

Education

B.S. Biology, Chemistry Minor 1963, Northern Illinois University
M.S. Zoology 1965, Northern Illinois University
Graduate Study toward Ph.D. in Physiology (Biophysics) 1965-1968,
University of Texas

Areas of Relevant Expertise

Human Toxicology, Animal Toxicology, Health Effects Review of Air
Monitoring Data, Health Effects of Air Pollution, Risk
Communication

Years of Experience

With This Firm: 3
With Other Firms: 28

**Relevant
Experience
Summary**

- Human Toxicology
- Animal Toxicology
- Air Monitoring Data Analysis
- Health Effects of Air Pollution
- Risk Assessment
- Risk Communication

Experience Summary

From 1984 until she joined HorizonTM in 2003, Ms. Wiersema lead the Toxicology and Risk Assessment Section of the Texas Air Control Board (TACB), which eventually became the Texas Commission on Environmental Quality (TCEQ). At the agency, she participated in and oversaw all activities related to health effects. Ms. Wiersema directed the development of Health Effects Screening Levels (ESLs) for more than 2000 chemicals in ambient air and the toxicological input to the "Modeling and Effects Review Applicability Guidance Document for Non-criteria Pollutants," which is the methodology by which ESLs are applied to air permit review at the TCEQ.

Other responsibilities included providing toxicological evaluation of contaminants in drinking water and other issues of concern to the general public, such as the Barton Springs Pool contamination and impacts of the Mexican Smoke. The Toxicology and Risk Assessment Section also provided support for Agency Emergency Response Actions, and Homeland Security Activities. Ms. Wiersema has significant experience in providing toxicological and risk information to local, national, and international media (BBC). On several occasions, Ms. Wiersema has represented the agency as an expert witness at legislative committee hearings. She was the TACB/TNRCC/TCEQ representative on the Texas Department of Health Toxic Substances Coordinating Committee for more than 10 years.

In addition, Ms. Wiersema oversaw many and varied special studies, such as a study of the effects of perchlorate in drinking water, and the development of TEXRISK, a multimedia model for predicting movement of chemicals from hazardous waste incinerator emissions through soil, sediment, water, fish, and produce. Ms. Wiersema directed staff efforts to review and document TCEQ cumulative risk assessment procedures to satisfy a legislative directive, and staff review of all risk assessment activities at high profile remediation sites such as Pantex-Amarillo and Alcoa-Lavaca Bay, a superfund site.

In 1984, when Ms. Wiersema was promoted to manager, there were 4 toxicologists in the group. By 2003, there were 35 staff members in the group, which included 20 toxicologists as well as engineers, geologists, hydrologists, and chemists.