







Bureau of Environmental Cleanup & Brownfields

Land Recycling Program Chapter 250 Proposed Rulemaking Revisions

Cleanup Standards Scientific Advisory Board Meeting
June 12, 2019

presented by Michael Maddigan PADEP

Tom Wolf, Governor

Patrick McDonnell, Secretary

Concepts Overview

Today's Discussion

- Overview of recommendations from Cleanup Standards Scientific Advisory Board (CSSAB) and subsequent revisions to proposed rulemaking text and medium-specific concentration (MSC) tables.
- Next steps in rulemaking process.



Subchapter A – GENERAL PROVISIONS

- 250.6(c) and (d) Public Involvement Plans (PIPs)
 - Recommendation: Add DEP to notification requirement.
 - Revisions:
 - Changed "opportunities" to "measures" in (c).
 - Clarified in (d) that remediator is responsible for notifying DEP of PIP and submitting plan to municipality and DEP prior to implementation.
 - Changes to (d) made (1) and (2) unnecessary so they were removed.



Subchapter C. STATEWIDE HEALTH STANDARD

- 250.306(d) Ingestion Numeric Values
 - Recommendation: Change groundwater ingestion rate (IngR) from 2 L/day to 2.4 L/day.
 - Revisions:
 - Res and non-res IngR for groundwater (GW) changed to 2.4 L/day and 1.2 L/day, respectively.
 - Res and non-res GW ingestion factors (IFadj) changed to 1.12 L-yr/kg day and 0.38 L-yr/kg day, respectively.
 - Res combined age-depended adjustment factor and ingestion factor (AIFadj)changed to 3.45 L-yr/kg day.
 - IngR values in references 4 and 5 updated.

Subchapter D. SITE-SPECIFIC STANDARD

- 250.409(1) Risk Assessment Reports
 - Recommendation: Make sure revised language requiring the use of site characterization data from an approved Remedial Investigation Report (RIR) allows for combined report submittals.

– Revisions:

- Revised language in (1) to exclude combined submittals.
- Addition of § 250.412 which clarifies that prior approval of RIRs are not necessary for combined submittals.



Subchapter D. SITE-SPECIFIC STANDARD

- 250.410(d) Cleanup Plans
 - Recommendation: Revise confusing language regarding when a cleanup plan is not required.

– Revisions:

- Revised language to explain when a cleanup plan is required.
- New language states that a cleanup plan is required when any institutional or engineering control is used as a remedy to address current and future exposure pathways or exposure pathways that existed prior to submitting an NIR.



Subchapter F. EXPOSURE AND RISK DETERMINATIONS

- 250.605 Sources of Toxicity Information
 - Recommendation: Add Provisional Peer-Reviewed Toxicity Values (PPRTV) Appendix to the toxicity value source hierarchy.
 - Revision: Added PPRTV Appendix to § 250.605(a)(3) as a "tier 3" toxicity value source.



Subchapter G. DEMONSTRATION OF ATTAINMENT

- 250.704(d) General Attainment Requirements for Groundwater
 - Recommendation: Remove proposed change to reference to § 250.707 instead of § 250.707(b)(2)(i).
 - Revision: Agreed. Reference to § 250.707(b)(2)(i) will remain unchanged. This section removed from proposed rulemaking.
- 250.707(b)(1)(ii) No recommendation but replaced "Medium-Specific Concentration" with "MSC" since term was previously defined in regulation.



Numeric Value Revisions

- GW ingestion rate change from 2.5 L/day to 2.4 L/day resulted in very minor changes to some numeric values.
- Perfluorobutane sulfonate (PFBS) GW numeric value of 57,000,000 μg/L was recalculated.
 - Res Used Aquifer value corrected to 690 μg/L
 - Non-Res Used Aquifer value corrected to 1,900 μg/L



Original Proposed Changes to Total PCBs & Aroclors

- Table 1 Renamed "POLYCHLORINATED BIPHENYLS (PCBS)" to "PCBs, TOTAL (POLYCHLORINATED BIPHENYLS" for uniformity.
- Removed individual Aroclor PCB values from Tables 1, 3A, 3B, and 5A.
- Calculated total PCB numeric values for soil (Tables 3A and 3B).



Proposed New Revisions for Total PCBs & Aroclors

- Non-cancer toxicity values available for Aroclors 1016 and 1254 so will retain these in tables.
- Eliminating all other Aroclors because their toxicity is based solely on the use of the total PCBs toxicity values as surrogates. This introduces unnecessary uncertainty.
- Recalculate total PCBs soil-to-GW numeric values using K_{OC} .



Proposed New Revisions for PCBs & Aroclors

Table 5A currently has no K_{oc} value listed for total PCBs resulting in the following soil numeric values:

	Residential	Non-Residential
Direct Contact	9.3	46
Soil to GW TDS <2500	0.05	0.05

Adding the K_{OC} value of 78,100 (using EPA's EPI Suite calculator) total PCBs numeric values in soil change to:

	Residential	Non-Residential
Direct Contact	9.3	46
Soil to GW TDS <2500	9.8	9.8



Technical Issues Outside the Scope of Rulemaking

- Soil MSC for vanadium
- Toxicity value hierarchy
- Solubility limits
- Phthalic anhydride
- Soil MSC for chlorides.



Next Steps for Rulemaking

 Final proposed annex to undergo DEP internal review (legal, policy office, etc.).

 Environmental Quality Board consideration of proposed rulemaking in late 2019.











Bureau of Environmental Cleanup & Brownfields

Questions? Mike Maddigan mmaddigan@pa.gov