly acting chemicals (including endogenous sources)” (NAS at 180). The industry’s analogy to “too big to fail” – “too polluted to tell” must be rejected by EPA and the Administration.
- Finally, the food and chemical industries rely upon their old standby argument for not releasing information about the potential health effects of chemicals, particularly in the food supply: the predicted consumer “confusion,” “fear” or “panic” that will result. If only the U.S. Treasury had a dollar for every time industry has made this specious claim -- for the TRI, for Consumer Confidence Reports under the Safe Drinking Water Act, for regulation of perchlorate, for mercury in seafood – there would be no budget deficit. It is an all purpose patronizing excuse for denying the public’s right to know about the toxic chemical pollution to which they are exposed and its potential harm. The Obama Administration is too smart to fall for the same old dodge when it comes to dioxin.

The chemical industry for years has sought to block, weaken or delay the EPA and other government bodies from assessing the harms of its hazardous chemicals. NRDC describes this tried and true industry strategy in three case studies – of formaldehyde, TCE, and styrene -- in our recent report, The Delay Game.<sup>7</sup> Dioxin is another poster child for these delay tactics, leaving the public at risk of continuing exposure to this dangerous chemical. Now, after 27 years of assessing dioxin, the industry is calling for additional review and “oversight” by OSTP, OMB and the NAS.

Children born in 1985 -- with dioxin in their bodies at birth -- are now 27, perhaps with children of their own, also born polluted with dioxin and hundreds of other toxic chemicals. Don’t let the chemical and food industries stall the dioxin assessment for another generation. We urge you and the Administration to reject the latest wave of industry pressure to further stall the release of the dioxin reassessment and finalize the non-cancer portion of the dioxin reanalysis by the end of this January and the cancer portion as quickly as possible thereafter.

Thank you for the EPA’s efforts, in the face of considerable opposition, to improve public disclosure about the potential hazards of toxic chemicals.

Sincerely,

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Cass Sunstein, Administrator, Office of Information and Regulatory Affairs  
Paul Anastas, Assistant Administrator, Office of Research and Development  
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<sup>1</sup> EPA news release. EPA Announces Schedule for Dioxin Assessment. 08/29/2011.  
<http://yosemite.epa.gov/opa/admpress.nsf/1e5ab1124055f3b28525781f0042ed40/dae0812e5b4ef50e852578fb0057355b!OpenDocument>

<sup>2</sup> IARC Volume 69. <http://monographs.iarc.fr/ENG/Monographs/vol69/volume69.pdf>

<sup>3</sup> Steenland K, Bertazzi P, Baccarelli A, Kogevinas M. Dioxin revisited: developments since the 1997 IARC classification of dioxin as a human carcinogen. *Environ Health Perspect.* 2004 Sep;112(13):1265-8. Review.

<sup>4</sup> NTP. 2011. National Toxicology Program 12th Report on Carcinogens. 2,3,7,8-Tetrachlorodibenzo-pdioxin (TCDD); "Dioxin". Available:  
<http://ntp.niehs.nih.gov/ntp/roc/twelfth/ListedSubstancesKnown.pdf>

<sup>5</sup> SAB Review of EPA's Reanalysis of Key Issues Related to Dioxin Toxicity and Response to NAS Comments (May 2010). EPA-SAB-11-014.  
<http://yosemite.epa.gov/sab/sabproduct.nsf/WebReportsLastMonthBOARD/9DE6A0825A9C050F85257412005EA22A?OpenDocument&TableRow=2.3>

<sup>6</sup> Inside EPA. EPA Floats Strict Dioxin Non-Cancer Risk Estimates To OMB, Riling Industry. December 15, 2011

<sup>7</sup> NRDC report, The Delay Game: How the Chemical Industry Ducks Regulation of the Most Toxic Substances. (2011) <http://www.nrdc.org/health/thedelaygame.asp>