



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

OFFICE OF
SOLID WASTE AND EMERGENCY
RESPONSE

June 12, 2003

OSWER No. 9285.7-75

Marcia L. Bailey, D. Env.
Environmental Toxicologist
U.S. Environmental Protection Agency, Region 10
Office of Environmental Assessment, Risk Evaluation Unit
1200 Sixth Avenue, OEA-095
Seattle, Washington 98101

Dear Dr. Bailey:

I am responding to recent inquiries concerning cancer toxicity values to evaluate inhalation and ingestion risks from exposure to tetrachloroethylene, also commonly known as perchloroethylene or "PCE," and specifically whether it would be appropriate to use a California Environmental Protection Agency (Cal EPA) inhalation unit risk value and oral slope factor. This letter supercedes an earlier version of this letter, which identified an incorrect source of the oral slope factor. This letter is consistent with the earlier letter regarding the inhalation unit risk value and its source.

In the absence of relevant values in the U.S. Environmental Protection Agency (EPA) Integrated Risk Information System (IRIS) or a value from EPA's National Center for Environmental Assessment/Superfund Technical Health Risk Support Center (STSC), which are the first two tiers of human health toxicity values in the EPA Superfund hierarchy, we would support consideration of the Cal EPA inhalation unit risk value from the Air Toxics Hot Spots Program and the oral slope factor from the Cal EPA Public Health Goal in Drinking Water.

In general, Cal EPA develops its toxicity values in a manner which is quite similar to the EPA IRIS program, in that many of the same databases and considerations are used. Cal EPA's assessments used information from some of the same sources or studies that EPA typically considers in the IRIS program, including the most recent relevant studies known to exist, and also considered this information in a manner similar to the EPA IRIS program.

In summary, having consulted on this matter with the STSC, the Office of Emergency and Remedial Response (OERR) supports use of the Cal EPA Air Toxics Hot Spots Program inhalation unit risk of $5.9 \text{ E-}6 \text{ (}\mu\text{g/m}^3\text{)}^{-1}$ for Superfund sites as the best value available at this time until a U.S. EPA value becomes available. Having consulted with the STSC about the Cal EPA Public Health Goal in Drinking Water oral slope factor of $5.4\text{E-}1 \text{ (mg/kg-day)}^{-1}$ for PCE, we also support the use of this value until a U.S. EPA value becomes available.

The Cal EPA presents a full, complete and transparent presentation of the relevant information on their development of these values on their internet website. Documentation on the Air Toxics Hot Spots Program inhalation unit risk value can be found at this internet website: http://www.oehha.ca.gov/air/hot_spots/pdf/TSDNov2002.pdf. Since this website does not take you directly to the PCE discussion, and this can be difficult to find on the internet website, we have downloaded the eight pages pertaining to PCE and include them as an enclosure to this letter. Documentation on the Public Health Goal in Drinking Water oral slope factor can be found at this Cal EPA internet website: <http://www.oehha.ca.gov/water/phg/pdf/PCEAug2001.pdf>. Because of the size of this document (75 pages) and because this website does not take you directly to this document, we have not included this document as an enclosure to this letter. With respect to the transparency of any Superfund Program decisions which may use these values in selecting a response action, we recommend that the appropriate documentation from the Cal EPA website be provided, or the link to the relevant Cal EPA internet website be identified.

Thank you for your inquiry. If you have any questions, please contact Mr. Dave Crawford of my staff at (703) 603-8891.

Sincerely,

/s/

Elizabeth Southerland, Deputy Director
Office of Emergency and Remedial Response

cc: Harlal Choudhury ORD/NCEA/STSC
Sarah Levinson, Region 1
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Nancy Riveland, Superfund Lead Region Coordinator, USEPA Region 9
Paul Sieminski, RCRA Lead Region Coordinator, USEPA Region 6
OERR NARPM Co-Chairs
Joanna Gibson, OERR Document Coordinator

Enclosure: California Environmental Protection Agency, Office of Environmental Health Hazard Assessment, Air Toxics Hot Spots Program Risk Assessment Guidelines, Part II, Technical Support Document for Describing Available Cancer Potency Factors, December 2002 (excerpt pertaining to tetrachloroethylene)