



National Tribal Toxics Council

400 D Street, Suite 200 907-277-2111 Office
Anchorage, AK 99501 1-877-335-6780 Fax

www.tribaltoxics.org

[@tribaltoxics](https://www.facebook.com/tribaltoxics)

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September 8th, 2023

Dr. Alaa Kamel

Mission Support Division (7602M)

Office of Program Support

Office of Chemical Safety and Pollution Prevention

US EPA

RE: Draft Supplement to the TSCA Risk Evaluation of 1,4-Dioxane; EPA-HQ-OPPT-2022-0905-0032 Docket

The National Tribal Toxics Council (NTTC) is an EPA Tribal Partnership Group (TPG) with the Office of Pollution Prevention and Toxics (OPPT). Since the TSCA 2016 revisions, the Council's primary goal is to improve the TSCA risk evaluation process such that risk to tribes is accurately characterized and tribal peoples can be assured that, as Congress intended, their lifeways too are protected through chemical risk management decisions. The NTTC appreciates the opportunity to provide comments on the Draft Supplement to the TSCA risk evaluation of 1,4-dioxane.

The NTTC recognizes and appreciates the strides EPA has taken towards considering tribal lifeways to address health risks from chemical exposure. Through public comments and meetings with EPA, the NTTC has been advocating for the consideration of pathways associated with tribal exposures for over a decade. Such considerations include chemical releases from unlined landfills to ground-and surface water, the consideration of tribal lands' proximity to reported air and water releases, and exposure to hydraulic fracturing releases, as well as the consideration of unique tribal exposures in cumulative and in aggregate.

We appreciate EPA collaborating with the NTTC to take steps towards considering exposures via tribal lifeways but EPA could go much further in this supplemental risk evaluation to address more realistic tribal exposures and potential risks from 1,4-dioxane. Recognizing that tribes have unique exposures and considering potential exposures via higher drinking water intake during sweat lodge activities, for example, is a step forward. However, the risk evaluation does not adequately assess the

exposures and risks of tribal members who in addition to consuming drinking water contaminated with 1,4-dioxane have dermal exposure via hauling surface water for daily steam bathing, inhalation during daily steam bathing - which typically lasts 2-3 hours, inhalation of contaminated indoor air, subsistence fishing, and inhalation of outdoor air at higher frequency and duration than the general population due to tribal lifeways. Dermal absorption in the evaluation was only estimated for occupational exposure and not for the general population. While we support EPA in taking steps towards considering aggregate exposures within some of the pathways included, the analyses do not adequately capture tribal exposures and risks. Exposures would need to be aggregated within and across pathways and routes of exposure, as well as across conditions of use.

Higher incidence of pre-existing conditions in tribal populations and simultaneous exposures to other harmful chemicals were also not considered. As NTTC has communicated to EPA on multiple occasions, tribal people experience significant health disparities from the general US population and have the lowest life expectancy of any other racial or ethnic group¹. EPA needs to conduct cumulative risk assessment for all TSCA chemicals, in order to adequately determine risks from exposure to chemical pollutants.

Another important omission from EPA's analyses in this document that is very relevant to tribes, is the lack of consideration of residential mobility greater than 33 years. The vast majority of tribal members spend their entire lives in the same place, on their land and in their community. Increasing the residential mobility to 70 years, for ex., would substantially affect the chronic risk estimates.

The NTTC is encouraged by the development of new methods and the novel applications of existing methods in this risk evaluation, as well as by the consideration in some of the analyses of aggregate, chronic, and sentinel exposures. We see this as a step forward in capturing risks. We also appreciate the inclusion of figures that clearly map TRI data and Water Quality Portal data to tribal reservation boundaries, but wish to point out that many tribal populations have treaty-guaranteed rights to resources contained in ceded areas outside of reservation boundaries that continue to be accessed daily. Releases from hydraulic fracturing fluids are critically important to many tribes that have reservation and tribal resource areas near hydraulic fracturing operations. We recommend adding tribal reservation boundaries to figure 2-5 to make clear the co-location of reported 1,4-dioxane in produced waters and tribal concerns.

EPA found cancer risks greater than 1 in a million from drinking water contaminated with 1,4-dioxane from both hydraulic fracturing and down-the-drain releases. We are extremely concerned that EPA did not identify these exposures as drivers of unreasonable risk and urge EPA to consider the cancer risk they present when making risk management decisions. The proximity of hydraulic fracturing operations to many tribal communities is a likely source of 1,4-

¹ Fuller, R. et al., 2022, Pollution and Health: A Progress Update, The Lancet, Vol. 6, Issue 6, E535-547. [https://www.thelancet.com/journals/lanplh/article/PIIS2542-5196\(22\)00090-0/fulltext](https://www.thelancet.com/journals/lanplh/article/PIIS2542-5196(22)00090-0/fulltext)

dioxane contamination of tribal drinking water, as is the use of consumer products containing 1,4-dioxane. We are concerned that EPA will not use its risk management authority to protect tribal populations from the cancer risks these two pathways present. EPA has a 1 in a million cancer risk level target² for protecting the general population from drinking contaminated water. At the very least, the same benchmark should be applied to protecting potentially exposed and susceptible subpopulations like tribes

As always, we welcome any opportunity to collaborate with EPA in advancing the protection of tribal people and lifeways from the impacts of toxic chemicals. Should you or your staff have questions or comments regarding this letter, please contact myself, Dianne Barton, NTTC Chair, at (503) 731-1259 / bard@critfc.org.

Sincerely,

A handwritten signature in cursive script that reads "Dianne C. Barton".

Dianne C. Barton, Ph.D.
Chair, National Tribal Toxics Council

² EPA, 2000, Methodology for Deriving Ambient Water Quality Criteria for the Protection of Human Health, <https://www.epa.gov/wqc/human-health-water-quality-criteria-and-methods-toxics>.