TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

Protecting Texas by Reducing and Preventing Pollution

July 10, 2014

Water Docket
U.S. Environmental Protection Agency
28221T
1200 Pennsylvania Avenue NW.
Washington, DC 20460

Attn: Docket ID No. EPA–HQ-OW-2014-0135

Re: Comments on the U.S. EPA Second External Review Draft Health Risk and Exposure Assessment for Ozone and Related Photochemical Oxidants EPA–452/P–14–004a

Dear Sir or Madam:

The Texas Commission on Environmental Quality (TCEQ) appreciates the opportunity to respond to the U.S. Environmental Protection Agency's (EPA) request for input in the notice published in the May 13, 2014, edition of the *Federal Register* entitled: "Updated National Recommended Water Quality Criteria for the Protection of Human Health."

Enclosed, please find TCEQ's comments regarding the EPA request for public comment referenced above. If you have any questions concerning the enclosed comments, please contact Michael Honeycutt, Ph.D., Toxicology Division, Office of the Executive Director, at michael.honeycutt@tceq.texas.gov.

Sincerely,

Richard A. Hyde, P.E.
Executive Director

Enclosure

Updated National Recommended Water Quality Criteria for the Protection of Human Health - 2014

General Comments

On May 13, 2014, the EPA announced the availability of draft updated national recommended water quality criteria for the protection of human health for 94 chemical pollutants. In general, the Texas Commission on Environmental Quality (TCEQ) agrees with EPA in using the most up-to-date scientific information to derive health-protective criteria. The TCEQ commends the EPA in using the latest available toxicity information for developing ambient water quality criteria instead of relying on a strict hierarchy. The TCEQ submits the following comments on the draft criteria.

1. TCEQ appreciates the incorporation of latest scientific information. However, with the incorporation of updated exposure assumptions, such as body weight of 80 kilograms and drinking water intake rate of 3 liters/day, these water quality criteria are not consistent with and are, in some cases, more conservative than National Primary Drinking Water Regulations that apply to public water systems. It does not make sense for a surface water body that is used for drinking water to be regulated more stringently than the treated drinking water coming from the water body. The TCEQ recommends using the actual Maximum Contaminant Level (MCL), when available, in the surface water quality equation.
2. The updated exposure assumption of 3 liters/day for the default drinking water intake rate is based on water intake from all sources, which includes the ingestion of water through sources such as food. The surface water quality criteria are numeric values calculated for pollutant concentrations in ambient waters that are protective of human health. As such, drinking water exposure assumptions used in those calculations should be reflective of the purpose of the calculation. By using a water intake rate that accounts for intake of more than water alone (i.e., beverages, food, etc.), EPA is compounding conservatism and calculating unrealistic criteria.
3. The TCEQ supports the use of bioaccumulation factors (BAFs) over bioconcentration factors (BCFs). In our current version of the Procedures to Implement the Texas Surface Water Quality Standards (RG 194), the TCEQ already strongly encourages permittees to develop site-specific BAFs when attempting to tailor the statewide human health criteria to their location.
4. TCEQ applauds the use of available up-to-date toxicity data rather than relying on a strict hierarchy for collection of toxicity information. The cited reference to USEPA, 2005 on page 7 of the Draft Update of Human Health Ambient Water Quality Criteria: Chlorophenoxy Herbicide (2,4-D) 94-75-7 (EPA 820-D-14-028) should not be included. The 2005 USEPA document refers to an oral reference

dose (RfD) of 0.005 mg/kg-day; whereas, the USEPA 2012 referenced document provides the oral RfD of 0.05 mg/kg-day, which is used as the basis for the draft updated criterion value for chlorophenoxy herbicide.

5. The EPA's 2000 Methodology for Deriving Ambient Water Quality Criteria for the Protection of Human Health (EPA-822-00-004) recommends states consider childhood exposure and using a relative source contribution (RSC) factor when calculating human health criteria for noncarcinogens. However, EPA is proposing only to utilize an assumed default RSC factor of 20 percent and forgo including childhood exposure variables in the proposed criteria calculations. During the 2010 revision of the Texas Surface Water Quality Standards (30 Texas Administrative Code, Chapter 307), Texas revised human health criteria for noncarcinogens to include childhood exposure but elected not to use the RSC factor. These revised criteria were approved by the EPA Region 6 on June 29, 2011. This approach appears more scientifically defensible than using an assumed default RSC factor for every noncarcinogen. The TCEQ may elect to utilize RSC factors in the future if more evidence is presented supporting the assumed 20 percent; however, using both the RSC factor in addition to childhood exposure factors already implemented by the state is overly stringent.