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Bureau of Environmental Cleanup & Brownfields

Land Recycling Program
Chapter 250 Rulemaking Overview

Cleanup Standards Scientific Advisory Board Meeting
February 13, 2019

presented by
Michael Maddigan
PADEP

Tom Wolf, Governor

Patrick McDonnell, Secretary

Concepts Overview

Today's Discussion

- Overview of rulemaking text changes.
- Overview of changes to medium-specific concentration (MSC) and other tables.
- Next steps in rulemaking process.

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Subchapter A – GENERAL PROVISIONS

- 250.1 – Changed the definition of a volatile compound.
- 250.4 – Updated practical quantitation limit (PQL) calculation language.
- 250.6(c) and (d) – Updated public involvement plan (PIP) language.
- 250.10 – Changed references to the Groundwater Monitoring Guidance to reference Appendix A of the Technical Guidance Manual (TGM).
- Addition of § 250.12 – Professional Seals

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Subchapter C. SATEWIDE HEALTH STANDARD

- 250.304(f) – Added five aqueous solubility sources.
- 250.305(g) – Clarified that this provision does not apply to compounds with a primary Maximum Contaminant Level (MCL) or Health Advisory Level (HAL) and a secondary MCL (SMCL). Removed fluoride and manganese from Table 2 Secondary Contaminants table.
- 250.306(d) – Changed groundwater ingestion rate from 2 L/day to 2.5 L/day. This resulted in changes to the groundwater ingestion related exposure factors in the table in § 250.306(d).

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Subchapter C. STATEWIDE HEALTH STANDARD

- 250.306(e) – Changed the references and text of this section to reflect new blood lead model use.
- 250.307(g)(1) – Added “x 24 hr/day” to the numerator in the equation in § 250.307(g)(1). This was inadvertently omitted from the equation in the previous rulemaking.
- 250.308(a)(2)(ii) – The word “standard” was replaced with “generic numeric value” to avoid the implication that the 1/10th value is always the soil MSC for saturated soil.

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Subchapter D. SITE-SPECIFIC STANDARD

- 250.402(d) – Clarified that 250.311(e) cannot be used to protect ecological receptors under the site-specific standard (SSS).
- 250.409(1) – Clarified that an approved remedial investigation report is needed prior to having an approvable risk assessment report.
- 250.410(d) – Clarified that a cleanup plan is required when institutional or engineering controls are used to attain the SSS.

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Subchapter E. SIA STANDARDS

- 250.503(e) – Added language to clarify that when land use changes from non-residential to residential at Special Industrial Area (SIA) sites, an amendment to the baseline environmental report may be needed, not just a new remediation plan.

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Subchapter F. EXPOSURE AND RISK DETERMINATIONS

- 250.603 – Changed citation of the EPA's 1992 *Final Guidelines for Exposure Assessment* to EPA's 2011 *Exposure Factors Handbook*.
- 250.605 – Added EPA's Office of Pesticide Program's Human Health Benchmarks for Pesticides to the toxicity value source hierarchy.

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Subchapter G. DEMONSTRATION OF ATTAINMENT

- 250.704(d) – Changed reference to § 250.707 because § 250.707(b)(2)(i) relates only to the 75% 10x rule, not all statistical tests.
- 250.707(b)(1)(ii) – Replaced “Statewide health standard” with “Medium-Specific Concentration.”
- 250.707(b)(1)(iii) – Add language clarifying when or if a vapor intrusion analysis is necessary at sites with localized petroleum releases.

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Tables 1 & 2

- Table 1 – Added perfluorooctane sulfonate (PFOS), perfluorooctanoic acid (PFOA), and perfluorobutane sulfonate (PFBS).
- Table 1 – Added footnote that the PFOS and PFOA MSC also applies when combined.
- Tables 1 & 2 – Added TDS units of “mg/L” in the headers.
- Table 2 – Added footnote stating that the MSCs for copper and lead are PA State MCLs.

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Tables 3A & 3B

- Tables 3A & 3B – Calculated PFOS, PFOA, and PFBS soil numeric values.
- Tables 3A & 3B – Calculated total PCB soil numeric values and deleted individual Aroclors.
- Table 3B – Footnotes regarding trihalomethanes (THMs) and haloacetic acids (HAAs) removed.

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Tables 4A, 4B, & 5A

- Table 4A – Residential and non-residential direct contact values calculated for lead using updated models and target blood lead level of 10 µg/dL.
- Table 4B – No soil or groundwater numeric values for aluminum or iron so removed all “NA’s.”
- Table 4B – Calculated copper values and removed all “NA’s.”
- Table 5A – Added PFOS, PFOA, and PFBS toxicity data.

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Table 7 – Default Values for Calculating MSCs for Lead

- Updated the residential exposure input parameters for use in the IEUBK blood lead model.
- Updated the non-residential exposure input parameters for use in the Adult Lead Model used by EPA.

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PCBs

- Total PCB groundwater value based on MCL.
- Removed individual Aroclor PCB values from Tables 1, 3A, 3B, and 5A.
- Calculated total PCB numeric values for soil (Tables 3A and 3B).
- This approach is more consistent with EPA's evaluation of PCBs in soil.

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Next Steps for Rulemaking

- Finalize language for proposed annex, including proposed changes to tables.
- Environmental Quality Board consideration of proposed rulemaking in mid-2019.

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Questions?

Mike Maddigan

mmaddigan@pa.gov