



May 6, 2014

Toxicology Division, MC 168
Texas Commission on Environmental Quality
P.O. Box 13087
Austin, TX 78711-3087

SUBMITTED VIA EMAIL: tox@tceq.texas.gov

RE: Request for Public Comment on the Whitepaper – TCEQ Guidelines to Develop 24-Hour Inhalation Reference Values

Dear Sir or Madam:

The Center for Advancing Risk Assessment Science and Policy¹ (ARASP), which is managed by the American Chemistry Council² (ACC), welcomes the opportunity to provide comments on the Texas Commission on Environmental Quality's (TCEQ) whitepaper titled: "TCEQ Guidelines to Develop 24-Hour Inhalation Reference Values." ARASP fosters activities to promote the adoption of policies and practices that assure the most relevant science and methodologies are used as the foundation for assessing potential risks from chemical exposures.

We commend the TCEQ for recognizing the importance of appropriately evaluating and characterizing acute inhalation exposures. The whitepaper lays out a framework for how the TCEQ will determine the relevance for developing a 24-hour reference value (ReV), analyze the availability and utility of the information for derivation of the ReV and utilize mode of action information to inform the calculations. The whitepaper also highlights the importance of understanding how a chemical interacts with the body during exposure and what key events are necessary to induce effects. Additionally, the approach encourages the consideration of all data and acknowledges the need to carefully evaluate each step of a mode of action (MOA), when

¹ ARASP is a coalition of nineteen organizations focused on promoting the development and application of up-to-date, scientifically sound methods for conducting chemical assessments. ARASP members include: Acrylonitrile Group, ACC's Chlorine Chemistry Division, Ethylene Oxide Panel, Formaldehyde Panel, Hexavalent Chromium Panel, High Phthalates Panel, Hydrocarbon Solvents Panel, Olefins Panel, Oxo Process Panel, Propylene Oxide/Propylene Glycol Panel, Public Health and Science Policy Team, Silicones Environmental, Health and Safety Center of North America and Vinyl Chloride Health Committee, American Cleaning Institute, American Petroleum Institute, CropLife America, Halogenated Solvents Industry Alliance, Nickel Producers Environmental Research Association and Styrene Information and Research Center. More information can be found: <http://arasp.americanchemistry.com/>

² ACC represents the leading companies engaged in the business of chemistry. ACC members apply the science of chemistry to make innovative products and services that make people's lives better, healthier and safer. ACC is committed to improved environmental, health and safety performance through Responsible Care®, common sense advocacy designed to address major public policy issues, and health and environmental research and product testing. The business of chemistry is a \$770 billion enterprise and a key element of the nation's economy. It is one of the nation's largest exporters, accounting for 12 percent of U.S. exports. Chemistry companies are among the largest investors in research and development. Safety and security have always been primary concerns of ACC members, and they have intensified their efforts, working closely with government agencies to improve security and to defend against any threat to the nation's critical infrastructure.



known, to ensure that available relevant and reliable toxicokinetic and toxicodynamic information is considered. ARASP strongly supports the use of MOA in chemical assessments, and strongly supports the MOA approach put forward by TCEQ.

TCEQ has conducted several rounds of peer review on the proposed guidelines and revised them as appropriate based on those comments. Included here are two additional suggestions to help improve the clarity and implementation of the guidelines.

- Problem Formulation - the whitepaper states that derivation of chemical specific 24-hour ReVs might be needed, specifically in the case of those chemicals where the duration of exposure is a contributing factor. TCEQ should consider adding language to the whitepaper noting that when a 1-hour ReV is adequate and scientifically justified, based on the mode of action, to account for effects elicited from a single 24-hour exposure then a 24-hour ReV should not be calculated.
- Mode of Action and Dose Metric - in this section of the whitepaper TCEQ identifies some questions for consideration in the evaluation. Additional questions that TCEQ should consider including are: (1) Are the adverse effects seen relevant to humans? (2) Are the adverse effects reversible given the exposure duration? and (3) Are the adverse effects biologically plausible?

ARASP supports TCEQ's efforts to develop these guidelines and appreciates the opportunity to provide additional review and comment. If you have any questions or require further information please feel free to contact me by phone (202-246-7000) or by email kimberly_wise@americanchemistry.com.

Respectfully,

Kimberly Wise, Ph.D
Senior Director
Chemical Products & Technology Division
American Chemistry Council

