

PVC Environmental Taskforce

Information on PVC; the attacks, 'Wins', and 'Learning' of the past three months



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Rhetoric – What harm can it do?

- The smoke from [redacted] contains hundred of toxic compounds, including dioxins and furans some of the most toxic compounds known to science. Health effects from exposure to dioxins include reproductive and developmental problems, damage the immune system, interference with hormones and also cause cancer.

2

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Rhetoric – What harm can it do?

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Short communication

Dioxin inhalation doses from wood combustion in indoor cookfires

Amanda L. Northcross , , S. Katharine Hammond, Eduardo Canuz, Kirk R. Smith

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<https://doi.org/10.1016/j.atmosenv.2011.11.054> [Get rights and content](#)

Abstract

Approximately 3 billion people worldwide rely on solid biomass fuels for household cooking and space heating, and approximately 50–60% use wood, often indoors in poorly ventilated situations. Daily exposures to high concentrations of smoke from cookstoves inside kitchens create large smoke exposures for women cooks and their small children. The smoke from burning the wood fuel contains hundred of toxic compounds, including dioxins and furans some of the most toxic compounds known to science. Health effects from exposure to dioxins include reproductive and developmental problems, damage the immune system, interference with hormones and also cause cancer. This study measured concentrations of dioxins and furans in a typical Guatemalan village home during open cookfires. Measured concentrations averaged $0.32 \pm 0.07 \text{ ng m}^{-3}$ over 31 fires. A Monte Carlo simulation was conducted using parameter estimates based on 8 years of research experience in the study area. The estimated total daily intake of 17 particle phase dioxin and furans for women, a 5-year-old child and a 6-month-old infant were 1.2 (S.D. = 0.4), 1.7 (S.D. = 0.7) and 2.0 (S.D. = 0.5) respectively. The 46% of babies have an estimated total daily intake (TDI) which exceed the WHO TDI guideline for dioxins and furans, 3% of women and 26% of 5-year-old children based solely inhalation of particle phase dioxins in woodsmoke from an open cooking fire. These values maybe underestimates, as they did not include gas phase concentrations or ingestion of dioxins and furans

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Rhetoric – What does it really mean?

The screenshot shows the EPA website's 'Wood Smoke and Your Health' page. A blue arrow points from the 'What is wood smoke?' section to a list of pollutants: benzene, formaldehyde, acrolein, and polycyclic aromatic hydrocarbons (PAHs). Another blue arrow points from the 'Smoke Detectors' box to the same list of pollutants. The 'Smoke Detectors' box contains the text: 'Each year, about 3,000 people die in residential fires in the U.S. – mainly from smoke inhalation. A properly installed and maintained smoke alarm is one of the best and'.

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Rhetoric – What does it really mean?

The screenshot shows the 'Executive Summary' section of a document. A blue arrow points from the text 'the subject of a new rebranding campaign in the vinyl industry, "clean-vinyl" and "bio-vinyl" are two examples of the trade names at the forefront of this campaign to position vinyl as a breakthrough and advanced green product.' to the text 'However, PVC is unique within the broad spectrum of plastics because it is a chlorinated plastic. Its chlorinated chemistry is responsible for a range of environmental and human health hazards: from the beginning of its lifecycle where the vinyl chloride monomer is a known human carcinogen; to the release of dioxin, another human carcinogen, when PVC is manufactured; and when PVC burns in accidental building and landfill fires, in jobsite burn barrels, as well as in incinerators.' Another blue arrow points from the text 'The vinyl industry concedes that uncontrolled burning from accidental building fires and burn barrels are a significant source of dioxins in the environment.' to the text 'The vinyl industry concedes that uncontrolled burning from accidental building fires and burn barrels are a significant source of dioxins in the environment. [The Vinyl Institute, "Dioxin Levels in the United States", vinylindesign.com, accessed October 13, 2015, http://www.vinylindesign.com/mainmenu/Learn/VinyltheEnvironment/DioxinSources.html]'

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Rhetoric – What does it really mean?

[Healthy Building Network \(HBN\) Deceives on PVC roofing membranes](#)

As we will see in the next few slides, agencies are seeing through the rhetoric, and we are making headway

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A 'Big Win'



https://www.vinylinfo.org/wp-content/uploads/2023/01/EPA-CBD-Petition-1-12-23.pdf?utm_source=newsletter&utm_medium=email&utm_campaign=cbd&eid=7498

Shawn,

In a big initial win for the PVC industry, the EPA has tentatively denied the Center for Biological Diversity's (CBD) 2014 petition to regulate discarded PVC as hazardous waste.

The EPA wrote in its [notice](#) posted in the Federal Register, "The Petition does not present evidence that discarded PVC presents a substantial present or potential hazard to human health or the environment when solid waste is improperly treated, stored, transported or disposed of, or otherwise managed." The Agency also cited that "the EPA has higher priorities for limited available resources."

The EPA is requesting public comments by or before February 13, 2023. The VI will soon circulate information and suggestions if you would like to submit personal or company comments to the Agency.

We want to thank all who have supported our efforts. The VI will continue to generate supportive public comments for the record.

Sincerely,

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Other 'Wins'



- Last month, the European Court of Justice determined that titanium dioxide (TiO₂) in powder form has been [wrongly classified by the European Union](#) (EU) as carcinogenic. As a result, the Court declared a corresponding regulation of the EU Commission null and void. And it announced that the EU Commission committed a “manifest error” in assessing the reliability of the study on which the classification was based.

Good news

The EU's Court ruling based on the lack of science-based evidence to determining regulation was a welcomed outcome in the PVC industry. Providing the EU Commission does not appeal the earliest titanium dioxide will be delisted as a carcinogenic is the Spring of 2023

Bad news

However, the ruling has come late in the process for the PVC manufactures. When the initial regulation came into law in 2019, companies throughout the EU PVC supply chain went to great expense to change their formulations to comply with the regulation, which was based on activist rhetoric and no scientific data.

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Other 'Wins' - TSCA

Jan. 2, 2023, Specifically, the D.C. Circuit Court petition argues that the EPA has not adequately explained the need for the TSCA (Toxic Substance Control Act) data . During the risk prioritization process, the Agency determined that it had insufficient data on the substance to understand if it has the potential to harm wildlife and issued the order.

The Vinyl Institute stated in its petition that the Test Rule is arbitrary, capricious, and an abuse of discretion.

As of a past date, the parties filed motions regarding whether additional submission may be made to the record.

Result of motions

The U.S. Court of Appeals for the District of Columbia Circuit is refusing, for now, a chemical industry group's bid and will require the EPA to reconsider the scientific record for a recent TSCA chemical testing order and to halt the implementation of the tests in the meantime, handing an early win to the Vinyl industry in a wave of novel court challenges to recent test mandates

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**“You never lose, you either win or you learn.
Those are your options.”**

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‘Learning’ No response from ILFI from most recent email

Thank you for considering this vital topic of PVC roofing membranes and for allowing us to discuss the need to separate them from the central Red List.

Keeping PVC roofing membranes on the Red List is not having the effect that the list was set out to accomplish. There are many uses of PVC in construction designed to last and safely perform for decades, manufactured with internationally recognized environmental standards. In contrast, some other PVC products, such as packaging, are discarded quickly and may not make the best environmental choice.

An unintentional effect of Red Listing all PVC products is that it leads decision-makers to choose possibly less sustainable alternatives that produce more GHG emissions than PVC roofing membranes. In the past decade, enormous improvements to recycling PVC roof membranes have been made to provide a circular economy by extending their useful life into other long-lasting products.

With my research, I have found that much of the information regarding PVC is outdated, at least where roofing membranes are concerned. Before sending third-party data and studies, I would ask ILFI to reply with their main concerns with PVC roofing membranes. It would allow us to start a dialogue on what would be necessary to consider separating and removing PVC roofing membranes from the Red List.

My goal is not to criticize or reduce the Red List’s efficacy but to help it improve, steering decision-makers toward products suited to reaching our environmental goals. We encourage all manufacturers to use subscribed standards to increase sustainable construction products for the ILFI family and the construction industry.

Regards,

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‘Learning’, We may have a workaround?

This is the message I received from my contact at the Vinyl Institute, (VI),
Dominique DeCaria - *Vice President - Regulatory & Technical Affairs*

“I did have an initial discussion with Teresa McGrath from HBN last Friday. We spoke for about 30 minutes, and agreed to get together again soon to continue the conversation. I learned a little more about what their concerns are, and I hope to continue to dial in on what that is before we get too far ahead of ourselves in guessing about the issues, they will attack us on. Stay tuned – should be an interesting week or two ahead.”

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