

ADMINISTRATION OF LAND RECYCLING PROGRAM
FINAL RULEMAKING AMENDMENTS
COMMENT AND RESPONSE DOCUMENT

INTRODUCTION

In assembling this document, the Environmental Quality Board (Board) has addressed all pertinent and relative comments associated with this package. For the purposes of this document, comments of similar subject material have been grouped together and responded to accordingly.

During the public comment period, the Board received approximately 13 comments from six individuals, organizations and the Independent Regulatory Review Commission. The following table lists these organizations. The Commentator ID number is found in parenthesis following the comments in the comment/ response document.

Table of Commentators

Commentator ID #	Name	Address	Requested Final Rule	Submitted One-Page Summary
1.	David L. Reusswig, P.G. Senior Hydrogeologist Groundwater Sciences	2601 Market Place St. Harrisburg, PA 17110		
2.	Jason A. Speicher First Energy Corp.	P.O. Box 16001 Reading, PA 19612		
3.	Jim LaRegina, P.G. President Pennsylvania Council of Professional Geologists	116 Forest Drive Camp Hill, PA 17110		
4.	Rodd Bender, Esq. Manko, Gold, Katcher & Fox ON BEHALF OF Beazer East, Inc.	401 City Ave., Suite 500 Bala Cynwyd, PA 19004		
5.	H. Scott Laird URS Corp.	333 Commerce Drive, Suite 300 Fort Washington, PA 19034		
6.	Kim Kaufmann, Executive Director Independent Regulatory Review Commission	333 Market Street 14 th Floor Harrisburg, PA 17101		

§ 250.1. Definition of “EQL”.

1) Comment: The definition of this term found under § 250.1 is being amended to read as follows:

Estimated quantitation limit. The lowest concentration that can be reliably achieved within specified limits of precision and accuracy during routine laboratory operating conditions. The EQL is generally 5 to 10 times the MDL (method detection limit). However, it may be nominally chosen within these guidelines to simplify data reporting. For many analytes the EQL analyte concentration is selected as the lowest non-zero standard in the calibration curve. Sample EQLs are highly matrix dependent. The EQLs in the EPA publication Test Methods for Evaluating Solid Waste, Physical/Chemical Methods [SW-846] are provided for guidance and may not always be achievable.

Regulations have the full force and effect of law and establish a binding norm that is applicable to all that fall under its jurisdiction. Therefore, regulations must be clear and unambiguous. The first sentence of this definition, "The lowest concentration that can be reliably achieved within specified limits of precision and accuracy during routine laboratory operating conditions." accomplishes this goal. The remaining sentences lack the clarity needed to establish a binding norm and should be deleted. (6)

Response: The Board accepts this comment and has deleted all but the first sentence in this definition.

§ 250.11. Periodic review of MSCs.

2) Comment: Under this new section, the Board is proposing a plan to keep the medium-specific concentrations (MSCs) current by requiring reviews of the MSCs as new scientific information becomes available, but in no case more than 36 months after the effective date of the most recently promulgated MSCs. The regulations should clarify how the Department of Environmental Protection (Department) will implement this provision and the effects that changes to the MSCs might have on remediation projects that are either in the planning stages or have already begun. For example, if an MSC value changes during a remediation project, what standard will be required? It would benefit the regulated community to include language in the final-form regulation that spells out how any changes to MSCs will be administered. (2, 6)

Response: Any revised standards will become effective upon publication in the Pa. Bulletin. Future changes will be administered in the same manner as with previous revisions to the regulations and the current rulemaking. This means that the new standards must be met in any final report submitted after the day the final regulations are published. The entire rulemaking process, from the time the initial draft rules are first publicly available, through the proposal of the rules and the official comment period, until the final rules are promulgated, typically takes over two years. This provides licensed professionals working on remediation projects sufficient notice of likely changes.

§ 250.304 and 250.305. MSCs for groundwater and MSCs for soil.

3) Comment: In section 250.304(c), the Board is amending a reference to an EPA Office of Water Publication. As required by Section 1.6 of the Pennsylvania Code & Bulletin Style Manual, the year or edition of the document being incorporated by reference should be included in the final-form regulation. (6)

Response: The Board has added the year of publication of the document.

4) Comment: The Board is adding similar language under both sections that would require remediators using the SHSs of the Land Recycling and Environmental Remediation Standards Act (Act 2) to address vapor intrusion exposure pathways in one of two ways. Listed below is the language being added as Subsection (h) under both sections:

The methodology used by the Department for calculating the MSCs for groundwater/ soil does not address the vapor intrusion exposure pathway. Therefore, to demonstrate attainment under the act for the vapor intrusion exposure pathway the remediator shall address the vapor intrusion exposure pathway in accordance with section 304(f)(4) of the act (35 P. S. § 6026.304(f)(4)) and Subchapter D (relating to site-specific standard), or in accordance with technical guidance published by the Department addressing vapor intrusion into buildings from groundwater and soil under the Statewide health standard.

A commentator believes that the Department lacks statutory authority under Act 2 “to require evaluation of the vapor intrusion pathway through the MSC formulas, or otherwise under the SHS.” The Department can require this type of evaluation when a remediator is using the site-specific standards under Act 2, but cannot require this type of evaluation when a remediator is using the SHSs of Act 2. The Board should explain what authority it has to require remediators using SHSs to demonstrate attainment as required by these sections. (4, 6)

Response: The Board does not agree with the position of the commenter. Section 303(c) of the Land Recycling Act requires that when establishing a MSC for groundwater and soils that the calculation shall address the ingestion and inhalation of volatiles and particulates. The statute provides authority for the Board to promulgate SHS MSCs that address the vapor intrusion pathway. This can be done directly through promulgation of MSCs that directly address the vapor intrusion pathway, or indirectly through promulgation of MSCs that do not directly address the vapor intrusion pathway but are supplemented by assessment and remediation procedures that otherwise address the vapor intrusion pathway.

5) Comment: The reference to technical guidance published by the Department is vague. We recommend that the final-form regulation include a specific name and/or document number for the technical guidance referenced above and also the year or edition of the document. (6)

Response: The final rulemaking does not include any reference to the technical guidance document.

6) Comment: A commentator believes that it is inappropriate to incorporate technical guidance by reference because it would give the document the authority of a duly promulgated regulation without the benefit of formal notice and a public comment period. As suggested by the commentator, has the Board considered including the full language of the guidance document in these regulations? (4, 6)

Response: The final rulemaking does not include any reference to the technical guidance document.

Appendix A, Table 1. Medium-Specific Concentrations (MSCs) for Organic Regulated Substances in Groundwater

Note: The proposal to leave the MSCs for methyl tertiary butyl ether (MTBE) unchanged generated the most comment on the proposed rulemaking. To the extent possible, the Department has consolidated the concerns expressed over this decision in this section of the Comment and Response Document. Where a commentator raised a unique concern relating to MTBE, it is included as a separate comment.

7) Comment: In existing regulation, the MSC for MTBE is 20 ug/1 for groundwater used for drinking water. That numeric standard is not being amended under this proposed rulemaking. However, the EQB is deleting the designation of (h), lifetime health advisory level, from the table. According to the Board, MTBE is no longer included in the EPA "Drinking Water Standards and Health Advisories" table and there is no published concentration number. Therefore, the designation is being deleted.

In its discussion of the treatment of this MSC in the Preamble to the rulemaking, the EQB included the following statement: "The Department has decided that the previously considered revisions for MTBE included in the September 1, 2009 draft, which allowed for higher concentrations of MTBE based on health based calculations, would have resulted in unacceptable taste and odor impacts on groundwater used for drinking water." Public commentators are concerned with the Board's decision to retain the existing numeric value for MTBE. As noted in the Preamble, the Department's Cleanup Standards Scientific Advisory Board (CSSAB) also has concerns, "because they do not reflect specific health-based criteria from the Land Recycling Act."

Aside from the debate on the underlying science of the MSC for MTBE, we have concerns with the process used by the Board. First, as noted by a commentator, "In the absence of an maximum contaminant level (MCL) or a health advisory level (HAL), the Department is statutorily required to calculate the MSC using valid scientific methods that are not more stringent than the health-based criteria set forth in Section 303 of the Land Recycling Act." We agree with the commentator and note that the deletion of the lifetime health advisory level designation would mandate that MSC for MTBE be calculated using valid scientific methods. 35 P.S. § 6026.303(c).

Second, what is the Board's statutory authority for basing any MSC on unacceptable taste and odor impacts? How does the Board's decision to retain the MSC for MTBE at 20 ug/1 fit into the General Assembly's declaration of policy found in the Section 102 of the Act:

Cleanups should be based on the actual risk that contamination on the site may pose to the public health and the environment, taking into account its current and future use and the degree to which contamination can spread offsite and expose the public or the environment to risk, not on cleanup policies requiring every site in this Commonwealth to be returned to a pristine condition. (35P.S. § 6026.102(6))

We believe this declaration of policy clearly establishes the intent of the General Assembly. We urge the Board to listen to the advice of the CSSAB and align the MSC for MTBE with actual health risks, not taste or odor. (1, 2, 3, 5, 6)

Response: In the original Chapter 250 regulations published in the PA Bulletin August 16, 1997, the Board promulgated a groundwater MSC for MTBE of 20 µg/L based on a draft lifetime Health Advisory Level (HAL) published by EPA. In reviewing the basis for the MSC for MTBE in preparation for this amendment, it was determined that the draft HAL had been deleted from the EPA tables of drinking water standards. In the most recent publication of EPA drinking water standards, MTBE is listed under a separate table titled Drinking Water Advisories with an advisory level of 20 µg/L. Early drafts of the revised tables for this amendment used the toxicity data in Table 5 and the standard formulas to calculate a groundwater MSC. Upon further consideration of the issue, the EQB decided not to propose a change in the MSC for MTBE for this amendment because, although the draft HAL was not finalized by EPA, the new EPA drinking water advisory level reflects no change in the degree of protectiveness.

8) Comment: The Department should adopt two separate standards for MTBE – risk-based MSCs and a separate secondary MCL (SMCL) based on taste and odor concerns for MTBE. SMCLs are included in the rules already for several metals based on similar reasons. (2)

Response: EPA has not promulgated a SMCL level for MTBE.

9) Comment: In my experiences at sites where there are detectable (i.e., above the laboratory detection limits or PQLs) levels of MTBE in groundwater but the levels are below the SHS of 20 µg/L, it is the need to remove potential liability issues and deter lawsuits, and not the actual MTBE concentration, that drives my clients to still put a treatment system on the homeowner's water supply well, and this would still be the case if the standard was changed to 190/960 µg/L, particularly if concentrations were below these numbers yet above the odor threshold of 20 µg/L. (1)

Response: The SHS MSCs apply at the point of compliance independent of actual use of the groundwater. Remediators would not necessarily have an incentive to remediate contaminated groundwater that was below the published MSC levels.

10) Comment: U.S. EPA does not enforce National Secondary Drinking Water Regulations. They are established only as guidelines to assist public water systems in managing their drinking water for aesthetic considerations, such as taste, color and odor. These contaminants are not considered to present a risk to human health at the SMCL. Because the Department has adopted

a policy of consistency with MCLs in Act 2, it is inconsistent and improper to enforce cleanup for just one substance based on this secondary standard that is odor-based. (5)

Response: The Chapter 250 regulations have always includes MSCs for the SMCLs substances. In the original Chapter 250 regulations published in the PA Bulletin August 16, 1997, the Board promulgated a groundwater MSC for MTBE of 20 µg/L based on a draft lifetime Health Advisory Level (HAL) published by EPA. In reviewing the basis for the MSC for MTBE in preparation for this amendment, it was determined that the draft HAL had been deleted from the EPA tables of drinking water standards. In the most recent publication of EPA drinking water standards, MTBE is listed under a separate table titled Drinking Water Advisories with an advisory level of 20 µg/L. Early drafts of the revised tables for this amendment used the toxicity data in Table 5 and the standard formulas to calculate a groundwater MSC. Upon further consideration of the issue, the EQB decided not to propose a change in the MSC for MTBE for this amendment because, although the draft HAL was not finalized by EPA, the new EPA drinking water advisory level reflects no change in the degree of protectiveness.

11) Comment: The proposed MTBE standards apparently reflected the Department’s concern that if a person’s groundwater supply, which had no odor of MTBE before, became impacted by a release, then it should be the responsibility of the person performing the cleanup to restore the quality of the water supply to pre-release condition. I agree that this is the ethically proper concern, but the question is the appropriate way to accomplish it. Arbitrarily “cherry-picking” the Act 2 rules is the incorrect approach and should be rejected in this instance. Act 2 regulations should include a narrative standard that addresses this situation. It is the right of the Commonwealth to include such standards to protect its citizens, even if federal rules don’t require it. If adopted, such a requirement should be applicable to all SMCLs, not singly to MTBE. (5)

Response: The Chapter 250 regulations have always includes MSCs for the SMCLs substances. In the original Chapter 250 regulations published in the PA Bulletin August 16, 1997, the Board promulgated a groundwater MSC for MTBE of 20 µg/L based on a draft lifetime Health Advisory Level (HAL) published by EPA. In reviewing the basis for the MSC for MTBE in preparation for this amendment, it was determined that the draft HAL had been deleted from the EPA tables of drinking water standards. In the most recent publication of EPA drinking water standards, MTBE is listed under a separate table titled Drinking Water Advisories with an advisory level of 20 µg/L. Early drafts of the revised tables for this amendment used the toxicity data in Table 5 and the standard formulas to calculate a groundwater MSC. Upon further consideration of the issue, the EQB decided not to propose a change in the MSC for MTBE for this amendment because, although the draft HAL was not finalized by EPA, the new EPA drinking water advisory level reflects no change in the degree of protectiveness.

Appendix A, Table 2. Medium-Specific Concentrations (MSCs) for Inorganic Regulated Substances in Groundwater.

12) Comment: The Table references that the MSC for sulfate is a primary MCL. The U.S. EPA does not currently have a finalized MCL for sulfate. The commentator suggests that the Department remove sulfate from having a proposed risk-based MSC and rely on the SMCL established by EPA (250 mg/L). (2, 6)

Response: In the original 1997 regulations, sulfate appeared on the main Table 2, with an MSC of 500,000 µg/L based upon a draft MCL published by EPA in its publication “Drinking Water Regulations and Health Advisories” (EPA 822-R-96-001) dated February, 1996. In subsequent versions of this document, the draft MCL is deleted. The MSC for sulfates has been revised in Table 2 to indicate that the new value is based upon the secondary MCL of 250,000 µg /L which is published in the 1996 EPA document as well as all subsequent versions of that document. Since the revised MSC is based upon a secondary MCL, the value for sulfates has been moved from the main body of the table to the table of secondary contaminants. This move is indicated as a deletion of sulfates from the main body of the table and the addition of sulfates to the secondary contaminant portion of the table.

Preamble, Compliance Costs.

13) Comment: For chemicals that can be ubiquitous in the environment when the MSCs are lowered based on toxicological data, the regulated community may be forced to expend additional funds to conduct background studies on such chemicals. Therefore, it may be inappropriate for the Department to state in the Preamble that the proposed changes to the rules are not expected to add significant costs to the cleanup of contaminated sites. (2)

Response: The Board determined that the some cleanup standard concentration values will be lower (and therefore their costs will be higher) and some will be higher (resulting in costs that will be lower). The Board is not asserting that the costs for some individual cleanups might not be higher, especially if the individual cleanup involved large volumes of a substance that has a new significantly lower concentration number. The finding of the Board was that the net effect should be negligible.