National Tribal Toxics Council

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Assistant Administrator Michal Freedhoff
Office of Chemical Safety and Pollution Prevention
Environmental Protection Agency
1200 Pennsylvania Ave NW
Washington, DC 20460-001

Submitted via Regulations.gov; Docket Number EPA-HQ-OPPT-2024-0114

Re: 2024 Draft Risk Evaluation for 1,1-Dichloroethane and 2024 Draft Human Health Hazard Technical Support for 1,2-Dichloroethane

The National Tribal Toxics Council (NTTC) is an EPA Tribal Partnership Group with the Office of Pollution Prevention and Toxics (OPPT). Since the 2016 TSCA amendments, one of the Council's primary goals has been to suggest improvements to the TSCA risk evaluation process such that risks to tribes are accurately characterized and tribal peoples can be assured that, as Congress intended, their lifeways, environment, and health are protected in all chemical risk management decisions. The NTTC appreciates the opportunity to provide comments on the Draft Risk Evaluation of 1,1 Dichloroethane under TSCA.

Risk Characterization for Potentially Exposed or Susceptible Subpopulations

After many years of advocating for the consideration of unique tribal exposures and risks in EPA risk assessments, the NTTC appreciates and strongly supports EPA in taking the step to correctly identify subsistence fisher populations who consume fish as a potentially exposed and susceptible subpopulation (PESS) and in characterizing lifetime tribal exposures from two facilities releasing 1,1-dichloroethane on the Navajo Nation. We strongly support EPA's efforts to quantify the greater exposures via higher fish consumption that tribal people experience. The NTTC's position on previous risk evaluations for chemicals that release to the environment has been that tribal populations likely experience the highest exposures of all the populations considered under TSCA when it comes to exposure via fish consumption and we strongly support EPA's recognition that tribal populations represent the sentinel fish consumption exposure scenario in this draft risk evaluation.

Incidental Oral Ingestion and Dermal Exposure from Swimming

While the NTTC appreciates and supports the inclusion of tribal fish consumption in the draft risk evaluation, it is worth noting that fish consumption is only one exposure pathway that could lead to potentially higher exposures for tribal people. The draft risk evaluation considers ingestion and dermal exposure from recreational swimming as a means to determine risk from contact with surface waters affected by 1,1-dichloroethane. The SWIMODEL default inputs assumed 3 hours exposure time per event, for 22 years of 238 events/year (competitive). Tribal populations can experience day long exposure to surface waters throughout a lifetime of subsistence harvest practices that likely exceed a recreational swimming scenario. Higher tribal fish consumption correlates with greater frequency and duration of exposures via fish harvesting. In order to evaluate real-world exposures of and risks to tribal populations, EPA should consider surface water exposure related to subsistence harvest practices in addition to recreational swimming.

Air Emissions from Landfills

The NTTC has also been advocating for the consideration of the unique disposal circumstances in tribal communities as a source of chemical exposure in EPA risk evaluations for quite some time. While the draft risk evaluation specifically considered the disposal of 1,1-dichloroethane to Hazardous Waste Landfills at a level of 22,682 kg per year, the risk evaluation focused on leachate to groundwater from landfills and not air emissions. Table 3-4[1] reports 672 unique disposal sites that report 1,1-dichloroethane in air emissions. It would be useful to understand how many of the 672 disposal sites accept 1,1-dichloroethane waste before assuming that all landfill emissions are the result of the decomposition of other chemicals. This point is significant in determining the location of fenceline communities proximate to landfills. EPA should include air emission modeling of landfill in addition to chemical facility releases in the risk evaluation. Releases via leachate and air emissions from unlined and unmanaged landfills with open burning, such as the ones prevalent in Alaska Native villages with no hazardous waste facilities, should also be considered.

Environmental Exposure to Terrestrial Species

The risk assessment asserts that for terrestrial mammals and birds the relative contribution to total exposure associated with inhalation is secondary to exposures by diet and indirect ingestion. The *Guidance for Developing Ecological Soil Screening Levels* does not include highly volatile chemicals because of the lack of data on carcinogenic endpoints and therefore was not used for quantitative evaluation of the relative contribution of inhalation exposures. EPA's *Wildlife Exposure Factors Handbook* provides respiration rates for terrestrial animals and would provide a better method to evaluate the risks to terrestrial wildlife from volatile pollutants. Since the risk evaluation finds that the primary exposure pathway for human receptors is due to the volatility of 1,1-dichloroethane and known carcinogenic endpoints, it would seem the same pathway also exists for terrestrial species. Inhalation exposure of wildlife and domestic animals is unavoidable and, while reported

[1] Draft Risk Evaluation for 1,1-Dichloroethane, July 2024.

effects of exposure on these species are not available, the mode of action may be similar to laboratory animals or humans where damage to liver, kidney, or nervous systems may be occurring. The NTTC supports the full consideration of all tribal natural resources in TSCA risk evaluations. The Tribal-FERST (Tribal-Focused Environmental Risk and Sustainability Tool)[2] is an invaluable tool for risk evaluation practitioners to use to better understand the protective relationship that tribal people have with wildlife natural resources.

Land Use Analysis

The land use analysis[3] did not identify any residential, industrial/commercial businesses or public spaces within 1000 meters of industrial release points and thus found no risks to general population releases from ambient air pathways. The Google Earth images of the facilities used in the analysis clearly show that facilities are adjacent to "uninhabited" areas, including forested land, the Mississippi River, and apparent farm lands. So called uninhabited areas could be used by tribal hunters, gatherers, and fishers, as well as by farmers, recreational hunters and boaters. Land use analysis that limits itself to human population density as a metric of general population risk misses important potential uses by humans and wildlife alike.

Chronic Exposure Scenario

EPA's general population exposure scenario assumes a duration of up to 33 years (Table 5-55). Tribal exposures differ from those of the general population, workers, consumers, or any other population considered under TSCA. Tribal peoples tend to reside, work and harvest on the lands of their ancestors for their entire lifetime. A default value of 78 years as was used in the fish ingestion scenario is more reflective of tribal communities that may be chronically exposed to airborne environmental contaminants from industrial facilities or landfills.

Incomplete Data

The NTTC has urged EPA to use the data gathering authorities it was granted by TSCA to collect the information it requires to carry out chemical risk evaluations. In this draft risk evaluation, EPA once again frequently cites lack of information while evaluating exposures and impacts. The NTTC urges EPA to use its authority to collect or generate any data or information it is missing for future risk evaluations before determining a chemical does not present unreasonable risk based on lack of data.

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.

[2] https://tribalferst.usetinc.org/about-us/ (accessed 9/3/2024)

[3] Appendix E, Draft Risk Evaluation for 1,1-Dichloroethane, July 2024.

Sincerely,

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

Note: The Members of the Council are offering their opinions on toxics issues and do not speak for individual tribes