

March 6, 2020

Andrew Wheeler, Administrator
U.S. Environmental Protection Agency
1200 Pennsylvania Avenue, NW
Washington, DC 20460

Re: Imminent and Serious Health Risks from Acute Consumer and Worker Exposure to Trichloroethylene

Dear Administrator Wheeler:

The undersigned organizations are national, state and local groups committed to assuring the safety of chemicals used in our homes, workplaces and the many products to which our families and children are exposed each day.

For years, our communities have been at risk from exposure to trichloroethylene (TCE), a chemical ubiquitous in air, water, contaminated waste sites, industrial facilities and household products. While EPA has long known of TCE's serious risks, it has repeatedly failed to take action.

We are calling on EPA to take immediate action to address the imminent and serious acute risks of both fetal heart defects and other serious health effects presented by TCE. After years of foot dragging, the threat to the public from uncontrolled exposure to TCE is simply too great to justify several more years of inaction while EPA completes the lengthy risk evaluation and rulemaking process under TSCA.

EPA conducted comprehensive assessments of TCE's human health effects in [2011](#) and [2014](#). These evaluations demonstrated that consumers and workers face serious and imminent risks of harm from short-term exposure to TCE, including serious and potentially fatal heart developmental defects at extremely low levels of exposure. Based on these concerns, EPA proposed to ban several major TCE uses under the Toxic Substances Control Act (TSCA) in late 2016 and early 2017. However, following pressure from the chemical industry, the Trump EPA abandoned these rulemakings, leaving workers and consumers unprotected from risks of fetal heart malformations, cancer and several other serious health effects.

EPA recently issued a draft risk [evaluation](#) for TCE under TSCA that continues this failure to protect public health. Reversing findings of the 2011 and 2014 assessments and the 2016 and 2017 proposed rules, the draft excludes heart defects in fetuses from its determination of unreasonable risk. According to a recent [report](#) by the Center for Investigative Reporting, this reversal was the result of White House intervention: EPA career scientists were directed to rewrite the evaluation to cast doubt on the evidence of cardiac defects and to shift the basis of its risk determinations to other less sensitive endpoints.

In upcoming comments on the draft risk evaluation, our groups will show that this political meddling in the work of career experts has resulted in a risk evaluation that is scientifically indefensible and violates TSCA's requirement to protect vulnerable populations (such as pregnant women and their offspring) from unsafe chemical exposures.

Even as it disregards the evidence of fetal heart defects, the draft risk evaluation provides overwhelming evidence that short-term exposure to TCE causes other developmental effects and suppression of the immune system, compromising resistance to infections and leading to autoimmune diseases. As the draft evaluation indicates, these effects can result from a *single exposure* to TCE, and the evaluation shows that nearly all workers and consumers are acutely exposed to levels of TCE that are unsafe.

The evaluation analyzes 40 separate commercial and industrial conditions of use which expose more than 312,000 workers to TCE. It concludes that projected acute exposures for *all of these conditions of use* are alarmingly close to TCE levels causing adverse effects. As a result, margins of exposure (MOE) for inhalation or dermal exposure or both are well below the “benchmark MOE” that EPA uses to define unreasonable risk under TSCA. Moreover, even on the highly debatable assumption that most or all workers are using respirators and gloves, the evaluation shows that any reduction in exposure would be insufficient to protect against unreasonable risk. With the inclusion of fetal heart malformations, by far the most sensitive endpoint for TCE, the risk would be much larger. As EPA found in its 2017 proposal, “people are exposed at a level that is 3,000 times higher than what EPA determines is protective for” these effects. (81 Fed. Reg. 91612)

The evaluation also analyzes acute exposure risks for 25 consumer products, including several common household items like carpet cleaners, spot removers, shoe polish, degreasers and cleaners, adhesives and sealants and fabric spray. For all but one of these products, EPA concludes that acute exposures by consumers have MOEs well below benchmark MOEs and thus also present unreasonable risks to health under TSCA. Again, inclusion of the fetal heart defects greatly increases the projected risk. For consumer exposures, the MOE for this endpoint is more than 1500 times lower than the MOE for immune effects, which is itself far below the benchmark MOE. The exposed population for TCE-containing consumer products is substantial and includes several groups vulnerable to TCE’s acute developmental and immunotoxic effects, including women of childbearing age, children, the elderly and individuals with preexisting infections, people with organ transplants, people undergoing radiation or other cancer treatments, and people with chronic diseases that lead to compromised immune systems.

While acute exposure presents immediate risks, long-term TCE exposure also has serious health effects. TCE is a known human carcinogen, is harmful to male reproductive performance, causes neurological damage and is a liver and kidney toxin. The draft risk evaluation finds that workers who have chronic exposure to TCE lack adequate protection for these effects and face unreasonable risks under TSCA.

This alarming evidence of risk requires EPA to take the following immediate steps to protect consumers and workers from acute TCE exposure:

- EPA should issue and broadly disseminate a health advisory that warns the public of the danger of acute TCE exposure and urges consumers and workers to avoid such exposure.
- EPA should immediately finalize its proposed 2017 bans under TSCA on TCE use for [vapor](#) and [aerosol degreasing and spot removal](#).
- EPA should list TCE under section 5(b)(4) of TSCA as a chemical that “present[s] or may present an unreasonable risk to human health and the environment.”
- The Agency should send letters to all TCE manufacturers, industrial users and producers and sellers of TCE-containing consumer products that:

- (1) Call for immediate suspension of sale and distribution of consumer products containing TCE;
 - (2) Urge manufacturers, processors and commercial users to immediately reduce workplace concentrations of TCE to an 8-hour limit of 0.00037 parts per million (ppm),¹ placing principal reliance on engineering controls, and implement comprehensive safety and health programs that include worker education and training, hazard communication, and exposure monitoring;
 - (3) Call on manufacturers and distributors of TCE and all products containing the chemical to immediately revise product labels and Safety Data Sheets (SDSs) to prominently warn workers of TCE's acute hazards and recommend immediate reductions in exposure; and
 - (4) Encourage all firms using TCE to investigate and adopt safer substitutes.
- EPA should quickly follow up to make elimination of consumer use and limits on workplace exposure mandatory through an immediately effective rule under TSCA section 6(d) and/or a declaration under section 7 that TCE is an "imminently hazardous chemical substance."

We have previously asked EPA to take immediate action to protect consumers and workers from acute exposure to two other chemicals -- 1-Bromopropane (1-BP) and Methylene Chloride (MC) -- undergoing TSCA risk evaluations. To our great disappointment, EPA did not respond to these requests. Instead, in a December 3 presentation to the Science Advisory Committee on Chemicals, Assistant Administrator Dunn [maintained](#) that TSCA risk evaluations should play no role in identifying and protecting the public from immediate threats of harm. This is a deeply troubling misunderstanding of EPA's public health responsibilities. If EPA receives credible evidence of an imminent and serious threat to health from a TSCA risk evaluation or another source, the Agency cannot ignore this evidence on the ground that it was developed for a different purpose or its hands are tied for the 3-4 years required to complete the evaluation and subsequent risk management rulemaking. As demonstrated above, EPA has numerous tools and ample authority to act now and the powerful evidence of TCE's immediate and severe risks present a compelling case for action.

We look forward to meeting soon with your staff to discuss EPA's response to this letter.

Please contact SCHF counsel Bob Sussman at bobsussman1@comcast.net with any follow-up questions.

Respectfully submitted,

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¹ According to the draft risk evaluation at 252-253, the HEC₉₉ for congenital heart defects in fetuses is 0.0037 ppm and the Uncertainty Factor (UF) is 10. Workplace exposure limits for TCE should protect against heart defects as they represent the most sensitive endpoint for TCE.

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