Notice of Final Rulemaking Department of Environmental Protection Environmental Quality Board 25 Pa. Code Ch. 250 Administration of the Land Recycling Program

Order

The Environmental Quality Board (Board) by this order amends 25 *Pa. Code*, Chapter 250 (relating to Administration of the Land Recycling Program). The amendments update the Statewide health standards by using current EPA guidance and updated toxicological information. The proposal also corrects errors and codifies certain established policies into regulation.

This order was adopted by the Board at its meeting of ______(blank)____.

A. Effective Date

These amendments will go into effect upon publication in the *Pennsylvania Bulletin* as final rulemaking.

B. Contact Persons

For further information contact Troy Conrad, Director, Land Recycling Program, P.O. Box 8471, Rachel Carson State Office Building, Harrisburg, PA 17105- 8471, (717) 783-7816; or Kurt Klapkowski, Assistant Counsel, Bureau of Regulatory Counsel, P.O. Box 8464, Rachel Carson State Office Building, Harrisburg, PA 17105-8464, (717) 787-7060. Persons with a disability may use the AT&T Relay Service by calling 1-800-654-5984 (TDD users) or 1-800-654-5988 (voice users). This final-form rulemaking is available electronically through the DEP Web site (http://www.dep.state.pa.us).

C. Statutory Authority

This rulemaking is being made under the authority of sections 104(a) and 303(a) of the Land Recycling Act (35 P. S. §§ 6026.104(a) and 6026.303(a)), and section 1920-A of The Administrative Code of 1929 (71 P.S. § 510-20). Section 104(a) of the Land Recycling Act authorizes the Board to adopt Statewide health standards, appropriate mathematically valid statistical tests to define compliance with the Land Recycling Act and other regulations that may be needed to implement the provisions of the Land Recycling Act. Section 303(a) of the Land Recycling Act authorizes the Board to promulgate Statewide health standards for regulated substances for each environmental medium and methods used to calculate the standards. Section 1920-A 2 authorizes the Board to formulate, adopt and promulgate rules and regulations that are necessary for the proper work of the Department of Environmental Protection (Department).

D. Background of the Amendments

The primary purpose for this rulemaking is to update the standards related to cleanup of contaminated sites under the Land Recycling and Environmental Remediation Standards Act (Land Recycling Act). The Land Recycling Act requires the Board to establish by regulation uniform Statewide health-based standards so that any substantial present or probable future risk to human health and the environment is eliminated. The original standards were promulgated in 1997 and codified in Chapter 250. Section 104(a) of the Land Recycling Act explicitly recognizes that such standards would need to be updated over time as better science became available and as the need for clarification or enhancement of the program became apparent. Updating the standards serves the public as the Department is able to use the most up-to-date health and scientific information to establish the cleanup standards. In addition, the changes in standards serve both the public and the regulated community as they provide clear information on what is or will be done at contaminated sites. This gives the public notice and provides remediators with a clear endpoint to the remediation process. Several amendments are currently part of guidance, but are being added to Chapter 250 to give the requirements the legal status of a binding norm, which should lead to greater consistency and clarity across the Commonwealth.

E. <u>Summary of Changes to and Comments and Responses on the Proposed</u> <u>Rulemaking</u>

The Board received comments on the proposed rulemaking from six commentators. Five individuals submitted comments during the 30-day public comment period, subsequent to the notification of availability published at 40 Pa.B. 1297 (March 6, 2010). The Department provided the Independent Regulatory Review Commission (IRRC) with all comments received during the public comment period. On May 5, 2010, IRRC submitted written comments to the Board. Based on the comments received, several changes have been made in the final-form rulemaking.

Section 250.1. Definitions. One commentator pointed out that regulations have the full force and effect of law and establish a binding norm that is applicable to all that fall under its jurisdiction and, therefore, regulations must be clear and unambiguous. The commentator felt that the first sentence of the definition for Estimated Quantitation Limit accomplishes this goal, but that the remaining sentences lack the clarity needed to establish a binding norm and should be deleted. The Board accepts this comment and has deleted all but the first sentence of this definition.

Section 250.11. Periodic Review of MSCs. Two commentators felt that the Board should clarify how the Department will implement this provision and the effects that changes to the medium-specific concentrations (MSCs) might have on remediation projects that are either in the planning stages or have already begun. The Board believes that it is sufficient to state that 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.

Sections 250.304 and 250.305. MSCs for groundwater and MSCs for soil. In § 250.304(c), the Board is amending a reference to an EPA Office of Water Publication. One commentator felt that, 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. The Board agrees and has added the year of publication of the document.

In both sections, the Board had proposed to add language that would require remediators using the Statewide health standard (SHS) under the Land Recycling Act to address vapor intrusion exposure pathways in one of two ways. One commentator believes that the Department lacks statutory authority under the act to require evaluation of the vapor intrusion pathway through the MSC formulas, or otherwise under the SHS. The Board does not agree with the position of the commentator. 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 do not 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.

One commentator felt that the reference to technical guidance published by the Department is vague. Another commentator felt 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. The commentator also suggested that the Board consider including the full language of the guidance document in these regulations. In its final form, the 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. 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 Board has consolidated the concerns expressed over this decision in this discussion. Where a commentator raised a unique concern relating to MTBE, it is included as a separate comment.

In its discussion of the treatment of this MSC in the Preamble to the rulemaking, the Board 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, a commentator expressed 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."

One commentator questioned the Board's statutory authority for basing any MSC on unacceptable taste and odor impacts and how the decision to retain the MSC for MTBE at $20~\mu\text{g/L}$ fit into the General Assembly's declaration of policy found in the Section 102 of the Land Recycling Act.

In the original Chapter 250 regulations published in the PA Bulletin August 16, 1997, the Board promulgated a groundwater MSC for MTBE of 20 $\mu g/L$ 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 $\mu g/L$. 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 Board 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.

In other, separate comments, one commentator suggested that the Board 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. The Board has not accepted this suggestion because EPA has not promulgated an SMCL level for MTBE.

One commentator related that 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 ug/L, it is the need to remove potential liability issues and deter lawsuits, and not the actual MTBE concentration, that drives the installation of 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 ug/L, particularly if concentrations were below these numbers yet above the odor threshold of 20 ug/L. However, 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.

Appendix A, Table 2. Medium-Specific Concentrations (MSCs) for Inorganic Regulated Substances in Groundwater. The Table includes a reference that indicates that the MSC for sulfate is a primary MCL. The U.S. EPA does not currently have a finalized MCL for sulfate. One 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). 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. One commentator felt that when the MSCs are lowered based on toxicological data for chemicals that can be ubiquitous in the environment, 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. The Board determined that 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.

F. Benefits, Costs and Compliance

Benefits

The Department and Board are required to update the cleanup standard concentration values and the associated toxicological data in a timely manner in order to assure that environmental response actions at contaminated sites are remediated based on the current EPA guidance and current toxicological information.

Meeting this responsibility in these amended regulations assures the protection of the public health and environment relating to exposure to regulated substances where it has been determined that lower concentrations of a regulated substances are required to meet the standards established by the statute.

These amended regulations also avoid unnecessary expense for remediators when remediating contaminated property where it has been determined that higher concentrations of regulated substances are protective and meet the standards established by the statute.

Compliance Costs

These technical amendments to the Land Recycling regulations will affect owners, operators and purchasers of properties and facilities who volunteer or are required to perform remediation of contaminated sites.

These changes are not expected to add any significant costs to the cleanup of contaminated sites under this program. Some cleanup standard concentration values will be lower and some will be higher. The net cost should be negligible.

Compliance Assistance Plan

The department has regularly provided the regulated public with workshops to explain new regulations, guidance and policy. These are conducted on an average of every one to two years. Workshops will be planned to coincide with the finalization of this rule.

Paperwork Requirements

No forms or reports are required beyond those established by Act 2.

G. Pollution Prevention

The Federal Pollution Prevention Act of 1990 established a national policy that promotes pollution prevention as the preferred means for achieving state environmental protection goals. DEP encourages pollution prevention, which is the reduction or elimination of pollution at its source, through the substitution of environmentally friendly materials, more efficient use of raw materials, or the incorporation of energy efficiency strategies. Pollution prevention practices can provide greater environmental protection with greater efficiency because they can result in significant cost savings to facilities that permanently achieve or move beyond compliance. This regulation has incorporated the following pollution prevention provisions and incentives:

As this program assumes pollution has taken place, minimizing the release is not an option. However, in remediating a site, potential sources of pollution are often removed in order to attain the Act 2 standards, thus eliminating or minimizing the potential for future exposure to regulated substances.

H. Sunset Review

This regulation will be reviewed in accordance with the sunset review schedule published by the Department to determine whether the regulation effectively fulfills the goals for which it was intended.

I. Regulatory Review

Under section 5(a) of the Regulatory Review Act (71 P.S. § 745.5(a)), on February 24, 2010, the Department submitted a copy of the proposed rulemaking, published at 40 Pa.B. 1297, and a copy of the Regulatory Analysis Form to the Independent Regulatory Review Commission (IRRC) and to the House and Senate Environmental Resources and Energy Committees for review and comment.

Under section 5(c) of the Regulatory Review Act, IRRC and the Committees were provided with copies of the comments received during the public comment period, as well as other documents when requested. In preparing these final-form regulations, the Department has considered all comments from IRRC, the Committees and the public.

Under section 5.1(j.2) of the Regulatory Review Act, on <u>(blank)</u>, these final-form regulations were deemed approved by the House and Senate Committees. Under section 5.1(e) of the Regulatory Review Act, IRRC met on <u>(blank)</u> and approved the final-form regulations.

J. Findings of the Board

The Board finds that:

- (1) Public notice of proposed rulemaking was given under sections 201 and 202 of the act of July 31, 1968 (P.L. 769, No. 240) (45 P.S. §§ 1201 and 1202) and regulations promulgated thereunder at *I Pennsylvania Code* §§ 7.1 and 7.2.
- (2) A public comment period was provided as required by law, and all comments were considered.
- (3) These regulations do not enlarge the purpose of the proposal published at 40 *Pennsylvania Bulletin* 1297 (March 6, 2010).
- (4) These regulations are necessary and appropriate for administration and enforcement of the authorizing acts identified in Section C of this order.

K. Order of the Board

The Board, acting under the authorizing statutes, orders that:

(a) The regulations of the Department of Environmental Protection, *25 Pennsylvania Code*, Chapter 250, are amended to read as set forth in Annex A.

- (b) The Chairperson of the Board shall submit this order and Annex A to the Office of General Counsel and the Office of Attorney General for review and approval as to legality and form, as required by law.
- (c) The Chairperson of the Board shall submit this order and Annex A to the Independent Regulatory Review Commission and the Senate and House Environmental Resources and Energy Committees as required by the Regulatory Review Act.
- (d) The Chairperson of the Board shall certify this order and Annex A and deposit them with the Legislative Reference Bureau, as required by law.
- (e) This order shall take effect immediately.

BY:

Chairperson Environmental Quality Board