

FACT SHEET

Changes to the ATSDR Policy Guideline for Dioxins and Dioxin-Like Compounds in Residential Soil

Purpose

The Agency for Toxic Substances and Disease Registry (ATSDR) is updating its *Policy Guideline for Dioxins and Dioxin-Like Compounds in Residential Soil*. This update does not reflect a change scientific opinion on dioxin toxicity.

This update also does not change ATSDR's 1998 Toxicological Profile and Minimum Risk Level (MRL) determination of the health concerns associated with dioxin exposure. The primary objective of this change is to provide greater consistency in how health assessors evaluate dioxin exposure. Greater consistency is expected to result in more appropriate evaluations of site-specific conditions.

Primary Change to the Policy

Following extensive review, ATSDR is deleting the criterion establishing an "action level" at 1-part per billion (ppb).

History of the Dioxin Policy Guideline

In 1998, ATSDR adopted a Policy Guideline for Dioxin and Dioxin-like Compounds. The policy was accompanied by a Technical Support Document. The policy was developed to guide health assessors in evaluating the public health implications of dioxin and dioxin-like compounds (including 2,3,7,8-tetrachlorodibenzo-*p*-dioxin and other structurally related halogenated aromatic hydrocarbons) in residential soils near or on hazardous waste sites. The guideline established three levels as criteria to compare dioxin levels in residential soil:

- a **screening level**,
- an **evaluation level**, and
- an **action level**.

The guideline also recommended specific considerations for public health actions.

An objective internal evaluation of the experience of ATSDR and its public health partners in using the 1998 policy guideline identified problems with interpretation of the "action level" and with consistency in assessing the hazards of exposure to dioxins in residential soils.

Changes Being Made to the ATSDR Policy Guideline for Dioxins and Dioxin-Like Compounds in Residential Soil

The specific changes to the policy guideline, the reason for those changes, and the expected impact of those changes are summarized in the following table:

Change	Reason for Change	Impact of Change
<p>Eliminate the "action level"</p>	<p>The purpose that ATSDR intended with the 1-ppb TEQ action level was intended to be a trigger for consideration of specific public health actions that may have been necessary to address exposure to dioxins in soil.</p> <p>The action level was <i>not</i> intended to</p> <ul style="list-style-type: none"> • define a specific level of contamination in residential soil that poses a public health hazard. • represent a level of contamination at which soil cleanup should occur. • be used as an initial screening level that defines a safe level of exposure below which there are no public health concerns. <p>Confusion about interpretation of the action level has been a barrier to a more complete evaluation of exposure to dioxins in residential soils.</p>	<p>This update brings the approach for evaluating dioxin into line with the scientific approach to evaluating other chemicals. No other chemical has had an "action level."</p> <p>Decisions made in the past about site cleanup are not affected by this update.</p> <p>The minimum risk level (MRL) for dioxin exposure described in the 1998 Toxicological Profile remains the same.</p> <p>Public health actions described in the 1998 policy guideline are options that may be applied as appropriate rather than being triggered by a prescribed soil concentration.</p>
<p>Strengthened emphasis on exposure pathway analysis beyond direct soil contact</p>	<p>Dietary sources and indirect exposure pathways may make a significant contribution to dioxin exposure.</p>	<p>Assessing both direct and indirect exposure pathways should result in a more comprehensive evaluation of exposure conditions at residential sites with dioxin contamination.</p>