

Toxicology Excellence for Risk Assessment



TERA

a nonprofit corporation dedicated to the
best use of toxicity data for risk values

September 4, 2007

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Dear 1,3-butadiene Peer Review Panel:

Enclosed are the following materials for the review of TCEQ's 1,3-butadiene Development Support Document:

- A compact disk (CD) containing the TCEQ DSD for 1,3-butadiene, the charge to reviewers, and the key references. If there are references you wish to see that are not on the CD, please let me know as soon as possible, and I will obtain them for you.
- A short background document prepared by TCEQ that explains the process they used to develop the DSD for 1,3-butadiene.
- Two sets of public comments on the DSD that TCEQ would like you to take into consideration as you conduct your review.

Please review the enclosed materials carefully and consider the issues and questions identified in the charge. However, as you conduct your review, please keep in mind that certain issues are TCEQ program-wide policy decisions that cannot be changed for individual chemical assessments. For example, in order to ensure consistent protection of human health, chemical-specific ReVs and ESLs are based on a defined risk management objective of no significant risk. The risk management goals were approved by the Commissioners and Executive Director of the TCEQ and are consistent with other TCEQ programs. ESLs developed in accordance with these no significant risk levels are intended to prevent adverse effects potentially associated with cumulative and aggregate exposures as defined in Section 1.2 of RG-442 ESL Guidelines (TCEQ 2006).

Therefore, you are asked not to comment on the following policy decisions:

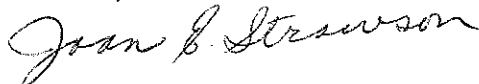
- The no significant risk level for a ReV for an individual chemical with a nonlinear dose-response assessment is defined as the concentration associated with a hazard quotient (HQ) of 1. In consideration of cumulative and aggregate exposure, the Toxicology Section (TS) uses an HQ of 0.3 to calculate short-term and long-term health-based ESLs for chemicals with a nonlinear (threshold) dose-response assessment (i.e., health-based ESLs = 0.3 x ReV).

- The IS uses a risk management goal of 1×10^{-5} to calculate long-term ESLs for individual chemicals with a linear (nonthreshold) dose-response assessment. Further adjustment of this no significant risk level is not necessary since few chemicals with a linear dose-response assessment are routinely permitted in Texas.
- Air concentrations calculated at a theoretical excess lifetime cancer risk of one in 100,000 (1×10^{-5}) are based on a lifetime exposure of 70 years, the default used by TCEQ for exposure analysis.

We ask that you provide us with your written comments by Friday, October 5 (sooner, if possible). After receiving all of the written comments, *TERA* will evaluate them to assess whether there are any conflicting recommendations from the panel or any unresolved issues. We will then distribute the written comments to TCEQ and the panel in preparation for the follow up conference call. The purpose of the conference call is to allow TCEQ to ask questions of the panel members, and to address any conflicts or unresolved issues. We are planning to hold the call during the week of October 29, so please advise me of available days and times during that week as soon as possible.

We look forward to receiving your comments by October 5. If you have any questions or concerns, please contact me (910-692-7752 or email Strawson@tera.org).

Sincerely,



Joan E. Strawson, M.S., M.T.S.C., J.D.
Senior Advisor in Risk and Outreach

Enclosures:

CD containing the report, charge, key references
Introductory materials
Public comments