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DEPARTMENT OF ENVIRONMENTAL PROTECTION



Bureau of Environmental Cleanup & Brownfields

Land Recycling Program Technical Guidance Manual Sections I, II, & III Proposed Revisions

**Cleanup Standards Scientific Advisory Board Meeting
March 15, 2017**

**presented by:
Michael Maddigan
PADEP**

Tom Wolf, Governor

Patrick McDonnell, Acting Secretary

CSSAB TGM Comments

First Round of Comments

- Cleanup Standards Scientific Advisory Board (CSSAB) provided comments on the Technical Guidance Manual (TGM) in 2013.
- Most of 2014 and 2015 focused on Vapor Intrusion (VI) guidance.
- TGM revised in 2016 based on 2013 CSSAB comments and presented to the Board.

CSSAB TGM Comments

Second Round of Comments

- Revised sections I & II of the TGM presented to CSSAB at February 24, 2016 meeting.
- Revised TGM section III presented to CSSAB at July 13, 2016 meeting.
- Revised TGM sections V & VI presented to CSSAB at November 11, 2016 meeting.

CSSAB TGM Comments

Second Round of Comments

- CSSAB provided 40 additional comments on sections I, II, & III in November 2016.
- Comments on sections V & VI provided to the Department today.
- Today's discussion will focus on the second round of comments on sections I, II, & III.

Section I Revisions

- **Page 4 – Recommended adding SOP’s to this section**
- Reference to SOP’s in Section I.C.1 will be expanded to include reasoning behind each.
- Including SOP’s in TGM could make periodic revisions burdensome.

Section II A Revisions

- **Page II-3 – Is SIA designation subject to DCED determining what an “enterprise zone” is?**
- Reference to DCED in definition of enterprise zone from Chapter 250.
- All SIA eligibility determinations in § 250.502.
- DCED is not responsible for determining if a property is eligible for cleanup under the SIA.
- New language will explain this.

Section II A Revisions

- **Page II-7 – Language describing the process of completing public notice of the NIR seems convoluted and inverted.**
- Errors in this section have been corrected to be consistent with the revised language in the regulations.

Section II A Revisions

- **Page II-14 – Concern over requiring additional soil samples if latest soil data is more than 2 years old.**
- Original language is from Q&A#123 which was incorrect.
- Liability relief corresponds to specific releases regardless of date of release or when data associated with that release is collected.
- Text on historical data will be revised.

Section II A Revisions

- **Page II-15: It needs to be clearly stated that older groundwater data can be used to delineate contaminant distribution if data is consistent with current groundwater quality.**
- Agreed. Older site data that are still representative of current site conditions can be used to help delineate contaminant distribution. The site characterization section will be revised to reflect this.

Section II Background & SIA Revisions

- **Page 9 – Concern over the deletion of the phrase “or soil vapor transport onto the site”.**
- The deleted phrase will be re-inserted.
- The Department concurred with other recommended language changes and will make the appropriate revisions.

Section II SHS Section Revisions

- **Pages 19-28 – Are revisions to the eco-screen section needed to clarify that if habitats of concern do not exist, no further ecological evaluation is necessary?**
- Previous discussions established that PNDI searches should be conducted prior to Step 5 of the eco-screen process. This section will be revised to clarify when a PNDI search is necessary.

Section II SSS Revisions

- The CSSAB made numerous minor language revision recommendations to address errors and confusing text.
- Most of the recommended revisions will be made.

Section II Revisions

- **Page 14 – Concern that determining seasonal groundwater variations may require years of collecting groundwater elevation data.**
- Text will be added to emphasize that seasonal variations are site-dependent and may not exist at every site. Professional judgment is needed.
- An effort will be made to find reasonable options for determining seasonality.

Section II Revisions

- **Page 97 – Confusing language describing the use of soil management plans as part of post remediation care plans (PRCP).**
- The second sentence in the 5th bullet on page 97 will be revised to say: *“A PRCP containing any language proposing any potential future changes to the remedy will require the approval of the Department at the time of the proposed change.”*

Section II Revisions

- **Page 102 – Language in the “Provisions and Applicability” section implies that any changes in the Act 2 regulations promulgated after March 2004 cannot be applied under the One Cleanup Program.**
- To clarify, the sentence in question will be revised to: *“The One Cleanup Program applies only to remediation of properties conducted pursuant to the provision of Act 2.”*

Section II Revisions

- **Page-135 – Language was added about the need for a residual risk assessment after completion of a remedial measure. Should that go in a Final Report?**
- A residual risk assessment is not a separate report. A residual risk assessment should be part of the attainment section of the final report. Clarification will be added to Section G.III.

Section II Revisions

- **Page 137 – Suggestions were provided on how to improve the revised language in the last full paragraph.**
- This paragraph will be rewritten to provide detail and clarity.
- The commentator also asked how this screening method will be affected by the new vapor intrusion groundwater screening values. This will be discussed.

Recommendations Not Adopted

- Recommendations that were not adopted and questions that the Department determined did not require revisions are discussed below.

Recommendations Not Adopted

Section II A

- Pages II-14 to II-15: Language requiring non-biased soil sampling within individual areas under the SHS appears to conflict with the language for NIRs that allows identifying individual areas or the whole property as the “site”. How would this impact risk assessments using 95% UCL calculations for exposure point concentrations based on all data from the property?

Recommendations Not Adopted

Section II A

- Page II-15 – The text should clarify what groundwater can be used to demonstrate attainment when no remediation is necessary.

Recommendations Not Adopted

Section II A

- Figure on Page 26 and the figure provided by Craig Robertson at the last CSSAB meeting.
- Concern that the revised VI guidance requires all buildings to be accessed to evaluate significant foundation openings.

Recommendations Not Adopted

Section II Background and SIA

- Page 1 - The Department is explicitly expanding the list of environmental media that must be demonstrated to meet the background standard by including the word “sediment” in the Introduction for the first time in the 20 years since the TGM was first drafted.

Recommendations Not Adopted

Section II SHS

- Page 4 – Concern over the language at the bottom of this page rationalizing limiting the application of the 1/10th factor to the soil-to-groundwater generic value to only “periodically” saturated soil.
- Page 40 – Can a soil management plan be incorporated as part of a PRCP and EC?

Recommendations Not Adopted

Section II SSS

- Page 14 - Since the hierarchy has been removed in the TGM for evaluating toxicity data instead of the PADEP toxicity database, is the Department sure that this database will always be reflective of the most current toxicity data?

Recommendations Not Adopted

Section II SSS

- Pages 17 to 59 – Multiple comments and questions regarding unclear and/or redundant text.

Recommendations Not Adopted

Section III

- Page 3 – Based on the Department’s determination in Section II that soil contamination in the permanently saturated zone is a groundwater issue, does this mean that remediators can ignore the impacts of soil contamination below the water table in the fate and transport analysis?

Recommendations Not Adopted

Section III

- Page 135 – Multiple revisions are proposed regarding when baseline risk assessments are required and when eliminating pathways using engineering or institutional controls.

Recommendations Not Adopted

Section III

- Page 137 – The first part of the comment discusses how COCs for a risk assessment can be determined if certain pathways are eliminated. The last part of this comment asks how is this screening method affected by the new vapor intrusion groundwater screening values?

Next Steps

- CSSAB section V & VI comments to be reviewed and revisions will be made as needed.
- Regional office comments currently being addressed.
- Regional office review in April.
- Internal review in May.
- Final draft provided to CSSAB at June meeting.
- Publish draft TGM for public comment in July.



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Additional discussion?