

March 27, 2020

Francesca T. Grifo, Ph.D.
Scientific Integrity Official
U.S. Environmental Protection Agency
1301 Constitution Ave. NW
Washington, D.C. 20460

Dear Dr. Grifo,

On behalf of the Union of Concerned Scientists, I write to report an allegation of a violation of scientific integrity under the U.S. Environmental Protection Agency's (EPA) Scientific Integrity Policy. We allege that, between December 2019 and February 2020, White House political officials altered the scientific findings of EPA scientists on a risk evaluation for the chemical trichloroethylene (TCE).

According to an investigation by Elizabeth Shogren of Reveal News, in December 2019, scientists in the EPA's Office of Chemical Safety and Pollution Prevention (OCSPP) wrote a draft risk evaluation for TCE, which is used in consumer and industrial contexts and is known to contaminate groundwater, air, and soil.¹ The draft risk evaluation used fetal heart defects as the baseline for determining unsafe TCE exposure levels – a health-protective finding that aligned with scientific consensus.² Given that fetal heart malformation “is the effect that is most sensitive [to TCE exposure],” the draft reads, “it is expected that addressing risks for this effect would address other identified risks.”

However, EPA scientists report that officials in the Executive Office of the President (EOP) altered their findings. In unsigned emails and anonymous redline edits, officials directed the scientists to discard the science on TCE's role in fetal heart defects. The EOP version acknowledged that several studies have linked TCE with fetal heart defects but noted “uncertainties which decrease EPA's confidence in this endpoint.” The White House contended instead that immunosuppression should be the main “[driver] for EPA's determination of unreasonable risk” – a major deviation from the scientists' findings. The White House also deleted all 322 instances of the phrase “cardiac toxicity” from the draft risk evaluation and increased mentions of “immunosuppression” more than 30-fold.

On February 21, 2020, OCSPP's risk evaluation – which included the White House's revisions and scrapped fetal heart defects as a baseline for TCE's risks – was released for public comment.³ The risk evaluation is currently undergoing a four-day peer review, which began on

¹ Shogren, E. 2020. EPA scientists found a toxic chemical damages fetal hearts. The Trump White House rewrote their assessment. *Reveal, from the Center for Investigative Journalism*, September 10. <https://revealnews.org/article/epa-scientists-found-a-toxic-chemical-damages-fetal-hearts-the-trump-white-house-rewrote-their-assessment/>

² Makris, S.L., C.S. Scott, J. Fox, T.B. Knudsen, A.K. Hotchkiss, X. Arzuaga, S.Y. Euling, C.M. Powers, J. Jinot, K.A. Hogan, B.D. Abbott, E.S. Hunter, M.G. Narotsky. 2016. A systematic evaluation of the potential effects of trichloroethylene exposure on cardiac development. *Reproductive Toxicology*, 2016(65): 321-358. <https://www.ncbi.nlm.nih.gov/pubmed/27575429>

³ Environmental Protection Agency (EPA). 2020. Draft Risk Evaluation for Trichloroethylene. February 26. <https://www.epa.gov/tsca-cbi/draft-risk-evaluation-trichloroethylene>

Tuesday, March 24th. Because the EPA scientists' original draft is not public, the peer reviewers will be assessing a highly edited version whose findings depart from those of EPA scientists.⁴

According to the EPA's Scientific Integrity Policy, it is essential "that the scientific information and processes relied upon in policymaking manifest scientific integrity, quality, rigor, and objectivity," and that "political or other officials [do] not suppress or alter scientific findings."⁵ The EOP's direct changes to EPA scientists' risk evaluation violate these provisions. They demonstrate that this scientific work was **not** "free from political interference or personal motivations," that EPA scientists **were unable to** "represent [their] own work fairly and accurately," and that scientists **were unable to** "avoid conflicts of interest and ensure impartiality." The White House's alterations void these scientists' expertise and independence and directly oppose EPA's scientific integrity policy.

The public depends on federal agencies' risk evaluations, which form the backbone of policy decisions. EPA's chemical evaluations help determine if, how, and to what extent a chemical could pose a serious risk to human health, and whether the EPA should control or stop its use and manufacture. For TCE, the influence of this type of evaluation are enormous: TCE has been found on 1,400 military bases and nearly 800 Superfund sites, and it contaminates the drinking water of 14 million Americans.⁶ These impacts underscores how crucial it is that these evaluations rely on the best available science.

A timely investigation is warranted to assess the extent of this alleged violation of scientific integrity. The Union of Concerned Scientists does not have financial conflicts of interest with any of the potential individuals involved in this allegation.

Sincerely,

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Center for Science and Democracy
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Lead Science and Policy Analyst
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⁴ Shogren, E. 2020. EPA science panel plows ahead with toxic chemical's review, despite coronavirus crisis. *Reveal, from the Center for Investigative Journalism*, March 26. <https://www.revealnews.org/article/epa-science-panel-plows-ahead-with-toxic-chemicals-review-despite-coronavirus-crisis/>

⁵ U.S. Environmental Protection Agency. 2014. Scientific Integrity Policy. https://www.epa.gov/sites/production/files/2014-02/documents/scientific_integrity_policy_2012.pdf

⁶ Monica Amarelo. 2018. Notorious Cancer-Causing Solvent TCE Taints Tap Water for 14 Million Americans. *Environmental Working Group*, July 24. <https://www.ewg.org/release/notorious-cancer-causing-solvent-tce-taints-tap-water-14-million-americans>. See also Shogren, September 10, 2020.