

## Human Health Risk Assessment for 1,4-Dioxane in Drinking Water Briefing and Request

NC Secretaries' Science Advisory Board – April 2, 2025 Frannie Nilsen, PhD, Environmental Toxicologist, DEQ



## Legislative Report Details and Timeline



#### **Sept 2023:**

NC General Assembly directed DEQ to prepare a human health risk assessment of 1,4-dioxane in drinking water supported by peer-reviewed scientific studies.



### **Dec 2023:**

the difficulty in meeting the legislative timeline and recommended a strategy to meet the requirements in the time given



### **Jan 2024:**

DEQ followed the strategy the SSAB suggested and convened a group of experts to begin the directive activities.



### May 1, 2024:

DEQ delivered the assessment to the Joint Legislative Commission on Governmental Operations.

### Request to the Board

### Request/Charge to the Board

DEQ's request that the SSAB review the May 2024 Human Health Risk Assessment for 1,4-Dioxane in Drinking Water and provide formal feedback regarding whether the approach and findings of the report are scientifically reasonable.

#### Recall:

The report was produced at the request of the NC General Assembly and is final, and the ask of the SSAB now is for retrospective feedback on the report's scientific adequacy as a foundation for health-based water quality management.

The DEQ is not seeking edits or suggestions of other ways the data may have been analyzed or what additional data could be generated to fill gaps.

DEQ is interested in the SSABs feedback on whether the 2024 product is scientifically sound and whether the cancer slope factor (CSF) used in the hazard evaluation section and its derivation are appropriate.

Your attention is drawn to the CSF because that is an aspect of the 2024 report that is used to determine a health-based concentration for lifetime exposure.

# Human Health Risk Assessment Report is Available

### Report is available here:

https://www.deq.nc.gov/leg islative-reports/14-dioxane-drinking-water-human-health-risk-assessment/open



1,4-Dioxane in Drinking Water Legislative Report

May 1, 2024

The Human Health Risk Assessment evaluating 1,4dioxane in North Carolina's drinking water, as directed by Session Law 2023-137: 9(a).

North Carolina Department of Environmental Quality

Department of Environmental Quality

