

EXECUTIVE SUMMARY

Administration of the Land Recycling Program 25 Pa. Code, Chapter 250

The Department of Environmental Protection (Department) proposes to amend its regulations for the administration of the land recycling program. This rulemaking is proposed under 25 Pa. Code § 250.11, which requires the Department to periodically review new scientific information that relates to the basis of the Statewide health standard medium-specific concentrations (MSCs) and to propose to the Environmental Quality Board (Board) any changes to the MSCs as necessary.

Purpose of the Proposed Rulemaking

The Department is required to review and update the MSC values and the associated toxicological data every 3 years to ensure that environmental response actions at contaminated sites are remediated based on current EPA guidance and up-to-date toxicological information. This ensures the protection of public health and the environment from exposures to regulated substances where it has been determined that lower concentrations of a regulated substance are necessary. By regularly updating the MSC values, property owners may avoid unnecessary expenses when remediating contaminated property for redevelopment where scientific research has determined that higher concentrations of regulated substances are protective and meet the standards established by the statute.

Summary of the Proposed Rulemaking

The proposed rulemaking authorized by the Land Recycling and Environmental Remediation Standards Act (Act 2), which directs the Board to set Statewide health standards for regulated substances for soil and/or groundwater, as well as the methods used to calculate the standards. These proposed amendments update the Statewide health standard MSCs based on current science.

This rulemaking proposes to add five compounds from the Per- and Polyfluoroalkyl substances (PFAS) family of compounds for which new toxicity data has been published. These five include Gen-X (Hexafluoropropylene Oxide (HFPO) Dimer Acid) and its ammonium salt, Perfluorobutanoic acid (PFBA), Perfluorohexanoic acid (PFHxA), and the potassium salt of Perfluorobutane sulfonate.

Additionally, this rulemaking proposes to introduce updated models used to calculate the soil direct contact numeric values for lead, as well as reduce the target blood lead value for lead, and adds an additional statistical method for attaining the Statewide health standard for lead in soil.

The rulemaking proposes to add averaging of attainment sample data as a statistical test to demonstrate attainment of the lead direct contact values in soil under the Statewide health standard. The use of averages conforms to the methods utilized by both the Integrated Exposure Uptake Biokinetic (IEUBK) model and the Adult Lead Model (ALM).

The proposed rulemaking would update the methods for determining toxicity values for polycyclic aromatic hydrocarbon (PAH) compounds using relative potency factors established by the EPA; makes changes to the use of toxicity values from the Health Effects Summary Tables (HEAST) database; and, uses guidance from EPA to adopt certain toxicity values that are based on subchronic exposure instead of chronic exposure.

These proposed changes, based on new information, would protect public health and the environment. The changes would serve the public and the regulated community by providing clear information on the requirements of Act 2 and Chapter 250 related to the appropriate cleanup of contaminated sites.

Affected Parties

These proposed amendments to the Land Recycling Program regulations will affect owners, operators, and purchasers of properties and facilities who volunteer or are required to perform remediation of contaminated sites. These amendments are not expected to add any significant overall costs to the cleanup of contaminated sites. The net cost difference should be negligible as some of the cleanup standard concentration values will be lower and some will be higher.

The proposed amendments to the Statewide health MSCs would reflect the latest toxicological data on human health effects that can occur when humans are exposed to hazardous and toxic chemicals. Updating the MSCs based on the latest toxicological data helps to assure potentially affected residents of this Commonwealth and persons, including businesses, small businesses and other organizations, interested in buying and redeveloping contaminated sites, that the MSCs are protective of human health.

Outreach (Advisory Committee/Stakeholder Consultation)

The Board received many comments on the lead standards during the public comment period on the previous Chapter 250 rulemaking. Most of the commentators expressed concern with the proposed increase in the non-residential direct contact numeric value for lead in surface soil in Table 4A. The main concern expressed by the public comments was the proposed use of 10 micrograms per deciliter ($\mu\text{g}/\text{dL}$) as the target blood lead level. Due to the large number of comments and concerns, the Department published an Advance Notice of Proposed Rulemaking solicit information necessary to prepare this proposed rulemaking. The Department requested information which could be used to evaluate the proposed updates to the lead models used to calculate the soil lead MSCs, potential changes to model input parameters, and potential changes to the statistical tests used to demonstrate attainment of the Statewide health standard for lead in soil at Act 2 remediation sites. The Department received comments from three individual commentators, which were considered during the development of this proposed rulemaking.

An initial presentation of the concepts for this proposed rulemaking was presented to the Cleanup Standards Scientific Advisory Board (CSSAB) at the August 11, 2021 meeting. At this meeting, the CSSAB and the Department agreed that the CSSAB should form two workgroups: one to work through the various issues on lead and another to work through the concerns regarding PAH toxicity values.

The CSSAB Lead Workgroup reviewed the target blood lead level, the various inputs to be used in the new models, and the use of averaging for attainment of the direct contact values. The CSSAB PAH workgroup addressed questions regarding the relative potency factors in comparison to the various other toxicity value sources. Both workgroups developed whitepapers that were presented at CSSAB meetings on June 30 and August 11, 2022, and are included with the proposed rulemaking.

During CSSAB meetings on October 10, 2022, January 23 and May 31, 2023, CSSAB members reviewed and provided feedback on the draft, proposed regulatory amendments to Chapter 250. The Department worked with the CSSAB to resolve their concerns. Following these presentations and discussions, the CSSAB voted on January 23, 2023, to concur with the Department's recommendation to move the proposed regulation forward to the Board for consideration. After making additional updates to the draft to address the HEAST values changes and add PFHxA, the CSSAB reviewed and affirmed their decision to support the Department on May 31, 2023.

Recommendation

The Department recommends adoption of this proposed rulemaking, with a 60-day public comment period and at least three public hearings.