Land Recycling Program

Question and Answer (Q&A) Document

Updated: June 2023

This Q&A Document is organized in order of the sections of the Land Recycling Program Technical Guidance Manual (TGM) with the understanding that each issue will be addressed within the TGM during future revisions, as appropriate.

<u>Section II – Act 2 Remediation Process</u> <u>Section III – Technical and Procedural Guidance</u> (Note: Q&A's for UECA are currently addressed in the <u>UECA FAQ document</u>.) <u>Section IV – Vapor Intrusion</u> (Note: Q&A's for VI are currently addressed in the <u>VI</u> <u>FAQ document</u>.) <u>Section V – Relationship to Other Environmental Statutes</u> <u>Section VI – Related Documents and Websites of Interest</u> <u>Appendix A – Groundwater Monitoring Guidance</u>

Section I – Overview

Currently no Q&A's for this section.

Section II – Act 2 Remediation Process

Question II.1: When characterizing my site under the site-specific standard, how can I be confident that the Department will be satisfied that I have adequately delineated the extent of contamination?

Response: Chapter 250 states that remediators should characterize to the selected standard. This can be challenging to determine during the remedial investigation phase under the sitespecific standard because the numeric cleanup goal would be determined in a risk assessment after characterization has been completed. Since site characterization is an initial investigative step, delineating contamination to the Statewide health standard medium-specific concentrations (MSCs) is generally an acceptable starting point as a numeric characterization goal. The MSCs are based on conservative exposure and toxicity parameters that reduce the likelihood of unacceptable risks to human health and the environment usually making them acceptable targets for characterization. Keep in mind that demonstrating attainment of an Act 2 standard is a separate process from characterization and additional sampling to delineate contamination may be required after a risk assessment or an exposure pathway evaluation is performed. For example, site-specific numeric standards calculated by a remediator may be lower than their respective Statewide health standard MSCs when accounting for cumulative risk. The site-specific standard cannot be met if cumulative risks exceed the risk thresholds described in Act 2 (1x10⁻⁰⁴ for carcinogens and a hazard quotient of one for non-carcinogens) so additional sampling and remediation may be necessary in these instances.

To avoid the potential need to collect additional samples beyond the selected numeric characterization goal, remediators may consider delineating contamination to USEPA Regional Screening Levels (RSLs) which are based on lower risk thresholds; $1x10^{-06}$ for carcinogens and 0.1 hazard quotient for non-carcinogens. RSLs can be a useful option for remediators as characterization targets under the site-specific standard because they help account for cumulative risk. Characterizing to the RSLs is not required but they serve as useful lower-bound thresholds where applicable. Ultimately, for voluntary cleanups, the remediator determines whether the Statewide health standard MSCs are acceptable delineation targets or if delineating to values lower than the Statewide health standard MSCs, such as the RSLs, is best for their project. It is recommended that remediators discuss their characterization targets with DEP prior to submitting their Remedial Investigation Report.

Reference: § 250.204, § 250.402, § 250.408

Question II.2: For some property uses such as hospitals, hotels, gyms/fitness facilities, and churches it can be difficult to determine if the land use is residential or nonresidential based on the Act 2 definitions. What should I do if I'm not sure which property use my site falls under?

Response: The best way to determine whether a property is residential or nonresidential is to contact your DEP Project Officer and discuss the property details to come to a consensus on its use. Knowledge of the specific use of the property is important because that is what dictates whether a property is residential or nonresidential. For example, most hotels are designed for short-term occupancy such as a few days or weeks which would be considered nonresidential, but other hotels are designed for extended stays of months or years which could be considered residential. Additionally, some recreational facilities are designed for short-term indoor use only, which would be considered nonresidential because there would be minimal exposure to potentially contaminated soil or from vapor intrusion while outdoor recreational facilities such as playgrounds, hiking trails, or sports fields would be considered residential because of the

likelihood of direct exposure to potentially contaminated soil. Indoor recreational facilities that have exposures similar to schools could be considered residential. Discussing specific property use with DEP is the best way to make this determination.

Reference: Act 2 Section 103

Question II.3: What is the acceptable length of time allowable between municipal or newspaper notification and the submission of a Notice of Intent to Remediate (NIR), plan, or report to the Department?

Response: According to both the Land Recycling and Environmental Remediation Standards Act (Act 2) and the Chapter 250 Regulations, the submission of public notices and reports should be completed at the same time as the submission of an NIR, plan or report to the Department. Remediators should submit NIRs, reports, and plans in a timely manner, however, the Department allows some flexibility with this time frame due to potential unforeseen circumstances. If proof of the mailing of the municipal and public notices are not submitted with 60 days of the NIR or report submittal, the Department may require the notices to be reposted and the NIR, plan, or report be resubmitted.

Reference: § 250.5 (e)

Question II.4: Does a notification in an online newspaper meet the notification requirement for Act 2?

Response: Yes, as long as the online publication is considered a publication of general circulation serving the area in which the site is located.

Reference: §250.6(f)

Question II.5: Can I submit my final report at the same time as other reports in a site-specific standard cleanup?

Response: In general, this is only appropriate for site-specific cleanups that do not require a cleanup plan (CP). Chapter 250 and Act 2 state that the final report cannot be approved until the remedy proposed in an approved cleanup plan has been completed. There may be situations where DEP regional office staff and the remediator have been in communication throughout the process, and these communications can include agreements on report

submissions. DEP encourages remediators to communicate with the regional office staff early and often throughout the process.

Reference: § 250.411(b)

Question II.6: The preamble from the November 2021 Chapter 250 rulemaking states that the amendments to § 250.305(g) allow remediators to determine a soil MSC for chloride. How are remediators expected to do this?

Response: Prior to the November 20, 2021, Chapter 250 rulemaking, remediators addressed chloride in soil by using guidance from an October 3, 2014, Program Clarification Memo from DEP's Oil & Gas and Land Recycling Programs regarding common constituents for oil and gas related spills and releases. Chloride soil MSCs have not been developed due to a lack of toxicity information because chloride is not particularly toxic to humans. MSCs cannot be developed for constituent that don't have toxicity values. However, the 2021 amendments to § 250.305(g) allow for the determination of soil MSC values for substances with secondary MCLs but no toxicological information in Appendix A, Table 5B, of Chapter 250. Chloride falls into this category. This determination is based on the physical capacity of the soil to contain a regulated substance as described in § 250.305(b). A soil's physical capacity to contain a regulated substance allows for a cap concentration of 190,000 mg/kg to be applied to chlorides. By taking 1/10th of this concentration as per § 250.311(b), the concentration becomes 19,000 mg/kg for chlorides in soil. This value can then be used as the soil MSC for chlorides through evaluation of ecological receptors. As stated in § 250.305(g), compliance with a soil-to-groundwater or direct contact value is not required for substances having a secondary MCL, but no toxicological properties listed in Appendix A, Table 5B.

In order to utilize the MSC for chlorides as part of an ecological evaluation, appropriate sampling for total chlorides would need to be completed. SPLP sampling, as described in the October 3, 2014 Program Clarification Memo, would not be applicable for comparison. Also, a brief explanation of the derivation of the 19,000 mg/kg value should accompany its use since it is not a value provided in the Chapter 250 MSC tables.

Reference: § 250.305(b), § 250.305(g), § 250.311(b)

Section III – Technical and Procedural Guidance

Question III.1: In the Bureau of Clean Water's Toxics Management Spreadsheet (TMS) program which is utilized for diffuse groundwater discharges to surface water, Target Quantitation Limits (TQL) are listed for most pollutants on the References tab. Some of the listed TQLs are at concentrations above the most stringent Chapter 93 Surface Water Quality Criterion for the pollutant. How are the TQLs utilized to attain surface water quality criteria at an Act 2 site?

Response: The remediator should review groundwater sampling data that is collected at monitoring wells which are hydrologically closest to the surface water body being studied. If groundwater sampling laboratory analytical results from the wells indicate <u>non-detect</u> concentrations with a laboratory reporting limit that is at or below the TQL, surface water will have attained an Act 2 standard, regardless of the most stringent Chapter 93 criterion. This is only applicable to non-detect concentrations. If an estimated concentration below the reporting limit is detected (i.e., a "J-value"), this comparison is not applicable.

Reference: § 250.309 and § 250.406

Section IV – Vapor Intrusion

(Note: Q&A's for VI are currently addressed in the VI FAQ document.)

Section V – Relationship to Other Environmental Statutes

Currently no Q&A's for this section.

Section VI – Related Documents and Websites of Interest

Currently no Q&A's for this section.

Appendix A – Groundwater Monitoring Guidance

Currently no Q&A's for this section.