PEER REVIEW COMMENT FORM

UPDATED ATSDR POLICY GUIDELINE FOR DIOXINS AND DIOXIN-LIKE COMPOUNDS IN SOIL

October 2004

GUIDE TO REVIEWERS:

The objective of peer review conducted by the Office of Science is to ensure the highest quality of science for NCEH/ATSDR policy, studies, and results of research; therefore, your comments should be provided with this goal in mind. Please note that your unaltered comments will be sent to the investigator for a response. You should receive a copy of the response to the peer review comments when they are available.

Please comment on the three (3) major changes to the dioxin and dioxin-like revised policy:

ATSDR's screening values are much higher than the values the -- has set for **Soil Cleanup Target Levels** (SCTLS) for -- and other hazardous waste sites. -- SCTL for TEQ dioxins is **7 parts per trillion for residential land use, and 35 parts per trillion for industrial land use**. In addition, the -- calculates TEQs using 1/2 the detection levels for all nondetected congeners if any congeners are measured. As a result, there tends to be at least an order of magnitude of difference in the numbers that are of concern to -- regulators versus the screening values we as a cooperative-agreement state health department are asked to use. Unless ATSDR is able to convince EPA and -- regulators that ATSDR's toxicological interpretations for TEQ dioxins are correct and EPA's and -- are not, my guess is that ATSDR's MRLs and other screening values will continue to be ignored when these other entities have jurisdiction.† It is also likely our recommendations with respect to public health will likewise be ignored. It is my opinion that our section's continued use of these screening values may cause a credibility problem with our health assessments, both with our sister environmental regulating agency and the public.

It is confusing that on page 3 paragraph 2 that the new policy states that animal studies have demonstrated cancer effects, yet ATSDR does not have a CREG for TEQ dioxins. It is my understanding that the Sveso studies have also shown associations with human cancer, especially breast cancer and other cancers for women.

The new policy does not discuss TEQ dioxins' role as endocrine disrupters (at very low levels), nor the added effects of these chemicals with other known endocrine disruptors (PCBs and flame retardants) which are also environmentally persistent in soil, air, and food chains. The combined effects of endocrine disruptors are thought to adversely affect sex ratios (less males are born) and may have other long

reaching effects that are not presently well understood nor extensively studied. Along these pharmacokinetic lines, the federal government's study of Agent Orange applicators (Operation Ranch Hand) has shown that dioxin exposure appears to have a causal role in adult-onset diabetes.