

# DRAFT

## DEPARTMENT OF ENVIRONMENTAL PROTECTION [25 PA. CODE CHAPTER 250]

### Calculation of Soil Lead Medium-Specific Concentrations Advance Notice of Proposed Rulemaking

The Department of Environmental Protection (Department) is soliciting information for the development of proposed amendments to Chapters 250 (relating to the calculation of medium-specific concentrations (MSCs)) in response to public comments on the previous Chapter 250 proposed rulemaking which proposed changes to the models used to calculate the soil lead MSCs. After further consideration, the Department rescinded the proposed lead modeling amendments and will address this issue in a subsequent rulemaking. The Department, through this Advance Notice of Proposed Rulemaking (ANPR), is soliciting information necessary to prepare the proposed rulemaking.

The information received in response to this ANPR will be used to evaluate the updates to the model, 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.

#### *Background and Purpose*

During the public comment period for the previous proposed rulemaking, the Environmental Quality Board received numerous comments expressing concern with the proposed amendments to § 250.306(e) which updated the models used to calculate the soil lead MSCs. For the non-residential numeric value calculation, the Society for Environmental Geochemistry and Health (SEGH) Task Force Approach to the Assessment of Lead in Soil was proposed to be replaced with USEPA's Adult Lead Model (ALM). For the residential numeric value calculation, Uptake Biokinetic (UBK) Model for Lead (version 4.0) was proposed to be replaced with EPA's Integrated Exposure Uptake Biokinetic (IEUBK) Model for Lead in Children from 2010 which has subsequently been updated in May 2021. Updates to the model input parameters Table 7 were also proposed.

Additionally, on September 17, 2020, the Cleanup Standards Scientific Advisory Board (CSSAB) provided a memo to the Department titled "Consideration for the Application of the IEUBK Model and ALM for the Development of Soil Direct Contact Values for Lead within the Act 2 Program." In this memo, the CSSAB compared attainment outcomes for each of various datasets using three tests: 75% /10x, 95% UCL, and the average of the attainment sampling soil concentration. Based on this analysis, the CSSAB recommended the Department consider the use of the average lead concentration as an additional option for the attainment demonstration for sites with soil lead contamination. Persons wishing to use the two existing attainment tests could still do so consistent with what is currently provided for in the regulations implementing Act 2.

#### *Specific Information Requested by the Department*

1. The Department is seeking scientific information regarding the proposed updated models in calculating the residential and non-residential direct contact numeric soil values for lead.
2. The Department is seeking scientific information regarding the use of the most scientifically appropriate target blood lead level and other model input parameters for calculating the residential and non-residential direct contact numeric soil values for lead.

3. The Department is seeking scientific information regarding the use of the average lead concentration as an additional option for the attainment demonstration of the Statewide health standard for sites with soil lead contamination.

The Department will open a public comment period for 90 days after the publication of the ANPR in the *Pennsylvania Bulletin*.