

ATSDR Soil Dioxin Policy
Letter to Colleagues
Draft for Approval
November 7, 2006

(DATE)

Dear Colleague:

The Agency for Toxic Substances and Disease Registry (ATSDR) has published a Notice in the Federal Register announcing a change in its *Policy Guideline for Dioxins and Dioxin-Like Compounds in Residential Soil*. Since your work may involve sites that have been contaminated by dioxin, we are writing to alert you of this change, since it may affect how you evaluate such sites in the future.

Following extensive review, ATSDR is deleting the criterion establishing an “action level” at 1-part per billion (ppb). The objective of this change is to improve consistency in how health assessors evaluate dioxin exposure. Greater consistency is expected to result in more appropriate evaluations of site-specific conditions.

This update does not signal a change in our scientific opinion about dioxin toxicity. Nor does it change the Minimum Risk Level (MRL) determination of the health effects associated with dioxin exposure, established in ATSDR’s 1998 Toxicological Profile on chlorinated dibenzo-*p*-dioxins.

The decision to update the Policy Guidelines resulted from a review of health assessments since the “action level” was established. This review demonstrated that the action level had not been consistently applied. Differences in the interpretation of the 1998 guideline have led to inconsistencies in the application of the screening and action levels to public health assessments. The action level has been interpreted as 1) a soil concentration that defines a public health hazard, 2) an ATSDR clean-up level which implies the need for site remediation, or 3) an initial screening level that defines a safe level of exposure, below which there is no public health concern. None of these interpretations was intended by the original policy guidance or appropriate.

Following is a summary of the changes proposed:

- Deletion of the 1 ppb action level: The 1-ppb dioxin soil concentration should not be used as a comparison value for defining public health hazards in public health assessments and consultations. The 1-ppb action level can be cited by health assessors as the Superfund Dioxin Cleanup policy criterion (EPA 1989, 1998).
- Retention of the 0.05 ppb screening level: The MRL of 0.05 ppb for dioxin TEQ in soil remains the basis for screening soil concentrations. Levels exceeding this screening level should be evaluated as described in the *ATSDR Public Health Assessment Guidance Manual* (PHAGM)(ATSDR 2005).

- Recommendation to conduct exposure pathways analyses for dioxins and dioxin-like compounds: While the guideline focuses on assessment of direct exposure to soil contamination, particularly soil ingestion, health assessors should be aware of the potential impact of indirect exposure pathways on exposed populations in site-specific health assessments. The PHAGM provides assistance in evaluating indirect exposure pathways, such as food chain contamination. (ATSDR 2005)
- Updated Toxicity Equivalency Factors: The 2006 World Health Organization Toxicity Equivalency Factors (TEF) values for dioxins and dioxin-like compounds have been added to the policy.

We believe these changes will improve the utility of the policy through increased clarity and improved consistency of application of evaluation criteria in health assessments. Since no other chemical has an established “action level,” this update brings dioxin assessments in line with the way all other chemicals are evaluated by ATSDR.

A Federal Register notice will be issued announcing the release of the ATSDR Policy Guideline for Dioxins and Dioxin-like Compounds in Soil document for public comment. We are sending this notification letter to our public health partners and other eventual users of the, so that you are aware of specific changes and clarifications that we have made. The Policy Guideline document, Summary Fact Sheet, and Peer Reviewers comments are available for downloading on the ATSDR website (<http://www.atsdr.cdc.gov> _____).

Sincerely,

Howard Frumkin, MD, DrPH
Director,
National Center for Environmental Health/Agency for Toxic Substances and Disease
Registry